



**WATER SERVICES  
ASSOCIATION OF AUSTRALIA**

# Community education materials

*Downstream, Think and Drink*

October 2019



# Purpose of this portfolio

The *Water: Think and Drink* materials were created in America as part of the Australian Water Recycling Centre of Excellence program, for engaging with communities considering purified recycled water for drinking. An AWCRE and American collaboration also created the [Global Connections Map](#). Two research projects in America created *Downstream* and *Ways of Water*.

The creators were New Water ReSources, a world leader in providing education materials and visitor centres on purified recycled water for drinking. AWCRE worked with the American Water Reuse Foundation to make the materials available for water industry use via the Water 360 platform and WaterReuse Association and Water Research Association websites.

we have made them available for industry use via the Water360 platform. They are a ready-to-go resource that can be freely used in their own right. Alternatively they are worth considering as inspiration for any bespoke education materials being developed.

The *Downstream* series has also been widely used in America and can be used by utilities. It has been translated into other languages and is available on YouTube.



After the city rejected reuse in the 1990s, a demonstration project was set up and existing office spaces converted to a visitor experience. San Diego is now proceeding with reuse.

## *Downstream*

A series of education materials used extensively in the US and elsewhere, as part of visitor experiences for communities considering adopting purified recycled water for drinking



# DOWNSTREAM

**WATER REUSE**  
RESEARCH



© 2012 by the WaterReuse Research Foundation



**A  
true  
simple  
story about  
the need for  
WATER REUSE  
technology for  
a sustainable  
future**



**DID YOU KNOW**



**All Earth life  
is water-life.**



**Whether you're a goldfish,  
a butterfly, a potato,  
or a person...**



**you need water  
to survive.**



**While you can go almost  
a month without food**

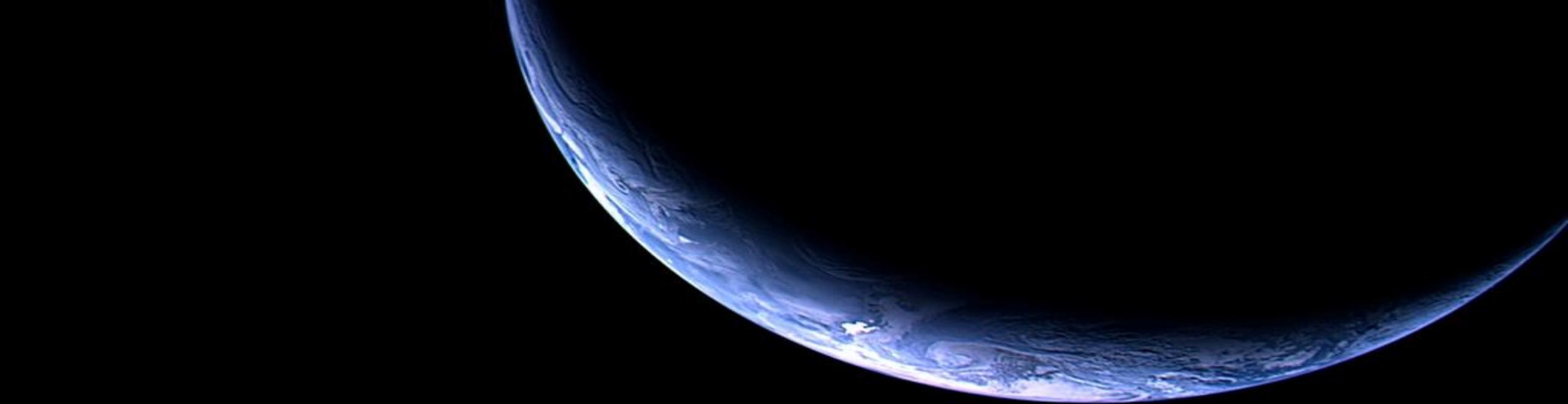


**your body  
can't survive  
one week  
without water.**

One Week						
S	M	T	W	T	F	S
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8

