

Waterproofing Northern Adelaide

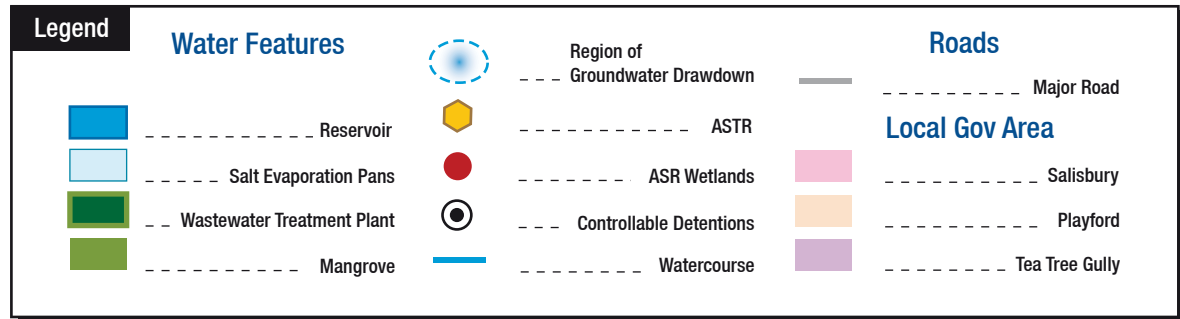
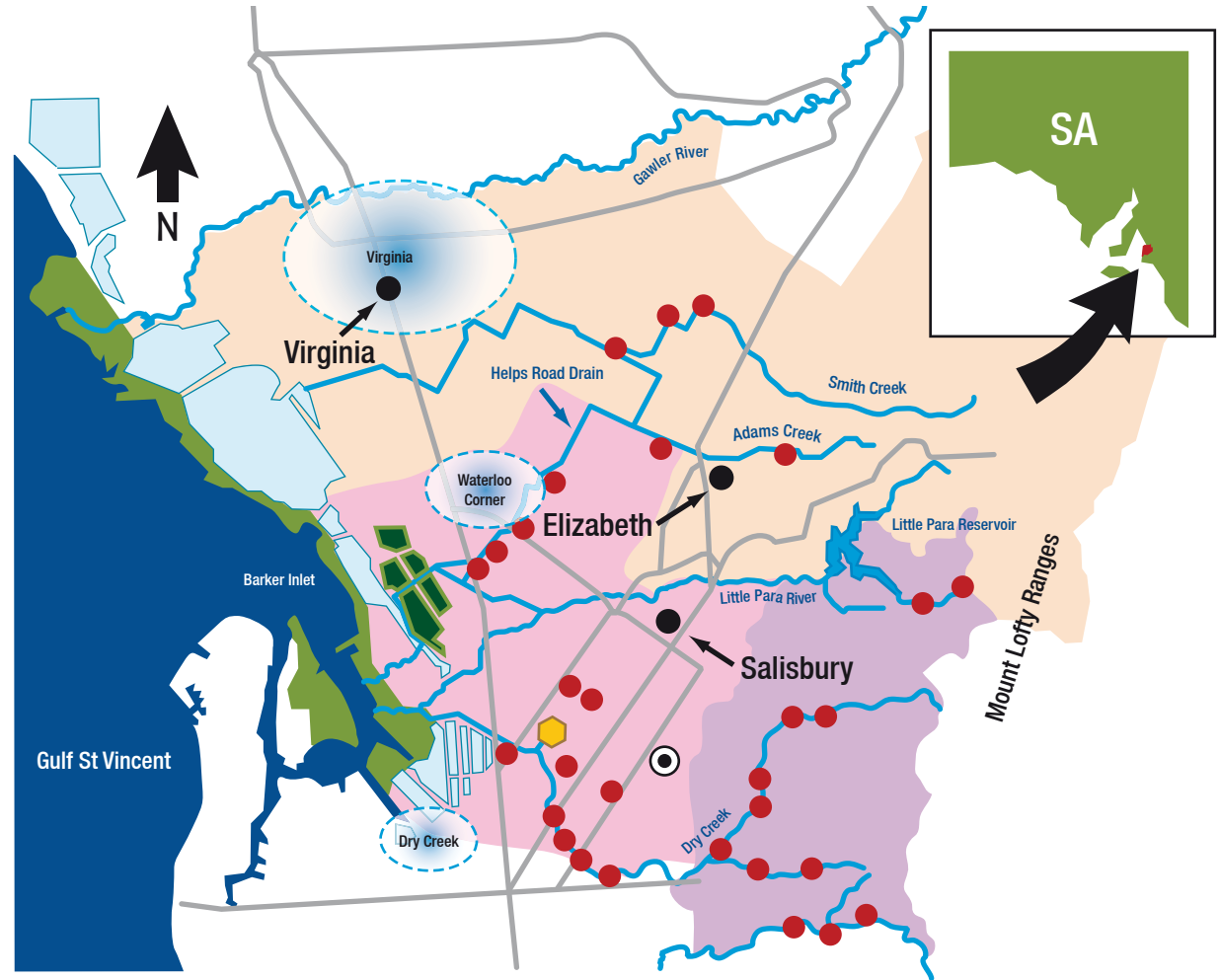
This project will integrate stormwater, groundwater, wastewater and drinking water systems in the Northern Adelaide Plains region of South Australia and will include;

