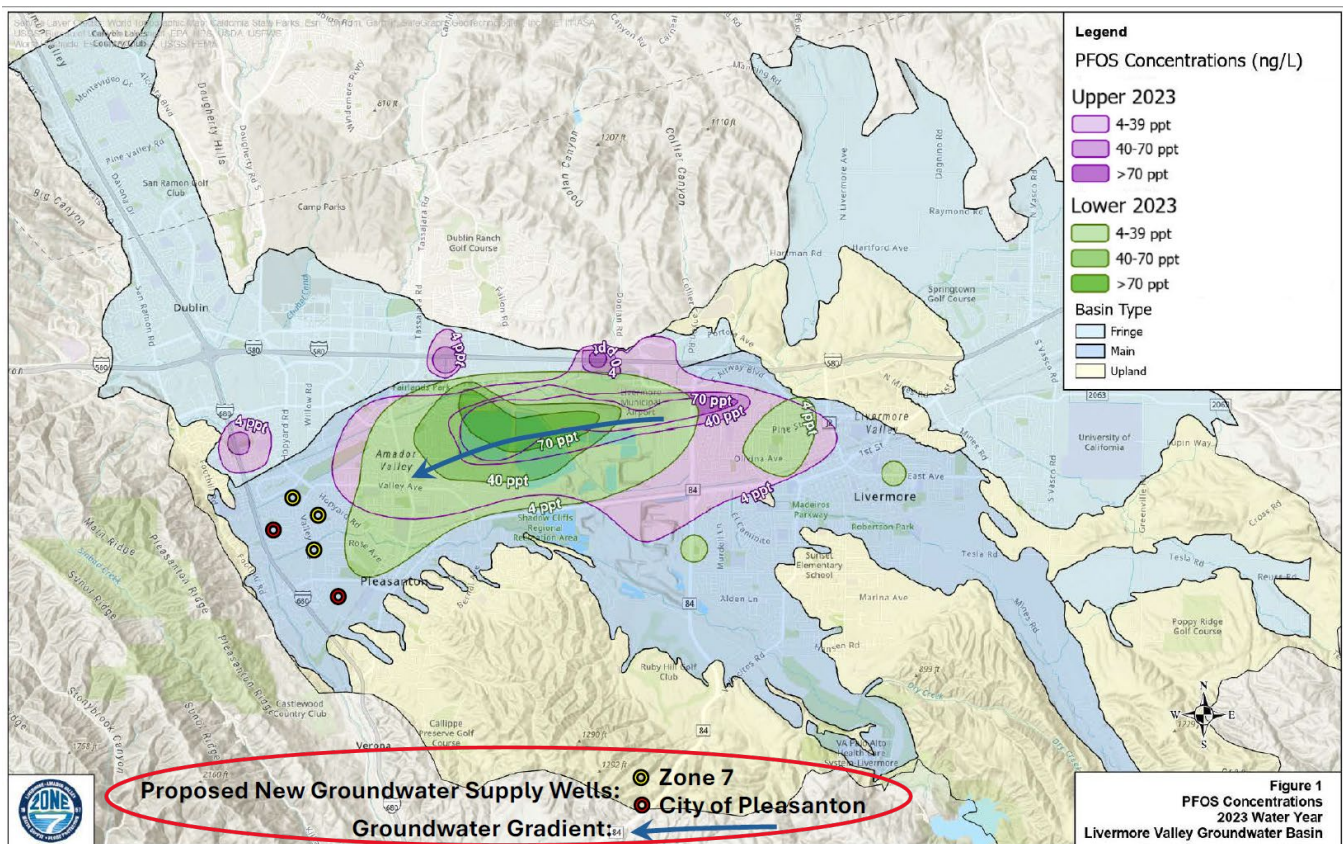


# Message to Geologists, Hydrogeologists and Environmental Engineers residing in the Tri-Valley

## Re.: PFAS Contamination in the Livermore Valley Groundwater Basin

Jim Lehrman, PG, CHG, CPG, Pleasanton, CA  
 George Reid, PG, CHG, CEG, CPG, Pleasanton, CA  
 Erik Sommargren, Livermore, CA

Unbeknown to many, there's a large regional plume of per- and polyfluoroalkyl substances (PFAS) in the drinking water supply underlying the Tri-Valley, where groundwater provides 20% of our water on average and 50% in 2022. Both the upper and lower aquifers of the Livermore Valley Groundwater Basin (totaling ~1,000' in thickness) are severely impacted by PFAS. The PFAS plume is approximately two miles wide and six miles long, as defined by concentrations exceeding the USEPA's recently promulgated maximum contaminant levels (MCLs) and data from the Tri-Valley region's water wholesaler, Zone 7 Water Agency (Zone 7). Three local geologists (the authors) are advocating for actions to prevent further degradation of the Basin, and seek your support.



