

# **Water Security in South Australia**

## **Piloting a Water Security Strategy for the Barossa**

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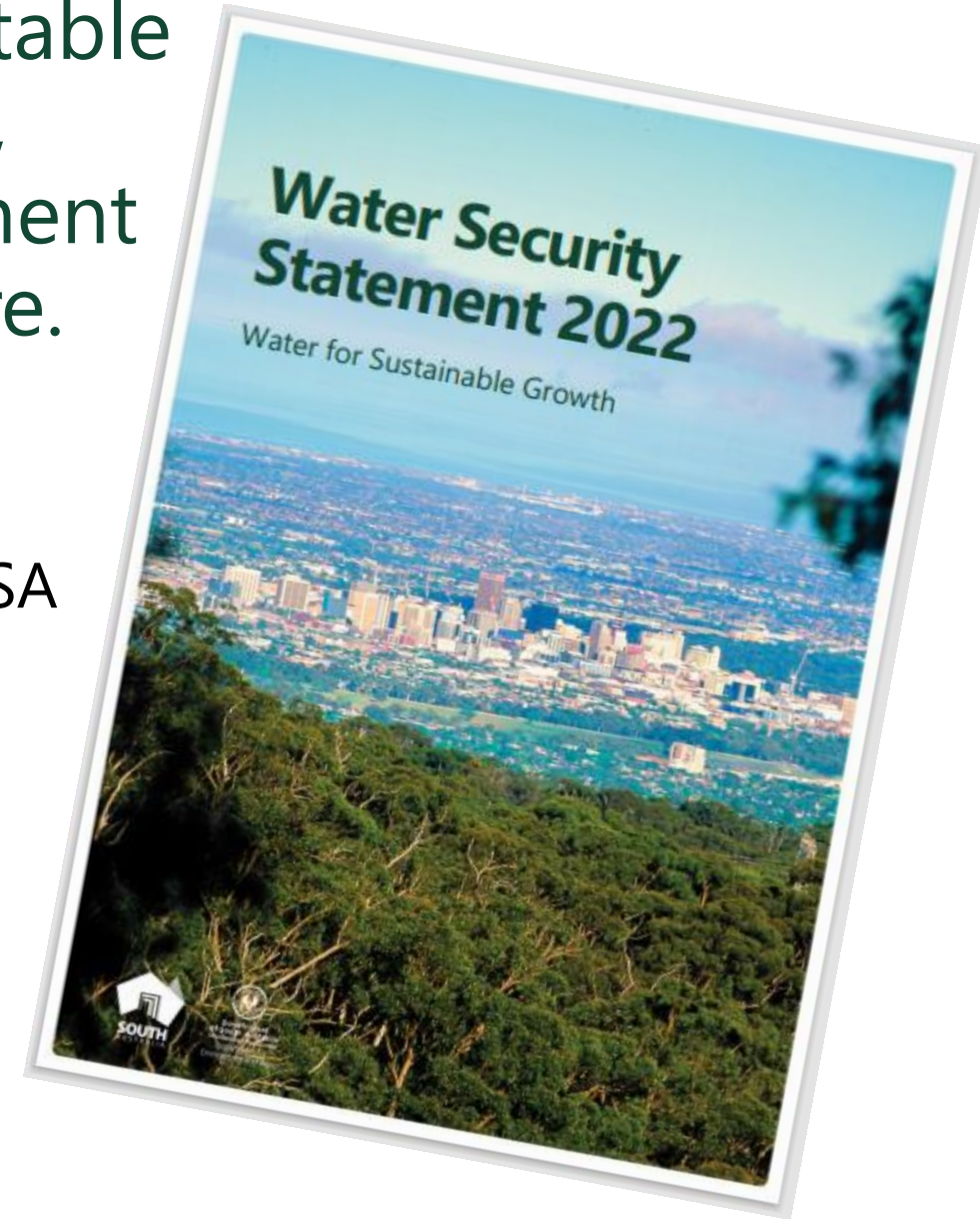
Water Security Team, Department for Environment and Water

