



SAN JOSE WATER

# The Science Behind the Standards:

*A Look Inside SJW's 2025 Public Health Goal Report*

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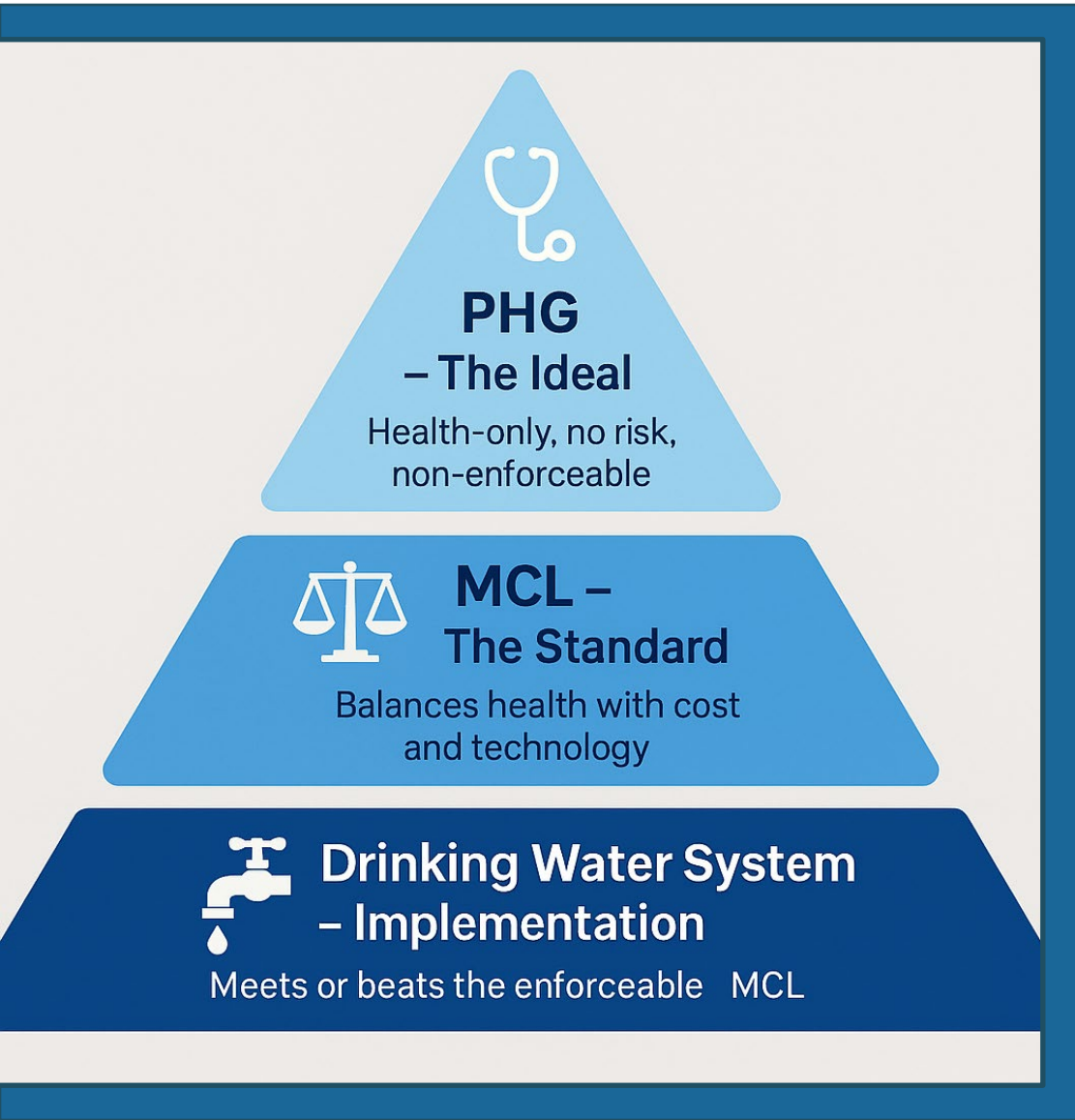
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Followed by Q&A

