

Water Quality Update

Facilities Committee Update
November 20, 2025

Presentation By:
Preston Thomas, OUSD Chief of Systems & Services



**OAKLAND UNIFIED
SCHOOL DISTRICT**

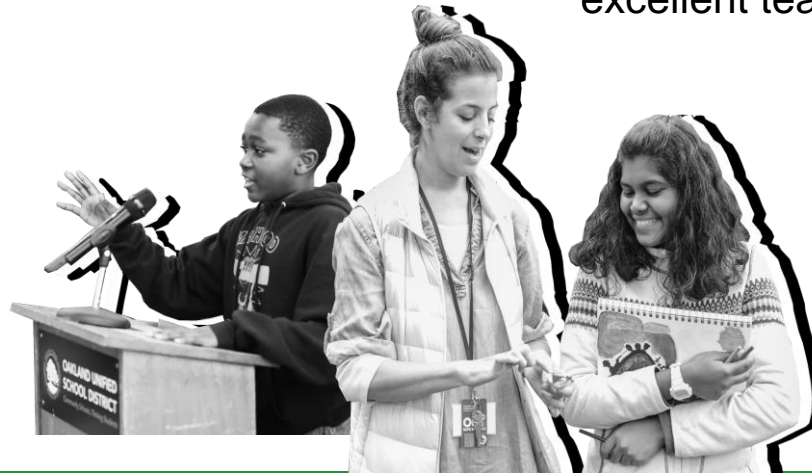
Community Schools, Thriving Students

Our Vision

All OUSD students will find joy in their academic experience while graduating with the skills to ensure they are caring, competent, fully-informed, critical thinkers who are prepared for college, career, and community success.

Our Mission

Oakland Unified School District (OUSD) will build a Full Service Community District focused on high academic achievement while serving the whole child, eliminating inequity, and providing each child with excellent teachers, every day.



Agenda

- Facilities Master Plan
- Building High Water Quality Standards in OUSD
- Dashboard Development Samples
- Cost of Maintaining System
- Cost of Staffing
- Board Policy 3511.3 Clean Water Policy



Providing Safe, Clean Drinking Water across OUSD

Strategy 1
Installation of FloWater
Systems

Strategy 2:
Comprehensive
Diagnostic Testing

Strategy 3
Replace Identified
Fixtures

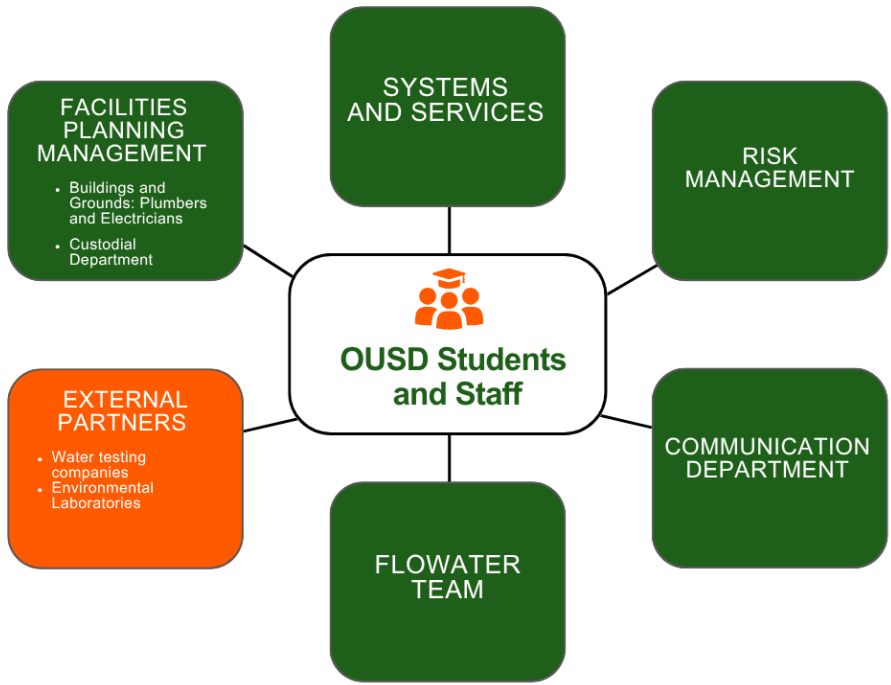
Strategy 4
Signage and Visible Cues

Strategy 5
Replace Kitchen Plumbing
Systems

Strategy 6
Improve
Communication Systems



Effective Systems = Effective Teams



- ❖ The OUSD Board has dedicated **\$20.5 Million of Measure J and Y**, and one time funding to address this problem.
- ❖ This work brings together teams across OUSD to build healthier, more supportive learning environments at every school.



