



Privacy flushing: the water Australia flushes to stay quiet

Flushing a toilet an extra time, or early, just to cover the sound of using it. Japan tackled it in 1979. Australia has never measured it.

11 billion

litres of drinking water a year, estimated, flushed in Australian workplaces only to mask sound

1.74 → 1.08

flushes per toilet visit, before and after a sound masker was installed (Japan, 2010)

2.2 billion

litres a year in Melbourne workplaces alone, estimated

The estimate is a range

No Australian study of privacy flushing exists. The only measurements anywhere are Japanese, so we show three cases. Every other input is Australian, metered and sourced.

Case	Extra flushes per toilet visit	Australian workplaces, litres a year
Conservative	0.20	5.5 billion
Central (our headline figure)	0.40	11.1 billion
At the measured Japanese rate	0.66	18.3 billion

The central case assumes privacy flushing happens here at about 60% of the measured Japanese rate. It covers workplaces only, leaving out schools, shopping centres, airports, pubs and homes.

What 11 billion litres looks like

About 4,400

Olympic swimming pools

About 1,067 litres

per office worker a year. A full wheelie bin of drinking water each.

1.2 billion

shower minutes, at up to 9 litres a minute

We're asked to count shower minutes. Nobody has ever been asked to stop flushing twice.

Japan got there first

1799

A bronze urn at a temple in Okayama Prefecture masks toilet sounds by splashing water onto a roof tile.

1979

During the Tokyo drought, Orihara Manufacturing releases the Etiquettone, Japan's first electronic toilet sound device. Tokyo City Council endorses it to save water.

1988

TOTO launches the wall-mounted Otohime ("Sound Princess"). Panasonic and Lixil follow. Today they're standard in Japanese office and public toilets.

How the estimate is calculated

Employed Australians × share at a workplace × working days × toilet visits at work × extra flushes per visit × litres per flush

Central case: 14,836,600 × 0.70 × 230 × 2.0 × 0.40 × 5.8 litres = **11.1 billion litres a year**

Input	Figure	Source
Employed Australians	14,836,600	ABS Labour Force, Aug 2026
At a workplace on a given day	70%	Assumption
Working days a year	230	Assumption, after leave and public holidays
Toilet visits at work per day	2 (of 4.8 a day)	Assumption; daily rate from Goyder Institute, 2014
Extra flushes per visit	0.40	Assumption, about 60% of the measured Japanese rate
Litres per flush, installed toilets	5.8	Goyder Institute, metering of 140 Adelaide homes, 2014

Why 5.8 litres when new dual flush toilets use 4.5 or 6? Plenty of older 11 litre toilets are still installed, and 5.8 litres is what was actually measured. Change any assumption and the number moves. That's why we publish the working.

The Japanese evidence

Study	Flushes per visit, no device	With device	Extra flushes
Japan Women's University, TOTO and Meiji University, 2010	1.74	1.08	0.66
Nikkei survey of women, 2016	2.3	1.5	0.8

The 2010 study measured behaviour before and after installation and was published in the SHASE conference proceedings. Our central case is conservative against both measurements.

By capital city

City	Workers	Litres a year, workplaces
Sydney	3,042,000	2,273 million
Melbourne	2,933,000	2,191 million
Brisbane	1,529,000	1,142 million
Perth	1,323,000	989 million
Adelaide	804,000	601 million
Canberra	261,000	195 million
Hobart	138,000	103 million
Darwin	86,000	64 million

ABS estimated resident population, 30 June 2025, converted to workers at the national employment rate. Central case.

Sources

Matsumoto A. et al. (2010), study of attitudes to toilet sound and sound masking devices, SHASE Annual Conference Proceedings. Japan Women's University, TOTO, Meiji University. jstage.jst.go.jp

Hornyak T., "Like Fancy Japanese Toilets? You'll Love the Sound of This", The New York Times, 2 December 2025 (1799 urn, 1979 Etiquettone, 1988 Otohime, 2016 Nikkei survey).

Arbon et al. (2014), Understanding and predicting household water use for Adelaide, Goyder Institute Technical Report 14/15.

National Construction Code 2025, Volume Three, clause B1D2. Sydney Water. Yarra Valley Water. ABS Labour Force Australia, August 2026. ABS Regional Population, 30 June 2025.