



# Water banking: insurance against drought

## The next drought is coming.

The challenge for Australia is that climate is expected to become more extreme. But we have solutions to prepare us.



Australia generally has a hot and dry climate and is prone to droughts. These droughts are projected to be more severe and frequent in the future.

## What is water banking?

Storing water underground in natural reservoirs.

Excess water is stored when available for future use during drought. Sourced from rain water or via recycled wastewater.

Also known as **managed aquifer recharge**

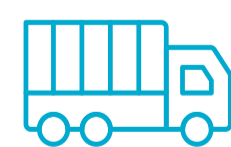
## Why bank water?



Communities and industries, like agriculture, need greater water security.



Water can be stored long-term for drought supply.



Avoid expensive and timely water cartage when regular water sources dry up.



Manage water storage safely to reduce impacts to the environment.

## How much does it cost?

Our recent study shows it can be cost-effective, with variation depending on the system applied.

**\$0.05/kL** ▶ **\$0.48/kL**  
Cheapest Most expensive

We have modelled a range of scenarios to bank surface water and the costs involved. Average costs are based on 2-3 different scenarios.<sup>1</sup>

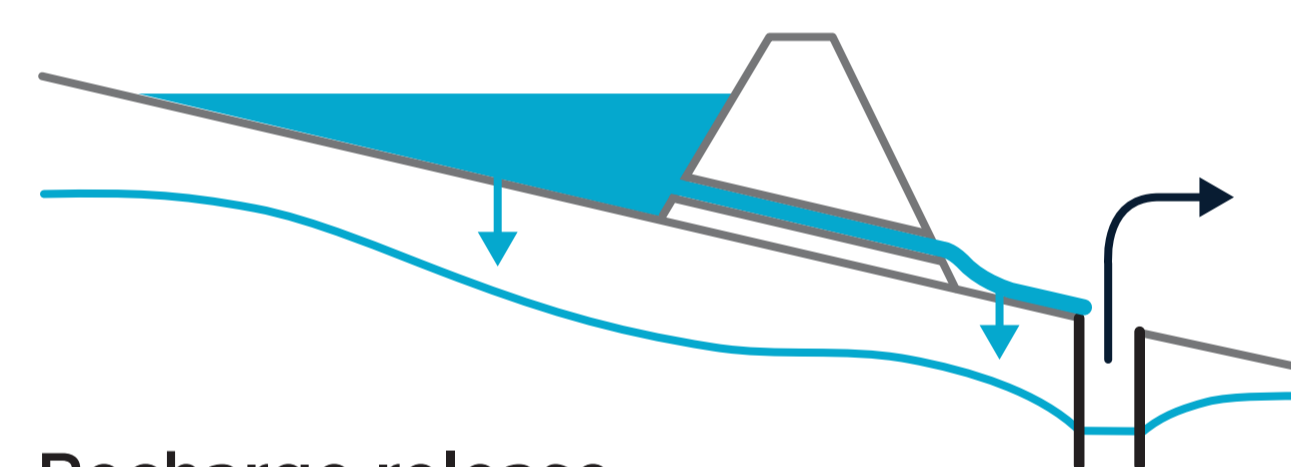
## Opportunities in Australia

Water banking is suitable in a range of geographical settings.

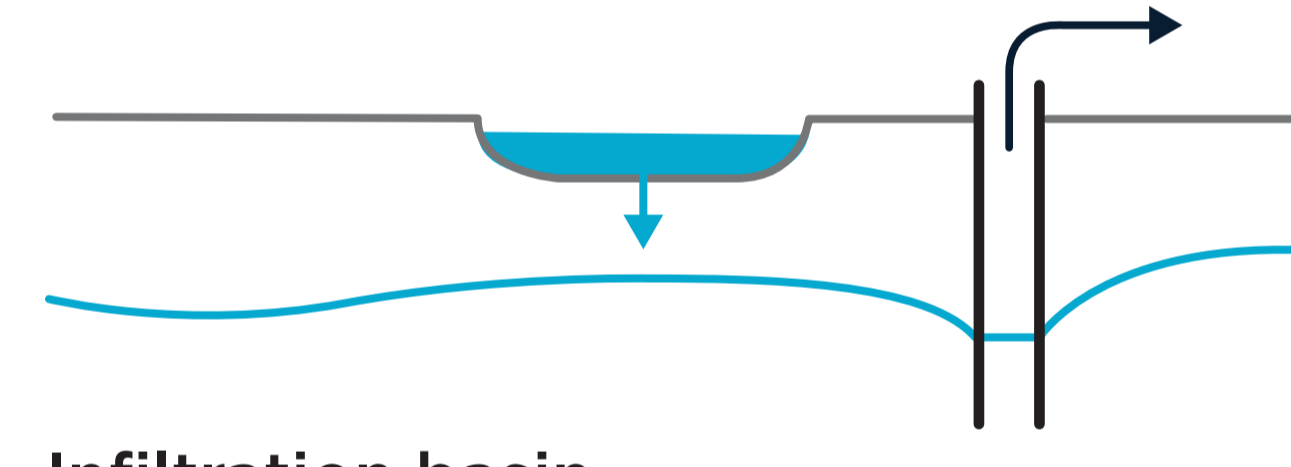
For example, we identified 4km<sup>3</sup> of potential storage opportunities in the Murray-Darling Basin.<sup>2</sup>



