

# Leichhardt Council Water Reuse Feasibility Study

Leichhardt, New South Wales, Australia

Leichhardt is a densely populated municipality in Sydney's Inner West. Leichhardt Municipal Council (LMC) has identified sustainability in water use and reuse as not just a means of saving water, but also taking responsibility for and reducing its environmental impacts of the community.

LMC has sought, through this project, to improve Council's urban water management and minimise stormwater and water systems issues in its area.

HydroScience, in partnership with the Institute for Sustainable Futures, has prepared a feasibility study to urban water management according to Water Sensitive Urban Design principles. The project team has developed innovative projects to reduce the use of mains water across the Council area and improve the stormwater quality.

Options were dependent on location and site conditions. Urban design issues addressed/considered in this project are urban salinity, water table depth, land contamination, topography and soil type.

HydroScience has developed and costed water engineering solutions based on opportunities where high demand and non-potable water supply sources coincide. One example is where a large sewer passes nearby playing fields and sewer mining offers drought proof irrigation. Another example is a large disused water storage tank that can be used as part of stormwater harvesting, storage, distribution and irrigation solution.

HydroScience also developed a Water Sensitive Urban Design diagnostic tool to assist Council in deciding what systems are most appropriate in which locations. This will allow opportunistic Water Sensitive Urban Design implementation for example, when traffic calming works are being constructed options such as rain garden may be considered. Analysis of the Council's mapping data allows identification of sectors where particular Water Sensitive Urban Design Tools are most appropriate.

## Project Overview

### Highlights

- ❖ Water sensitive Urban Design
- ❖ GIS Demand mapping
- ❖ Sewer mining
- ❖ Stormwater Harvesting

### Details

Completion Date: 2009

Contact: Andrew Fraser

Ph: 02 9249 5100

[afraser@hydroscience.net.au](mailto:afraser@hydroscience.net.au)

