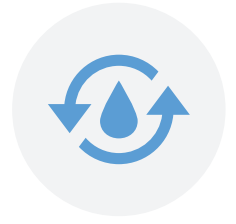


# Water



## Relevant Targets

### 5 Target 5

## Protect and secure our water resources

Water security underpins sustainable economic development, population growth, primary production, food security and a healthy urban ecology. In recent years Adelaide has reduced its water consumption but potable mains water use continues to be dominated by residential consumption. The Adelaide Desalination Plant at Port Stanvac does give us comfort but we must also develop ways to increase water efficiency.

Urban form and design are some of the most important contributors to improving water security. This can be

achieved by incorporating water sensitive urban design in new development to decouple population, economic and housing growth from unsustainable water resource consumption. Opportunities for stormwater and wastewater capture and reuse at the local, neighbourhood and regional scale will also be supported.

Better stormwater management is needed to ensure our natural waterways, linear parks and green open spaces are enhanced to keep stormwater where it falls.

In addition, protecting Greater Adelaide's water supply catchments areas from inappropriate development is critical to ensuring our long term water security.



# Water

## Policies

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**P115.** Incorporate water-sensitive urban design in new developments to manage water quality, water quantity and water use efficiency and to support public stormwater systems.

**P116.** Protect and secure water resources in the region (refer to Map 12), including:

- the Mount Lofty Ranges Watershed
- prescribed water resources
- recycled wastewater networks
- stormwater harvesting.

**P117.** Increase the provision of stormwater infrastructure (including water sensitive urban design) to manage and reduce the impacts of:

- run-off from infill development
- urban flooding from increased short-duration intense rainfall events associated with climate change
- pollution from roads and other developed areas.