**It's *easy* to see why.**





**Seen from space, the Earth is  
a beautiful aqueous ball.**

**Deep blue oceans cover  
most of the surface.**

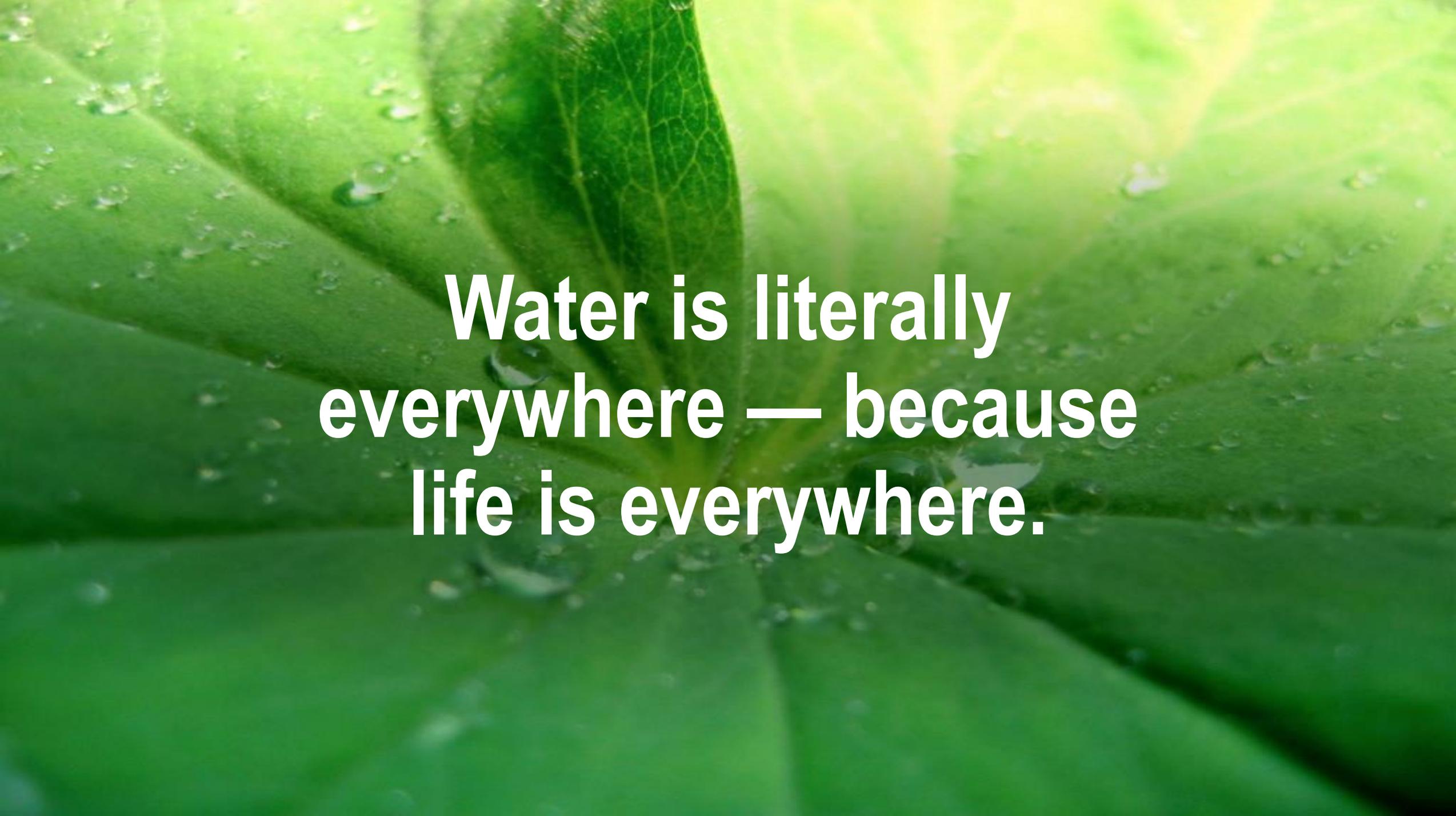


**Radiant clouds float  
through the atmosphere.**



**Massive blankets of frozen  
ice hug the poles.**



A close-up photograph of several vibrant green leaves. The leaves are covered in numerous small, clear water droplets of varying sizes, which catch the light and create a sparkling effect. The background is a soft, out-of-focus green, suggesting a dense cluster of foliage. The overall scene conveys a sense of freshness and natural beauty.

