

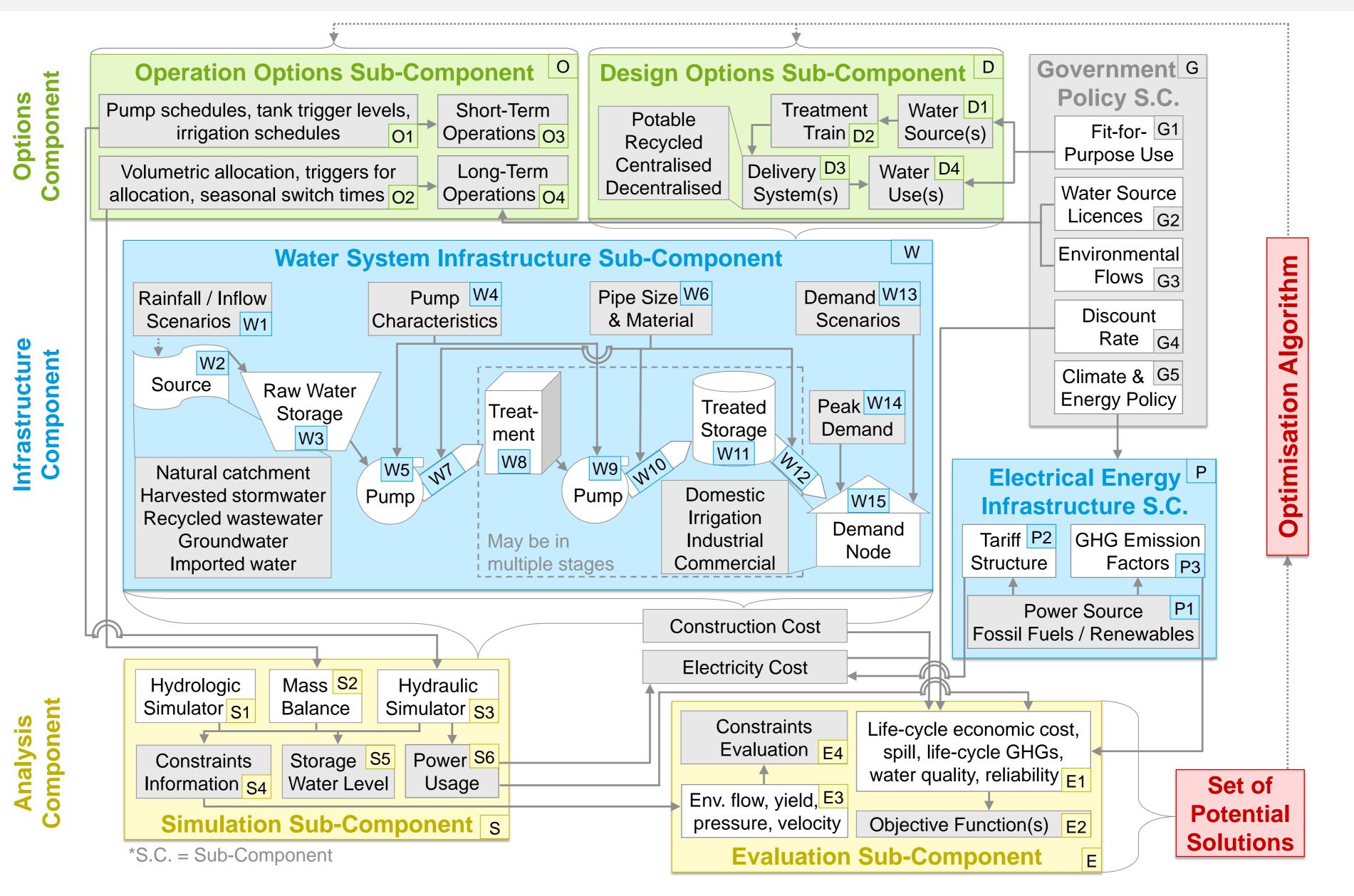


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Program C: Future Technologies Project C.5.1: Intelligent Urban Water Networks

