

A Home Water Audit can help

What is a Water Audit?

A Water Audit is a process where you determine how much water is being used and how it is being used. By performing a Water Audit, you may be able to see areas of water use in the home, which can be reduced and therefore save you money while saving this precious resource.

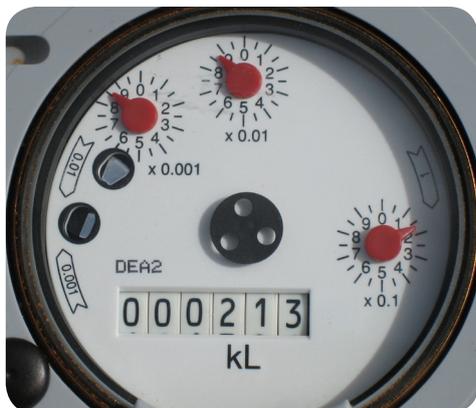
The steps are:

1. Determining how much water you are using
2. Determining where you are using this water (what activities)
3. Calculating how many litres of water are being used within these activities
4. Considering how activities can be amended and where water can be saved

1. How much water do I use?

To find out how much water you are using each day read your water meter at the same time every day (ie: 8am) for a number of days; then take the Day 1 figure away from the Day 2 figure to see how much water you've used between your first reading and second reading of the meter (see example below).

We recommend doing this over eight days as a good representation of your water use. It gives you the weekend as well, when your water use might be quite different for your week day use.



What numbers do I record?

You only need to record the black numbers (ignore the red numbers). In this example the figure of 213 is showing. This is a reading in kilolitres (kL). To convert kilolitres into litres, you multiply the kilolitre figure by 1,000.

How do I calculate the usage?

Let's assume Day 1 meter reading was 213, Day 2 meter reading is 380. To calculate how much water was used on Day 1, take the Day 2 figure from the Day 1 figure ie: $380 - 213 = 167\text{kL}$. $167\text{kL} = 167,000$ litres.

DAY/METER READING	WATER USE
DAY 1/A	(B-A)=
DAY 2/B	(C-B)=
DAY 3/C	(D-C)=
DAY 4/D	(E-D)=
DAY 5/E	(F-E)=
DAY 6/F	(G-F)=
DAY 7/G	(H-G)=
DAY 8/H	

Are my appliances water efficient?

If your appliances are reasonably new, the manufacturer's product information will tell you how much water they use. This might be on a "water rating label" on the machine which will also show a number of stars—a higher number of stars means a higher level of water efficiency. You can check the Water Efficiency Labelling and Standards (WELS) rating of appliances at www.waterrating.gov.au If your appliances are older, you can do a test yourself. This involves running the machine with all other water using appliances/watering systems off. Make sure others in your household know you are doing this test so they don't use any water!

1. Read your water meter with all water using appliances/watering systems etc off
2. Run the appliance in the normal manner (ie: do a load of washing)
3. Read the water meter when the appliance has finished
4. Alternatively, you can contact a licenced plumber who can help you determine the water consumption of individual appliances

How can I save water?

You will find tips on becoming more water wise in our tips section.

Here are some general ideas:

- Set some water saving goals and reward the household for meeting them
- Ensure all the plugs in your house seal correctly and replace them if they leak (remember to check the kitchen sink, the laundry tub, the bath and all bathroom basins)
- Check for leaks inside the house and outside in watering systems/taps etc—and get these fixed promptly
- A simple way to check if your toilet cistern is leaking is to place a small amount of food colouring in the cistern. If the colour appears in the bowl without you having flushed the toilet, then you have a leak. Get a plumber's advice on fixing it
- Make sure your airconditioning is in good working order. Have it serviced regularly
- Get the kids involved in water awareness and water saving—make a rain gauge, have them be 'water detectives', design water saving posters for the bathroom. Check the Lower Murray Water website for activities
- When you need to buy a new appliance, consider those with a higher WELS rating (the more stars an appliance has the more water efficient it is)
- If you are considering a new washing machine, keep in mind front loaders use far less water than top loading machines
- Upgrade your toilet(s) to newer dual flush style ones
- There are also lots of websites that have good information on water saving tips and water wise gardening. Search for water wise at home, water wise gardens, saving water for example

Where am I using this water?