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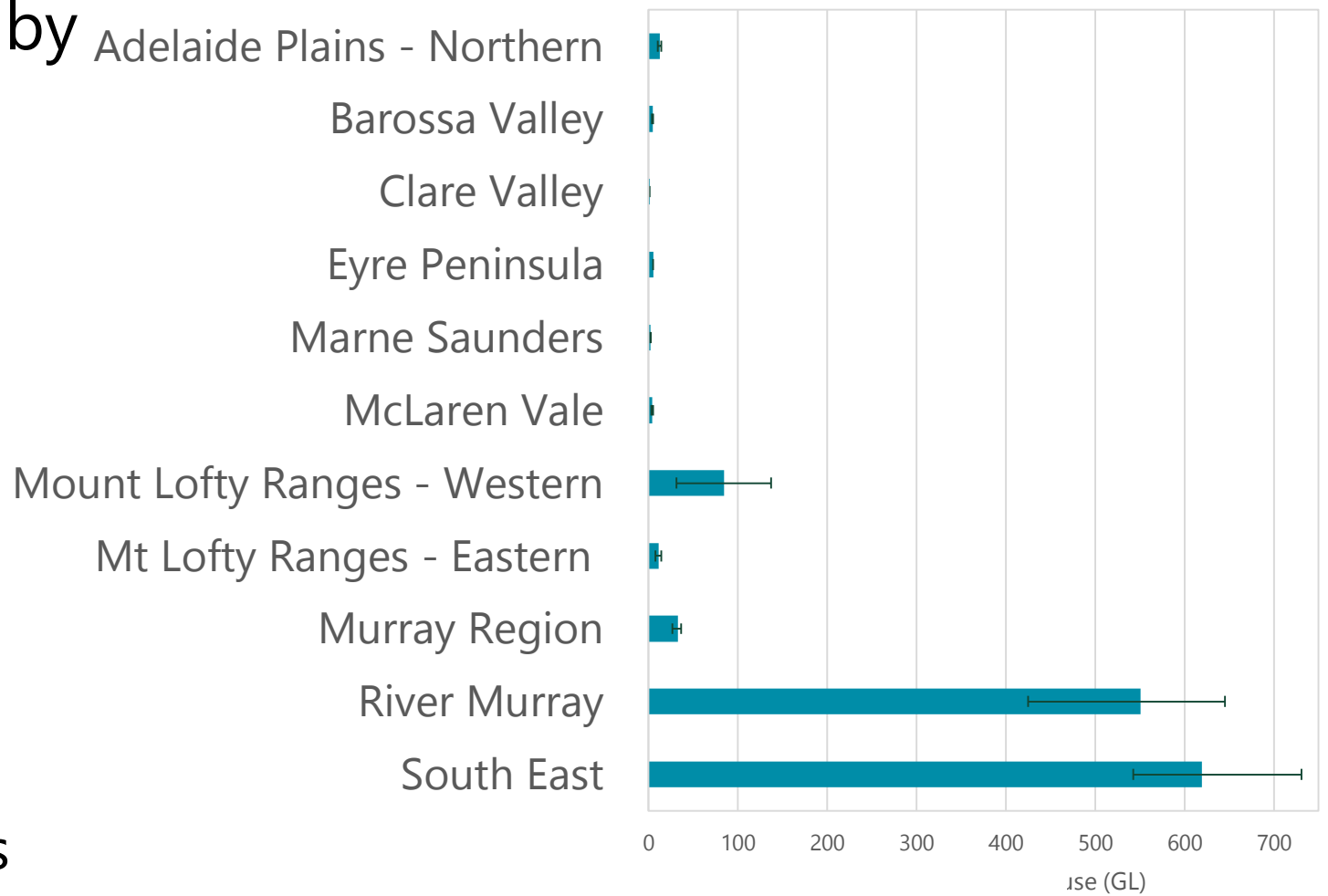
Water security is about having an acceptable quantity and quality of water for people, communities, industry and the environment that is affordable now and into the future.