# What is a Public Health Goal?

## The Health-Protective Benchmark



- Not a legal limit; a guide toward safer water.
  - Health goal for contaminant with no expected health risk over a 70-year lifetime exposure
- Developed by the California Office of Environmental Health Hazard Assessment (OEHHA)
- Guides the State Water Resources Control Board in setting enforceable Maximum Contaminant Levels (MCLs) feasible
  - MCLs must be set **as close to the PHG as is economically and technically feasible**

# PHGs vs. MCLs: *A Helpful Way to Think About It*



PHG = the health ideal  
*Like a North Star*



MCL = the enforceable  
safety standard  
*How close we can reasonably sail  
using proven tools and funding.*



Both work together to keep water safe while  
balancing practicality and reliability.



SAN JOSE WATER

# How PHGs are Developed

## OEEHA's Science-First Process



### Comprehensive Literature Review

- Evaluates current research on health effects of contaminants



### Toxicological & Epidemiological Data

- Assesses effects on sensitive populations over time



### Lifetime Exposure Modeling

- Estimates risk based on daily exposure over 70 years



### Public & Expert Peer Review

- Ensures transparency and scientific integrity



*For cancer-causing chemicals, PHGs reflect a **1-in-a-million lifetime cancer risk** — the most protective benchmark in U.S. water policy.*

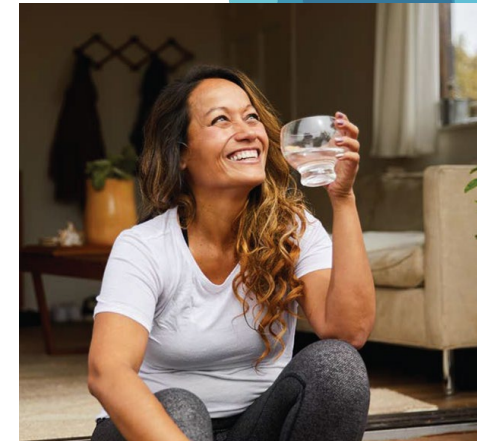
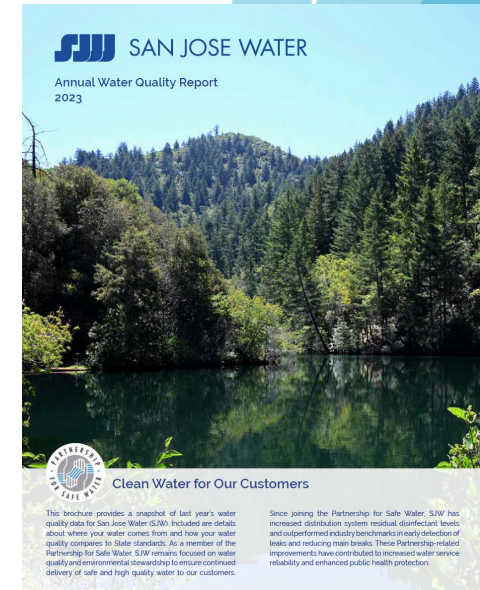


# Why PHGs Matter to Us

- **Guide Long-Term Planning**
  - PHGs inform treatment evaluations, source decisions, and risk prioritization for sensitive populations.
- **Benchmark Performance**
  - They provide a health ideal, let us track trends over time, and help set internal targets above minimum standards.
- **Support Reporting and Clear Communication**
  - SJW uses those findings to explain risk and actions to customers and regulators.