**Water is literally  
everywhere — because  
life is everywhere.**



**DID YOU KNOW**

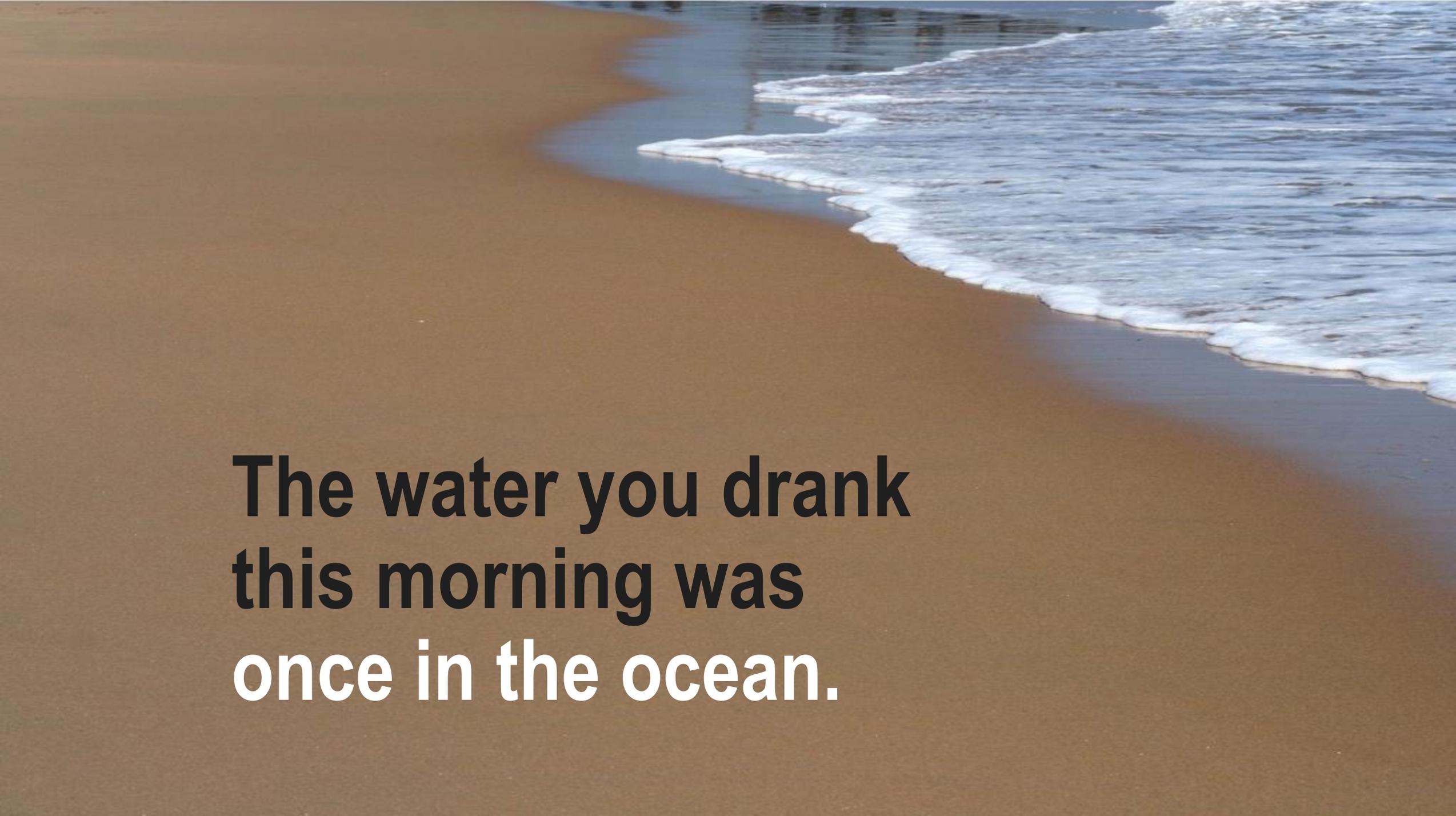


**The amount of water on  
Earth doesn't change.**

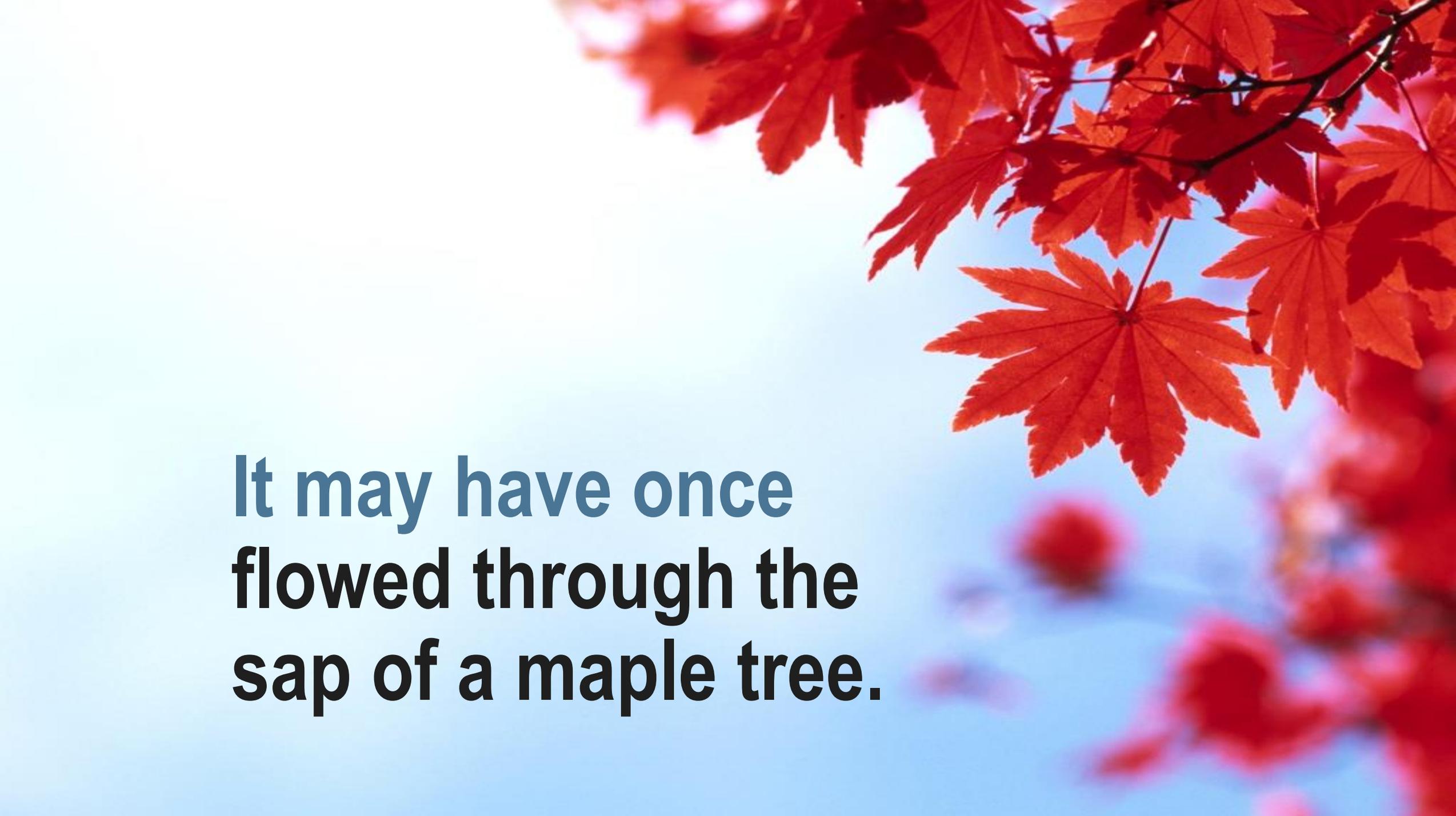


**The same water  
that existed on Earth  
billions of years ago  
still exists today.**



A photograph of a sandy beach with waves crashing onto the shore. The sand is a warm, golden-brown color, and the water is a deep blue with white foam from the waves. The waves are breaking from the right side of the frame towards the left. The text is overlaid on the lower-left portion of the image.

**The water you drank  
this morning was  
once in the ocean.**

A close-up photograph of vibrant red maple leaves against a clear blue sky. The leaves are in sharp focus in the foreground, while others in the background are blurred. The lighting is bright, suggesting a sunny day.

**It may have once  
flowed through the  
sap of a maple tree.**



**Or been drunk by the  
builders of the pyramids.**

**Your body is 62% water, so  
even the molecules inside you  
have been around the world.**



**The water that flows down  
your drain may connect to  
the source of drinking water  
for another community.**



**We are all living  
downstream.**



An aerial, high-angle photograph of a densely populated city, likely San Francisco, showing a vast expanse of multi-story buildings and residential structures. The image is slightly hazy, suggesting a clear but bright day. The text is centered over the middle of the image.

**As our population grows,  
demand for clean, drinkable  
water grows too.**



**The planet can  
never run out  
of water...**

**but it can run  
out of water  
we can drink.**





**DID YOU KNOW**



**More than 50 billion  
bottles of water  
are sold every year.**



**Many of the bottled  
water brands are sourced  
from municipal tap water.**



All water is reused water.





