Capability Statement
Urban Drainage & Stormwater Management

WATER TECHNOLOGY
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Capabilities

- Investigation of existing drainage systems
- Drainage augmentation options analysis
- Flood Mapping including extent, depth, hazard and planning maps
- Urban Hydrology
- State-of-the-Art numerical modelling of pipe, channel and surface hydraulics
- Flood mitigation studies
- Stormwater Management Strategies for new and existing urban development
- Expert WSUD design and MUSIC modelling services
- Water Quality investigations and monitoring
- Wetland design and analysis
- Urban Lake design and analysis including detailed model studies
- Golf Course waterway design

Overview

Despite our size and relatively small population, Australia has a very urbanised population concentrated around the capital cities and main provincial centres. Two significant trends are occurring in our cities, consolidation and increased density of development within older established suburbs as well as continued urban expansion in the outer fringe. These patterns of development place increased pressure on existing infrastructure.

Drainage and stormwater management systems are a critical component of this urban infrastructure as they interface our urban environment with the natural surface water environment. The management of these systems increasingly requires the ability to merge technical engineering skills with an awareness of the issues of environmental value and sustainability.

Water Technology is one of Australia's leading water sector consultancies offering a comprehensive range of services to both government and private industry clients. Our staff provide the understanding and technical skills necessary to meet the specialised engineering and environmental challenges faced within the urban stormwater field. We combine leading edge technology with outstanding project experience to deliver economic and environmentally sustainable solutions.

Selected Projects

Fairway Waters Pakenham

Client: Premier Places Pty Ltd

A conceptual stormwater management plan was provided in line with planning requirements. This included conceptual artificial wetland design in harmony with the development aesthetics as well as providing on-site stormwater detention and treatment.

Catherine Avenue Drainage Mitigation Study

Client: City of Kingston

A detailed hydrodynamic pipe and surface drainage model was established and used to develop innovative flood mitigation strategies providing cost-effective solutions for a low-lying and problematic drainage area.

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Glen Waverley Main Drain Flood Mapping and Mitigation Study

Client: Melbourne Water

Detailed numerical modelling including dynamic pipe and two-dimensional overland flow analysis was performed. Detailed flood maps were developed along with the investigation and costing of flood mitigation options.

Gardiners Creek Flood Mapping Study

Client: Melbourne Water

An extensive one-dimensional hydraulic model was developed for one of the major urban streams in Melbourne. Flood Mapping and GIS analysis was performed to produce data-sets for Melbourne Water's online flood information database.

Keysborough South Stages 2&3

Client: FR Perry and Assoc

A conceptual stormwater management plan was developed to support the rezoning of a 260 Ha parcel of land. A schematic drainage-scheme was prepared for the project including preliminary costings and staging for approval by Melbourne Water.

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