- Water Security Statement:
  - Provides overview of water security status across SA
  - Opportunity to have water security conversations
  - Sets water security priorities out to 2024
  - *Water Industry Act 2012* requirement



# Water security in SA

- Water security profile varies by region based on:
  - water resources,
  - industries supported
  - investment in infrastructure
- Key challenges:
  - Recent extended drought
  - Climate change impacts
  - Growth in water demand
  - Fit for purpose local solutions
  - Cost of infrastructure (*CAPEX and OPEX*)



Average annual water use (GL)  
2015-16 to 2018-19

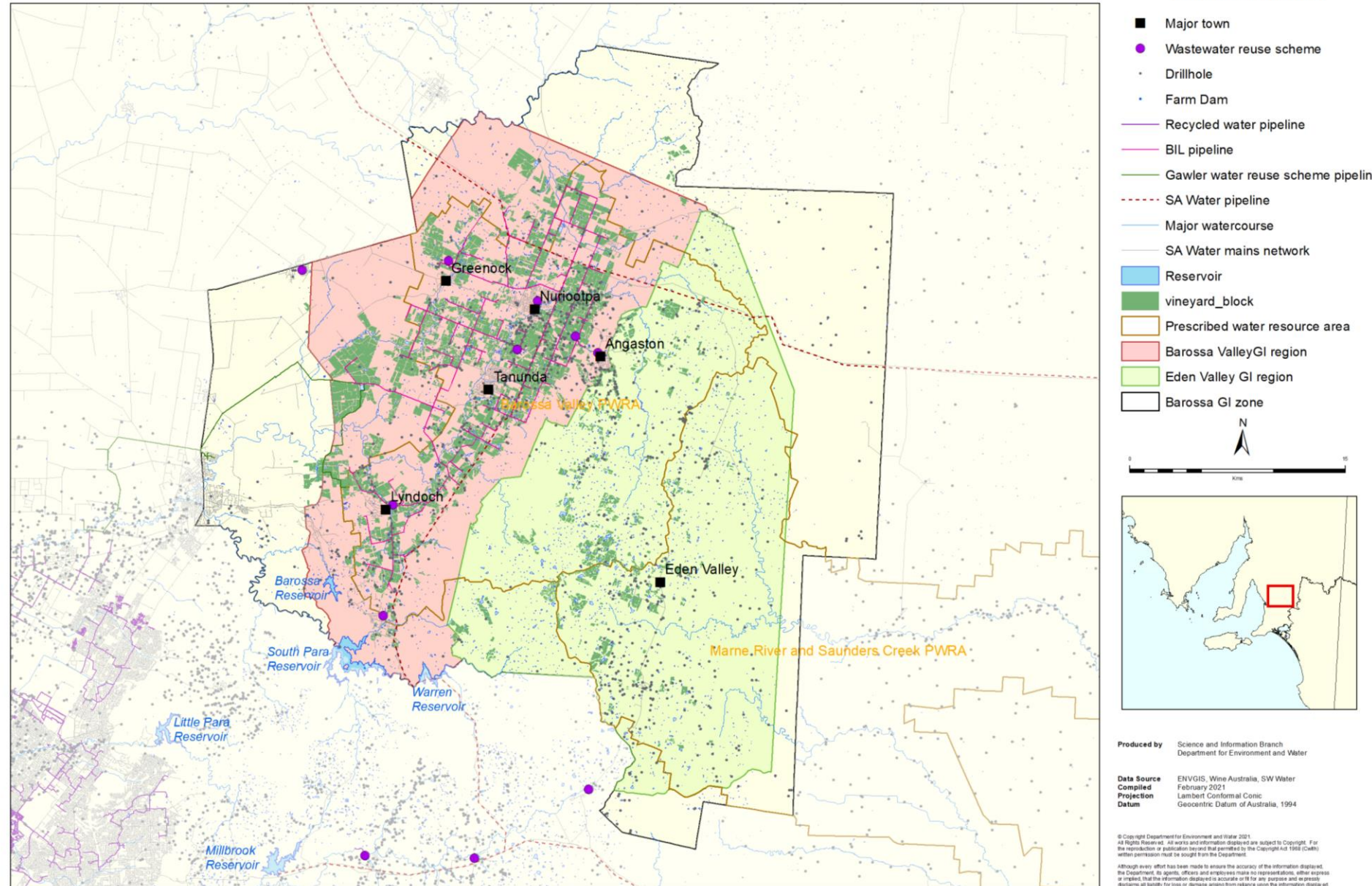
# Strategic priorities for water security

- 1. Climate resilience**
- 2. Water as an enabler of sustainable economic growth**
- 3. Ecologically sustainable water resource management**
- 4. Provision of critical human water needs**
- 5. Full implementation of the Murray-Darling Basin Plan**
- 6. Aboriginal water interests**
- 7. Integrated urban water management**
- 8. Innovation and competition in the water industry**
- 9. Data, analytics and insights for the digital water future**
- 10. Growing the South Australian water sector**