**Fortunately,  
the H<sub>2</sub>O molecule  
can't be polluted.**



**It can only be  
mixed with things  
that make it unsafe  
for certain uses.**



**Purification, by  
technology or  
nature, removes  
what was added.**



**DID YOU KNOW**



**We can produce water that's  
more pure than your tap water.**



# We can remove:

✓ **Plasticizers**

✓ **Viruses**

✓ **Pathogens**

✓ **Bacteria**

✓ **Salts**

✓ **Pharmaceuticals**

✓ **Contaminants**

✓ **Mineral Deposits**

**We have the technology, but  
people still misunderstand  
the reality of the use and  
reuse of water.**



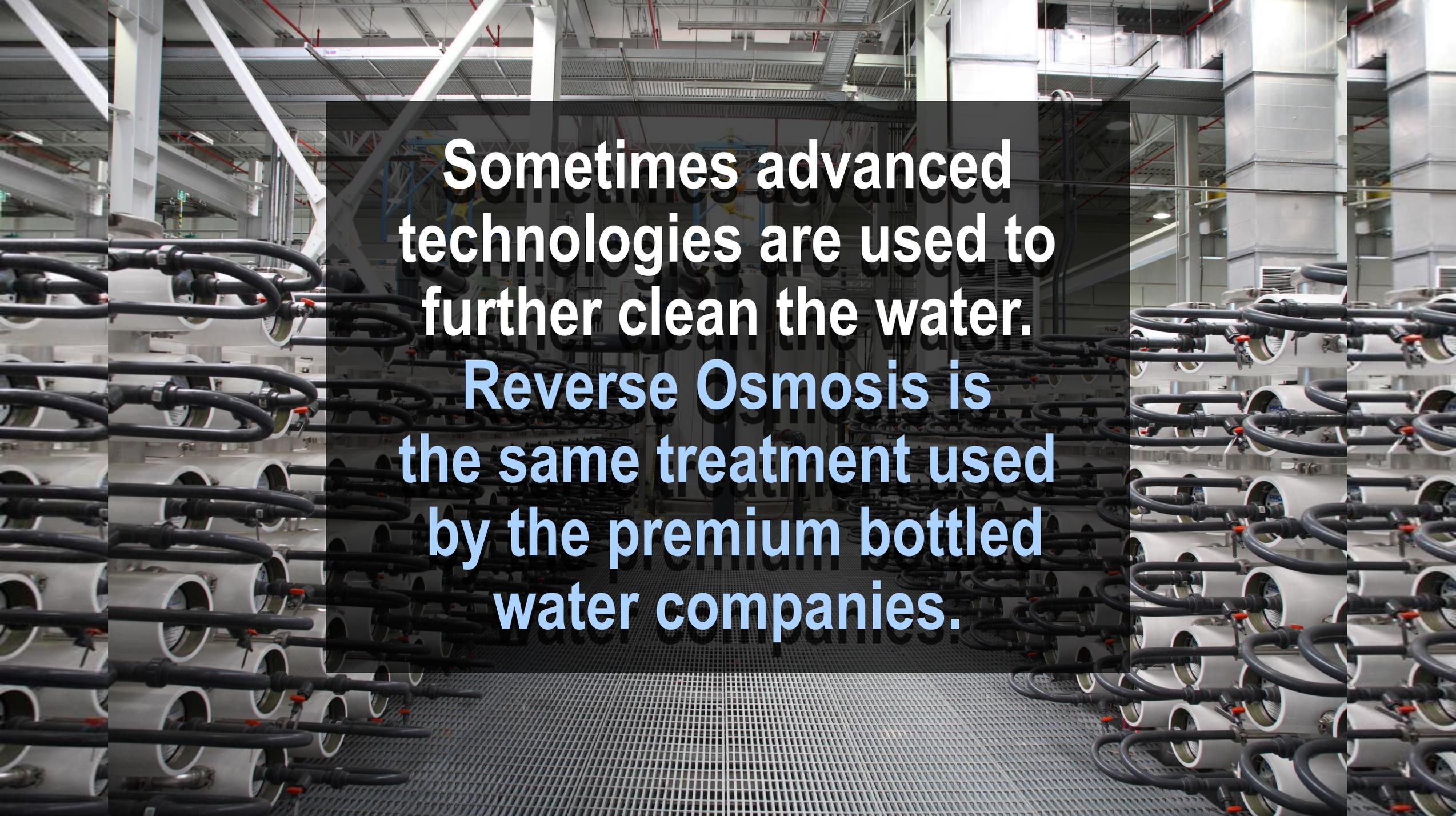
**Water reuse does NOT  
involve drinking water  
directly from the toilet.**



