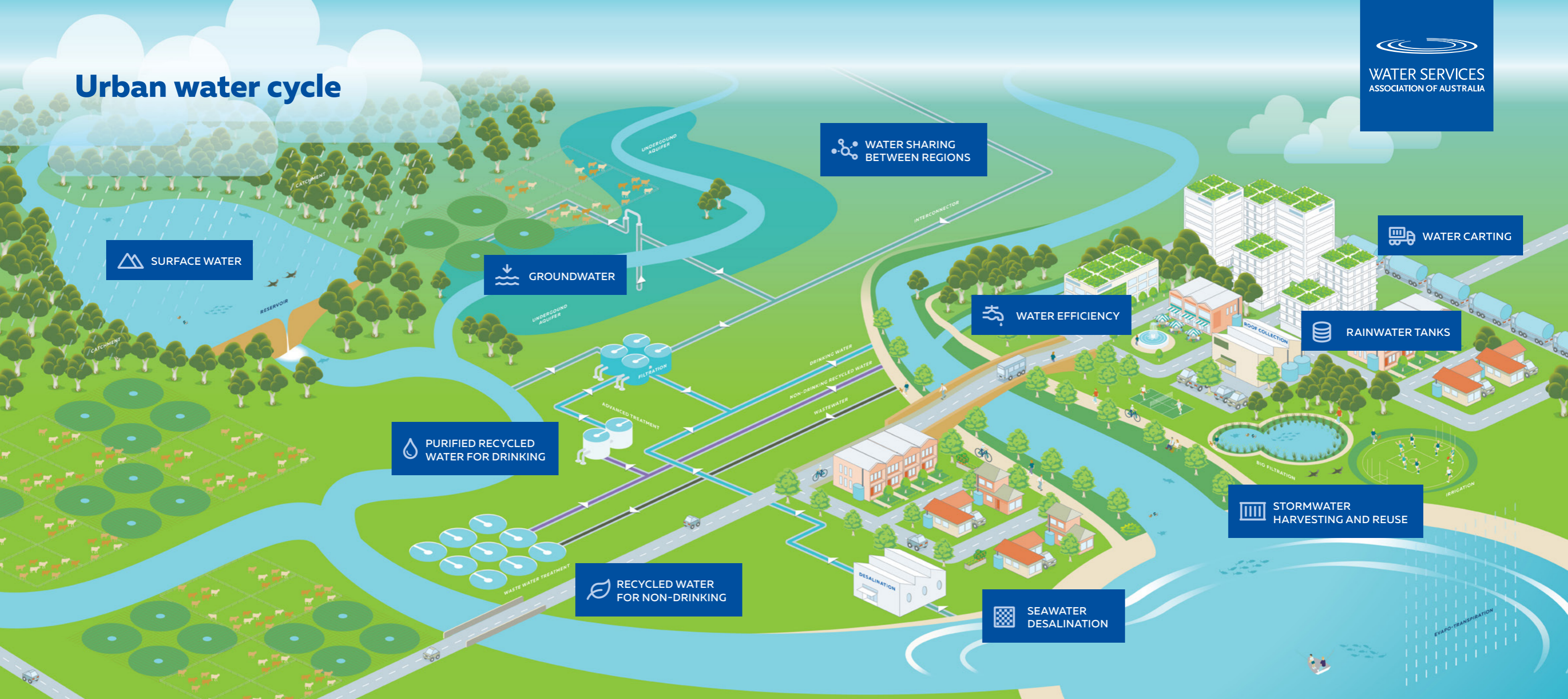


Urban water cycle



Groundwater

Can offer a relatively low-cost, reliable supply of water, even in times of drought. Involves wells to extract the water from groundwater aquifers and associated infrastructure to treat and transport the water.

Rainwater tanks

A water tank used to collect and store rain water runoff from a household rooftop via pipes, used for non-drinking water purposes. Can provide multiple benefits, eg. reduced demand on drinking water and liveability benefits.

Purified recycled water for drinking

Sourced from wastewater and stormwater treated to meet the Australian Drinking Water Guidelines through multiple levels of treatment and disinfection for drinking water use. A cost- and energy-effective option used by over 35 cities worldwide, eg. Perth.

Recycled water for non-drinking

Sourced from wastewater and treated to provide water for non-drinking purposes including irrigation, industrial and household uses. Reduces demand on drinking water systems, avoids discharge of wastewater to the environment.

Seawater desalination

Seawater treated to remove salts to create water suitable for drinking. Provides a cost-effective rainfall-independent source of water, while energy intensive many desalination plants are powered by renewable energy.

Stormwater harvesting and reuse

Collecting, storing and treating stormwater from urban areas for reuse for non-drinking purposes. Schemes provide multiple benefits to communities, including improving liveability and health benefits through the provision of green and blue infrastructure.

Surface water

Water is collected from rivers, dams and weirs and then treated and transported for drinking water. Is an important part of our existing water supply portfolio. Dams and reservoirs store water for future use, however are reliant on rainfall and are less resilient to climate change.

Water carting

Transporting small volumes of water (generally by truck) either within a catchment or between catchments. Is generally a high cost last resort option for water supply to communities, but can be viable for small remote communities.

Water sharing between regions

Pipelines connecting two or more major water sources to transport water from one catchment to another. Allows water supply in a region to be optimised by moving water between catchments and to communities with less water.

Water efficiency

Projects to reduce water use, including the supply of water efficient appliances, leak repairs, and behaviour change. While not a source of water, using water wisely will always be part of the water security equation in Australia.