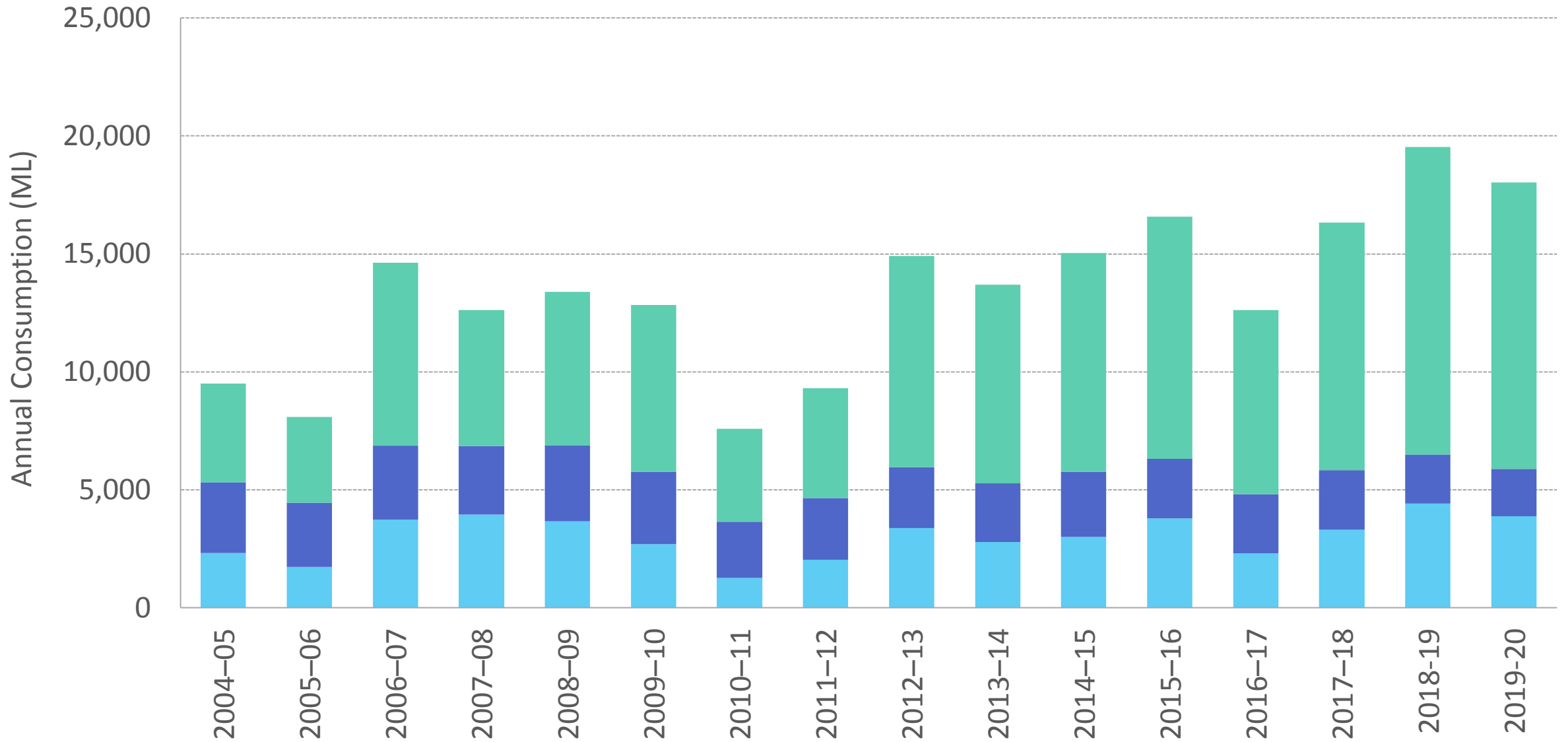


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# Barossa Water Security Strategy