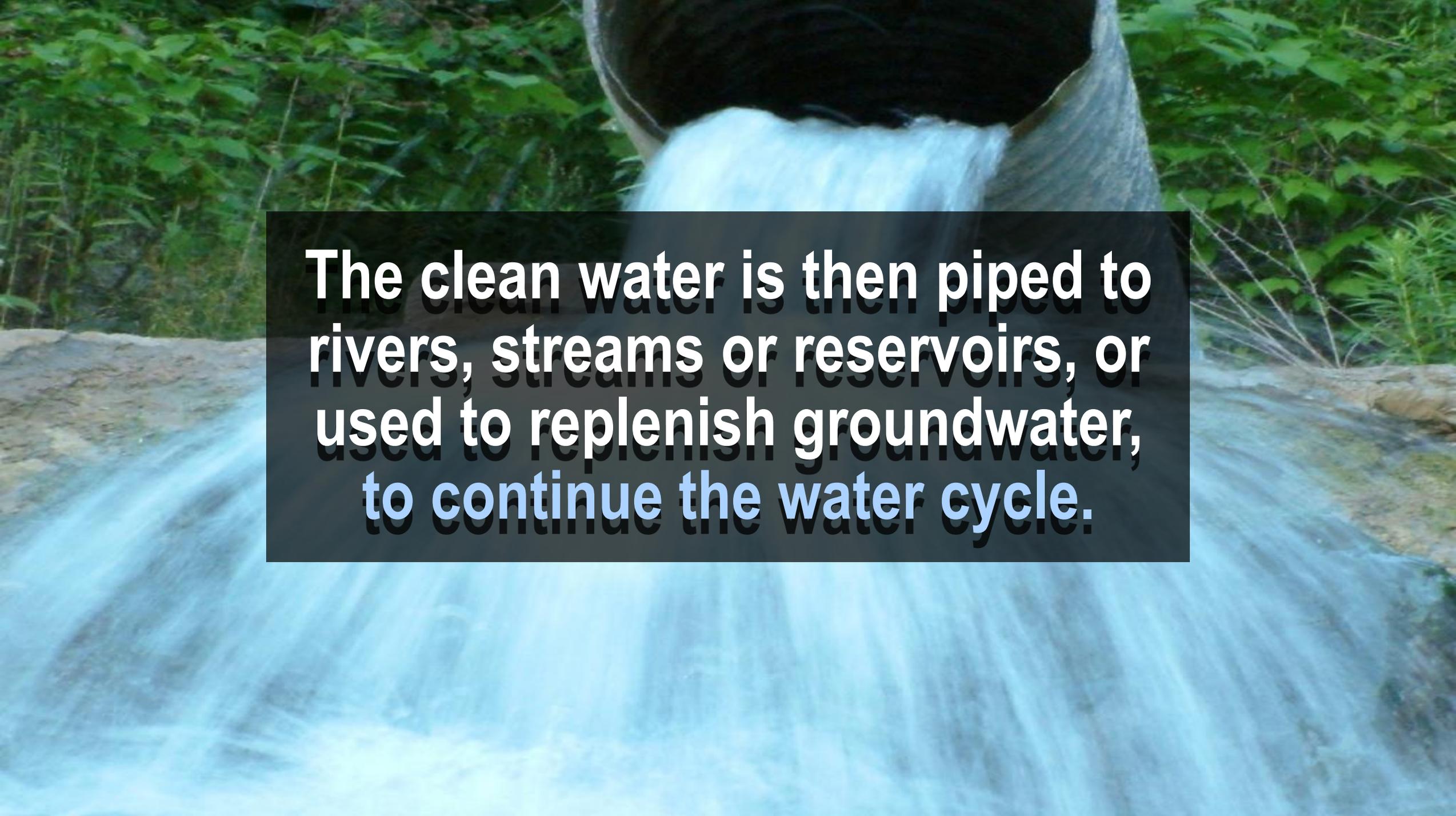
**Here's how it *actually* works:**



**First urban waste water is treated to remove harmful contaminants through a number of steps.**

The image shows a vast industrial water treatment plant. In the foreground and middle ground, there are numerous rows of white cylindrical reverse osmosis membrane modules. Each module is connected to a complex network of black flexible hoses and rigid pipes. The floor is covered in a grey metal grating. In the background, the facility's structure is visible, including white steel beams, overhead lighting, and various mechanical components. The overall scene is clean and organized, representing a modern water purification process.

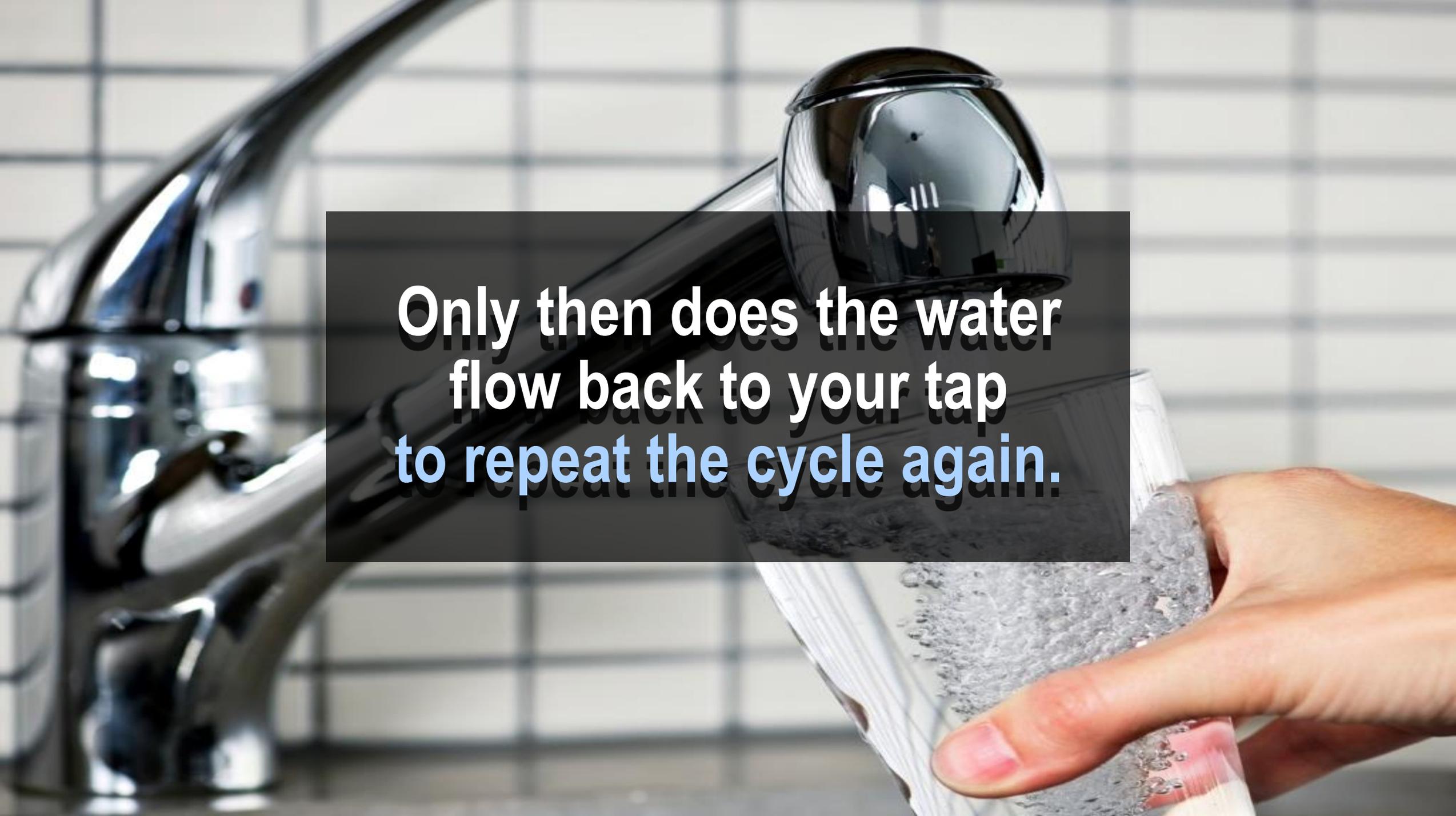
**Sometimes advanced technologies are used to further clean the water.**  
**Reverse Osmosis is the same treatment used by the premium bottled water companies.**

A photograph showing a large concrete pipe discharging water into a stream. The water is clear and flows over a rocky bed. The background is filled with lush green vegetation. A dark semi-transparent box is overlaid on the center of the image, containing white text.

**The clean water is then piped to rivers, streams or reservoirs, or used to replenish groundwater, to continue the water cycle.**

The image shows a vast, multi-level industrial facility, likely a water treatment plant. The scene is dominated by a dense network of large-diameter pipes in various colors: bright green, dark brown, and light blue. These pipes are arranged in long, parallel rows that recede into the distance, creating a strong sense of perspective. The pipes are supported by metal structures and are surrounded by various mechanical components, including valves and pumps. In the foreground, there are yellow safety railings and metal grates on the floor. The background features a high ceiling with skylights and a balcony with a white railing. The overall atmosphere is one of a large-scale, complex engineering project.

