

Water Quality & PFAS: What's it all about?

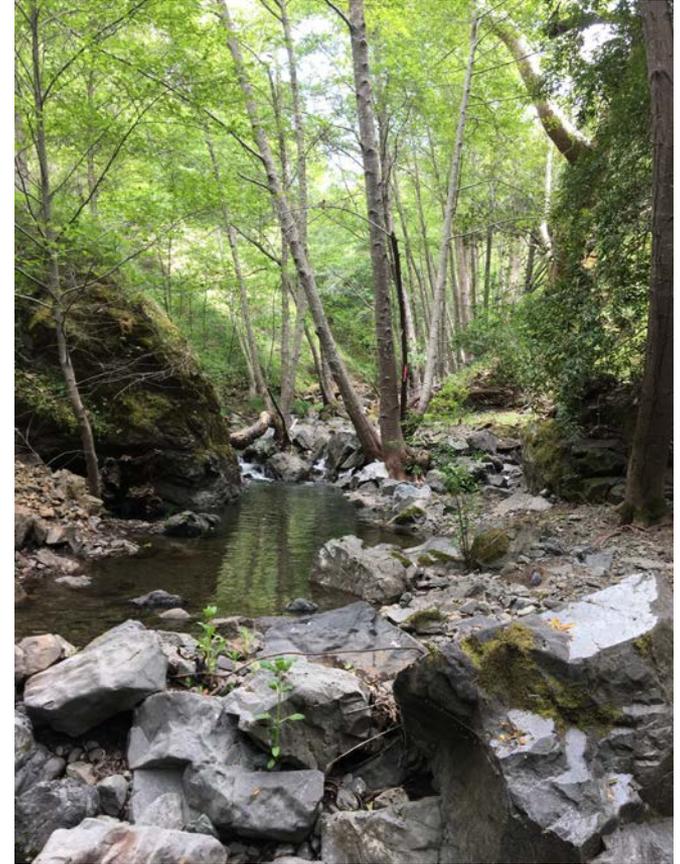
SJW Open House Webinar
August 13, 2020

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Director of Water Quality & Environmental Services



Agenda

- What are PFAS?
- Are they regulated?
- SJW's response
- Q&A



What are PFAS?

- PFAS stands for Per- and Poly Fluoro Alkyl Substances
- Extremely persistent chemicals
- Over 4,500 types
- Two “regulated in CA”
 - Perfluorooctanoic acid (PFOA)
 - Perfluorooctanesulfonic acid (PFOS)
- Seven others under review by the State

What are PFAS?

They are used in:



Non-stick Pans



Manufacturing



Flame retardant
and stain repellent in Fabrics

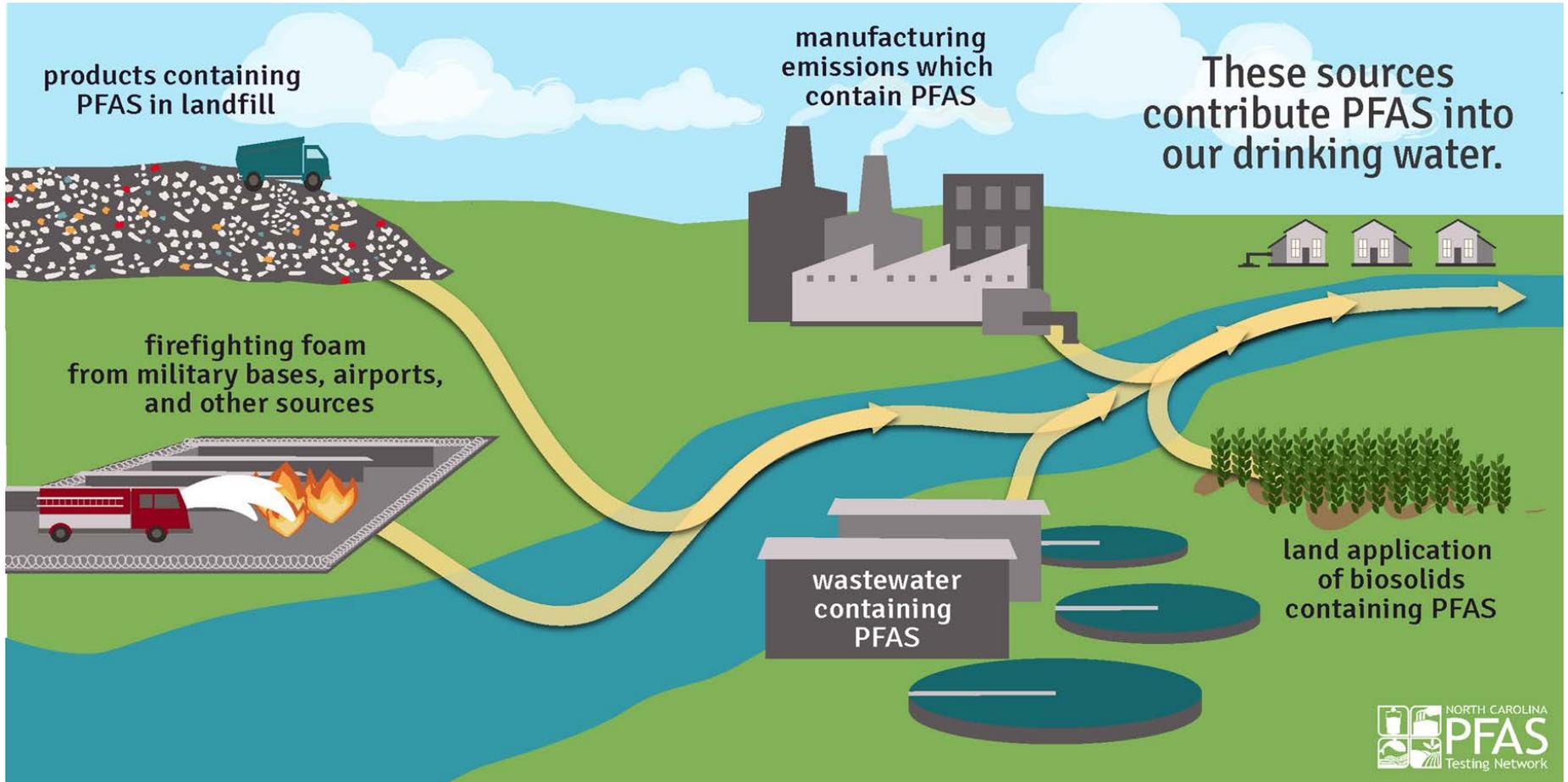


Fire Fighting



Food Packaging

Sources of PFAS



Why the concern over PFAS?



**Animal studies suggest
PFAS exposure is linked to...**



**damage to the immune
system**

liver damage

**birth defects, delayed
development, and newborn
deaths**

Information sourced from Agency for Toxic Substances and Disease Registry

Are PFAS Regulated?

- The Office of Environmental Health Hazards Assessment (OEHHA) has performed a risk assessment of the chemical using standard risk and exposure assumptions and proposed a health-protective level (Notification Level).

Substance	Notification Level (ng/L or PPT)	Response Level (ng/L or PPT)
PFOA	5.1	10
PFOS	6.5	40

- At the health-protective level there is a 1 in one million chance of adverse health impacts from drinking the water over a lifetime of exposure (2 liters/day over 70 years).

Monitoring History at SJW

2013 - 2015

Part of UCMR₃:

- Detection limit of method was 40 ppt
- No Detects at SJW

January 2019

SJW started **voluntary monitoring**

March 2019

DDW issued monitoring order for quarterly monitoring of 17 wells at four stations