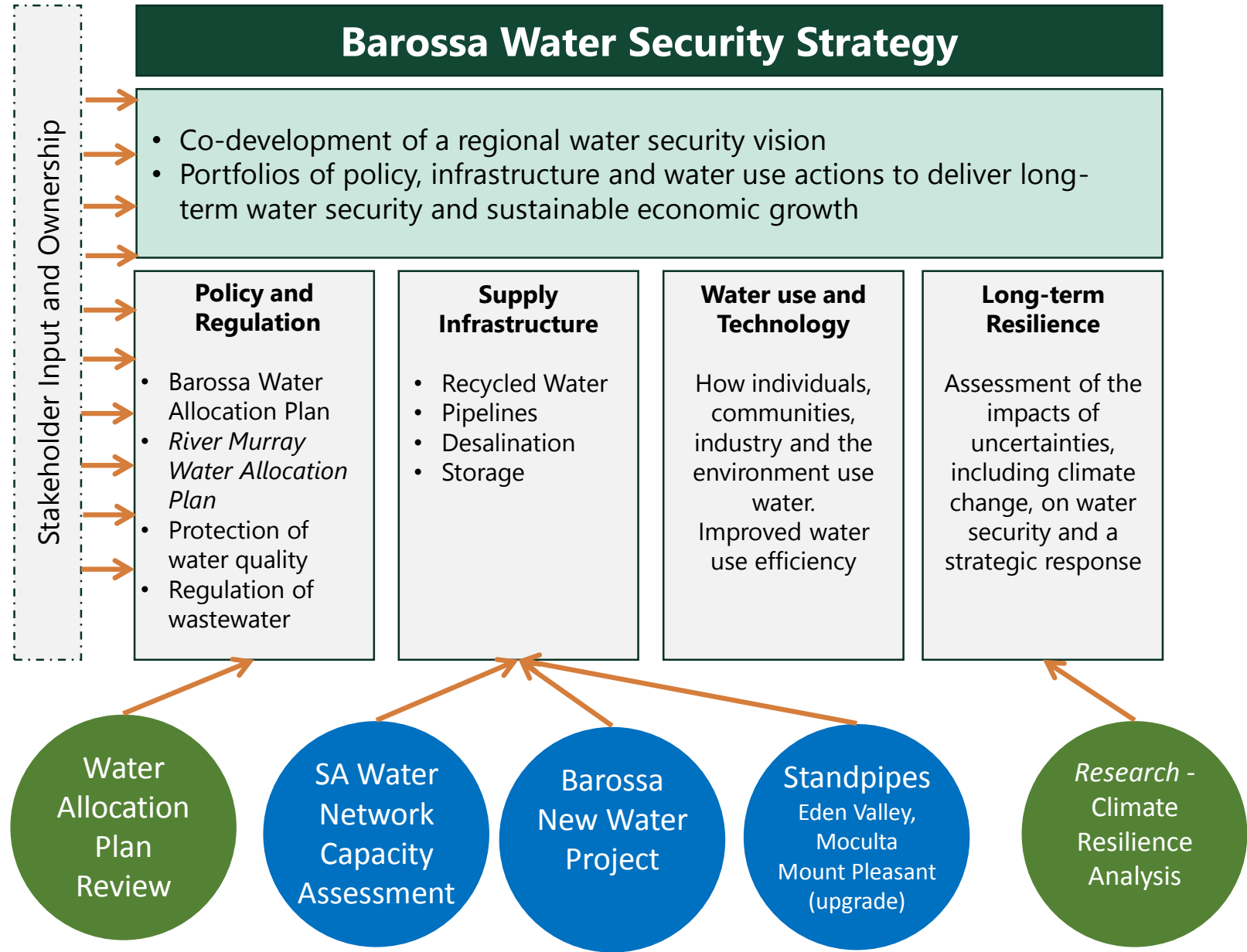
Groundwater      Surface water      Imported water - River Murray



