



Water Auditing Services

Seventy one percent of the Earth is water. Less than 1% of this is available fresh water for human consumption. How we manage this resource and maintain it for the future is a responsibility of today's governments, companies and individuals.

The key to implementing water efficiency is to save water without compromising the level of service to the end user.



Using water more efficiently has positive environmental, social and economic benefits. When you reduce your water usage:

- You reduce the cost of your water bill
- You reduce your energy costs associated with providing hot water and plumbing
- The community saves money on the cost of water and wastewater treatment plants, pumps, pipes and reservoirs
- Less waste is produced that needs to be disposed of
- The pressure on our natural fresh water resources is reduced
- On-site water treatment and chemical costs are reduced
- Trade waste discharge costs are reduced

Sustainable Water Management Strategies to suit your business

Sustainable Solutions International employs a holistic approach to evaluate your water use. This enables us to identify where water is being overused and the key areas that warrant improvement.

Our focus on innovative technologies enables us to provide water efficiency strategies that reflect international best management practice. We provide economical, ecologically sound and socially responsible water efficiency solutions that are tailored to suit your needs.

Our evaluation is conducted in a multi-step methodology targeted to find both short and long-term sustainable water management solutions.



Water Audit Targets

Water audits are conducted to meet clients needs based on a range of targets aimed at sustainable water management. Our methodology can be undertaken in various steps until client's goals are met. They include:

Step 1: Initial Data Collection

- Analyse historic water use
- Data logging of current water use
- Allows for understanding of "base" flow and usage trends at site
- Helps detect potential leaks

Step 2: Site Water Audit

- Based on site operations and practices
- Determine key opportunities for water reduction

Step 3: Detailed Water Audit

- Determine breakdown of water balance
- Data logging on major water users

Step 4: Sustainable Water Management Plan

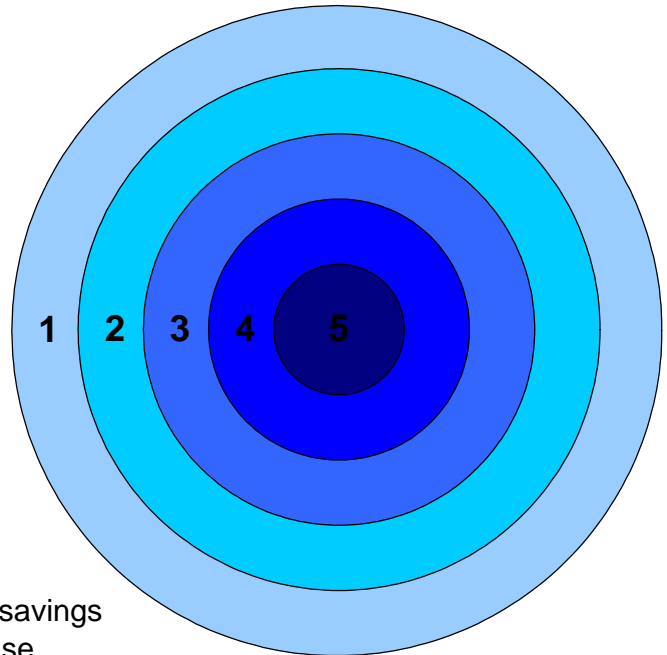
- Projects and procedures to maximise water savings
- Following principle of Reduce, Recycle, Reuse

Step 5: Implementation

- Undertake recommended strategies from Plan
- Install new technologies and processes

Annual Assessment

- Continued assessment and performance evaluation of water usage
- Comparison of reduced water usage for savings



Benefits of our water auditing service

- Aimed at reducing mains water use, annual cost of water
- Provides awareness of water use behaviour that enables cleaner production practices to be implemented
- Inefficient water fixtures are identified and can be upgraded with water saving devices
- Operation of plant equipment including laundries, evaporative cooling towers and swimming pool treatment equipment can be optimised to reduce water consumption
- Provide breakdown of water use to potable and non-potable categories
- Analysis on effectiveness of rainwater harvesting, greywater recycling, on-site wastewater recycling and sewer mining systems

Case Studies

Wesley Hospital, Auchenflower, QLD



Wesley Hospital is one of the largest hospitals and water users in Brisbane. On any given day, up to 1,500 people can be working and 600 patients treated. SSI was contacted to determine hourly and daily water usage through data logging and data processing. The first round of logging found water was being consumed at night although no site activities were occurring. Through an internal audit, hospital staff were able to detect leaks and inefficiencies in their operations.

As a result of the investigation, daily water usage reduced by 200 kL/day. This represents an annual saving of 70,000 kL which is equal to \$70,000 per year savings in water cost.

Carindale Shopping Centre, Carindale, QLD



The Westfield shopping centre Carindale is one of Brisbane's largest shopping centres with approximately 100,000 m² of lettable area. The centre has over 200 tenants and major water uses at the centre includes evaporative cooling towers, food preparation, irrigation and amenities toilet flushing. Working in partnership with Steve Paul & Partners (the hydraulic designers of the centre), SSI performed a water audit to identify the cause of abnormally high water use. The water audit identified a faulty cooling tower and hot water system as being responsible for the high water use.

The repairs identified by the water audit saved the shopping centre 7,300 kL/year of water.

International Malting, Geelong, VIC



The client wanted to reduce the consumption of water and wastewater generation at the plant. SSI provided a qualified engineer to work with International Malting's operational staff on a review of their process water use. A detailed water audit of the site was conducted that included both process flow monitoring and observing the behavioural habits of the workers.

As a result of the audit, leaks were repaired and cost-effective source control methods were identified to further reduce water use. It was also identified that some process water could be recycled for wash down and dust suppression. The water audit successfully reduced industrial water consumption by over 145 kL/ day.

For more information please contact:

Karl Johnson

Environmental Engineer
Sustainable Solutions International
Level 1, 19 Hope St
South Brisbane, 4101
Phone: 07 3255 0000
Fax: 07 3255 0066
Email: kjohnson@SustainableSolutionsInternational.com