- the capture and cleansing of stormwater in urban wetlands, aquifer storage and recovery (ASR) and distribution of water for the irrigation of public spaces, and for industrial use;
- an aquifer storage, treatment and recovery (ASTR) trial to be undertaken by the CSIRO to determine optimum practices of storage and recovery to treat water to drinking quality standards;
- the trialing of a system to utilise domestic rainwater tanks to harvest water and release it for community reuse; and
- hydrological modeling to predict the annual average runoff from regional catchments to enhance regional water management.

12.1 gigalitres per year of drinking water currently used for industrial and urban irrigation will be replaced with treated stormwater drawn from the Northern Adelaide Plains groundwater system. This will reduce the region's dependence on drinking water by six per cent.

The project will also substitute 1.2 gigalitres per year of water currently sourced from stressed groundwater systems and recharge five gigalitres per year to the local overused and over allocated groundwater.

The additional recharge to the groundwater will return the Dry Creek, Virginia and Waterloo Corner regions of groundwater drawdown to sustainable levels. The reuse of stormwater will reduce the ocean outfall through Barker Inlet by 20 gigalitres per year, and reduce pollutants entering the ocean by 40 tonnes per year.



Australian Government
National Water Commission

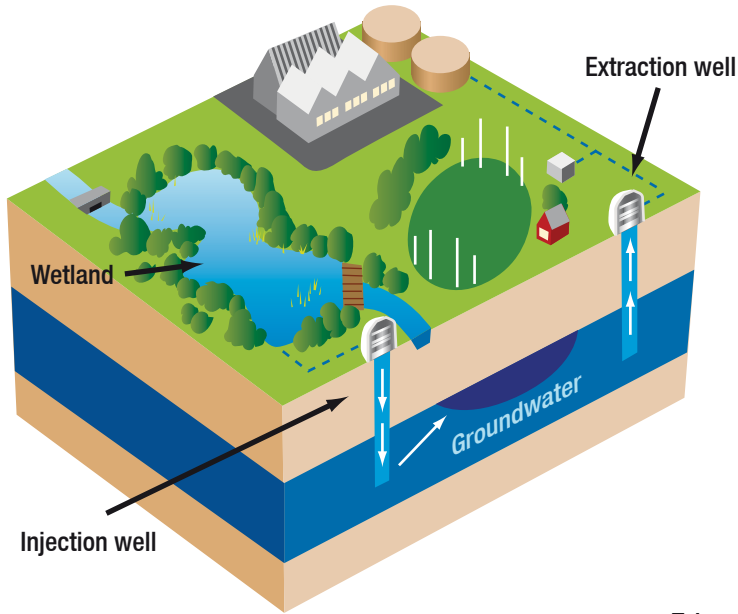
Waterproofing Northern Adelaide
Regional Subsidiary





Waterproofing Northern Adelaide

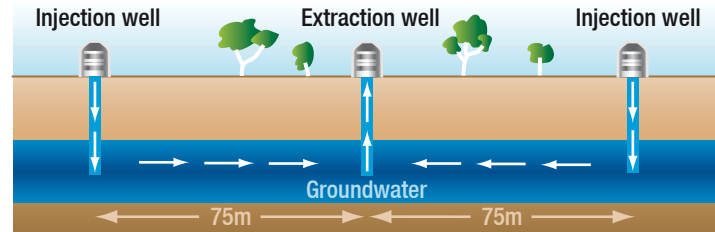
Aquifer Storage and Recovery (ASR)

Capture and cleansing of stormwater in urban wetlands, injection into the groundwater and extraction of groundwater for irrigation of public spaces and industrial use.