# 2025 PHG Report Scope

- Required under California Health & Safety Code every 3 years
- Focuses on contaminants that:
  - Were detected in SJW's water
  - Exceeded a California PHG or a federal MCLG
- Data from 2022 to 2024
- Evaluates potential treatment and cost





*The Water Quality Department maintains a vigorous monitoring program dedicated to providing high quality drinking water to our customers.*

Between 2022 and 2024, our highly experienced staff collected more than 3,000 regulatory and non-regulatory samples from our distribution system and treatment plant, generating over 69,000 data points.



# **PHG Report Findings**

*What We Found and What It Means for You.*

**(2022–2024)**

# What We Found (at a Glance)



- All SJW supplies meet State of California and USEPA drinking water standards.
- Some individual well results or single samples collected at customer taps exceed PHGs set at very conservative levels.

# How We Sample & What It Means for You



## Why We Sample Individual Wells

California regulations require water utilities to test for constituents at the source level — meaning each well is sampled individually.



## What You Actually Receive

Water from individual wells is typically blended with other wells at the wellfield before entering the distribution system.



*This blending often results in much lower concentrations of constituents than what's seen in individual well samples.*

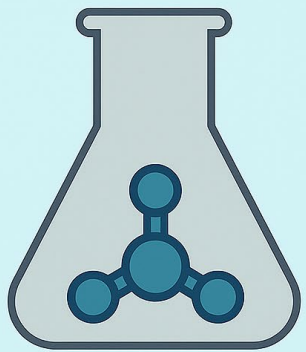


## Why This Matters

A detection at an individual well doesn't mean that level is present in your tap water.

# Volatile Organic Compounds: 1,1,2-Trichloroethane

## WHAT IS 1,1,2-TRICHLOROETHANE?



1,1,2-Trichloroethane is a man-made chemical once used as an industrial solvent and in making other chemicals.



- **What are Volatile Organic Compounds**

- Man-made chemicals like fuels, paints, and cleaners.

- **Our Findings**

*Detected in **1 of 88** groundwater wells*

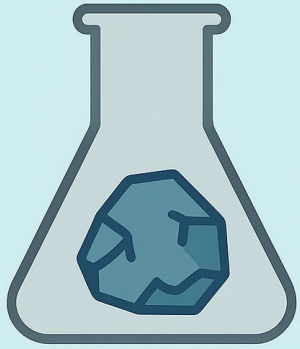
- **Highest Detected Level:** 3.6 µg/L
- **Public Health Goal:** 0.3 µg/L
- **Regulatory Limit (MCL):** 5.0 µg/L

- **Our Commitment**

- We will continue to monitor closely and apply treatment if needed to ensure water quality remains protective of public health.



# Inorganic Compounds: Arsenic



## WHAT IS ARSENIC?

Arsenic is a naturally occurring element in rock formations. Common in groundwater across California.



ROCK FORMATIONS

GROUNDWATER

ARSENIC

- **Our Findings**

- **Highest Level Detected:** 4  $\mu\text{g/L}$
- **Public Health Goal (PHG):** 0.004  $\mu\text{g/L}$
- **Regulatory Limit (MCL):** 10  $\mu\text{g/L}$

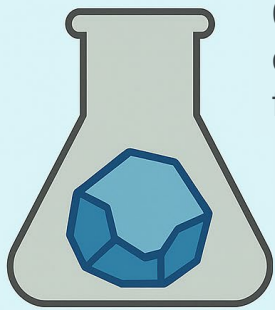
*Our results are well below the regulatory limit, though above the extremely low health-based goal.*

- **Our Commitment**

- We're actively monitoring and evaluating treatment options where potentially needed.

# Inorganic Compounds: Cadmium

## WHAT IS CADMIUM?



Cadmium is a naturally occurring element in rock formations.

Human activities like mining, smelting and refining can also release cadmium into the environment.

ROCK FORMATIONS

GROUNDWATER



## • Our Findings

*Detected in 2 of 88 groundwater wells*

- Highest Detected Level: 1.2  $\mu\text{g/L}$
- Public Health Goal : 0.04  $\mu\text{g/L}$
- Regulatory Limit (MCL): 5  $\mu\text{g/L}$

## • Our Commitment

- We will continue to monitor cadmium closely and apply treatment if needed to ensure water quality remains protective of public health.