Facilities Master Plan

Addition to Scope of Work: Addressing Water Quality

- Develop district wide approaches/strategies for water testing and management
- Outline costs, staffing needs, operational considerations, and risks for each approach
- Analyze existing water testing data alongside facility age, condition, and system information
- Provide recommendations from short-term operational fixes to long-term capital projects
- Integrate lead mitigation strategies into the Facility Master Plan, including a dedicated chapter toward the strategies
- Align water quality planning with districtwide capital and facility priorities

OUSDs Commitment to High Standards

Goal: Provide safe, lead-free drinking water across all facilities.

OUSD Standard: < 5 ppb at consumable outlets (more protective than federal 15 ppb).

Regulatory backdrop: California **AB 746** required school lead sampling by **July 1, 2019**; EPA **3Ts** remains the federal recommended framework for Training, Testing, Taking Action. [Cal Water Board](#)

- OUSD has adopted this framework in the testing we have completed during Summer 2025.

Summer 2025 comprehensive testing (completed):

- **6,781 samples** across **2,411 fixtures**

Peer/Local policies (context):

- **SFUSD** Outlets remain closed until re-test < 5 ppb.. [San Francisco Public Schools](#) in 2023.
- **LAUSD** Outlets remain closed until re-test < 15 ppb, goal to reach 5 ppb. [LAUSD](#) in 2019.
- **SDUSD** Outlets remain closed until re-test < 5 ppb. [San Diego Unified](#) in 2017.
- **DJUSD** Outlets remain closed until < 15 ppb [Davis Joint Unified School District](#) in 2017.

Staff Guidance

Scan QR code for updates!



MAXIMIZING WATER QUALITY AT OUSD



Access to clean drinking water is vital for the health and well-being of every student and staff member.

OUSD has implemented a tiered approach to ensure all water on our campuses meets the District's high water quality standards. In addition, we are actively replacing water fixtures that test with elevated levels of lead. Any fixture that does not meet OUSD's strict standards is shut down immediately and remains out of service until the issue is fully addressed.

OUR APPROACH

- Installation of Filtered Hydration Stations
- Comprehensive Diagnostic Testing
- Replace Identified Fixtures
- Signage and Visible Cues
- Replace Kitchen Plumbing Systems
- Improve Communication Systems

BEST PRACTICES FOR ACCESSING SAFE DRINKING WATER AT YOUR SCHOOL

Encourage Use of Designated Filtered Hydration Stations

- Guide students to use FloWater, Elkay, and similar water dispensers that meet OUSD water quality standards.
- Please see OUSD Water Filtration Systems Dashboard to track your schools testing progress. [See here.](#)



Promote Use of Personal Water Bottles

- OUSD has delivered 60,000 reusable, aluminum water bottles to elementary schools for students to use.
- Encourage students to bring and refill personal bottles from designated safe water sources.
- Develop a routine for students to be able to access water bottle filling stations and drinking fountains that meet our water quality standards.



Encourage Proper Use of Designated Drinking Fountains

- Please guide students to ONLY use drinking fountains that are designated as safe with the placement of our OUSD water quality sticker.