-  - - - - Existing groundwater levels
-  - - - - Recharge to raise stressed groundwater to sustainable levels

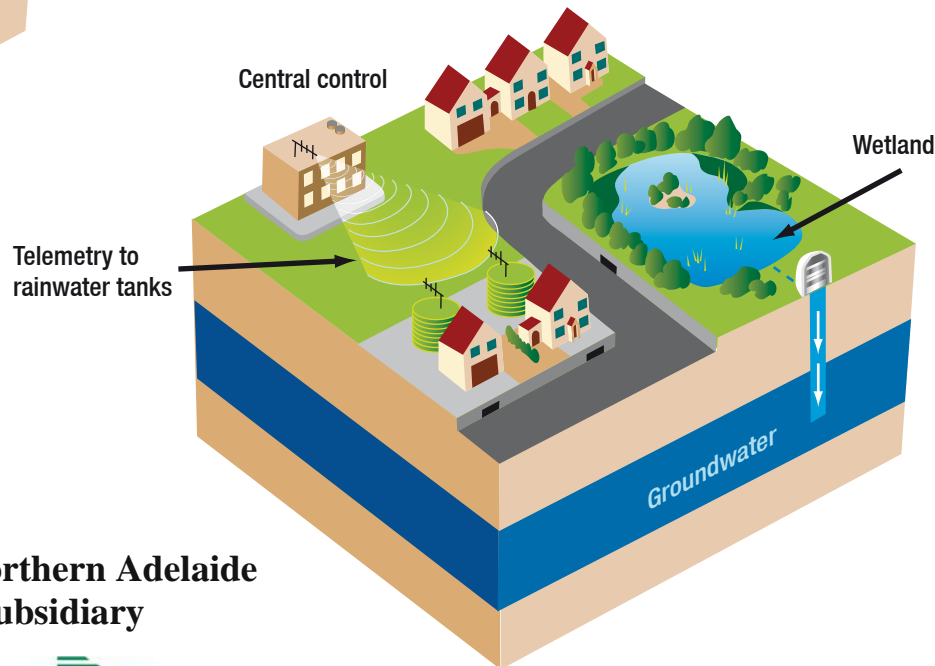
Aquifer Storage, Treatment and Recovery (ASTR)



An aquifer (groundwater) storage, treatment and recovery trial to determine optimum practices for using groundwater to treat stormwater to drinking water standards.

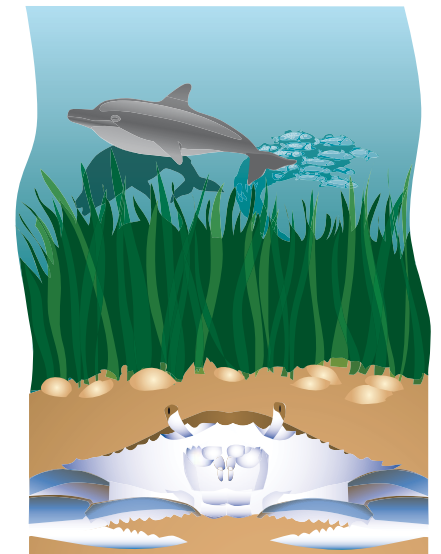
Controllable Detentions

Trialing of a system to utilise domestic rainwater tanks to harvest water and release it through stormwater drains into wetlands for aquifer storage, recovery and reuse.



Ocean Ecosystems

The reuse of stormwater in the region will reduce pollutants entering the ocean. This will help to preserve ocean ecosystems including fragile seagrass communities.



Waterproofing Northern Adelaide Regional Subsidiary