It isn't 'toilet-to-tap'

What's in a name?

Various names are sometimes used to describe purified recycled water for drinking. In the US it's often called 'potable reuse' – from the Latin *potare*, which means to drink – and 'potable water' is often what the water industry calls water that's been treated to drinking standard. The Australian water industry tends to avoid the term *potable reuse*, because it's not well understood or very clear to our customers.

Other places have different names for purified recycled water and the process used to create it. Some of these include:

- Some US cities have adopted 'Pure Water' as their branding. For example Pure Water San Diego, Pure Water Monterey, Pure Water Arizona, Pure Water Colorado, Pure Water Brew (Oregon). They often refer to the water itself as 'purified water'.
- In Orange County (California USA) and Perth (Western Australia), the groundwater schemes are called Groundwater Replenishment System/Scheme.
- Singapore's national water agency, PUB, call their purified recycled water NEWater.
- In Virginia USA, Hampton Roads Sanitation District call their purified recycled water SWIFT water as the scheme that produces it is called the Sustainable Water Initiative For Tomorrow.



Purified recycled water from Hampton Roads (Virginia), NEWater from Singapore, GWRS water from Orange County (California)

• In the UK where it is being considered in Hampshire as part of the Water For Life program, Southern Water found that 'water recycling' was the most suitable term.

In Australia, 'purified recycled water' is often used, reflecting that this water is different from recycled water used for irrigation or industry. Purified recycled water is recycled water that has been taken through further stages of treatment, purifying it so that it meets strict health and safety standards for drinking water.



Toilet-to-tap

One phrase that sometimes appears during discussions about purified recycled water for drinking is 'toilet to tap'. This phrase was used a lot in the late 1990s when San Diego (California, USA) first considered adopting purified recycled water for drinking. A mayoral candidate who opposed the proposal, used the phrase frequently to criticise it. The City was not well prepared with factual information and responses, and eventually for a range of reasons, the proposal was dropped.



The phrase is not accurate; because it doesn't describe the extensive, rigorous process the water goes through. WSAA asked Jeffrey Pasek, who was the Project Manager for Pure Water San Diego for over 20 years, what he says when asked whether Pure Water San Diego means toilet-to-tap. His answer: *"No, it's not toilet to tap, it's toilet to treatment to treatment to treatment to testing to testing to treatment to tap.... I take the chance to highlight the very many levels of vigilance and treatment between wastewater and the public water supply."* (San Diego's FAQ is below.)

The San Diego is a fascinating case study in the world of reuse, especially because the City has gone from having support levels of only 26% in 2004, up to 73% in 2012, 79% in 2019. For more detail about it, including the notion of 'the effluent of the affluent', visit <u>WSAA's All Options on the Table, Lessons from the Journeys of Others</u> report. Alternatively, watch WSAA's webinar with Jeff Pasek from Pure Water San Diego, where he outlines that the notion was not true but rather

Is this program "toilet to tap"?

"Toilet to tap" is not an accurate description of the water purification process. Water goes through numerous treatment steps and is subject to strict testing requirements before it would ever return to drinking water taps. In California, all forms of water are highly regulated and monitored to ensure safety. Since there is no new water on Earth, all water goes through a natural cycle and is essentially recycled water before it is treated and tested and then returned to homes and businesses as drinking water.

a misconception. Watch the WSAA webinar on San Diego, a city that turned opposition around; here.



San Diego will drink water recycled from sewage. Cheers.

Oregon Homebrewers Get Set to Experiment With 'Sewerage Brewerage'

Portland will get to show off just how good its super-pure recycled wastewater is.



In San Diego, a video called Downstream helped explain that toilet to tap is not an accurate term. Some excerpts are below; also see the full Downstream presentation.