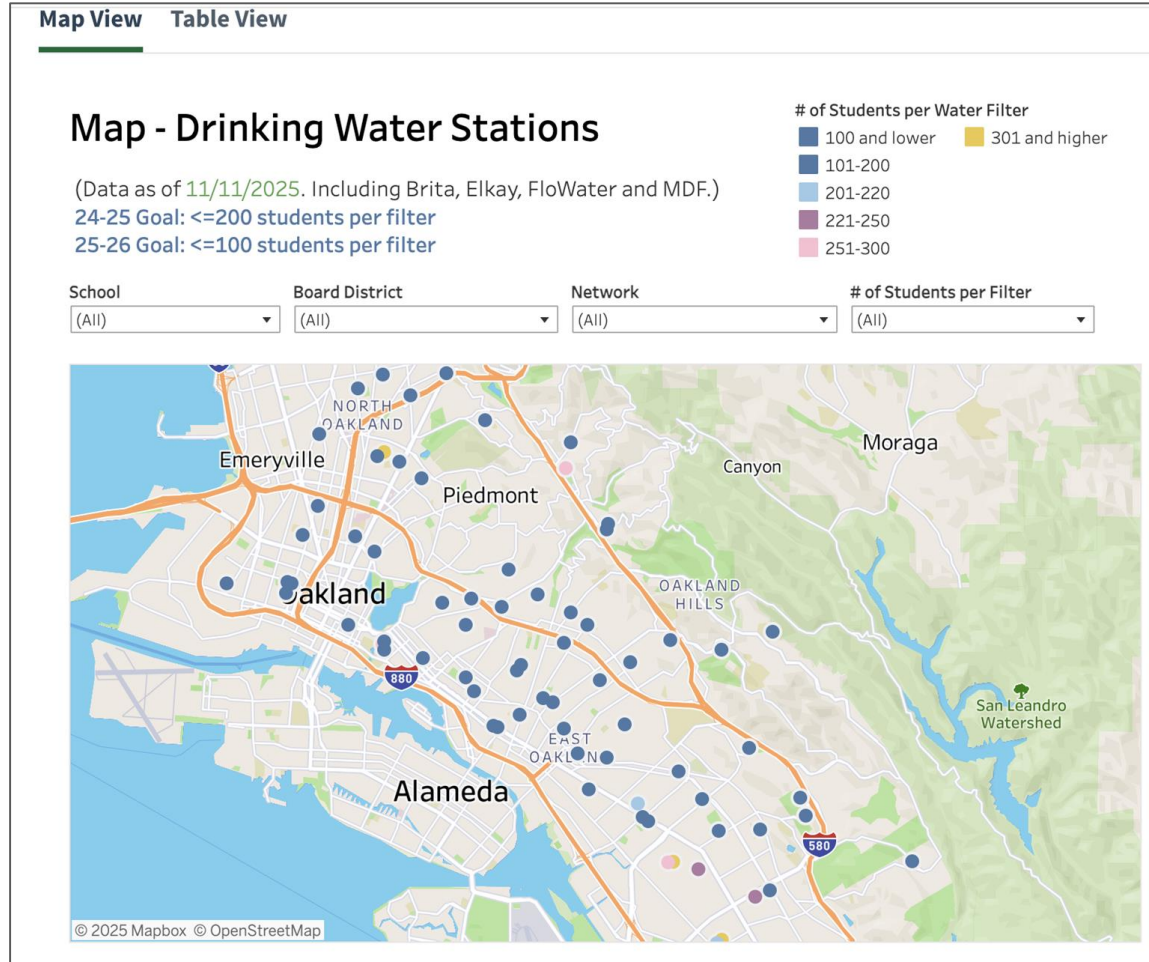


Scan QR code for updates!