**Eventually it reenters the urban water system where it is treated at a water treatment plant again.**

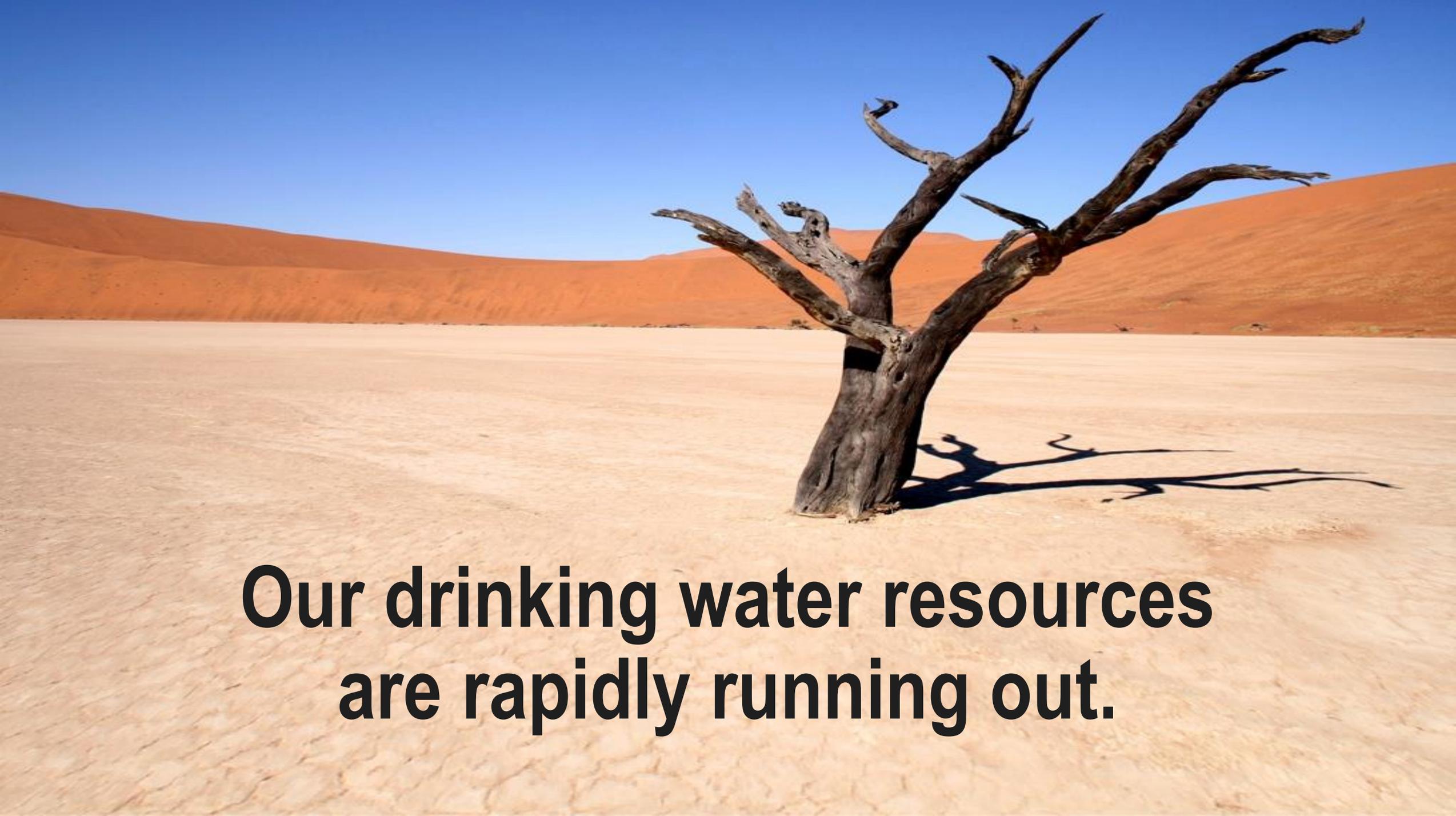
A close-up photograph of a hand holding a clear glass under a chrome faucet. Water is flowing from the faucet into the glass. The background is a white tiled wall. A semi-transparent black box is overlaid on the center of the image, containing white text.

