

Warren
Smith &
Partners

CONSULTING ENGINEERS

WATER SMART SOLUTIONS CAPABILITY STATEMENT

HYDRAULIC

FIRE

CIVIL

SYDNEY WATER ACCREDITED
WATER SERVICING
CO-ORDINATOR AND DESIGNER

THE COMPANY

Warren
Smith &
Partners



Warren Smith and Partners' consulting in civil, water, hydraulic and fire protection has been built on a reputation for reliability and high quality service over its 35 years in business. It prides itself on being one of the most progressive, innovative and commercially oriented practices in Australia. The company's operating philosophy is to:

- **Deliver excellent solutions for clients**
- **Provide a truly professional, cost effective service**
- **Maintain our position as leaders in the profession**

Our senior professional staff are leaders in their field with a high level of experience and depth, supported by a selection of motivated and talented young developing engineers.

We retain our expertise by investing in our staff professional development and getting involved in research.

We have a deep understanding of property development from working for many years with leading property developers, builders, property managers, architects and urban planners.

We are adept at working as a team, either delivering through a co-ordinated outcome with the client's consultants, or leading a team of hand-picked experts who we consider are 'the best in the business'.

THE WATER SMART SOLUTIONS PRACTICE

A water smart solution involves local schemes which integrate recycled water and stormwater into water and waste water services. The benefits of doing this are numerous; it unlocks development potential, is more sustainable, and increases property value.

Development potential is unlocked by:

- removing water and wastewater constraints, **enabling early land release.**
- staging construction, **lowering investment risk and deferring cash flow.**
- **reducing lead times** by eliminating the need for large infrastructure upgrades.
- **reduce developer costs** through cost sharing arrangements with the water authority.
- small systems being more flexible and hence more **responsive to changes in demand.**

Customers are attracted to these sustainable solutions that:

- conserve (scarce) drinking water supplies.
- reduce wastewater pollution of waterways.
- preserve health of creeks and waterways.
- are resilient to change.



Neighbourhoods with water smart solutions are more appealing to live in and increase property value with:

- a reliable and maintenance-free alternative water supply to meet BASIX.
- attractive open space, with water features and a well irrigated green landscape.
- a cooler neighbourhood offsetting the 'heat island' effect of urbanised areas.
- the disruption of amplifying major water infrastructure avoided.



The local solution may need to be temporary, but often it is best nested within a permanent solution within a regional system run by the water authority. Warren Smith would develop a solution that maximises the value of the site and then assist to negotiate a suitable agreement with the water authority.

To do this the Water Smart Solutions team have the capability to:

- Utilise the latest technology and control systems.
- Draw on knowledge of what works in practice.
- Obtain approval from regulators and government approval agencies.
- Negotiate appropriate cost allocations with the water authority.

Warren Smith and partners would implement it either the clients representative contracting to suppliers, or offer a consortium to design, build, and operate the system.

THE WATER SMART SOLUTIONS TEAM

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The Water Smart Solutions service is part of the Civil and Water Engineering practice, headed up by Michael Cahalane.



Michael Cahalane has been with the firm for 11 years. Michael has a proven track record in delivering major Civil and Water projects. Michael managed the design team for the delivery of the Barangaroo

Headland Park between 2012 to 2015. This included the design of a seepage and stormwater reuse system for irrigation, bio-retention swales, stormwater and sewerage management. Michael has an excellent track record in the successful delivery of this and other significant projects on time and within budget.



Robert Keessen leads the Water Smart Solutions practice. Robert has thirty years' experience in the industry, and joined the company from Sydney Water where he was the Project Director of the Water Smart Communities project.

Robert comes with a wealth of experience as a strategic planner in the water industry, with

- experience working with the development industry;
- connections and credibility with government agency planners and policy makers;
- the commercial acumen to negotiate suitable financial agreements.



Preneshin Govender is an experienced Water and Civil Infrastructure Designer, and is valued for his innovative solutions to technical challenges. Preneshan has 10-years' experience in feasibility, preliminary design and detailed design of water supply, wastewater and stormwater networks.



Laura's career as a Civil and Water Engineer has been characterised by her ability to work co-operatively with clients, contractors and operators to develop functional designs that are buildable, and operable as well as being effective.



Nicole's role as a Civil Engineer is underpinned by her resourcefulness and the ability to engage with clients on the role of water on their projects. Her work has included a range of community, cultural, heritage and health care projects.



KEY PROJECTS



Barangaroo Masterplan (2010-Ongoing)

Client:

Barangaroo Delivery Authority (BDA)

Contact:

Peter Funder (BDA)
Project Director
0437 689 915

Scope of Works:

- Design of upgrade road works to Hickson Road.
- Sydney Water sewer and water masterplanning to address the additional loading resulting from Barangaroo South, Central, Crown Casino and Barangaroo Point.
- Advice on the construction of new buildings in Central adjacent to and over the existing sewerage pump station SPS1129.
- Concept design for the relocation of SPS1129.



University of Sydney (UoS)

Client:

The University of Sydney

Project Value:

\$20m

Contact:

Martin Ayers (UoS)
Services Manager
0401 719 579

Scope of Works:

Masterplan (2013 ongoing)

- Capacity assessment and infrastructure upgrade requirements to accommodate the proposed \$1.4bn 2020 Campus Improvement Plan.
- Sewer and Water upgrade plans and staging.
- Construction documentation for sewer, water gas and stormwater.

Integrated Water Management Plan (2017)

- Setting water management goals for the Camperdown and Darlington campuses.
- Review of existing water use and landscape irrigation practices.
- Site water balance analysis.
- Cost and value analysis of recycled water, stormwater and rainwater harvesting, water conservation.
- Recommend a water management strategy.
- An action plan to progress towards the long term goals.



Kapooka Army Base ELF Expansion (2008 – 2012)

Client:

Department of Defence (DoD)

Project Value:

\$220m

Contact:

Nathan Szymanski (DoD)
Project Manager
0428 963 276

Scope of Works:

- New base sewage treatment plant for irrigation and toilet flushing reuse.
- 10km of effluent distribution pipelines, including 2km of rising main.
- A 1.0ML effluent reservoir, telemetry and chlorination system.
- All road and stormwater drainage works for the above facilities.



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