

Talking About PFAS





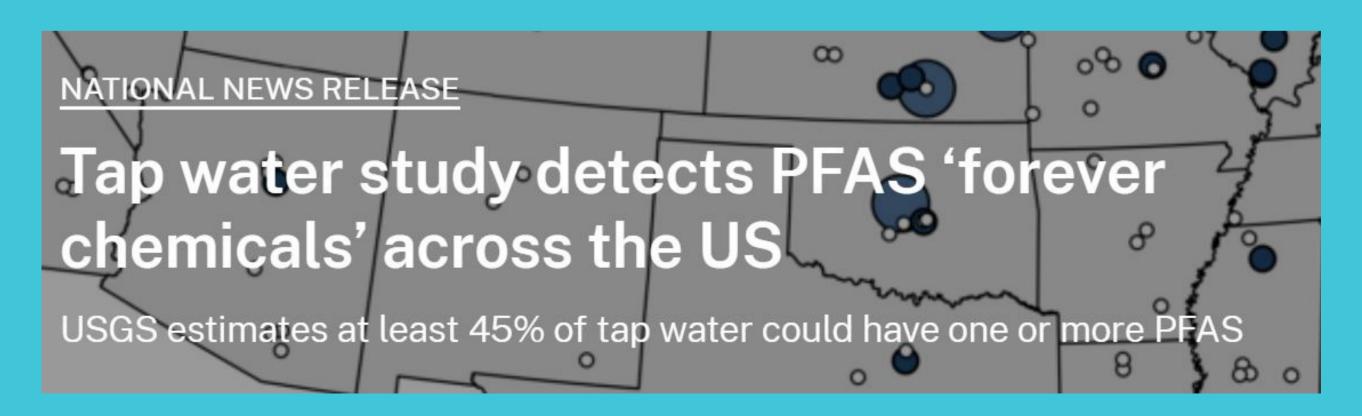
"The Fear of the Unknown is the Greatest Fear of All!" - Yvon Chouinard

Media uses its platform to garner reader/viewership

Fear is a motivator

Sensationalized Headlines - many do not read articles for the full story

An uneducated population



Not so eco-friendly? Paper straws contain more 'forever chemicals' than plastic, study says

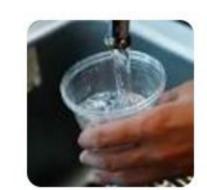
This can lead to feeling overwhelmed

Mary Walrath-Holdridge USA TODAY

Published 3:08 p.m. ET Aug. 28, 2023



'Forever chemicals' could be in nearly half of U.S. tap water, a federal study finds

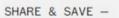


At least 45% of the nation's tap water could be contaminated with at least one form of PFAS known as "forever chemicals," according to a...

Jul 6, 2023



Asians in U.S. have highest exposure to cancer-linked 'forever chemicals' among all races











ASIAN AMERICA

Asians in U.S. have highest exposure to cancer-linked 'forever chemicals' among all races

Asian Americans' median level of PFAS was 88% higher than that of whites, research showed.

District can't remove all PFAS

And Its Local

| July 28, 2023

liars still engaged in deceiving the community so they can sell water that will kill some people.

LVMWD Clears the Air on PFAS Removal

This is in response to the July 28, 2023 Letter to the Editor titled "District Can't Remove all PFAS".

The original article titled "District douses tainted water red flag," was written to provide assurances and context to the community about an evolving water quality concern that has garnered recent national media attention.

California's public water and wastewater agencies, including LVMWD, are regulated by the State Water Resources Control Board (SWRCB) and are considered "among the most scrutinized businesses in the state." (source: https://calwaterassn.com/our-industry/faq/).

PFAS is a chemical compound made by humans and used in products that repel water, moisture, and heat; create non-stick surfaces; and are used in paint, makeup, furniture, carpet, clothing, cleaning products, and many other items found in your home. PFAS has also been found in some water sources and has even been detected in the atmosphere, which can end up in waterways and soil when it rains, it's practically everywhere.

LVMWD's drinking water comes from surface water sourced 400 miles away in the Sierra Nevada Mountains. Protections are in place to minimize the potential for water quality contaminants entering the delivery system and the watersheds themselves to ensure the highest quality source water.

Once our water travels to SoCal, it is first treated by the Metropolitan Water District of Southern California (MWD) before being sent to LVM-WD's delivery system and your home or business. This water is rigorously tested to ensure it meets or exceeds strict water quality standards set by the SWRCB. LVMWD also tests the water for additional parameters to further provide assurances of its safety.

