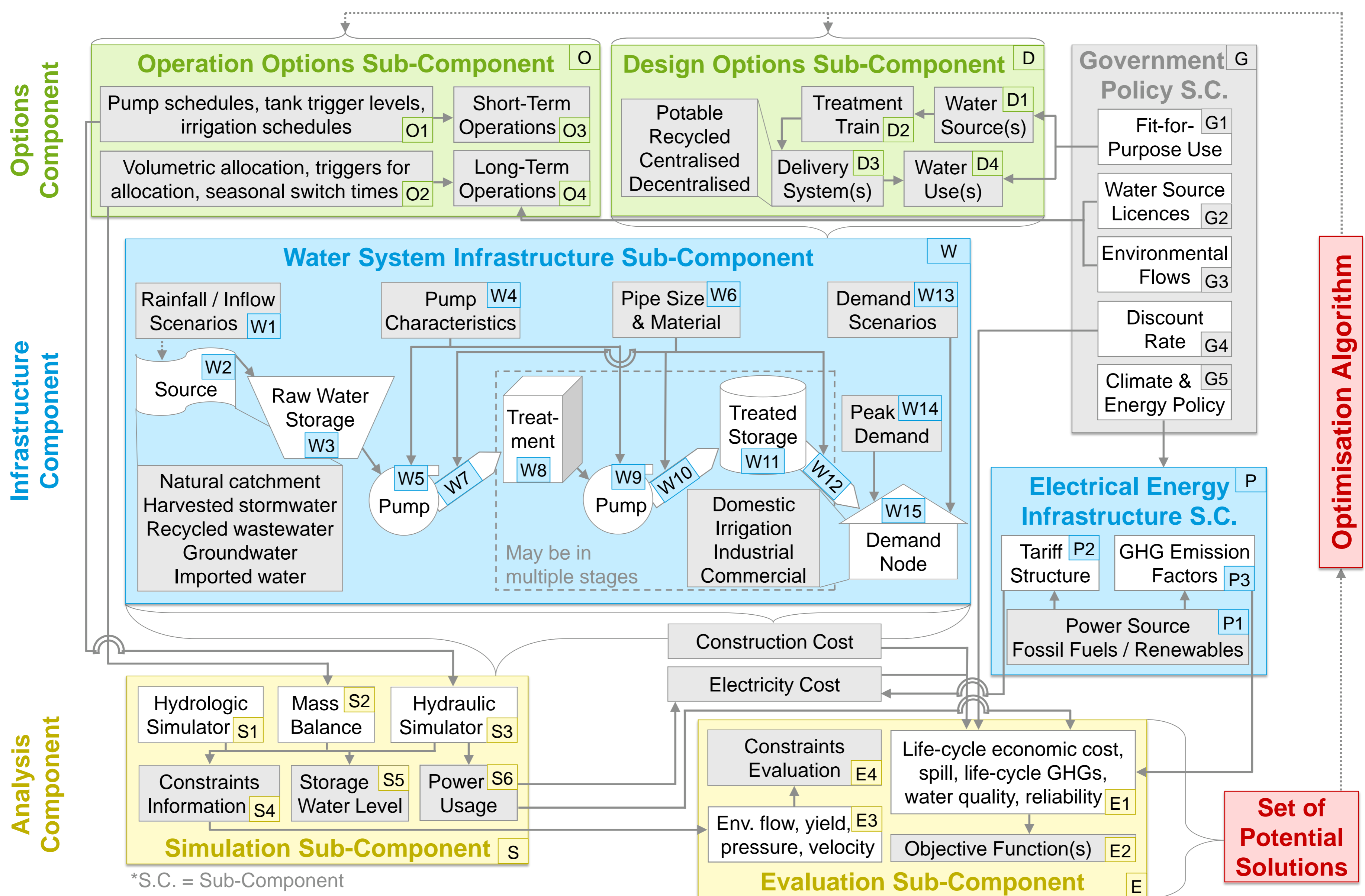




Pumping Operations of Alternative Water Supplies

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