# Inorganic Compounds: Chromium VI (Cr-VI)



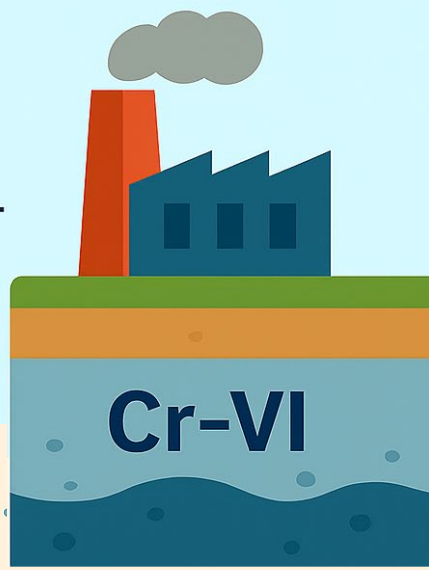
## WHAT IS Cr-VI?

Cr-VI, also known as hexavalent chromium, is a form of chromium that can occur naturally in certain rock formations.

Cr-VI can also enter water through industrial activities—such as manufacturing, metal plating.

**ROCK FORMATIONS**

**GROUNDWATER**



## • Our Findings

- **Highest Level Detected:** 8.2 µg/L
- **Public Health Goal (PHG):** 0.02 µg/L
- **Regulatory Limit (MCL):** 10 µg/L

*(Note: There is currently no federal MCL for Chromium-VI)*

Our results are below the California regulatory limit, though above the extremely low health-based goal.

## • Our Commitment

- We will continue to monitor closely and apply treatment if needed to ensure water quality remains protective of public health.

# Lead & Copper in Drinking Water

- **Our Findings**

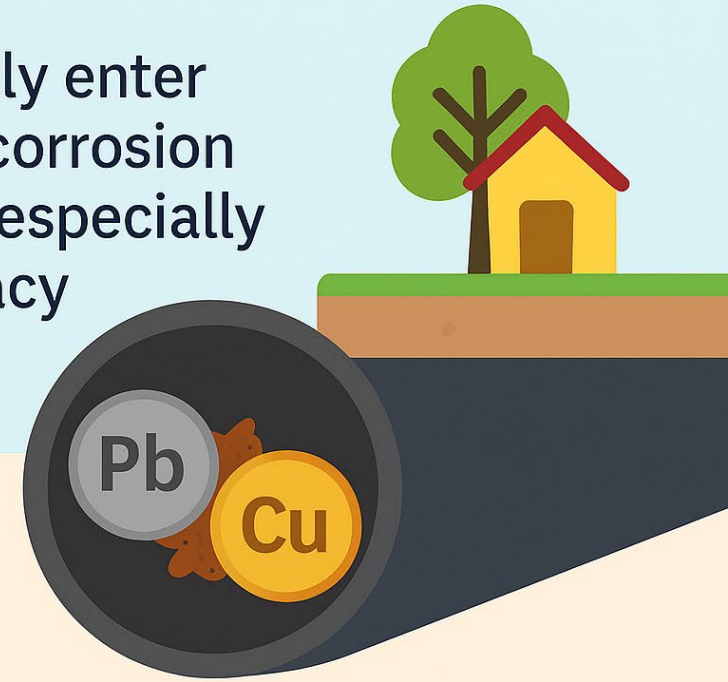
Constituent	Sample Year	Unit	Action Level	PHG	Detections
Copper	2022–2024	mg/L	1.3	0.3	ND – 2.000000
Lead	2022–2024	mg/L	0.015	0.0002	ND – 0.1100

- **Our Commitment**

- We monitor lead and copper at select customer homes and work to minimize exposure from plumbing materials.
- We’ve completed our initial lead service line inventory and invite customers to help by checking their service line materials and submitting the information online at [www.sjwater.com/servicelineinventory](http://www.sjwater.com/servicelineinventory).

