# The State of Health of the Mount Lofty Ranges Catchments from a water quality perspective

# Water in the Mount Lofty Ranges

The water resources and catchments of the Mount Lofty Ranges are critical to the wellbeing of the people of Adelaide and the future development of South Australia.

The ranges have higher rainfall and richer soils than other areas of South Australia, so are ideal for agriculture and intensive horticulture. The picturesque area has a mild climate, and attracts visitors and tourists as well as people to live and work in its towns. The quality of the water resource is also vitally important to the complex variety of natural ecosystems that are found across the landscape of the Mount Lofty Ranges.

The catchments of the ranges are also used for harvesting drinking water. The large storage reservoirs in the Mount Lofty Ranges collect the rainfall and supply Adelaide with drinking water. This drinking water must be safe.

Most South Australians rely on water from the Mount Lofty Ranges watershed, so protecting and improving its water quality is fundamental to their welfare.

The Government of South Australia is improving water quality in the Mount Lofty Ranges watershed.

Programmes worth over \$28 million are already under way, and more funds will be spent over the next five years to improve and accelerate these programmes.

The five-year programme aims to improve water quality and reduce the risk of contamination within a critical watershed area used for many purposes.

We will only achieve long term water quality improvements with a coordinated approach.

Funds will be used to:

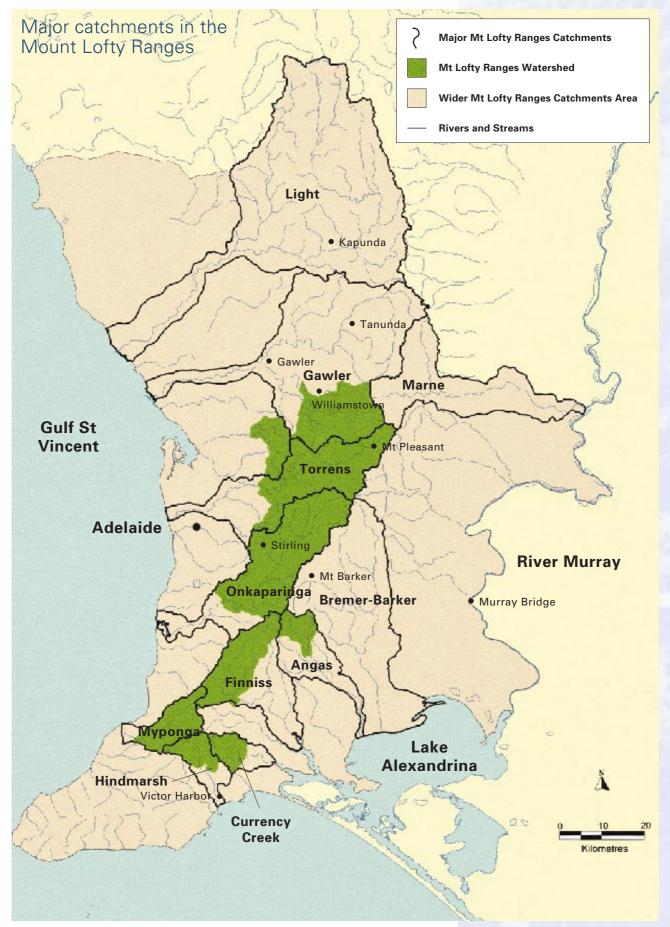
- accelerate sewering of major towns
- fence our rivers and streams
- conduct more comprehensive and targeted water quality monitoring programmes
- manage compliance with legislation and codes of practice
- make people more aware of how their activities can impact on water quality.



First Creek at Waterfall Gully (EPA).







AND

## The Challenges

Unfortunately, agriculture, tourism and rural living demands on the catchment can affect water quality. It is a difficult challenge to maintain a quality water supply.

Contamination from animal wastes and leaking septic tanks can cause significant water quality problems.

The water-borne parasites Cryptosporidium and Giardia (which can cause serious 'gastro' or gastrointestinal illness), and mild pesticide contamination of some water supplies, have been detected recently and show that we need to be vigilant in protecting our water supply catchments.

The accumulation of pesticides and chemical pollutants within the water system are complex to monitor and trace, and can be very difficult and expensive to manage where they become a problem.

Nutrients from urban storm water and rural industry sources can run off into rivers and streams and enter water supply reservoirs where they encourage algal blooms to develop.

### Major Programmes

The five Catchment Water

Management Boards have a strong
focus on on-ground works such as:

- fencing off streams, removing woody weeds and revegetating stream banks
- rehabilitating erosion sites
- establishing community-based 'Our Patch' sites as a focus for education, clean-ups, revegetation and waterway restoration.

The Mount Lofty Ranges Catchment Programme and Landcare groups, with funding from the Natural Heritage Trust Fund, are revegetating and fencing many areas throughout the ranges. The State Water Monitoring Coordinating Committee is developing an integrated approach to monitoring, and using landuse mapping, rainfall and topography data, and other information to identify risk areas in the watershed, which are then targeted with monitoring programmes.

Soil Conservation Boards are presenting small farm management training courses.

These, along with many other programmes already under way and to come, will all benefit from the additional funds the Government of South Australia has committed over the next five years.



Revegetation of a stream in the Piccadilly Valley (EPA).

View of different landuse practices at Piccadilly.



### The Mount Lofty Ranges Watershed Protection Office

The Government recognises that there are issues associated with multi-use catchments upon which we depend for our water supply. Having taken stock, the Government will implement a \$40 million programme covering a range of measures aimed at improving water quality in the Mount Lofty Ranges.

The Environment Protection Agency will have responsibility for ensuring that the programmes are delivered.

Responsibility for water quality matters in the watershed will be coordinated through the Mount Lofty Ranges Watershed Protection Office.

The Office will be working in close collaboration with the many groups involved in managing different aspects of the Mount Lofty Ranges, including:

- five catchment water management boards (Torrens, Patawalonga, Onkaparinga, River Murray, and Northern Adelaide and Barossa)
- Mount Lofty Ranges Catchment Programme
- four soil boards (Central Hills, Northern Hills, Southern Hills and Murray Plains)
- seven councils (Barossa, Playford, Tea Tree Gully, Onkaparinga, Mount Barker, Adelaide Hills & Alexandrina)
- approximately 67 Landcare groups

- local Government agencies, other State Government agencies, including the Department for Environment and Heritage, SA Water, Primary Industry and Resources SA, Planning SA, Transport SA and the Department for Water Resources
- and, of course, thousands of landholders.

Integrated catchment management schemes are making improvements on a large scale through natural resource management support, technical advice, education for local action planning groups, and on-ground land and watercourse management projects.