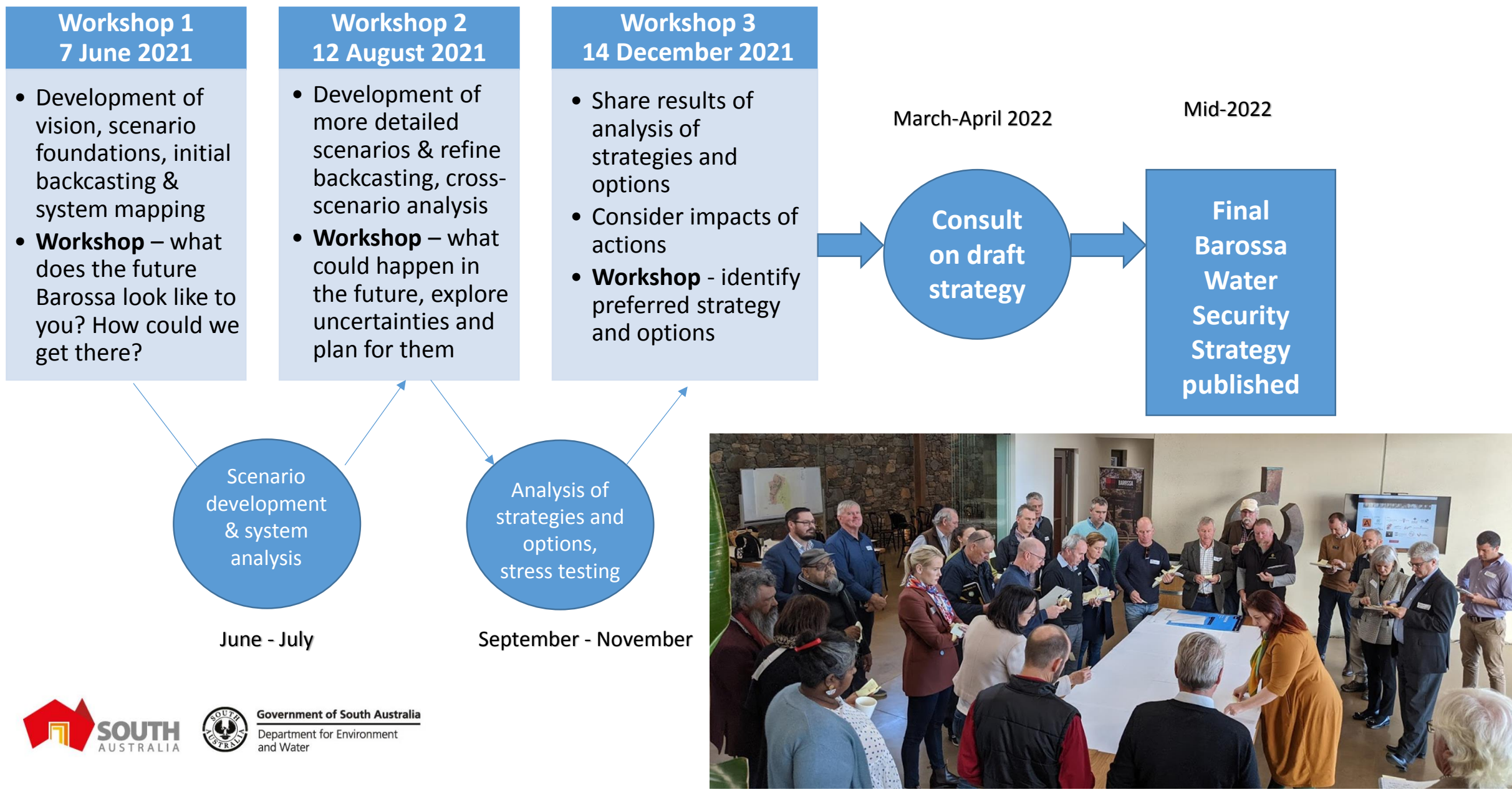
# Why a Barossa water security strategy?

- To ensure there is an acceptable quantity and quality of water for communities, industry and the environment that is affordable now and into the future.
- To complement “traditional” water allocation planning undertaken by government, and deliver solutions to water management challenges.
- To identify and support investment in enhanced water security outcomes.

- A 30-year time horizon
- A shared vision of water security
- Utilisation of scenarios to explore key uncertainties
- Pathways for the implementation of plausible actions
- Economic and hydrological analysis



