

Living Laboratory – Showers Summary



In 2022, Barwon Water launched the Birregurra Living Laboratory project as part of the Birregurra Sustainable Communities - Water Program. The first Living Laboratory project was all about showers, which are the highest water user in the home. Less time in the shower equals less water.

In Australia, the average shower time is seven minutes. According to the Saving Water In Melbourne (SWIM) 2022 study commissioned by Melbourne Metropolitan water corporations, 33.3% of Generation Z (people born between 1996 and 2010) take 10–15 minute showers compared to other generations such as baby boomers who shower for four to five minutes.

By keeping shower time's to just four minutes and by installing an ultra water efficient showerhead, residents are able to save water, energy and money off bills, as well as continue to preserve drinking water supplies.

Birregurra residents were invited to participate in a Living Laboratory shower innitiative which ran from April to May 2022. Participants were asked to conduct three exercises:

- Week 1: shower as usual over a five day period and record shower times
- Week 2: take four minute showers over a five day period and record shower times
- Week 3: take four minute showers over a five day period with a new ultra water efficient showerhead and record shower times.

Key findings

- The flow rate of existing showerheads ranged from 9 to 10 litres per minute. These were replaced with a new ultra efficient showerhead using five litres per minute, automatically reducing the water use of showers by almost half.
- All participants reported that their shower times were shorter than expected.
- Average shower times ranged from 2 to 9.6 minutes over the three weekly exercises.
- 71% of participants recorded four minute or less showers during all three weekly exercise's.
- The main motivator for residents to participate in the initiative was to save water.

The participants had either a one or two person household and no household's had children.



Living Laboratory – Showers Summary

"I estimate that my household has saved around 8,213 litres per year because of the new ultra efficient showerhead"

"I love the new showerhead"

"The new showerhead has a softer feel with the optimum water droplet size / pressure"

Participant feedback

A typical showerhead can use anywhere from 7 to 12 litres of water per minute. Barwon Water arranged installation by a qualified plumber of up to two high quality innovative ultra-water efficient showerheads that use around 5 litres of water per minute (the highest water efficiency showerhead in Australia).

85% of participants were very satisfied with their new ultra water efficient showerheads and would recommend them to others.

60% of participants liked that the new water efficient showerhead was saving water / energy the most, while 40% of participants liked the comfortable feel of the new showerhead the most.

Water savings

A household of four people can save around 70% (approximately \$140 per year) on their water bill by changing over to a new ultra water efficient showerhead and keeping shower times to four minutes.

There will also be savings on energy bills because less water needs to be heated.

Conclusion

The volume of water used when showering can be reduced by almost half when a typical showerhead is exchanged for an ultra-water efficient showerhead.

The results of this Living Laboratory initiative have provided valuable insights into the effectiveness of a water efficient showerhead and keeping shower times to four minutes.

The outcomes of the study will be used to assist Barwon Water to plan for future residential water saving initiatives, such as a showerhead exchange program.

If you would like further information about this Living Laboratory, other water saving programs or advice, please contact us using the information below

Volume of water used (litres) for household showers in a year and water bill costs

Number of People in Home	7 min shower Standard showerhead (9 litres/min)	4 min shower Standard showerhead (9 litres/min)	7 min shower Water efficient showerhead (5 litres/min)	4 min shower Water efficient showerhead (5 litres/min)
1	22,995	13,140	12,775	7,300
	\$51	\$29	\$28	\$16
2	45,990	26,280	25,550	14,600
	\$102	\$58	\$56	\$32
3	68,985	39,420	38,325	21,900
	\$153	\$145	\$84	\$48
4	91,980	52,560	51,100	29,200
	\$204	\$116	\$112	\$64
5	114,975	65,700	63,875	36,500
	\$255	\$145	\$140	\$80

*Assuming one shower every day for all members of a household using Barwon Water residential water charges, \$2.2286 per kilolitre

For further information

L 1300 656 007 | **△** info@barwonwater.vic.gov.au www.barwonwater.vic.gov.au