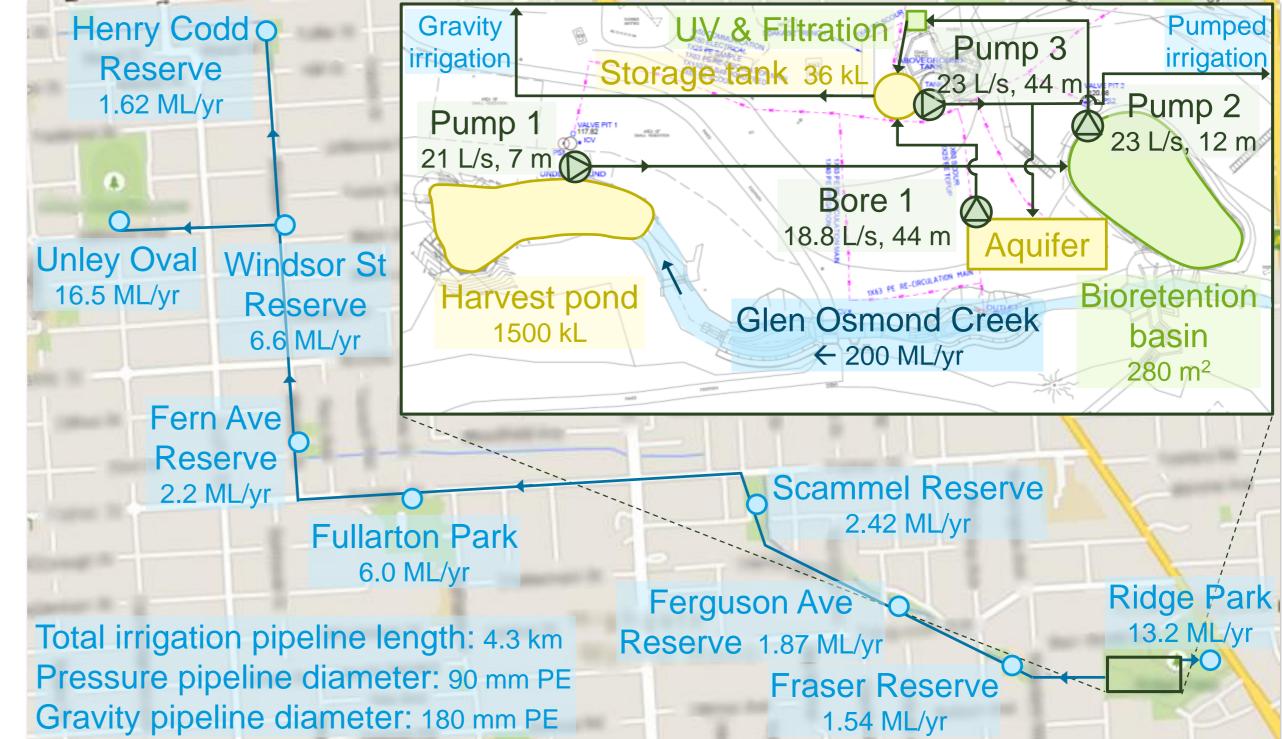
Pumping Operations of Alternative Water Supplies

Optimisation Framework



Case Study System

- Ridge Park, Unley, South Australia
- Harvested stormwater scheme
- Target harvest of 60 ML/year
- Winter: water is harvested and injected into a fractured rock aquifer
 Summer: water is recovered and used to irrigate recreational parks and reserves
 Operation options: trigger levels for pump stations, irrigation schedule, switch time between storage and recovery
 Design option: to resize the storage tank
 Irrigation system modelled in EPANET over one week in ten minute increments
 Harvesting system modelled in EPANET over six months in daily increments
 Objective: minimising energy costs







Business Cooperative Research Centres Programme