

Capability Statement Water Cycle Management



Capabilities

- Whole of life cycle analysis and design
- Water Efficiency Management Plans (WEMP's)
- Water Sensitive Urban Design (WSUD)
- Integrated Water Cycle Management Plans (IWCMP's)

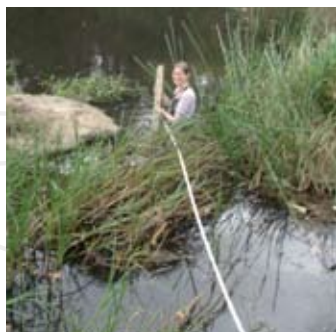


Overview

As pressure on our natural resources increases, integrated strategies to manage the water cycle are being recognised as crucial to the long term sustainability of developing areas. Integrated Water Cycle Management (IWCM) is a collection of targeted strategies aimed at securing water sustainability. Environmentally sustainable outcomes are achieved through consideration of environmental, social, technical, economic, financial, health and biodiversity issues. While ideally considered in the initial stages of proposed developments, this approach may also be retro-fitted to improve the performance of existing residential, commercial, industrial or agricultural schemes.

WSUD

Water Technology offers a comprehensive Water Sensitive Urban Design (WSUD) service. Through involvement in the design

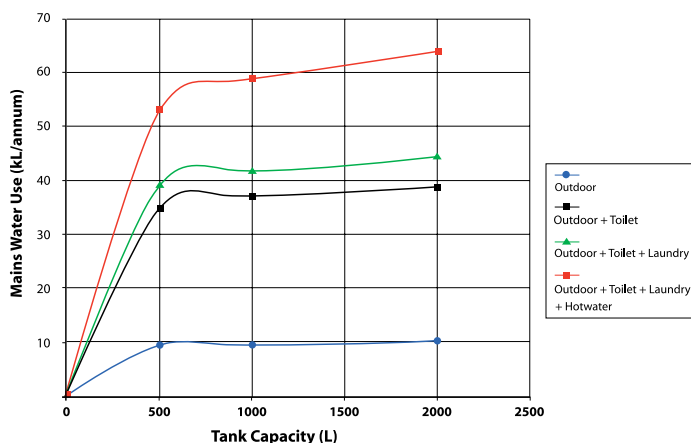


development process from the initial concept design stage, a comprehensive set of water quality treatment works may be incorporated into residential or commercial developments in order to achieve higher levels of sustainability, exceed receiving water quality targets and add value to the development itself.

A whole-of-system appreciation of catchment management and water quality issues is required to provide appropriate solutions to water quality problems in the aquatic environment. With this goal in mind, our staff possess the specialist skills and experience required to incorporate the most appropriate best practice stormwater management techniques in a treatment train approach.

WEMP

Water Efficiency Management Plans (WEMP) are increasingly employed around the country in the current drought conditions and are mandatory for moderate to major water users in South East Queensland.



Water Technology staff have extensive experience with all stages of the water cycle as applied to residential, commercial, industrial, mining, agricultural operations, demand minimisation, stormwater harvesting and the use of grey and treated waste water.

Several Water Technology staff are accredited Water Efficiency Assessors with the Queensland Water Commission at the highest levels - WE3 (Outdoor Water Use) and WE4 (Process Water Use which includes WE1 residential).

Water Technology have developed and maintain a sophisticated suite of modelling tools to simulate all stages of the water cycle at time scales from minutes to decades, and spatial scales from individual lots up to catchment scale. Such simulations may include consideration of complex processes or highly variable supply/demand relationships by using either observed historic conditions, or a statistical ("Monte Carlo") approach.

