

## **Objective:** Customers expect us to get the basics right. This means they can rely on the safety of our drinking water service in to the future.

## **Current State**

Mandatory conditions:

- Compliance with Safe Drinking Water Act 2011
- Compliance with Environmental Protection Act 1993

Target Outcomes:

Corporate Aesthetics Targets

Constraints:

- Middle River Reservoir high in organics, iron, manganese and bromide
- Discharge of Middle River WTP waste streams only possible when dam is overtopping
- Desal process must meet requirements of EPA license for discharge
- Power availability, reliability and cost of treatment, transportation and storage
- Impacts of storage on treated water quality

## Work Underway & Existing Plans

Infrastructure:

- Capacity upgrade of Penneshaw desalination plant from 300 kL/d to 400 kL/d.
- Refurbishment of Kingscote Tank
- Water quality improvement at Kingscote

Information and intelligence:

- Development of Water Quality
  Improvement Plan for Middle River
  system
- Ongoing condition assessments of SA Water infrastructure
- Ongoing water quality monitoring program

## Future State

Drivers for infrastructure upgrade:

- Increase in demand drives additional water treatment infrastructure or upgrade to existing infrastructure
- Change in population size and location

Changing sources:

- Reduced access to surface water due to climate change
- Reduction in quality of surface source water due to climate change
- Augmentation of source water due to demand increase

Changing constraints:

• Potential changes to water quality targets in the Australian Drinking Water Guidelines

Other opportunities

• Point of use treatment to create specific fit-for-purpose supplies