Source: The Independent, June 13, 2024. [https://www.independentnews.com/news/pleasanton\\_news/local-geologists-oppose-city-s-pfas-plans-for-new-wells/article\\_7e7ff684-2921-11ef-996c-e789a77a8480.html](https://www.independentnews.com/news/pleasanton_news/local-geologists-oppose-city-s-pfas-plans-for-new-wells/article_7e7ff684-2921-11ef-996c-e789a77a8480.html). Annotated to show proposed well locations and general groundwater gradient.

PFAS are a group of synthetic chemicals (including PFOS / perfluorooctane sulfonate) that have been used in consumer products since the 1950s, known as "forever chemicals" because they don't break down easily over time and are highly soluble in water. Health risks from PFAS include increased risk of

some cancers, thyroid disease, reduced ability of the body's immune system to fight infections, including reduced vaccine response, interference with the body's natural hormones and increased cholesterol levels and/or risk of obesity. While PFAS are contained in many consumer products, including water-resistant fabrics, nonstick cookware, cleaners, and personal-care products, one of the main routes of human exposure is consumption of drinking water. The suspected prime source of PFAS in our groundwater is spent fire-fighting foam, which can infiltrate soil and leach to groundwater.

**Some good news:** Before legally required, Zone 7 and the City of Pleasanton shut down about ten water supply wells that exceeded new PFAS MCLs. Zone 7 started wellhead treatment at one well to remove PFAS concentrations, plan to start wellhead treatment at three more wells this fall and have additional plans for wellhead treatment at even more wells in the next few years. Also, the San Francisco Bay Regional Water Quality Control Board (Water Board) is at long last requiring investigations into potential sources of PFAS, including Livermore-Pleasanton Fire Department sites and the Livermore Airport, where PFAS containing firefighting foam may have been used for decades. For these investigations, the Water Board has been referring to a technical memorandum on potential PFAS sources prepared for Zone 7 by Jacobs Engineering in 2020.

**The bad news:** Zone 7 and the City of Pleasanton plan to drill up to five new water supply wells just downgradient and west of the known PFAS plume to increase water supply, rather than pursuing more wellhead treatment in the short term. Millions of gallons of water per day would be pumped from each of the proposed new wells. This action would undoubtedly accelerate the migration of PFAS and spread these hazardous substances into yet unimpacted areas of the groundwater basin. Zone 7 and the City of Pleasanton seem to be justifying these plans based on (1) short-term cost savings over wellhead treatment and (2) groundwater modeling, which is without doubt inadequate to predict the exact rate of plume movement. Zone 7 has apparently claimed that (a) the plume is contained, and (b) a geologic groundwater barrier exists between the proposed new wells and the plume, which will restrict further plume migration. We find no credible evidence for these claims.

Prior to drilling expensive new test/pilot wells, adequate spatial and temporal data should be collected from existing monitor wells to establish statistically reliable PFAS trends. The new data could be used to calibrate transport in an updated groundwater model to better assess the risks of new production wells.

#### **What you can do:**

- Sign this petition as a knowledgeable professional demanding that the City of Pleasanton and Zone 7 stop their plans for the proposed new wells or delay those plans until adequate PFAS data is available to make better informed basin management decisions. Please click the link to sign: <https://chnng.it/9ZMBrGK6T7>. Include your professional registration (e.g., PG, CHG, CEG, PE).
- Ask Pleasanton City Council members, the Pleasanton City Manager, and Zone 7 Board of Directors (contact information below) to stop their current plans for the proposed new wells before spending up to \$2MM on test/pilot wells this fall. Other agencies to contact include Alameda County Supervisors, the Water Board, CalEPA-DTSC, and USEPA.

Your professional expertise is important to prevent further contamination of our aquifers. Your education, knowledge and experience with similar projects, subsurface geology and fluid flow in porous media qualifies you as an expert whose judgement on such matters should be highly valued by our elected officials. Please contact us at [trivalleygroundwater@gmail.com](mailto:trivalleygroundwater@gmail.com) to share your knowledge and advice. We are facing an uphill battle with highly funded agencies that move quickly and often disregard local experts and their concerns.

Pleasanton City Council:

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Julie Testa, Vice Mayor, [jtesta@cityofpleasantonca.gov](mailto:jtesta@cityofpleasantonca.gov)

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Pleasanton City Manager:

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Zone 7 Board of Directors:

Dennis Gambs, President, (925) 454-5756, <https://www.zone7water.com/post/contact-us?profile=1125>

Dawn Benson, Vice-President, (925) 454-5754, <https://www.zone7water.com/post/contact-us?profile=1128>

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Kathy Narum, (925) 454-5753, <https://www.zone7water.com/post/contact-us?profile=1101>

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