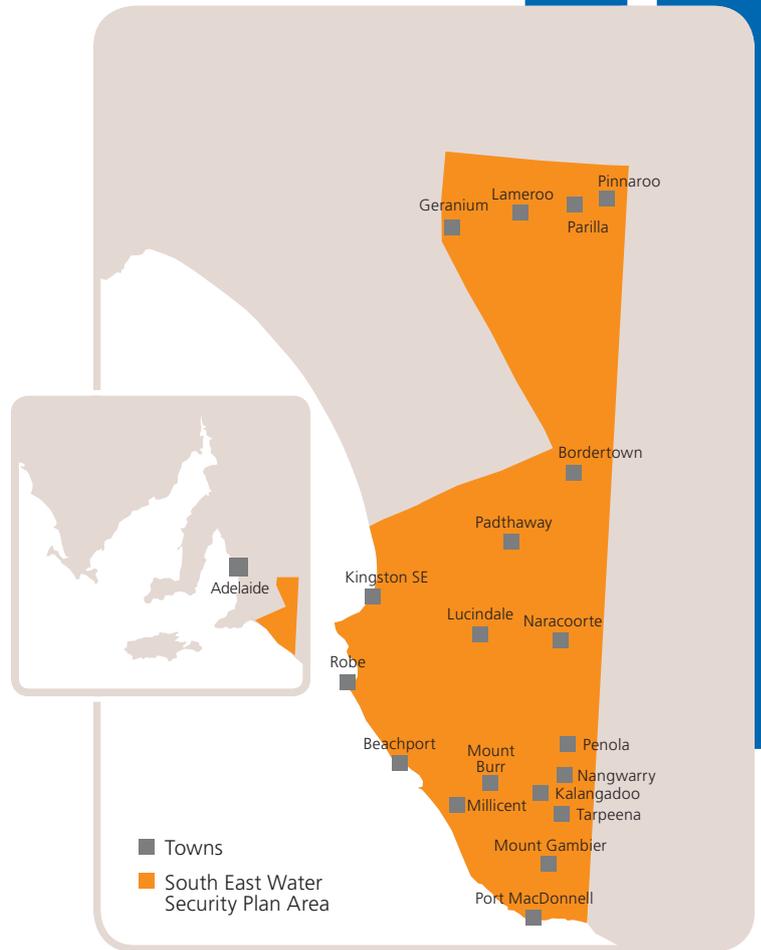


# SA Water Across the State 2014

## South East

Every hour of every day, SA Water's people embrace the challenge of delivering safe, sustainable and affordable water services to more than 1.5 million South Australian customers. Owned by the Government of South Australia, SA Water is focused on providing essential services that support growth and economic development throughout our state.

Driven to serve our customers for more than 150 years, we know water. We manage more than \$13 billion worth of assets, our water quality expertise is recognised around the globe and we are a leader in wastewater recycling. We employ more than 1400 people – each looking for innovative ways to deliver efficient and responsive water and wastewater services to our customers now and into the future.



Map of the 19 groundwater supplied townships in the water security plan for the South East.



The Blue Lake at Mount Gambier.



Government of  
South Australia



SA Water

## Water supply in the region

As early as the 1880s, water was pumped from the Blue Lake in Mount Gambier to supply this expanding regional centre. While the Blue Lake has become a popular tourist destination, its water continues to supply the Mount Gambier area. Over time, other communities in the South East including Penola, Millicent, Bordertown, Kingston and Naracoorte were provided with water from underground supplies. Much later, in the 1960s, a pipeline was constructed from the River Murray to supply the upper South East region with treated water.

Unlike other areas in South Australia, the region's rainfall is comparatively high, ranging from 400mm at Bordertown to 800mm at Mount Gambier. And despite the relatively high rainfall, the region has no substantial reservoirs because of its flat topography. The nature of the topography has led to several township supplies incorporating elevated tanks to provide the necessary pressure to force water through pipes and into homes and businesses.



*The official opening of the Naracoorte water supply by the Commissioner of Public Works, Mr M McIntosh, 26 April 1940.*

## Wastewater treatment in the region

SA Water also operates five wastewater treatment plants (WWTP) in the region at Finger Point, Naracoorte, Nangwarry, Millicent and Mount Burr. Finger Point WWTP was commissioned in 1989, with the remaining WWTPs being commissioned throughout the 1960s. Combined, the five WWTPs service around 38 000 customers with a network of some 360 kilometres. All plants continue to meet stringent Environment Protection Authority discharge quality requirements.



*Millicent Wastewater Treatment Plant.*

## Recent projects in the South East

### Water at a glance:

<b>Delivered:</b>	New bores and associated networks Water quality upgrades Water treatment plant efficiency and environmental upgrades Sludge handling improvements at treatment plants
<b>Community benefits:</b>	Around 10,000 customers will benefit from improved water security and quality

SA Water has been actively investing in the region to secure water supplies and to make water quality improvements for the towns of Kalangadoo, Naracoorte, Mount Burr and Lucindale. While the previous bores serviced the community well in the South East, they were beginning to age. The opportunity to upgrade was taken to deliver customers improved drinking water quality and a more secure supply. Our mains replacement program identified the need to replace approximately 740 metres of water main in Bunday Terrace Pinnaroo, and Chandos Terrace Lameroo. These relays will contribute to reducing the number of unplanned interruptions to customers and ensure that acceptable levels of water supply service are maintained.