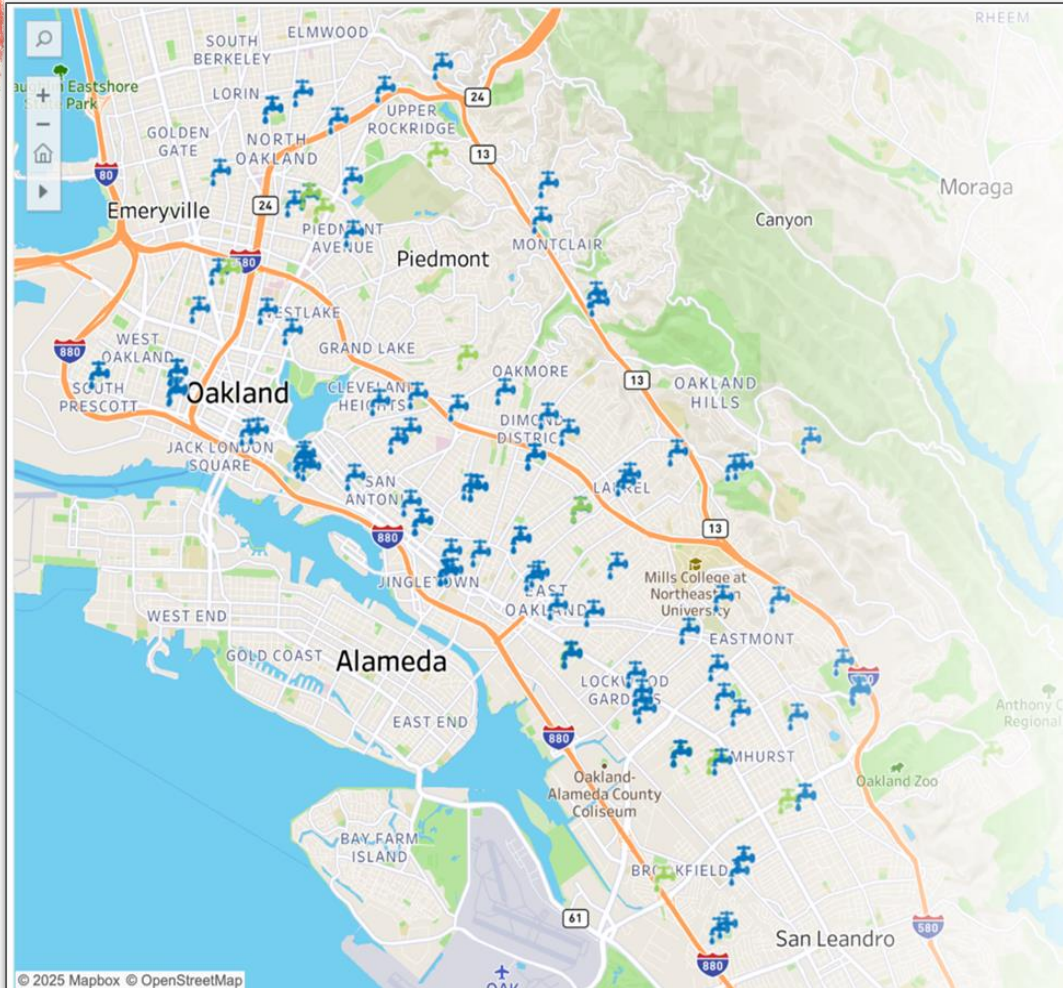


Dashboard Development

Water Filtration Systems Dashboard (Active)



Testing and Repair Dashboard (GoLive 1/1/2026)



Testing Dashboard

You Asked, We Listened

When families and staff said test results were hard to interpret, we created a **user-friendly dashboard** that shows each site, testing data — making water quality information **clear and accessible** for everyone.

Draft School Site Summary (GoLive 1/1/2026)

Summary

(SPE Network includes only Young Adult Program located at Santa Fa campus.)

View by BOE/Network/School: | Select BOE/Network/School: | Pass Category: | Operational Status:

BOE/Network/School	Total Tested Fixtures	# Passed Fixtures	# Fixtures with Elevated Lead Level	% Passed Fixtures	Pass Category	PassRate
						0.0% 100.0%
Bella Vista CDC	12	12	0	100.0%	Pass	
Bella Vista Elementary	20	20	0	100.0%	Pass	
Bret Harte Middle School	28	28	0	100.0%	Pass	
Bridges Academy	36	36	0	100.0%	Pass	
Bridges State PreK	6	6	0	100.0%	Pass	
Brookfield Village Elementary	47	47	0	100.0%	Pass	
Burbank CDC	19	19	0	100.0%	Pass	
Burckhalter Elementary	18	18	0	100.0%	Pass	
Carl Munck Elementary	27	27	0	100.0%	Pass	
Castlemont High School	42	42	0	100.0%	Pass	
Centro Infantil CDC	6	6	0	100.0%	Pass	
Chabot Elementary	32	32	0	100.0%	Pass	
Claremont Middle School	28	28	0	100.0%	Pass	
Cleveland Elementary	29	29	0	100.0%	Pass	
Coliseum College Prep Academy	33	30	3	90.9%	Pass	