## WHERE THEY COME FROM

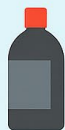
Lead and copper typically enter drinking water through corrosion of household plumbing, especially in older homes with legacy materials.





# WHERE THEY COME FROM

PFAS are a family of chemicals used in firefighting foams, non-stick cookware, water-repellent fabrics, food packaging, and other industrial applications.



PFAS

# Per- & Polyfluoroalkyl Substances (PFAS) in Drinking Water

## • Our Findings

Constituent	Sample Date	Unit	MCL / [AL]	PHG / MCLG	Detections
Perfluorooctanoic Acid (PFOA)	2022–2024	mg/L	(Pending)	0.00000007	ND – 0.000003
		ppt		0.07	3.0
Perfluorooctyl Sulfonate (PFOS)	2022–2024	mg/L	(Pending)	1.0	ND – 9.0
		ppt			

## • Our Commitment

- We routinely monitor for PFAS and are advancing proven treatment solutions.
- We will continue to share clear updates as regulations evolve.

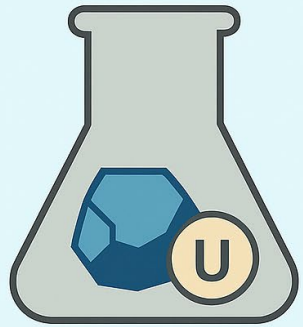
# From Data to Action: Willow Glen Wellfield Pilot Study



- Wellfield has been offline since 2019 due to detections of **PFOS**.
  - We also found **arsenic** levels ranging from non-detect to 4 µg/L, below legal limits but above the Public Health Goal.
  - To protect public health, we launched a pilot study testing treatment technologies to evaluate co-removal of arsenic and PFAS.
- 
- This study helps us evaluate full-scale treatment options and reinforces our commitment to safe, reliable water.

# Uranium & Radium in Drinking Water

## WHERE THEY COME FROM



Uranium and radium come from natural sources in the Earth's crust, where they can dissolve into groundwater as it flows through rocks and soil.



ROCKS AND SOIL

GROUNDWATER

## • Our Findings

### • Uranium

- Highest Detected level: 1.5 pCi/L
- Public Health Goal: 0.43 pCi/L
- Regulatory Limit (MCL): 20.0 pCi/L L

### • Radium

- Highest Detected level: 3.09 pCi/L
- Public Health Goal: 0.019 pCi/L
- Regulatory Limit (MCL): 5.0 pCi/L L

## • Our Commitment

- While the detected concentrations of pose minimal risk under current conditions, we continue to monitor closely.

# Public Health Goal (PHG) Assessment Summary

- **What Are PHGs?**

- Public Health Goals (PHGs)*

- Health-based goals set by California
    - Not enforceable regulations
    - Used to evaluate potential health risks and treatment feasibility

- **What We Found**

- Detected Levels*

- ✓ All results are **below legal limits** (state & federal)

- Above PHGs*

- Some constituents exceed PHGs
    - PHGs are set at **very conservative levels**

*We monitor water quality closely and use PHGs to guide health protection and treatment decisions.*



# Conclusion



## What You Can Count On

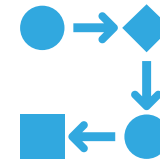
**San Jose Water's drinking water meets all state and federal *safety standards*.**

We've carefully evaluated health-based goals and treatment options.



## Where We're Taking Further Action

SJW is moving forward with permitting and construction of an ion exchange PFAS treatment facility at our most impacted wellfield



## What Happens Next

We'll continue **rigorous monitoring**.

You'll stay **informed every step of the way**.

# Thank You

Q & A



For the full PHG report and resources, visit our website or scan the QR code.