**Only then does the water  
flow back to your tap  
to repeat the cycle again.**

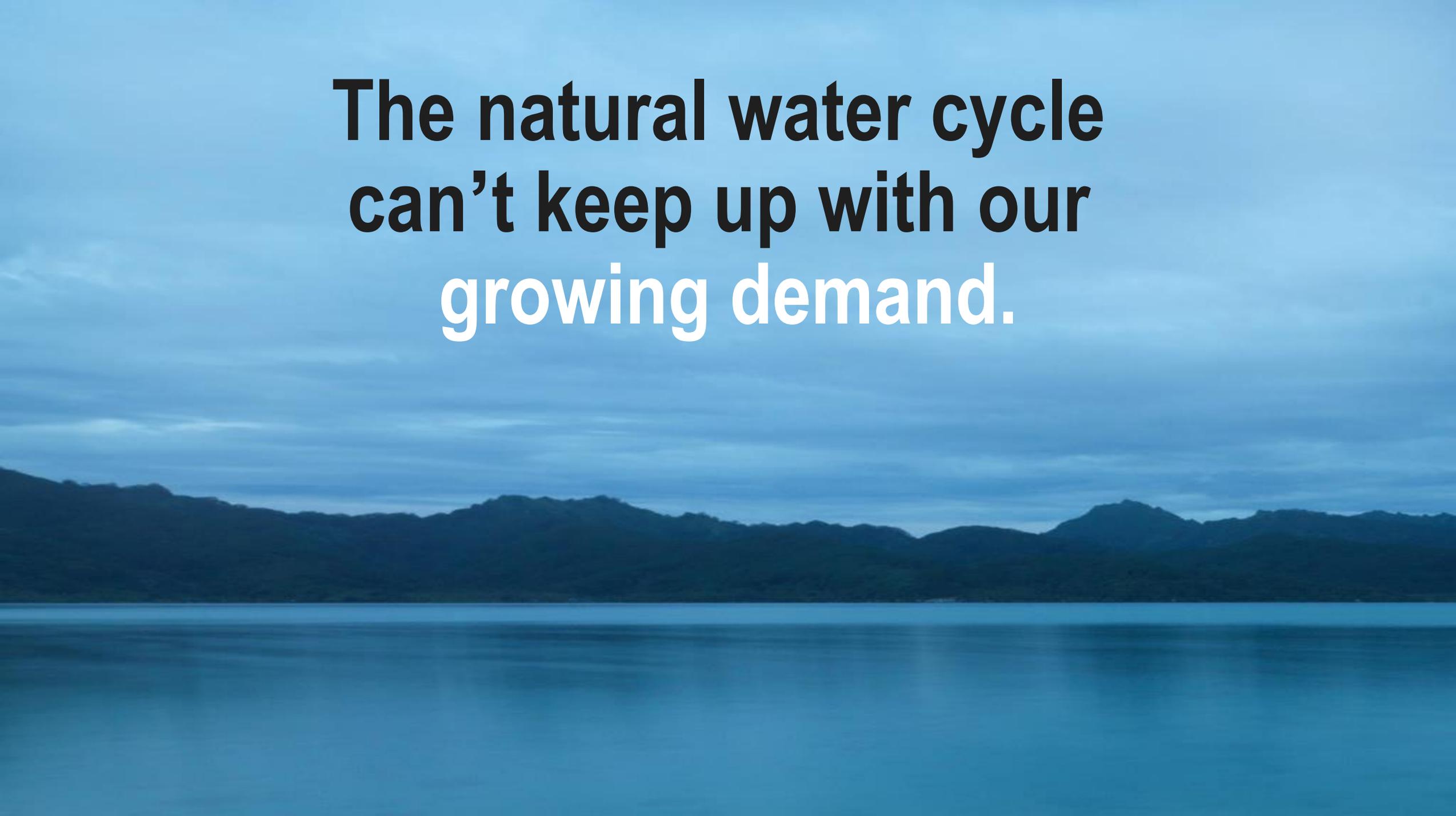


**So what does it all mean?**





**Our drinking water resources  
are rapidly running out.**

A blue-tinted landscape featuring a range of mountains in the middle ground and a body of water in the foreground. The sky is filled with soft, layered clouds. The overall mood is serene and somewhat somber due to the monochromatic color palette.

**The natural water cycle  
can't keep up with our  
growing demand.**

**Water reuse is  
often misunderstood.**



**The truth is all water  
is reused, always.**



**The water you drank this morning was used a week ago, a year ago, a century ago, and it will be used again tomorrow.**



**Modern technology  
allows us to get  
more mileage out  
of our water.**



**Properly treated water  
is the safest water  
on the planet.**



**We can waste less.**



**We can save more.**



**We can create  
a sustainable  
future for  
generations  
to come.**



**Now you know.**

# DOWNSTREAM



**It can be done.**



The Oxnard, California visitor centre is noted for its stunning architectural style



The Outdoor Classroom was a later addition to Water Corporation's Beenyup, Perth visitor experience

# *Think and Drink*

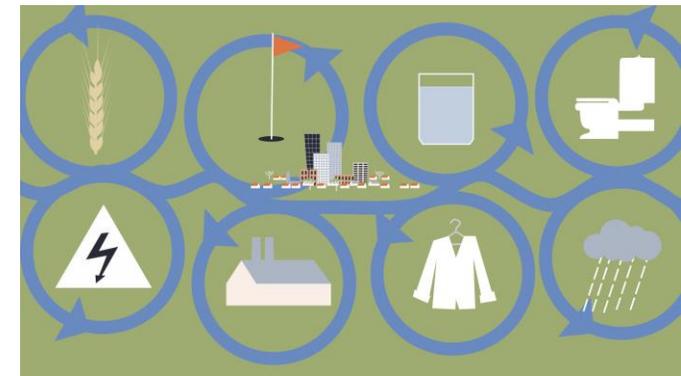
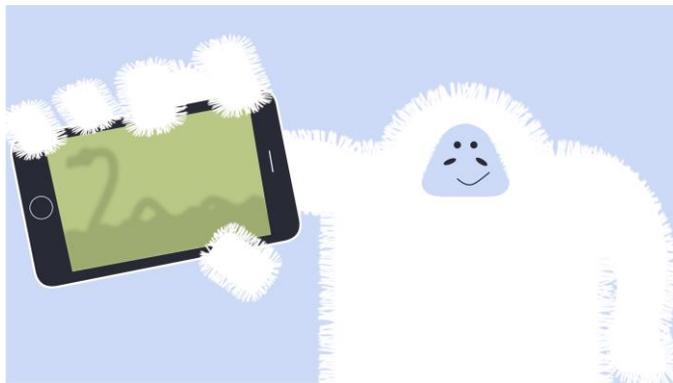
A series of animations that have been used in American studies and by American water utilities such as the Santa Clara website, El Paso Water, Soquel Creek Water District.

There are 5 Think and Drink videos – around 2 minutes each

They feature an Australian voiceover.

There are also **73 stills** of the animation that water utilities can use as education materials.