Present

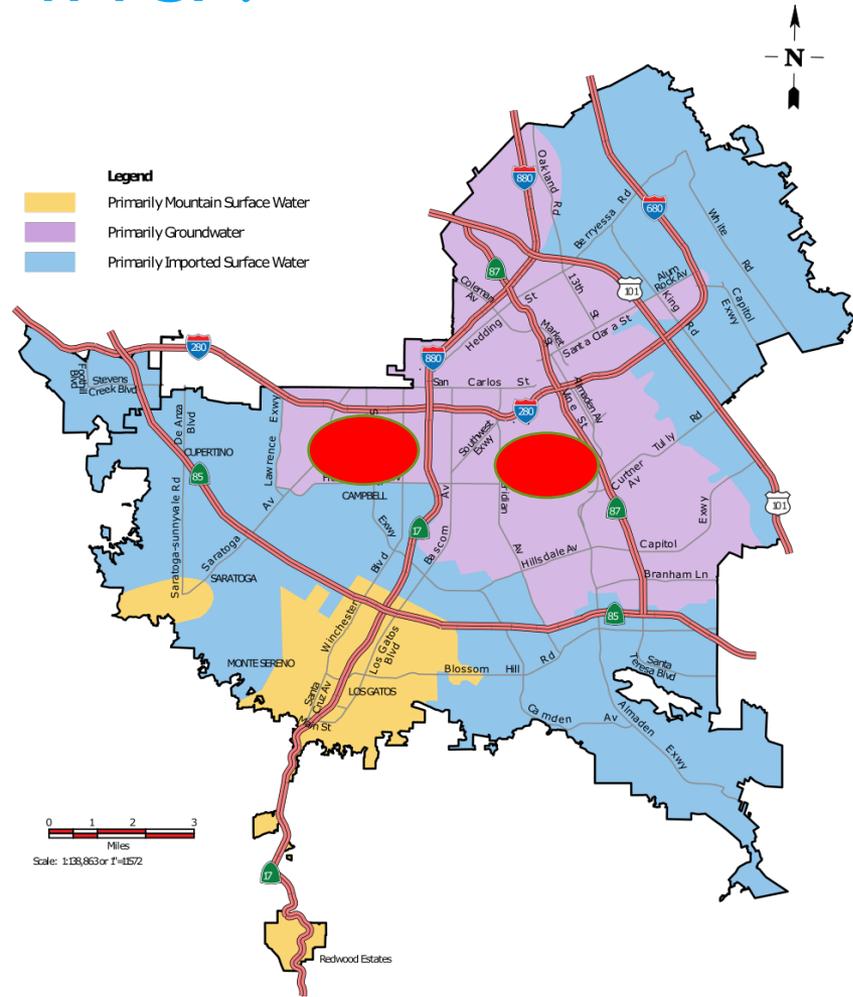
SJW has completed the monitoring of all of its wells. Wells with PFOS concentrations of $\frac{1}{2}$ the NL or greater, are monitored quarterly.



What Did SJW Find?

10 wells at three stations with PFOS results near or over CA Notification Level of 6.5 ng/L.

- 3 at Williams
- 5 at Willow Glen Way
- 2 at Malone



What did SJW Do?

- Immediately put all 10 wells with PFOS on a regulatory status of “Standby”
- Sent letters to towns, cities, CPUC, Santa Clara County and DDW (required)
- Voluntarily sent letters to customers



San Jose Water
Water Quality and Environmental Services
1221A S Bascom Ave, San Jose CA 95128



June 15, 2020

<Customer Name >
<Street Address >
<San Jose, CA 95125 >

Dear <Customer Name>,

We are writing to you today to let you know about the results of recent testing that took place on water wells that provided water to your property on <service address>.

On June 1, 2020, SJW received laboratory results indicating that its two wells at Malone Station had concentrations of perfluorooctane sulfonate (PFOS) above the Notification Level (NL) set by the California State Water Resources Control Board Division of Drinking Water (DDW). The NL is a set level at which we inform affected customers and public officials about the results.

What did SJW do?

Upon learning of the test results, SJW **immediately discontinued the use of these wells** on the day this was discovered (June 1). As a result, **you are no longer receiving water with concentrations of PFOS above the NL.** SJW took this step out of an abundance of caution. The PFOS concentrations in the wells did not rise to the level at which DDW recommends taking these wells out of service, but we always want to ensure the safest and highest quality water for our service areas.

Do I need to take action based on this information?

Landlords, businesses and schools are encouraged to share this letter with non-billed water customers at their locations. **Your drinking water continues to meet all federal and state regulatory standards**, and we will continue to do our work to make sure you receive safe and high-quality water every day.

What is a Notification Level?

Notification Levels are health-based advisory levels that are established for chemicals for which there are no formal regulatory standards. If one of these chemicals is identified in our wells in a concentration that is equal to or greater than the Notification Level, pursuant to California Health and Safety Code Section 116455, SJW is required to inform its affected customers, governing body (CPUC), the California State Water Resources Control Board Division of Drinking Water (DDW), and the local agency whose jurisdiction includes the areas served by SJW. No other action is required to be taken under this provision.