Works are now underway to develop a new water supply bore for the township of Robe. The new bore will be connected to Robe's water supply network via a pipeline to be installed along the Southern Ports Highway road reserve. This additional supply will complement recent upgrades to the township's water supply, including a new 2.4 million litre storage tank, new pump, and improved water treatment facilities. The upgrades will provide ongoing water security, particularly during periods of peak demand over summer. This will support further tourism and population growth in the township.

Significant upgrade works have also been completed on all five of our wastewater treatment plants in the region, demonstrating our ongoing commitment to improving environmental management. The works have involved upgrades to sludge drying facilities, upgraded inlet screens, outlet flow meters, and polishing lagoon upgrades, all of which have improved both environmental outcomes and the health and safety of our people. In Naracoorte the trunk sewer main that discharges to the treatment plant was relined.

### Wastewater at a glance:

<b>Delivered:</b>	Sludge drying efficiency upgrades Upgraded sludge hardstands Improvements to inlet screens Upgraded polishing lagoons Improved effluent flow meters to monitor discharge volumes New wastewater pump stations to replace in road manhole stations
<b>Community benefits:</b>	Improved effluent discharge quality Reduced environmental impacts Improved health and safety for our people

### Efficiency

Improvements to the filter cleaning processes (backwashing) at some Iron Removal Plants have increased efficiency by enabling the reuse of approximately 95% of water previously discharged to the environment.

Our projects are the result of successful collaboration between SA Water's Mount Gambier Workshop staff, regional operational staff, the Department of Environment, Water and Natural Resources, the Environmental Protection Authority, local contractors and local communities.

# Planning for the future

Nineteen townships are covered by the South East water security plan, and this update focuses on Mount Gambier, Naracoorte, Lameroo and how water consumption is tracking against supply allocation. In order to continue delivering quality drinking water and wastewater services that meet the unique needs of the communities we serve, SA Water plans for the future. Using an integrated water planning approach that responds to projected population growth, climate change and water supplies, SA Water applies cutting edge research and best practice techniques to develop water security plans that enable us to meet customers' requirements into the future.

A water security plan provides a comprehensive view of existing resources and future needs for each water supply system. The plans also identify future requirements for each water supply system. The options developed in the water security plans help SA Water to ensure appropriate resources are allocated for future water supply upgrades and maintenance.

Consultation with key stakeholders has been fundamental to the development of the water security plans. Key stakeholders have included local councils, regional development boards, and natural resource management boards who have provided local knowledge to help ensure that we have a clear understanding of future needs and issues, such as population projections, rezoning advice and business growth.

### Annual review

An annual review of the water security plans will incorporate new consumption data and review the assumptions, projections and recommendations. This will help SA Water deliver cost effective investments as they are needed.



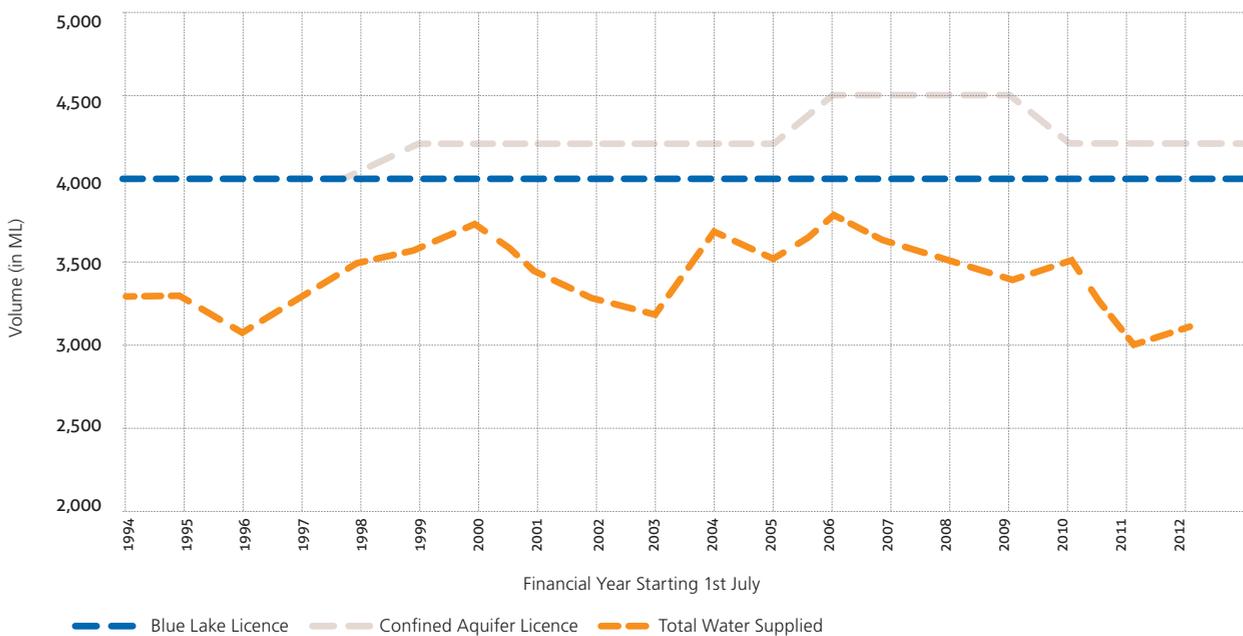
Groundwater bore infrastructure at Bordertown.