# Process



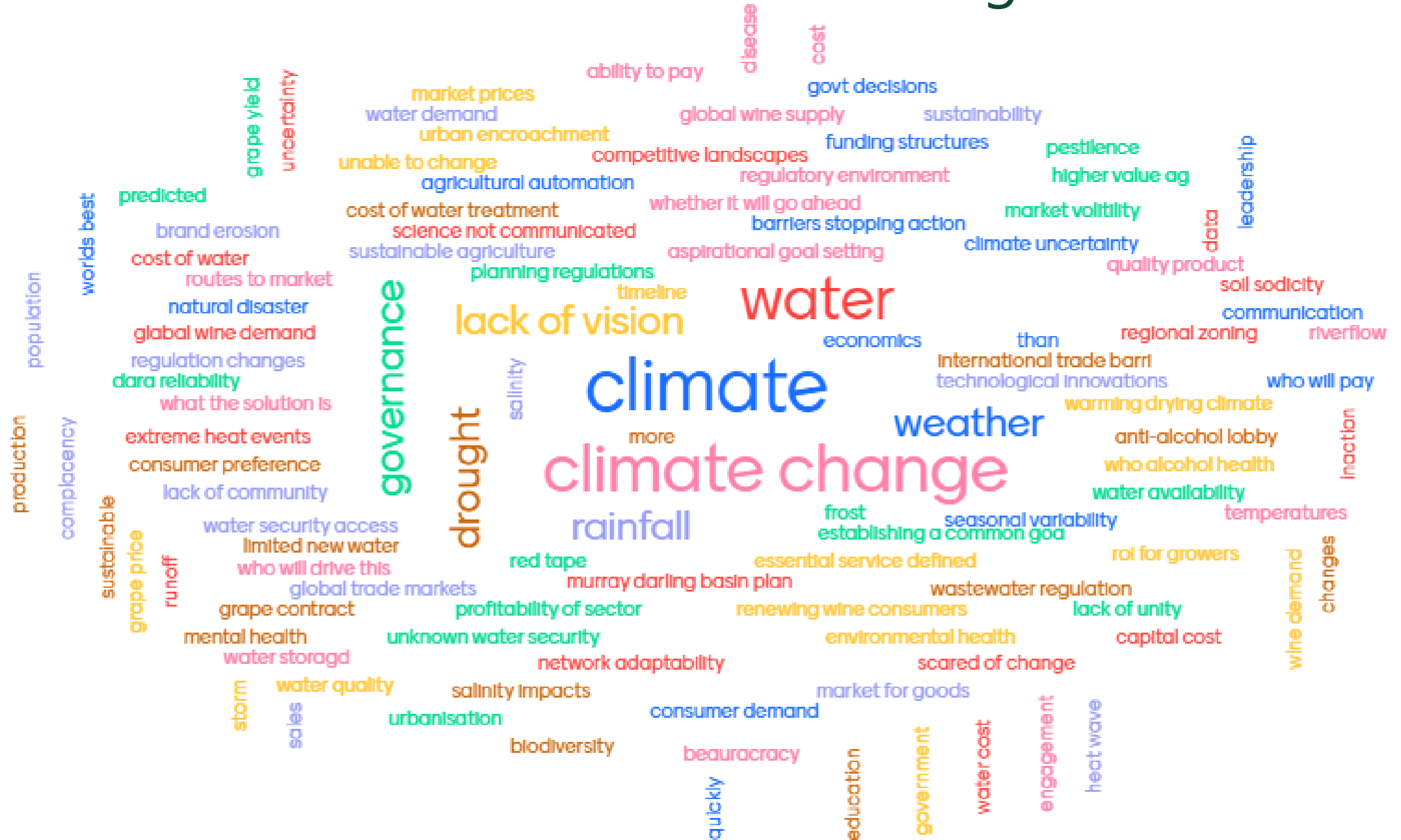
# Vision

Barossa is:

- an internationally recognised food, wine and agricultural region that supports diverse businesses, communities and ecosystems.
- underpinned by reliable long term availability of water (of acceptable price and quality), renewable energy, biodiversity and regenerative agricultural practices.
- strengthened by its unique Indigenous and non-indigenous cultural heritage.
- resilient and innovative - able to effectively adapt to future opportunities and challenges.