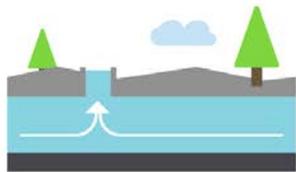
Notification Letters

- **January 2020:** Notified local officials and *11,300 impacted customers* of the detections of PFOS above the NL at Williams and Willow Glen Stations.
- **June 2020:** Notified local officials and *2,874 impacted customers* of the detections of PFOS above the NL at Malone Station.



Is SJW's Groundwater Safe to Drink?

- Yes, SJW's Groundwater meets all Federal and State Drinking Water Standards.
- Water hardness is a measure of its high mineral content.
- SJW is working to transition groundwater from free chlorine to chloramine. This is expected to improve the taste and odor of our water.



**Santa Clara
Groundwater Basin**



**Local/Regional
Streams and Rivers**

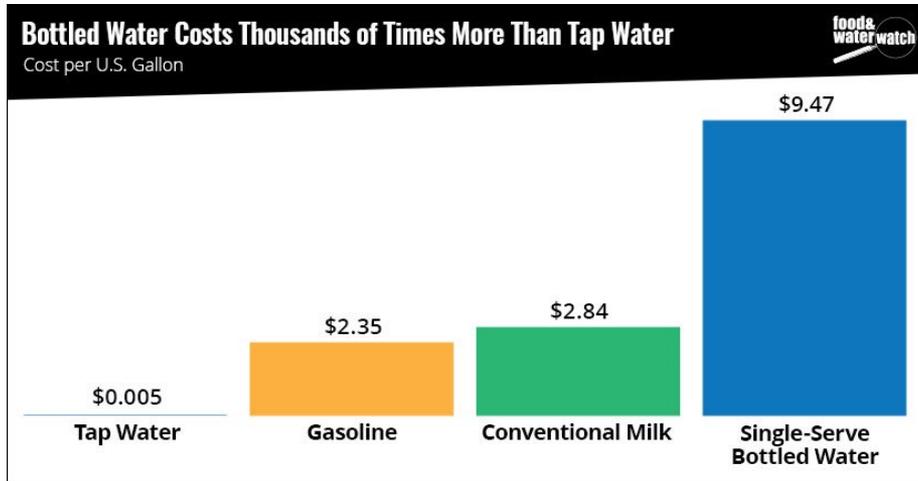


**California
Delta**



**Santa Cruz
Mountains Watershed**

Should I Drink Bottled Water?



- San Jose Water is safe, affordable and sustainable.
- SJW takes over 18,000 tests/year to ensure that your water meets standards.
- Bottled water is not regulated as stringently as tap water.

SJW SAN JOSE WATER
Annual Water Quality Report 2019

Clean Water for Our Customers

This brochure provides a snapshot of last year's water quality data for San Jose Water. Included are details about where your water comes from and how your water quality compares to State standards. SJW is pleased to report that your tap water met all USEPA and State primary drinking water health standards in 2019. As a member of the Partnership for Safe Water, SJW remains focused on water quality and environmental stewardship to ensure continued delivery of safe and high quality water to our customers. Since joining the Partnership for Safe Water, SJW has exceeded industry benchmarks in reducing main breaks per 100 miles of main and increased distribution system residual disinfectant levels. These Partnership-related improvements have contributed to increased water service reliability, more efficient main replacement, and enhanced public health protection.

Where do we go from here?



- Our goal is to provide “World Class” customer service and satisfaction.
- We achieve this by delivering exceptional quality water.
- We work towards this each and every day.



