

**Objective:** Customers expect us to get the basics right. This means they can rely on the availability of our water services in to the future.

## Current State

Targets & Current Performance:

- Being responsible custodians of water resources and assets for future generations.

Sources:

- Middle River monitored in-flows 4,600ML-30,500ML per annum (1970 – 92)
- Penneshaw desalination plant

Constraints:

- Middle River reservoir capacity 540ML constrained by length of time between spill seasons.
- Number of other water sources e.g. privately owned dams and water protection zones (yield and water quality not fully understood)
- Limited groundwater available

## Work Underway & Existing Plans

Catchment (hydrological) modelling

- 2009 & 2014 - reviewed land use and climate impacts.
- Updated modelling on Middle River with DEWNR & KI Natural Resources (underway, estimated completion June 2018)

Information and intelligence:

- Formalise Middle River take-limit with DEWNR (underway, estimated completion June 2018)

Infrastructure:

- See Safety landscape re Middle River dam upgrade
- Capacity upgrade of Penneshaw desalination plant from 300 KL/day up to 400 KL/day (underway, estimated completion Dec 2017)
- Discussions with a number of developers on sources to provide step-changes in volumes they require (underway and ongoing)

## Future State

Changing conditions:

- Climate change assessment based on Goyder Institute regional climate projections.  
<http://www.goyderinstitute.org/r212/media/system/attrib/file/203/SA%20Climate%20Ready%20Regional%20Summary%20-%20KI.pdf>
- Estimated sustainable yield 580ML/yr under worst case scenario (30% reduced inflow).
- Upstream land-use changes potentially reducing available water and spill periods of Middle River Reservoir.

Other opportunities:

- Providing fit-for-purpose water option (i.e. non-potable) could make additional sources viable due to less intensive treatment requirements