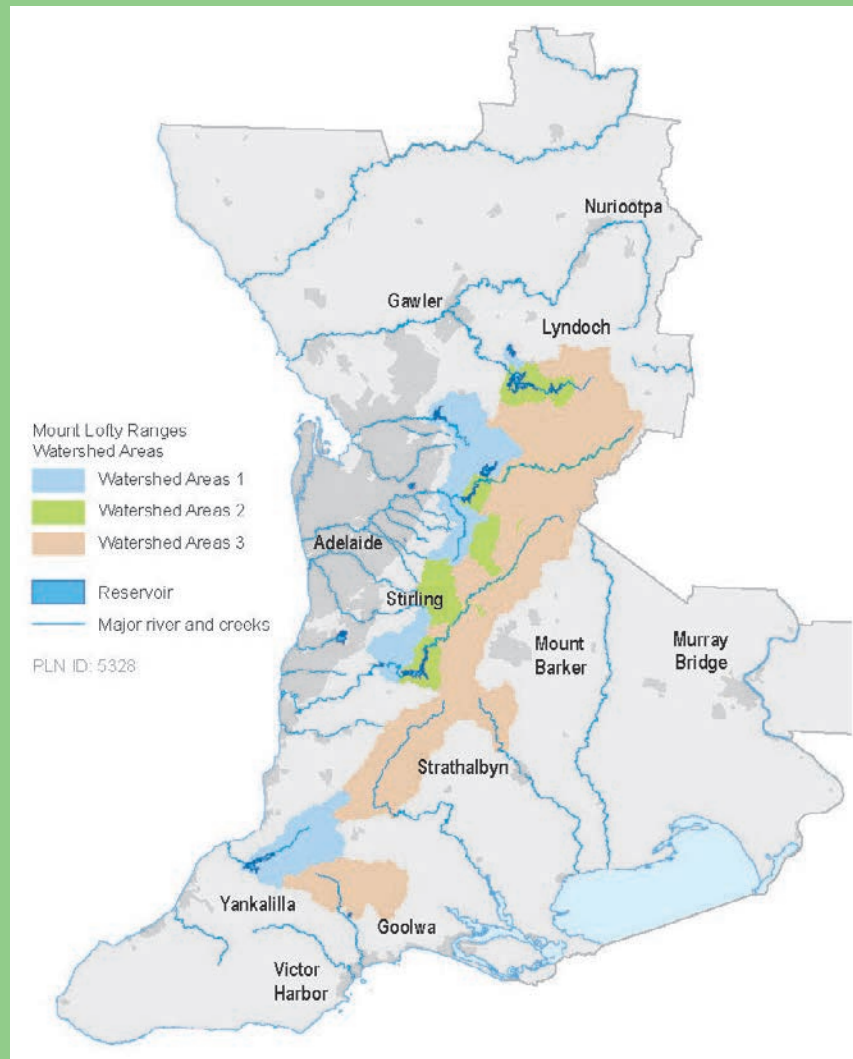
# Mount Lofty Ranges Watershed

The Mount Lofty Ranges Watershed has been divided into 3 sub- regions based on the relative potential of land uses/activities in these areas to generate pollutants that could threaten drinking water quality:

- Watershed Areas 1 – greatest risk
- Watershed Areas 2 – intermediate risk
- Watershed Areas 3 – least risk.

As such, new developments must demonstrate:

- a beneficial effect on water quality in Watershed Areas 1
- a beneficial, or at least neutral impact on water quality in Watershed Areas 2
- a negligible adverse, neutral or beneficial impact on water quality in Watershed Areas 3.



# Water

## Water sensitive urban design

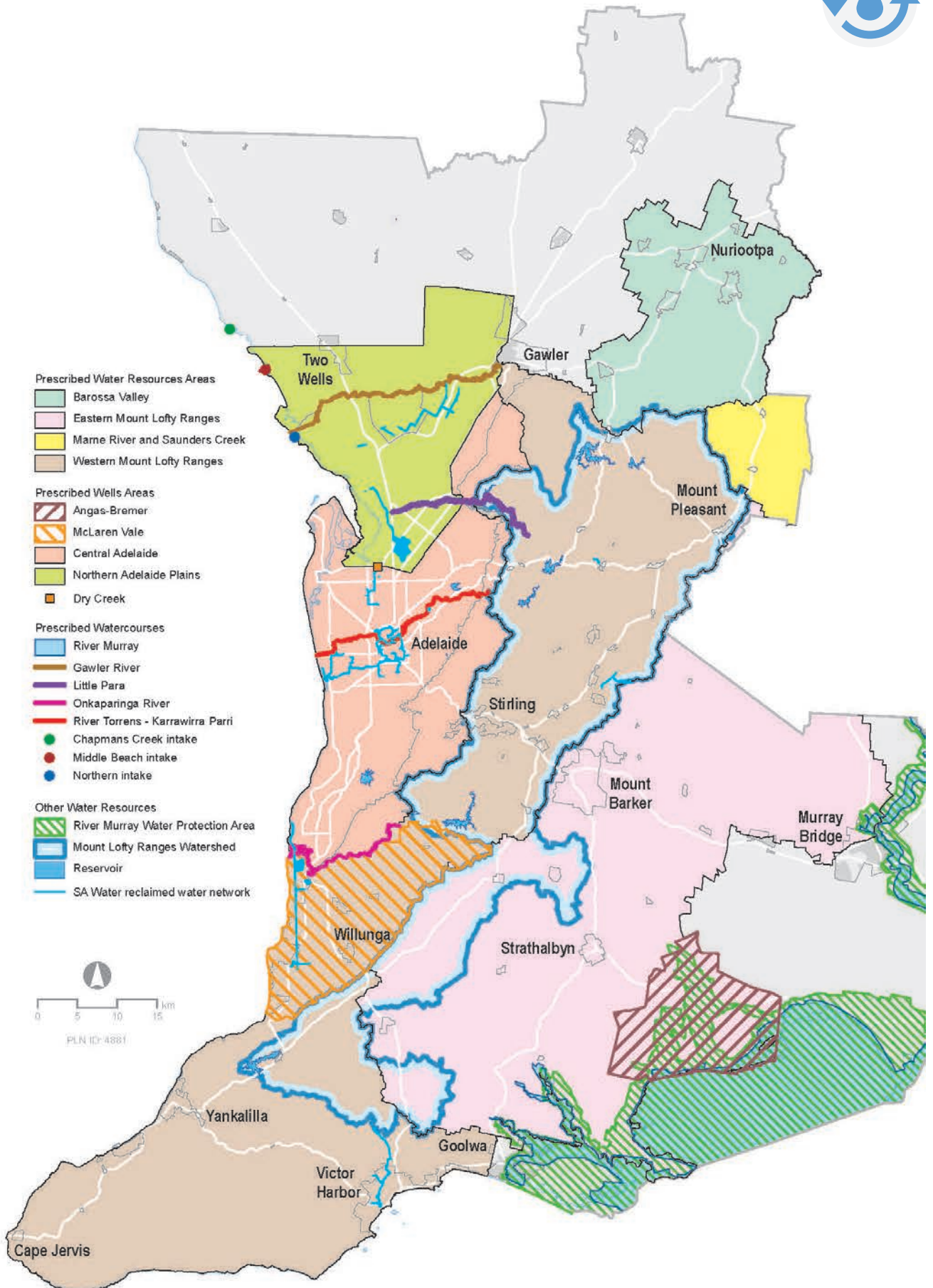
The State's Water Sensitive Urban Design (WSUD) policy<sup>14</sup> outlines the aim, objectives, principles and performance-based targets for WSUD in South Australia. It also sets out the Government's WSUD actions and outlines the wide range of WSUD techniques that can be incorporated into development projects and individual properties such as:

- bio-filtration systems
- permeable paving of footpaths, common areas and parking spaces (which can be used above the open underground water storage activities)
- green roofs and living walls (for example, plantings on roofs and down walls)
- wetlands to capture and treat run-off
- appropriate landscaping (for example, efficient irrigation, mulching, wind and sun protection, minimization of lawn areas and selection of suitable plants)
- capture and storage of rainwater and stormwater for re-use for residential purposes or to irrigate parks, sporting fields and other open spaces
- capture, treatment and re-use of wastewater
- water efficient fittings and appliances
- maintenance of fixtures (for example, fixing leaks and drips from plumbing and taps).

WSUD can be incorporated across a range of development types and scales, including individual homes, streets, vehicle parking areas, subdivisions and multi-units, commercial and industrial areas, and public land. WSUD helps to improve water quality and quantity, reduce flood risk in urban areas and enhance biodiversity.



### Map 12 — Water resources



# Water

## Making it happen - the planning system

### In the short term

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**A64.** Map and identify prescribed water resources areas.

**A65.** Introduce a policy framework into the Planning and Design Code that:

- protects prescribed water resources, catchment areas and the Mount Lofty Ranges Watershed (consistent with the water quality risk hierarchy associated with the Mount Lofty Ranges Watershed) while encouraging appropriate economic uses

- promotes water efficiency
- encourages water sensitive urban design
- promotes the use of alternative water supplies for new development.

### Other key levers to unlock opportunity

- Expand the use of recycled water from the Bolivar Wastewater Treatment Plant to support the intensification of horticultural production in the Northern Adelaide Plains.
- Implement the *Water for Good Plan* to ensure our state has a secure water supply system.
- Use water allocation plans, for example Adelaide Plains, Barossa, McLaren Vale, Western Mount Lofty Ranges, Eastern Mount Lofty Ranges and the Marne Saunders, to ensure sustainable water supplies for the community, industry and the environment for future generations.
- Deliver stormwater harvesting and reuse projects, which to date have an investment value of \$160 million.
- Implement the *Adelaide Coastal Water Quality Improvement Plan* to achieve and sustain water quality improvement for Adelaide's coastal waters and create conditions conducive to the return of seagrass along the Adelaide coastline.
- Investigate how to obtain maximum benefit from potential carbon and storage offsets ('Blue Carbon') provided by coast and marine habitats and how to best protect appropriate sites.