Now that you have determined how much water you are using in a week, let's see if we can work out where you are using it. Use the table below to record water use in your home over a week (you might find it easier to first complete one table per person and then combine it to get your weekly totals). To calculate 'Litres for each use' - use the table on the next page. This gives an approximation of how many litres are used for various tasks (eg: a filled bath is assumed to be using 120 litres).

WATER USE AREA		PEOPLE (A)	USES PER WEEK (B)	LITRES FOR EACH USE (C)	TOTAL USE PER WEEK (A=B=C)
	Bath				
	Cleaning Teeth				
	Cleaning the shower/bath etc				
	Shaving				
	Shower				
	Washing hands				
	Toilet flushing				
	Cleaning (water from laundry taps)				
	Washing machine				
	Cleaning (water from sink taps)				
	Dishwasher				
	Drinking Water				
	Food preparation and cooking				
	Washing dishes				
	Outside cleaning tasks				
	Pool, water feature & spa				
	Washing car & vehicles				
	Washing pets				
	Watering gardens/lawns				

How much water am I using in these activities?

Use the table below to calculate how many litres of water you are using with each activity. These are approximate only but they will give you a starting point.

WATER USE AREA		LITRES OF WATER USED	
	Bath	 120L	
	Cleaning teeth - with water running	 0.5L	3L per minute with water running
	Cleaning teeth - using a cup		
	Cleaning the shower/bath etc - with water running	 9L	6-11L per minute with water running
	Cleaning the shower/bath etc - with bucket		
	Shaving - with water running	 0.5L	3L per minute with water running
Shaving - using a cup (or plug in the basin)			
Shower	 6 - 11L		
Washing hands - with water running	 3L		
	Toilet flushing - single flush toilet	 3L	11L per flush for an older single flush toilet
	Toilet flushing - dual flush toilet	3L - 6L	
	Cleaning (water from laundry taps)	 9L	6-11L per minute with the water running
	Washing machine - 6kg load capacity - 6 star WELS	 30L	
	Washing machine - 6kg load capacity - 3 star WELS	88L	
	Cleaning (water from sink taps)	 9L	6-11L per minute with the water running
	Dishwasher - 5 star WELS	 7L	
	Dishwasher - older style models	25L	
	Drinking Water	 2L	2L per person, per day
	Food preparation and cooking	 1/2L	15L per half filled sink 1/4 to 1/2 L per saucepan
Washing dishes	 15L	15L per half filled sink	
	Outside cleaning tasks - using a running hose	 9L	15L per minute with hose running
	Outside cleaning tasks - using a bucket		
	Pool, water feature, spa - topping up with hose	 15L	per minute
	Washing cars and vehicles - using a running hose	 9L	15L per minute with hose running
	Washing cars and vehicles - using a bucket		
	Washing pets - using a running hose	 9L	15L per minute with hose running
Washing pets - using a bucket			
Watering gardens/lawns - with a hose	 9-15L	15L per minute	
Watering gardens/lawns - with a sprinkler		9-15L per minute	

Am I water wise at home?

Find out by taking the Home Water Wise Quiz and doing a Home Water Audit:

Score each question in the right hand column, then add your scores for a total and enter this in the table on page 6. Find out how water wise you are at home.

SECTIONS ONE - MY WATER SOURCE

My main source of water for household use and outdoor use is:	Treated water (mains water only) 0	Mainly treated water (mains water) and rainwater tank, greywater and/or recycled water 2	Rainwater tank, greywater, recycled water 5	SCORE
In the garden I have:	Lots of lawn and lots of plants 0	A drought tolerant variety of lawn and lots of plants 1	Small area of lawn (or no lawn) and mainly plants indigenous to my area 2	SCORE
My garden is set out in microclimates	No 0	Part of the garden is 2	All the garden is a series of microclimates 5	SCORE
The amount of my lawn / garden that needs regular watering is:	75% or more 0	Between 25% to 75% 2	25% or less 4	SCORE
I water my garden:	Each day in the permitted watering times 0	Every second day in the permitted watering times 2	Only when it needs it in the permitted watering times 5	SCORE
I water my garden:	With a hand held hose and/or sprinkler 0	Manually or with an automated system in the cool of the day 2	Using saved water, rain water or grey water 5	SCORE
I have mulch on my garden beds:	25% or less of the garden beds 0	Between 25% to 75% of the garden beds 2	75% or more of the garden beds 5	SCORE
I have a swimming pool:	Yes, with no pool cover 0	Yes, with a pool cover 1	No 2	SCORE

