Portfolio 4

Enhanced water sharing with Hunter Water Corporation





This portfolio includes:

- Water conservation
- Groundwater
- Water sharing between regions
 - Increase water sharing capacity with Hunter Water Corporation (up to 60 megalitres per day)
- Dam enlargements
 - Enlarge Mangrove Creek Dam by 80 gigalitres of storage
- Recycled water (for non-drinking purposes)

Environmental impacts

- Impacts on terrestrial and aquatic biodiversity in and around dam area
- Medium energy use and associated greenhouse gas emissions (unless they are offset)

Social impacts

- Potential Indigenous and European cultural heritage impacts in the dam area based on preliminary investigations to date
- Some temporary disruption for local residents during construction of pipelines

Reliability and system resilience

- Recycled water does not rely on rainfall which increases the reliability of our supply system
- Water sharing with Hunter Water Corporation and recycled water improve the diversity of our water sources and the resilience of our system

Cost

- The estimated average incremental cost for this portfolio is \$3.51 per kilolitre*. This is the total cost of the portfolio on a kilolitre basis across a 40 year period.
- Opportunities exist for cost sharing with Hunter Water Corporation due to joint benefits that would reduce costs.
- This includes both upfront costs to build and ongoing costs to operate the new assets across the 40 year period.
- The incremental cost for this portfolio is heavily affected by high estimated biodiversity offset cost associated with raising Mangrove Creek Dam.

Drought management plan

 As the options within this portfolio are generally climate dependent (e.g. a dam relies on rainfall for it to fill up), this portfolio offers no added benefit to our drought management plan (in the event of overlapping drought in Hunter and Central Coast), which means in a prolonged and extreme drought we will still have a large drought management gap to fill with additional investments in desalination.



Medium social impact



High environmental impact



Reliable supply

Capital cost (\$) Water conservation Groundwater Sharing water Dam enlargement (non-drinking) \$0.5M \$0.5M \$357M \$6.6M

\$3.51/KL