As stated in the article, the two known PFAS carcinogens, PFOA and PFOS, have not been detected in our source water, but "MWD has discovered one form of PFAS—perfluorohexanoic acid (PFHxA)—in our drinking water supply, but this substance is not a known carcinogen and is not yet regulated in the U.S."

Typically, groundwater is among the cleanest sources of water available, but that is not always the case. Groundwater can be susceptible to contamination from PFAS compounds used at industrial sites. However, LVMWD does NOT supply groundwater to its customers for drinking. PFAS is also found at some level in most wastewater streams.

Through its JPA, LVMWD and its partner agency Triunfo Water & Sanitation District will be building an Advanced Water Purification Facility where wastewater that has already been treated to recycled water standards will be further purified to produce Pure Water. The project will supply up to 30% of the region's water supply beginning in 2028. The water used in your home will be treated eight times, including with a process called reverse osmosis.

Reverse osmosis (RO) uses a semi-permeable membrane and pressure to force water through a pore that is 0.0001 microns. A recent study on airborne PFAS molecules observed the smallest PFAS molecule to be 0.14 microns (source: https://rb.gy/lOtsy), or about 1,400 times larger than the RO pore size.

Stanford University recently published an article on the use of purified wastewater as a source water option and concluded that "the quality of the reuse water, particularly the reverse-osmosis-treated waters, was comparable to groundwater, which is traditionally considered the highest quality water." (source: https://engineering.stanford.edu/magazine/cleanest-drinking-water-recycled).

The accusations in the aforementioned letter to the editor are categorically incorrect, irresponsible and without scientific merit. RO is one of the most effective forms of PFAS removal. Imagine trying to push an elephant (PFAS molecule) through the eye of a sewing needle (RO pore). That will never happen.

LVMWD's top priority is to ensure your water is the safest and cleanest available. We rely on science to create data, and data to create facts. Science is our guiding principle on all decisions related to your water, especially when public health of the community is at stake. Visit www.LVMWD.com/WQR for more information on the quality of your water and at www.OurPureH2O.com/DemoFacility for a tour of the Pure Water Demonstration Facility.



Water not as clean as it seems

Just a reminder, San Diego and Orange County have sewage recycled water plants. There are cancer clusters in these areas.

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Opened in 2020, the Pure Water Demonstration Facility provides the opportunity for JPA customers to learn first hand how the advanced purification process works.

Facts are the most important, but so is confidence in talking about PFAS

Perspective is Everything

Exposure frequency, from where, and how much

Who is the villian?

Dosage Amounts - Example: (PPT = 10 drops added to Rose Bowl filled with water)

Transparency, Safety, Trust

Water contamination is not an irrational fear, but the media, science community, water industry, and government have not effectively communicated exposure mechanisms so people can make educated and better-informed choices to limit exposure.

Water is not it

Communicating PFAS is Challenging

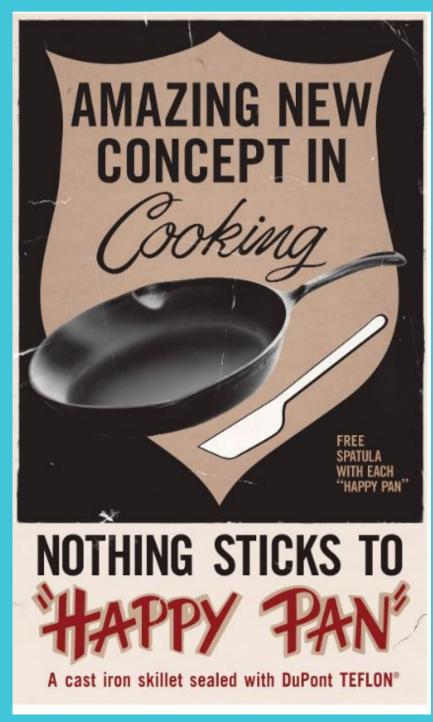
Changing Information

All or nothing mentality

Ingesting might be difficult to accept

PFAS dilemma continues to unfold

Breaking through the noise



What Do We Do?

Science Creates Data, and Data Creates Facts

Science is our Guiding Principle

Continue to lead with Trust, Safety, and Transparency

Education of Elected Officials, Community Leaders, HOA Groups, Journalists, Schools, Teachers

Consistency

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Action Items

- Staff will develop brief talking points for the Board
- Staff will respond to media requests and letters to the editor when appropriate
- District is already participating in a statewide effort with other agencies on creating a PFAS communications tool kit
- Staff will continue to highlight safety, transparency, and trustworthiness
- Staff will continue to create informational pieces on PFAS and the evolving science
- Staff will be contacting the service area communities to give updates on PFAS and will be available for HOA, civic, and other community gatherings for presentations on PFAS