Draft Customized List (GoLive 1/1/2026)

Map Summary Customized_List DrillDown

Customized List

School: Fixture Tag: Operational Status: Overall Testing Stat...: Initial Testing Status: 1st Retest Status: 2nd Retest Status: 3rd Retest Status:

School	Fixture Tag	Operational Status	Overall Testing Status	Initial Testing	1st Retest	2nd Retest	3rd Retest
	303-Annex 1-IN-DW-After School RM (B)	Operational	Pass	Pass			
	303-Annex 1-IN-DW-Clinc RM-(A)	Operational	Pass	Pass			
	303-Annex 1-IN-DW-Clinc RM-(B)	Operational	Pass	Pass			
	303-Gym1-HW-DW-Girls Locker Rm Entrance	Operational	Pass	Pass			
	303-Gym1-IN-DW-Girls Lockers Rm	Operational	Pass	Pass			
	303-Gym-1-IN-DW-Boys Locker Room	Operational	Pass	Pass			
	303-Gym-1-IN-Flo-Boys Locker Room Entrance	Operational	Pass	Pass			
	303-Main 2-HW-DW RM 224	Operational	Pass	Pass			
	303-Main 2-IN-Haw Rm 223B	Operational	Pass	Pass			
	303-Main 3-HW-DW-RM 300	Operational	Pass	Pass			
	303-Main 3-HW-Flo-RM 306	Operational	Pass	Pass			
	303-Main-1-HW-Bri RM 107	Operational	Pass	Pass			
	303-Main-1-HW-DW RM 101	Operational	Pass	Pass			
	303-Main-1-HW-DW RM 114	New Filtered Station	Pass	Pass			
	303-Main-2-HW-DW RM 200	Operational	Pass	Pass			
	303-Main-2-HW-DW RM 212	New Filtered Station	Pass	Pass			

Draft School Site Summary (GoLive 1/1/2026)

Customized List

School: Fixture Tag: Operational Status: Overall Testing Stat...: Initial Testing Status: 1st Retest Status: 2nd Retest Status: 3rd Retest Status:

School	Fixture Tag	Operational Status	Overall Testing Status	Initial Testing	1st Retest	2nd Retest	3rd Retest
	232-D-1-HW-DW-STAFF LUNCH RM (B)	Operational	Pass	Pass			
	232-D-1-IN-BRI-CAFETERIA	Operational	Pass	Pass			
	232-D-1-IN-KF-KITCHEN (A)	Operational	Pass	Pass			
	232-D-1-IN-KF-KITCHEN (C)	Operational	Pass	Pass			
	232-D-1-IN-KF-KITCHEN (F)	Operational	Pass	Pass			
	232-D-1-IN-KF-KITCHEN (G)	Operational	Pass	Pass			
	232-GYM-0-EX-GLO-DINING AREA (A)	Operational	Pass	Pass			
	232-GYM-0-EX-GLO-DINING AREA (B)	Operational	Pass	Pass			
	232-GYM-1-HW-DW-BOYS LOCKER RM ENTRANCE	Operational	Pass	Pass			
	232-GYM-1-HW-DW-GIRLS LOCKER ROOM ENTRANCE (Operational	Pass	Pass			
	232-GYM-1-HW-DW-GIRLS LOCKER ROOM ENTRANCE (New Filtered Station	Pass after re-test	Elevated	Pass after re-test		
	232-GYM-1-IN-DW-GIRLS LOCKER ROOM	Operational	Pass after re-test	Elevated	Elevated	Pass after re-test	
	232-HEALTH CENTER-0-EX-DW-COURTYARD (A)	Operational	Pass	Pass			
	232-HEALTH CENTER-0-EX-DW-COURTYARD (B)	Operational	Pass	Pass			
	232-MAIN-0-EX-DW-COURTYARD-(A)	Removed	Elevated	Elevated			
	232-MAIN-0-EX-DW-COURTYARD-(B)	Removed	Elevated	Elevated			
	232-MAIN-0-EX-DW-COURTYARD-(C)	Removed	Elevated	Elevated			
	232-MAIN-0-EX-DW-COURTYARD-(D)	Removed	Elevated	Elevated			

