



Water Efficiency Management Plans

The Queensland Water Commission is requiring South East Queensland businesses which use more than 10ML/ year to submit Water Efficiency Management Plans (WEMPs) to their local water supply authority. The WEMPs are part of a long term program to reduce water use by business.

Ongoing monitoring and reporting against these plans is expected to be introduced in early 2008.



The purpose of the WEMP is to:

- Account for water use
- Identify water savings
- Prepare a plan to implement the water savings identified

Sustainable Solutions International (SSI) has 4 qualified Water Efficiency Assessors (WEAs) on staff, and extensive experience in the WEMP process. We have been at the forefront of water audits and efficiency planning for some time. Our considerable experience in water auditing services has allowed our clients to realise very significant reductions in water usage, with corresponding economic savings.

In line with SSI's business ethics, our WEMPs are not only compliant with Queensland Water Commission guidelines, but also able to be realistically implemented from a time and cost perspective and will deliver real water savings within an economically viable payback period.

WEMPs produced by SSI have consistently delivered greater than the required 25% savings on water consumption, in some cases achieving up to a 61% reduction in water use, or have been recognised as industry best practice.



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



Water Audit Targets

WEMPs are conducted to maximise sustainable water management within clients needs. Our methodology follows the five steps listed below:

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

- Prepare mass water balance
- Data logging on major water users

Step 4: Sustainable Water Management Plan

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

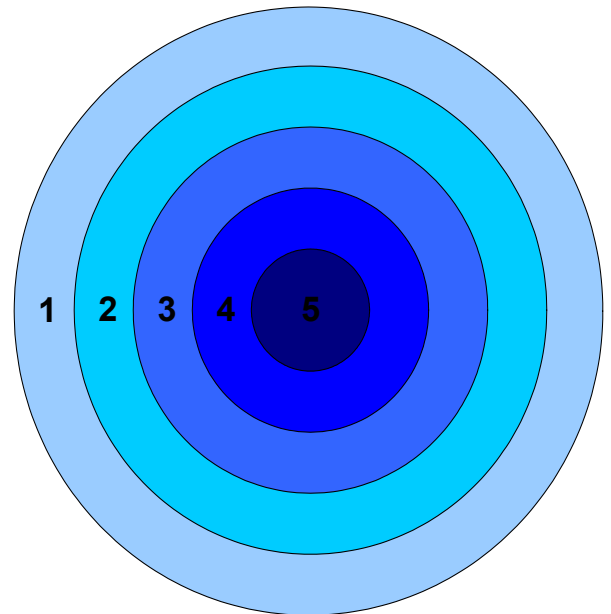
Step 5: Implementation

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

Ongoing Assessment

- Continued assessment and performance evaluation of water usage
- Comparison of reduced water usage for savings
- Ongoing reporting to Water Service Providers as required

We deliver sustainable water management strategies which do more than meet regulatory requirements, they add value to your business.



SSI is able to provide ongoing and follow through support via:

- Data logging and ongoing monitoring of flow rates
- Assistance with Business Water Efficiency Program subsidy and rebate applications
- 3 monthly and annual compliance reporting as required under Level 6 water restrictions
- Alternative water solutions such as recycled water and rain water options
- Future proofing your site with regard to water and waste requirements, to ensure your business remains viable and sustainable beyond current restrictions and in the face of future uncertainties.

Key Projects:

- **Brisbane Airport Corporation (BAC)**

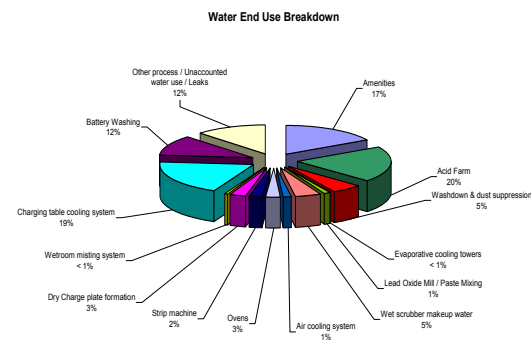
BAC is one of Brisbane's largest water users. BAC has over 190 buildings and includes passenger facilities, hangars, maintenance, retail, car wash and process facilities. SSI have identified opportunities for water savings through water efficient fixtures, rainwater harvesting, use of recycled water and water efficient practices which will lead to an overall water use saving of nearly 30%.



- **Gold Coast Airport**
- **DFO**

- **Century Yuassa Batteries**

SSI found significant opportunities to reduce water consumption at Century Yuassa Batteries through trade waste treatment, rain water harvesting, optimisation of cooling towers, improving design and operation of processes and changing and optimising staff water use practices. Through these initiatives Century Yuassa was able to reduce their potable water usage by 55%, and also found significant cost benefits in reduced trade waste charges.



- **Queensland Newspapers**
- **Riviera Marina**
- **Brisbane Markets**

- **Boral**

By assessing all of Boral's SEQ sites and looking at water efficient practices, rain water harvesting, on site recycling, water transfer between sites and sewer mining, SSI are working with Boral to make as many of the SEQ sites independent of the potable water supply as possible.



- **Department of Main Roads (QLD)**
- **Salvation Army**
- **The Wesley**
- **Red Cross (pro bono)**

- **Canossa**

Canossa is a mixed development that includes: one hospital, a 168 bed Nursing Home, a Convent, a Retirement Village with Independent Living Units and Serviced Apartments and a convention complex. The implementation of water saving strategies as per the WEMP prepared by SSI, led to an actual reduction of 61% on 2004/05 water use.

For more information please contact:

Dominic Xavier, Ian Spruce or Kate Pattingale
Sustainable Solutions International

Phone: 07 3255 0000

Fax: 07 3255 0066

Email: office@SustainableSolutionsInternational.com