### At a glance: Mount Gambier

Water sources:	Blue Lake (Unconfined Aquifer) – 4,000 ML Licence per annum Confined Aquifer – 210ML Licence per annum
Water treatment:	Chlorination & Fluoridation
Water storage:	Tanks at Keegan Drive and Potters Point
Residential meter growth:	Average increase of 0.8% per annum between 2010-11 and 2012-13
Average residential demand:	171kL per residential meter in 2012-13 197kL per residential meter over the last ten years

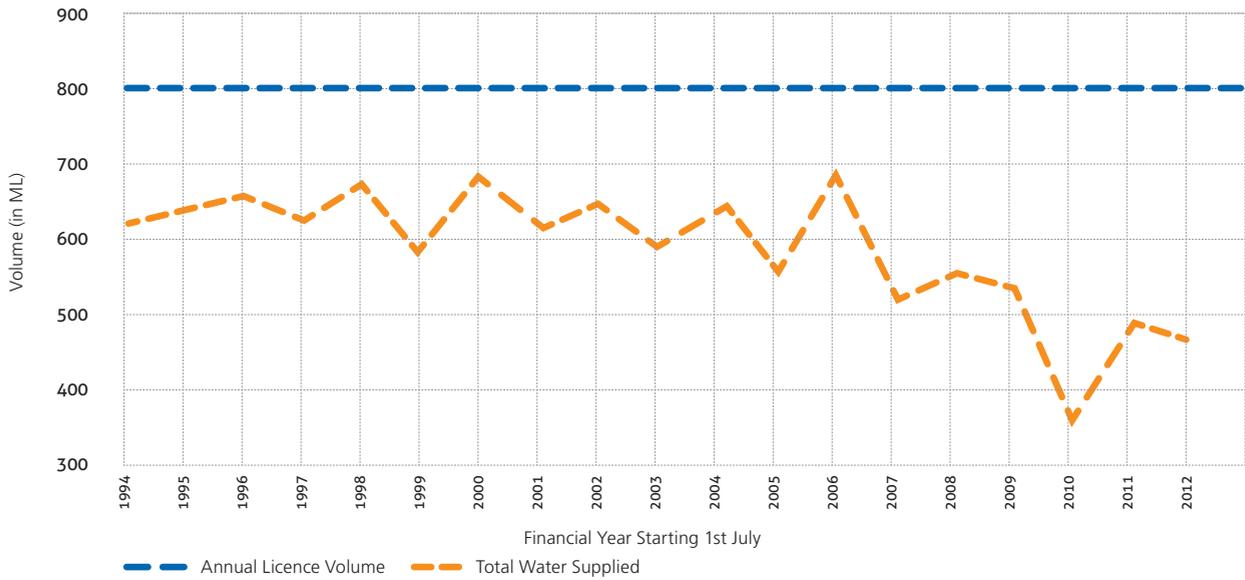
*kL = kilolitre or 1,000 litres  
ML = Megalitre or 1,000,000 litres*

Figure 1 – Mount Gambier Supply and Licence Allocation\*



\*The licence allocation is the volume of water provided on the water licence by the Department of Environment, Water and Natural Resources (DEWNR). It reflects the annual sustainable extraction limit for each groundwater source.

**Figure 2 – Naracoorte Supply and Licence Allocation**



**At a glance: Naracoorte**

Water sources:	Confined Aquifer – 800ML Licence per annum
Water treatment:	Chlorination
Water storage:	Surface Tank near Naracoorte
Residential meter growth:	Average increase of 1.0% per annum between 2010-11 and 2012-13
Average residential demand:	201kL per residential meter in 2012-13 224kL per residential meter over the last ten years

**At a glance: Lameroo**

Water sources:	Unconfined Aquifer – 155ML Licence per annum
Water treatment:	Iron Removal Plant & Chlorination
Water storage:	Elevated Storage Tank in Lameroo
Residential meter growth:	Average increase of 0.4% per annum between 2010-11 and 2012-13
Average residential demand:	251kL per residential meter in 2012-13 286kL per residential meter over the last ten years

**Figure 3 – Lameroo Supply and Licence Allocation**





Construction of an 8 inch water supply bore.

SA Water has established community and business relations teams, to ensure we work more closely with our customers. If you would like to contact us our details are below.

## General Enquiries

Service problems and faults (24hrs, 7 days a week):

1300 883 121

Customer Service (Monday - Friday, 8.30am-5.00pm):

1300 650 950

Water Wise Hotline:

1800 130 952

AWQC:

1300 653 366

Free translating and interpreting services:

131 450