SECTIONS TWO - OUTDOOR USE

I have a car and wash it	Once a week, using the hose 0	Less than once a week and using a bucket 2	Rarely, or take it to a car wash that recycles water 2	SCORE
I clean my driveway, paths and paving:	With a hose, washing it into the gutter 0	With a broom sweeping it into the gutter 2	With a broom, and I keep the gutter clean 5	SCORE
I regularly check my watering system is operating correctly:	No, never 0	Seasonally; adjusting and fixing as required 2	More regularly than seasonally; adjusting and fixing as required 5	SCORE

SECTIONS THREE - BATHROOM

I have a water saving showerhead:	No 0	On some of the showers in my home 2	Yes, on all showers in my home 4	SCORE
I have showers lasting:	10 minutes or more 0	5 minutes or more 1	3 minutes or less 2	SCORE
I turn the tap off when brushing my teeth/shaving etc:	No, I leave it running 0	When I remember 1	Yes, always and I use a cup to rinse after brushing my teeth 2	SCORE

SECTIONS FOUR - LAUNDRY

My washing machine is:	A standard top loader 0	A top loader with a suds saving option 2	A front loader, or a 4-star rated top loader 3	SCORE
I do the washing when I have:	Any items to wash, I don't wait to have a full load 0	When I have a full load 1	When I have a full load, or I adjust the water level accordingly 2	SCORE

SECTIONS FIVE - TOILET

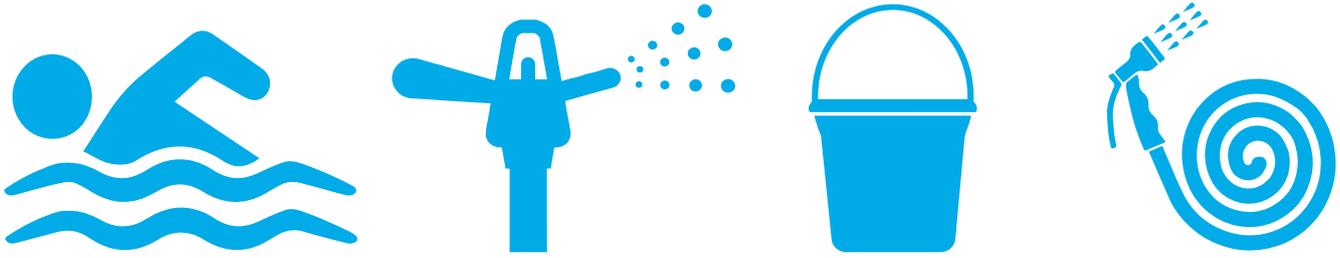
I check my toilet cistern for leaks:	Never 0	Once every few years 1	Annually 2	SCORE
The flush type on my toilet is:	A single flush only 0	An older-styled dual flush 1	A newer-styled dual flush 3	SCORE

SECTIONS SIX - KITCHEN

When I wash my dishes:	I use a dishwasher but don't wait to fill it 0	By hand in the sink 2	A dishwasher, with full loads and using an economy cycle 5	SCORE
I rinse fruit and vegetables by:	Leaving the tap running in the sink 0	Filling the sink 1	Putting a small amount of water in the sink 2	SCORE

SECTIONS	MY SCORE	OUT OF A POSSIBLE
1 - My Water Source		5
2 - Outdoor Use		40
3 - Bathroom		8
4 - Laundry		5
5 - Toilet		5
6 - Kitchen		7
TOTAL SCORE		70

MY SCORE	THIS MEANS
60-70	Congratulations, you are Water Wise at Home.
40-60	You are well on your way to being really Water Wise, but you could do more!
20-40	You need to do more to become Water Wise, please see our Water Wise Tips.
BELOW 20	Oh dear, you're a "Water Wally" please use our tips to be more Water Wise.



