



The seven-point plan for holistic water management

Our seven-point plan provides a useful framework for businesses to develop a resource management plan to structure and prioritise their water management.

1.Seek commitment and leadership from senior management

Commitment and leadership from senior management is essential to ensure a successful water management program.

To achieve real results, managers must take the lead in water efficiency and set an example for their staff. Managers must encourage changes in business processes and behaviours to achieve sustainable water savings.

Your business manager must commit to achieving sustainable and efficiency use of water and energy in writing.

A good example is to ask purchasing officers or staff to prioritise sustainable procurement practices and purchase best practice water efficient devices, fixtures and equipment for capital upgrades.

Ask staff to consider all costs over the life of equipment before buying.

If you take into account maintenance and water and energy costs over the life of the item, the lowest priced unit may not always be the cheapest.

2. Appoint a water manager

Organisations that appoint a water manager as a champion to drive efficiencies achieve the best results. This person must have a dedicated responsibility for water management, and will be responsible for managing budgets, leading initiatives and achieving savings, although this does not need to be their only task.

3. Understand how you manage water and energy

You can't manage a resource if you don't know how much you're using and where you're using it.

Determine where, how and when water is used at your business. Conduct your own water audit or contact us for assistance and develop a total water balance for your site. Include all water entering and leaving your site, including wastewater and evaporation.

Complete a fixtures and equipment survey so you know exactly what equipment you have and how much water it uses. This will help you identify inefficient equipment and opportunities to save, and to quantify the additional costs of water, including energy and chemical treatment costs.

You should understand:

- the services that you're connected to
- how much water your business uses overall. The average consumption over the last two years can be used as a baseline.
- how your water use affects other business costs, such as water treatment, wastewater treatment, power for pumping, heating or cooling or chemicals.
- where, when, why and how much water is used in your business
- your business' <u>benchmark for water use</u> to see how much you should be using.

4. Identify opportunities to improve water efficiency

The real cost of water to a business is more than water usage charges!

If you use less water, you directly pay less in water, wastewater and trade wastewater usage charges. Indirectly, you use less energy to pump and heat water and chemicals to treat the water.





When taking these additional costs into account, many water efficiency projects are more cost effective than first expected.

Some of the simplest ideas for saving water are often the most cost-effective, so don't be afraid to think laterally. Water efficiency is not just about large-scale technical solutions. Small changes can make a big difference.

The most effective water efficiency projects have short paybacks, from several months to three years, making them excellent candidates for internal funding approval.

5. Set a realistic goal

It is important to have realistic efficiency targets so everyone can measure progress and achievements. Consider a target water efficiency benchmark using your business type's key business activity indicator (KBAI) and best practice benchmarks where available. Establish reporting processes as you would for other resources.

6. Develop a water efficiency strategy

When you consider a water efficiency strategy, assess the impact of water efficiency on energy use and trade waste compliance.

A water efficiency strategy should work through the following principles in order:

Avoid

Avoid using water where possible.

- Timely leak repair
- Proactive maintenance to prevent leaks
- Active monitoring and investigation of changes in water use patterns
- Review food thawing practices to avoid using running water
- Review cleaning practises to avoid water use
- Review irrigation practices to avoid over watering

- Review pool makeup practices to avoid excess use of water
- Manage cooling systems for leaks.

Find out more about leak prevention.

Reduce

Where water use can't be avoided, reduce the amount being used. You can save money on your water and energy bills by choosing more water efficient products.



Visit the Australian Government Water Rating website to search for water efficient products and details about the Water Efficiency Labelling and Standards (WELS) <u>scheme</u>.

- 1. Install efficient devices and WELS rated products for:
 - showers
 - basin taps
 - kitchen taps
 - dual flush toilets
 - urinals.

Tip for showerheads: Achieve water and energy savings by installing a WELS 4 star rated showerhead with pressure compensating flow restriction. These showers maintain pressure and reduce water use to 6L per minute.

For an 8minute shower that's a saving of 24L if replacing a 3-star rated showerhead or 112L if replacing an old inefficient 20L per minute showerhead.



Tip for basin taps: install WELS 6 star rated pressure compensating flow regulators in your basin taps for the most cost-effective way to reduce the flow of your taps to 4.5L/min or less.

- 2. Retrofit or upgrade equipment to efficient devices and WELS rated products for:
 - pre-rinse spray valves
 - dishwashers
 - glasswashers
 - air cooled Ice making machines
 - waterless wok stoves and steamers.

Re-use

If you cannot reduce the amount of water being used, try to use it more than once. For example, reuse water from cooling towers or manufacturing processes to:

- flush toilets
- irrigate gardens
- suppress dust.

Re-use water must be fit for purpose. Consider getting professional advice and refer to the *Australian guidelines for water recycling*.

Recycle

Seek an alternative water source such as treated wastewater from another process or treated sewage effluent where health guidelines allow.

- 1. Recycle water by treating re-use water to a higher level before use to:
 - irrigate playing fields or golf courses
 - control dust
 - use in industrial processes
 - use in cooling towers (a high level of treatment is required to reduce salts).

Before recycling water, get professional advice and refer to the *Australian guidelines for water recycling*.

- 2. Consider using alternative water sources including:
 - rainwater
 - stormwater
 - bore water
 - treated wastewater.

If you're considering using rainwater, use our rainwater tank calculator to help you choose the best tank for your needs.

Find out more about producing recycled water.

7. Involve staff and customers

Behavior change of staff and customers will lead to sustainable water savings. You can implement the below ideas to help change their behavior.

- Increase staff awareness of water conservation through management reporting, bulletin boards, signage, newsletters and posters.
- Tell staff why and how they can help both your business and the environment.
- Include water and energy management practices in your staff inductions and training to clearly identify their roles and responsibilities.
- Highlight achievements and savings.
- Think of innovative ways to engage staff and customers in water efficiency.
- Ensure they can offer ideas and take part in water efficiency initiatives to increase their impact.
- Competitions can also be a good way to increase awareness. Consider engaging your customers, or making use of national events such as National Water Week (www.nationalwaterweek.org.au) to promote water efficiency.