

Georgie enjoys the challenge of developing technically sound water management solutions that compliment the overall desires for a site such as aesthetics, usability and service provision. Her experience includes the successful design and delivery of many stormwater treatment schemes and developing water sensitive urban design (WSUD) strategies for urban developments, industry and for the public domain. Georgie has contributed to the development of WSUD within Australia through authoring technical guidelines and presenting industry training courses and conferences. She has a Bachelor of Civil Engineering and Environmental Science and eight years experience in urban water management.

EDUCATION

Bachelor of Civil Engineering (Hons)
Bachelor of Science (Environmental Studies)

EMPLOYMENT HISTORY

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|------------------------------|-----------|
| DesignFlow | 2008- |
| Ecological Engineering/ EDAW | 2003-2007 |
| EPA Victoria | 2000-2007 |
| Bass Coast Shire Council | 1998-1999 |

EXAMPLE PROJECT EXPERIENCE

Strathaird Creek

Client: Melbourne Water

Developed a strategy to manage discharges from proposed residential development to minimize the risk of impacting on waterway ecology. This project involved detailed modelling and data analysis (MUSIC, RORB and RAP) to examine expected changes in flow patterns in the creek as a result of urbanization. The results of this detailed analysis were presented to non-technical Melbourne Water staff at a range of workshop.

Riverwalk Estate, Victoria

Client: VicUrban

The development of a stormwater treatment strategy that involved a suite of stormwater treatment elements to showcase a range of opportunities to add value to the landscape with self irrigating landscape features. Elements included a formal, hard edge, combined wetland and bioretention system, wind-row ephemeral wetland and a series of linear bioretention systems in the base of a combined floodway and POS corridor. Investigations for alternative non-potable water source options for the development was also undertaken.

Evermore Heights, Western Australia

Client: Satterly Property Group

The development of a strategy that identified opportunities for providing stormwater treatment within large infiltration basins and for reducing clogging through selection of appropriate vegetation. The strategy also involved establishing a sustainable groundwater extraction rate for reuse based on the change in groundwater recharge in the urbanised catchment. Modelling was undertaken using MUSIC.

Narre Warren North Wetlands, Victoria

Client: VicUrban

The functional and detailed design of two wetlands to treat runoff from a Greenfield development and adjacent freeway. The wetlands were designed in close collaboration with landscape architects.

Waterproofing Northern Adelaide, South Australia

Client: Council and Land Management Corporation

Project manager and engineer for the development of concept designs for stormwater treatment and reuse systems for three sites (Stebonheath, Andrews Farm South and Munno Para West). Worked closely with Council and Land Management Corporation to define project objectives from a functional perspective as well as ensuring that water management systems are integrated within and improve the surrounding landscape in accordance with the principles of WSUD.

Fitzroy Gardens and Birrarung Marr

Client: City of Melbourne

Concept designs for stormwater treatment and harvesting opportunities at these two high profile City of Melbourne Parks have been undertaken. Numerous workshops were held with City of Melbourne Staff to educate them on the benefits of stormwater treatment and harvesting and seek their input into the layout of the treatment systems.

Review of WSUD strategies and designs

Client: VicUrban

DesignFlow is regularly engaged by VicUrban to review WSUD strategies submitted by developers for the Docklands Precinct. These systems commonly involve streetscape components and DesignFlow assesses whether systems will operate as described in the strategy, meet best practice treatment objectives, enhance the landscape and will not be a maintenance burden.

Studley Park Stormwater Treatment and Reuse, Victoria

Client: Melbourne Water and Parks Victoria

The development of a strategy for treating and reusing stormwater at a high profile site within Yarra Bend Park which is intended to act as an example for future projects within the park. Consulted with community groups to engage them in the strategy development to ensure that the design met their needs and expectations. Managed a team of landscape architects, engineers, ecologists and surveyors to design the system.

Sydney University, Darlington, New South Wales

Client: Taylor Cullity Lethlean

Functional design of several stormwater treatment elements within Sydney University's Darlington Campus. Liaised with landscape architects and engineers during detailed design phase to ensure that final construction plans accurately reflected the design intent.

Introduction to WSUD Training Course

Client: Clearwater

Developed material for this training course and has since delivered multiple courses to Council staff. The course covers all aspects of integrated water management including storm water treatment and harvesting, potable water reduction, microclimate impacts of WSUD, asset management and simple assessment tools. 100% of course participants felt they had an improved understanding of the subject matter and that the course was informative and useful.

South East Queensland WSUD Technical Design Guidelines

Client: Healthy Waterways Partnership

Primary author of several chapters. The update provides practical design steps that reflect recent research findings and best practice design based on project experiences. Particular focuses of the guideline are consideration of landscape and ecological objectives in parallel with engineering ones and the importance of accommodating establishment and maintenance requirements during the design phase.

Derivation of Victoria's Hydrologic Regions

Client: Melbourne Water

As part of WSUD Engineering Procedures Manual: Stormwater, extensive modelling was undertaken to develop simple and rigorous tools that enable quick and easy size estimates for rainwater tanks and stormwater treatment devices across Victoria. This involved dividing Melbourne into hydrologic regions with similar rain fall patterns.

CONFERENCE PROCEEDINGS

Wettenhall, G. and Wong, T.H.F. (2006) "Hydrologic Regions for sizing stormwater treatment measures in Victoria" Proceedings for the 4th International Conference on Water Sensitive Urban Design, Melbourne, Australia, April 2006.

Wettenhall, G. (2006) "Green streets: creative stormwater design" Proceedings for the 7th National Street Tree Symposium, Adelaide, Australia, September 2006.

Wettenhall G (2009) "WSUD asset management", Stormwater Victoria Conference, June 2009