Portfolio 2
Climate independent
(upfront capacity)

love water use it wisely

Central Coast Council

This portfolio is the same as portfolio 1 with one slight difference - the desalination plant will provide 30 megalitres of water per day, instead of 20 megalitres of water per day. The benefit of this approach is that the water supply scheme would also be capable of meeting the majority of demand if a severe and prolonged drought were to occur. A higher capital cost would also occur when the plant was first constructed.

This portfolio includes:

- Water conservation
- Groundwater
- Recycled water (for non-drinking purposes)
- Purified recycled water
  - 6 megalitres per day
- Desalination
  - 30 megalitres per day production capacity.
  - The desalination plant operating triggers (on/off) would be set to manage time in restrictions and water security risks.
  - The operating triggers can then be increased as demand continues to grow to manage time in restrictions and water security risks.

Environmental impacts

- Low/medium impacts on natural biodiversity
- High energy use, however, we have included offsets for greenhouse gas emissions for desalination to manage this impact.
- Less treated wastewater released to ocean outfall

Social impacts

- Purified recycled water for drinking is a new technology for the Central Coast, and the community will likely have an interest in the process and its reliability, and safety
- Low cultural and heritage impacts
- There will be some temporary disruption for local residents during construction of pipelines and treatment plants

Reliability and system resilience

- Desalination and purified recycled water:
  - do not rely on rainfall which increases the reliability of our supply system
  - improves the diversity of our water sources and the resilience of our system
  - are adaptable to be upgraded over time and provide flexibility to respond to a long and severe drought if required

Cost

- The estimated average incremental cost for this portfolio is $214 per kilolitre. This is the total cost of the portfolio on a kilolitre basis across a 40 year period.
- This includes both upfront costs to build and ongoing costs to operate the new assets across the 40 year period.

Drought management plan

- As this portfolio uses the same technology as the emergency drought supply it means we can respond to a long and severe drought simply by bringing forward the construction of the next stage of the desalination plant. This means that the requirements of the drought management plan (if triggered) will be lower if this portfolio is implemented, compared to other portfolios

Low social impact

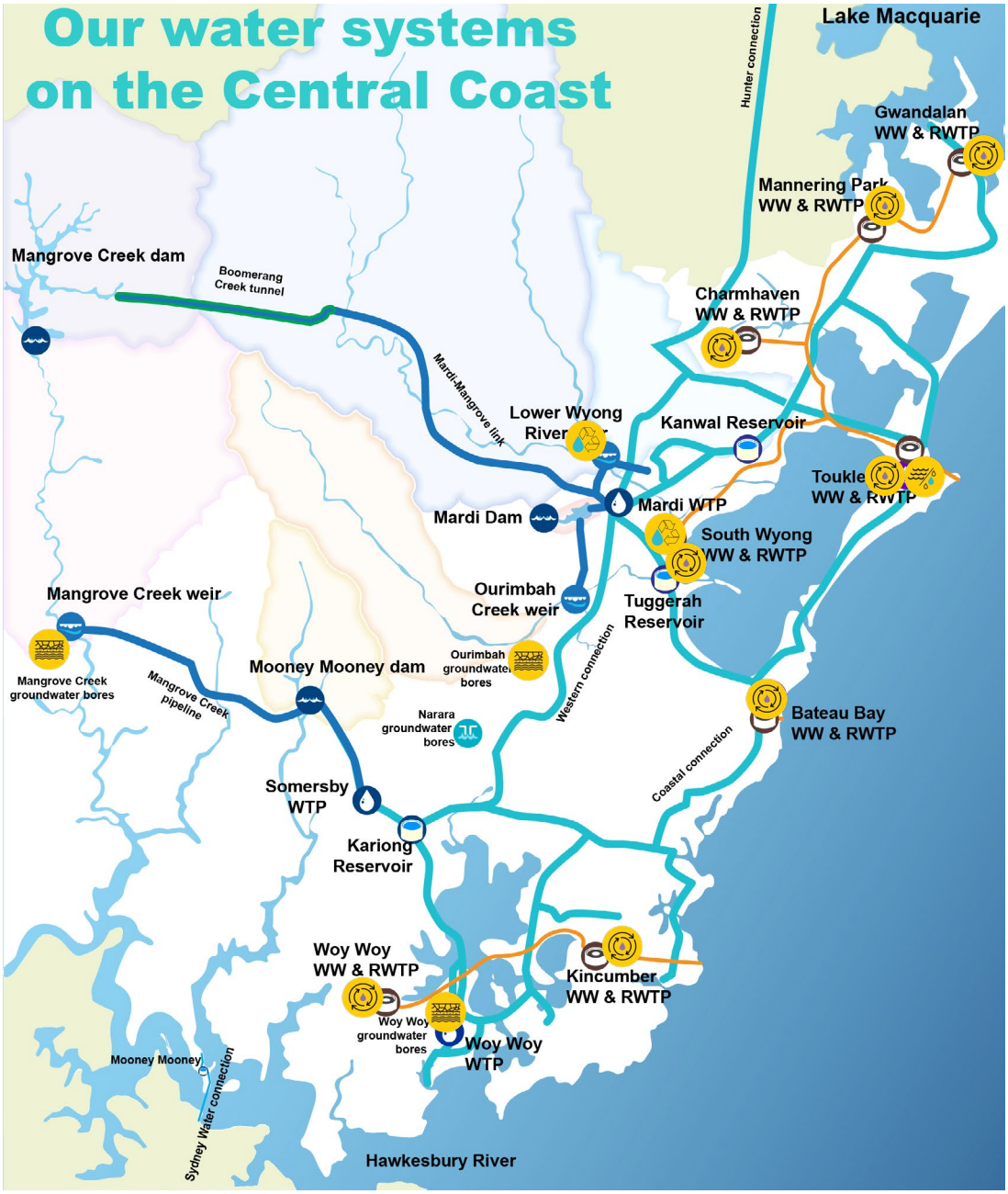
Medium environmental impact

Very reliable supply

Capital Cost ($)

Water conservation	Groundwater	Recycled water (non-drinking)	PRW	Desalination
Not currently costed	$0.48M	$6.6M	$48M	$230M

$2.14/KL



For more information on how we are planning our water future on the Coast visit
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