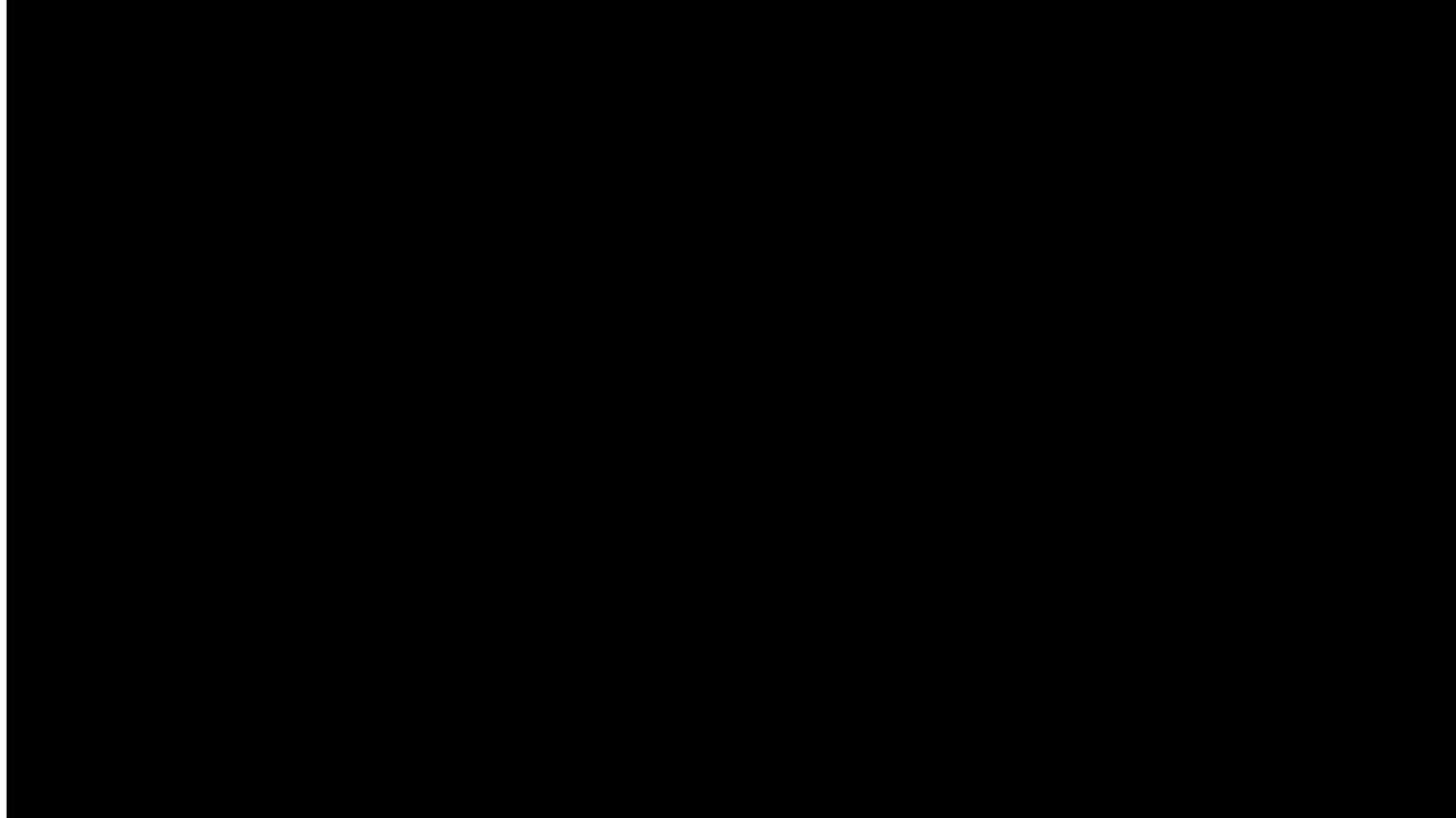
The materials can be downloaded free, and used freely, from the Water360 database held by WSAA.



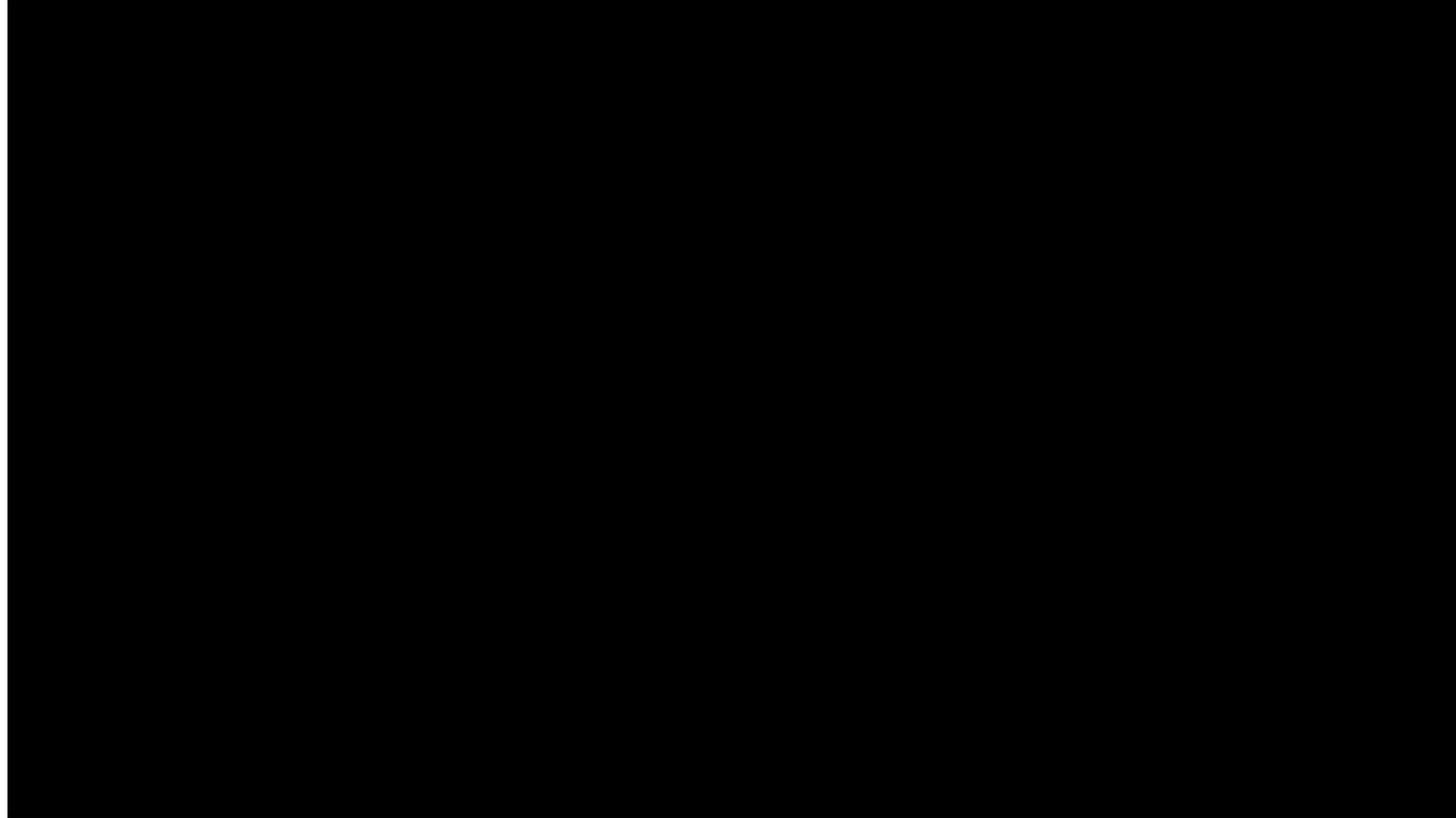
# Think and Drink *Designed for Purpose* video



# Think and Drink *Designed for Sustainability* video



# Think and Drink *Systems Thinking* video



# Think and Drink *Water Citizenship* video



# Think and Drink *Designed for Water Futures* video



# Think and Drink – 73 animation stills



Think-Drink-Animation-Stills.zip



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