Tips For Becoming More Water Wise At Home

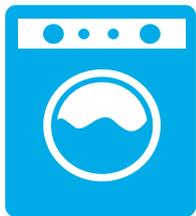
Garden & Outdoors

- Consider removing some of your lawn, or replacing it with a more drought tolerant variety
- When watering your lawn, give it a good soak rather than small amounts every day. This will help your lawn develop a deep root system which will assist in combating drought
- Group your plantings into microclimates, putting plants with similar water/sun/nutrient needs together
- Add water saving products to your garden beds; and mulch them to reduce evaporation
- Select plants that are indigenous to your area
- Check taps are not leaking, and check your drippers and other watering systems are working efficiently
- Only water your lawn and garden when necessary
- Install tap timers if you do not have an automatic watering system
- Check your watering system is operating within the Permanent Water Saving Rules approved times, and remember to adjust the watering requirement for the seasons
- If rain is forecast, turn off your watering system (you can always turn it on again if the forecast rain did not come)
- Use a bucket to save the warm-up water in the shower and put it on the garden, lawn or pot plants
- Re-use greywater on your lawn or garden
- Add compost to your garden beds
- Install an approved pool cover to reduce evaporation
- Make sure your pool cover allows rainwater to get in when it rains - that will save you top-ups
- If you have a heated pool, turn down the temperature - warm water evaporates more quickly than cold
- Wash your car at an approved car wash with a water recycling facility; or wash it at home less frequently on the lawn, using a bucket of water
- Use a broom to clean driveways, paths and pavers and remember to pick up the dirt (don't broom it into the street gutter)
- When mowing your lawn, don't cut it too short - a slightly longer lawn will be more resilient to hot weather
- Check your sprinklers are watering where you want - don't let them water paths, driveways or concrete areas
- Try to limit new plantings over summer - wait until Autumn or Winter
- Remember to also mulch your pot plants to reduce evaporation and to keep the roots cool
- Install a rain gauge - instructions on how to make a simple rain gauge are on the Lower Murray Water website www.lmw.vic.gov.au/Community/Education-Materials



Bathroom

- *Install a water saving showerhead in each of your showers*
- *Turn off the tap while brushing your teeth, shaving*
- *When washing your hands, turn the tap off while you lather, then turn on to rinse the soap off*
- *Consider putting a container in your bathroom basin to catch water to then be used on plants or the lawn*
- *Do not fill the bath to the top, just use the water you need*
- *Have a shorter shower (and encourage others in your home to do the same). Use a timer to help you know when it's time to turn off*
- *Put a bucket in the shower to catch warm-up water and use it on your plants or lawn*
- *Put the plug in the bath before you start running any water - this way the warm-up water will be used*
- *Install aerators on your basin taps*



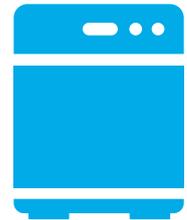
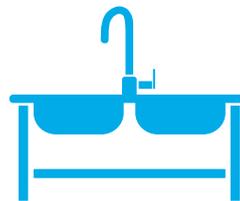
Laundry

- *Consider purchasing a front loading washing machine when you need to replace your old machine*
- *Operate the washing machine using full loads where possible; adjust the water level for smaller loads*
- *Consider using the suds saving option on your washing machine (if you have one)*
- *Use the shortest cycle on your machine when clothes aren't very dirty, you'll save electricity too*
- *Use the washing machine water for the garden or lawn*



Toilet

- *Consider having your rain water tank plumbed to use for toilet flushing*
- *Upgrade your toilet to a newer-style dual flush toilet*
- *Regularly check your toilet cistern for leaks and get these fixed promptly (see page 2 for a simple way to check your cistern for leaks)*



Kitchen

- *Always have a full load before turning the dishwasher on*
- *Look for a water efficient dishwasher when it's time to replace your current one*
- *Consider washing dishes by hand, using only the amount of water you need*
- *When rinsing fruit and vegetables, put a small amount of water in the sink, don't leave the tap running and don't fill up the sink*
- *Alternatively, put a container in the sink when rinsing fruit and vegetables and then use the collected water on plants or the lawn*
- *Select the correct sized saucepan when cooking vegetables and use only the water you need*
- *Keep the water from vegetable cooking, let it cool and then use it on plants or lawn*
- *Have everyone in your household use just one glass and one coffee cup each per day; refilling when necessary. This will save on washing up*