Partnering with Valley Water

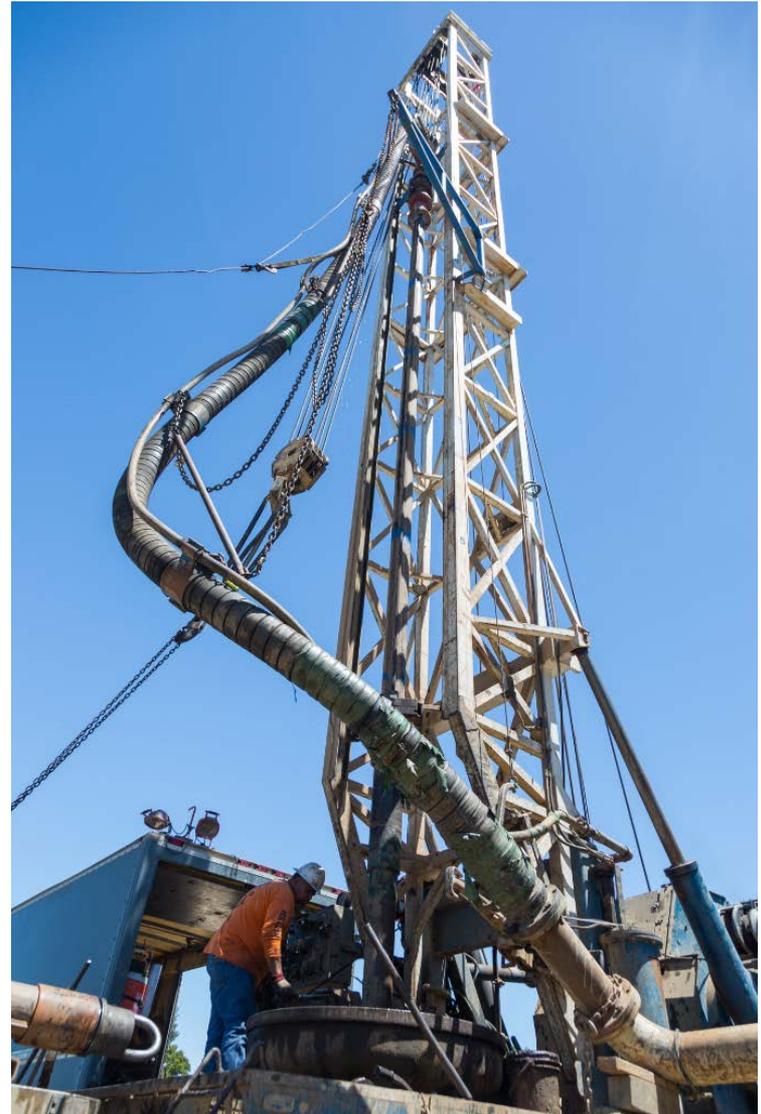
We are working with Valley Water to monitor and better understand PFAS issues and the fate of our aquifer:

- Understanding the extent of the presence of PFAS
- Establishing concentration trends
- Identifying sources
- Eliminating sources



Options Under Consideration

- Keeping the wells on “standby” status.
- Bringing the “standby” wells back online, provided the groundwater meets all regulatory standards.
- Installing a treatment system at the stations impacted by PFOS.



Drilling a well

Ensuring your water is safe

Goals for the Williams Station:

- Review PFOS/PFOA removal options
- Improve aesthetic issues by removing iron and manganese
- Match the hardness level of the groundwater to our surface treated supplies,
- Protecting wells against future contamination issues.

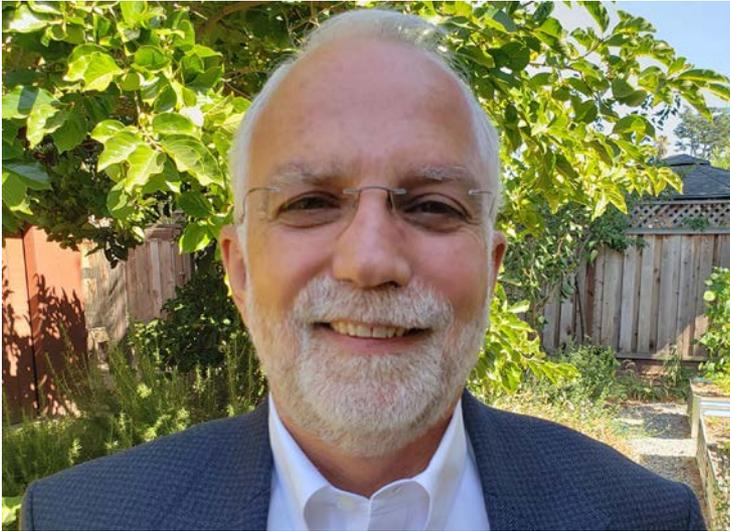


Next Steps



- Complete treatment study and develop cost estimate.
- Work with our customers to establish support and an understanding of what treatment means.
- Work with the CPUC to obtain permission to install treatment at Williams, Willow Glen and Malone.

Questions?



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