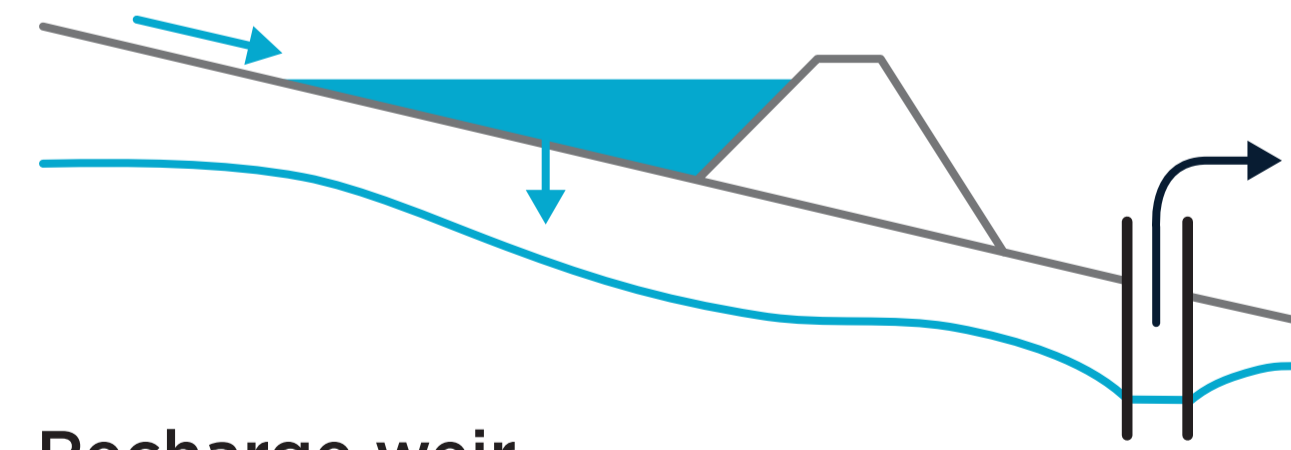
## Indicative costs for different systems



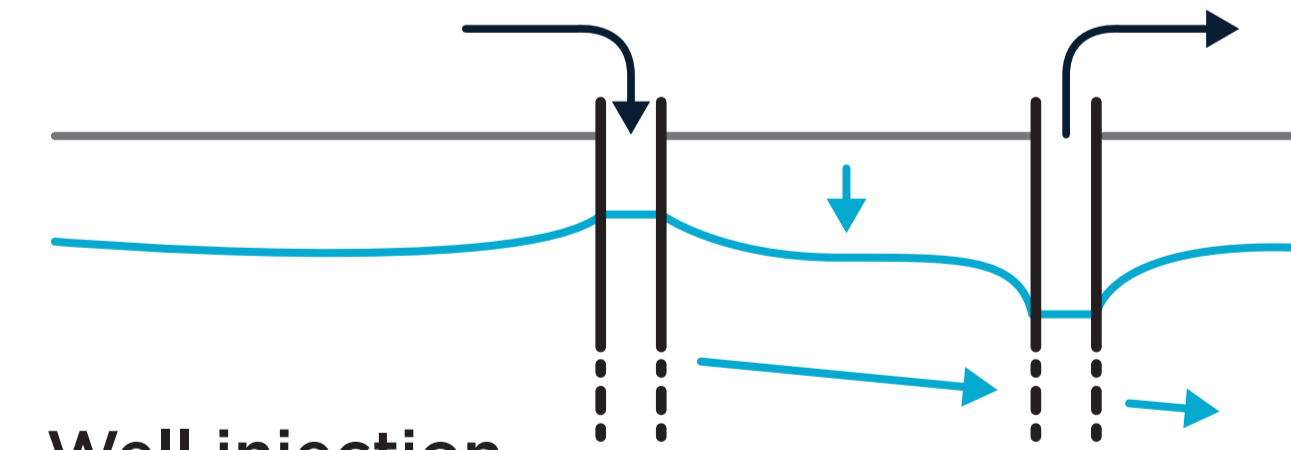
**Recharge release**  
\$0.06/kL Levelised cost  
Low Capex, Low Opex, 14% Opex/Capex



**Infiltration basin**  
\$0.10/kL Levelised cost  
Med Capex, Low Opex, 4% Opex/Capex



**Recharge weir**  
\$0.20/kL Levelised cost  
Med Capex, Low Opex, 4% Opex/Capex



**Well injection**  
\$0.30/kL Levelised cost  
High Capex, High Opex, 4% Opex/Capex

## Our R&D focus

- We look at how best to store water underground.
- Understanding and mitigating risks so water is safe for people and the environment.
- Tailored solution to the need and location.
- Securing demonstration sites.