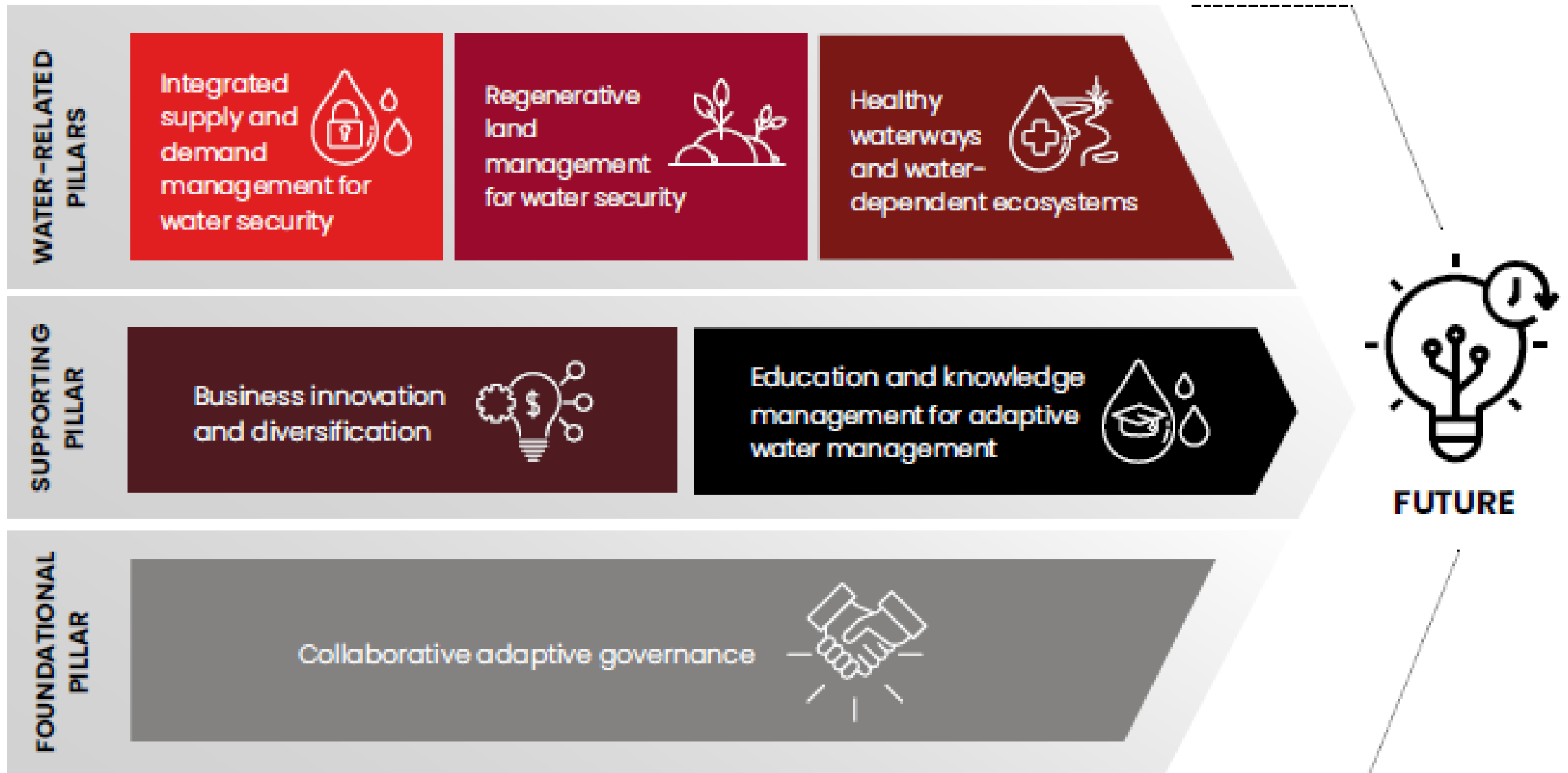


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# Impacts of climate change

- A mid-range estimate for the next 30 years is that there will be 6% less rainfall and 3.5% more potential evapotranspiration than a 1976 to 2005 baseline period.
- This would result in reduced streamflow and groundwater recharge and more variable seasonal climate conditions.
- Water security across the last decade provides a good guide to projected water security challenges projected under a mid-range 2050 climate change scenario.
- With no action to address water security the reliability of water for irrigation will decrease and environmental flows will decline.



# Water For Growth

- National Water Grid Authority
  - \$3.5 billion fund from Australian Government
- Infrastructure
  - Northern Adelaide Irrigation Scheme
  - McLaren Vale Treated Water Storage
  - Connections package – mid scale infrastructure
- Business cases
  - Northern Water
  - Barossa New Water, Eden Valley, Clare Valley

# Contacts and Further Information

[www.environment.sa.gov.au/topics/water/water-security](http://www.environment.sa.gov.au/topics/water/water-security)

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