Name Tag: 232-GYM-1-IN-DW-GIRLS LOCKER ROOM
 2nd Retest - Overall Re-Test Status: Pass after re-test
 2nd Retest - Date Retest: September 18, 2025
 2nd Retest - Type of Testing: Sequential
 2nd Retest - Draw 1 (Fixture): 1.6
 2nd Retest - Draw 2 (Angle Stop +): 1.3
 2nd Retest - Draw 3 (Pipe in Wall): 1.3



Costs and Staffing Levels

Maintenance Costs for System Integrity

Category	Description	Per station/unit	Estimated Annual Cost
FloWater Station Replacements	35 units annually	\$8,000.00	\$280,000
FloWater Stations	251 active units	\$522.00	\$131,059
Elkay Filtration Stations	31 active units FL10 Ultra-Capacity (10,000 gal) lead + microplastics filter 1 filter/station/yr \$210.99 each	\$210.99	\$6,540
Regular Filter Replacement (District-Wide)	361 filters in rotation Avg unit ≈ \$210.99	\$210.99	76,170
Reverse Osmosis (RO) Systems	Install \$3 K–\$4 K per unit Membranes \$369 every 2–3 yrs	\$184.50	\$15,867.00
Testing (Summer 2025 cycle)	6,781 samples / 2,411 fixtures Lab \$375,280	\$55.34	\$375,280.00
			\$884,916

Staffing Needs: OUSD 108 sites

Manager Dedicated to the Program:

- Currently 1 FTE staffing in 1x Funds (\$231,477.00):
 - Coordination, data/reporting, EPA/CDPH compliance, communication with site leader, dashboard development and maintenance, database integrity

Water Testing Team:

- Ongoing: Currently 2 Full Time Staff funding on 1x Funds in contracts
 - Certified sample collection, outlet database/labels, filter tracking, signage, training.

Plumbing Team:

- 10 FTE Plumbers (All B and G)
- Ongoing: 1-2 Dedicated Plumbers (\$177,382 per Staff)
 - Repairs and replacement of fixtures, filter replacements

Board Policy 3511.3 Clean Drinking Water

The Governing Board recognizes that clean, healthy water in its schools and early childhood centers is essential for student's well-being and wants to ensure that the drinking water in each of its schools and early childhood centers is, at a minimum, within all state and federal health standards with a phased plan to strive towards even more stringent standards that exceed state and federal guidelines. Full implementation of this policy shall take place within 180 days of its enactment.

Key Challenges and Considerations:

- Did not allocate funding to address problem.
- Did not allocated staffing implied current staff could manage workflow.
- Was not specific as to “what” would be tested other than consumable.
- Public posting times are impossible to meet.
- Did not articulate a district standard for frequency of testing.
- Did not specify well the type of testing to be performed.
- Public reporting needs to be explicit and timing often challenging to coordinate with site leaders and other key constituents.
- No AR’s were developed to support the policy.

Did not happen:

By June 30, 2019, the Board will review this policy, the District's facilities, potential funding sources, and other relevant information to consider testing and remediation for lead in consumable water at anything above 1 ppb.

(last update was 2/28/18)

Next Steps

Next Steps

1. January 1, 2026: Launch Dashboard to replace old system for updating the community.
2. January 2026: Receive recommendations from Facilities Master Plan in January to address water quality issues in OUSD.
3. February 2026: Incorporate positions needed to sustain program in the 2026-27 Budget Development to be approved by Board in June.
4. February 2026: Bring Policy recommendations to the February 2026 Facilities Committee Meeting.
5. March 2026: Bring Board Policy 3511.3 to the Board for revision.



THANK YOU

Any Questions?

Additionally, for more information, please reach out:

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Appendix



Strategy 1: Installation of FloWater Systems

WE BELIEVE

EVERY HUMAN HAS A FUNDAMENTAL
RIGHT TO **DRINKING WATER THEY CAN
TRUST**



THE MOST ADVANCED WATER PURIFICATION TECHNOLOGY

Removes up to 99.9% of contaminants through a 7x Advanced Purification process

Lead is removed from the Advanced Osmosis System

PURIFY



Sediment Filter



Carbon Filter



Advanced Osmosis

IMPROVE



Activated Oxygen



Alkaline Enhanced

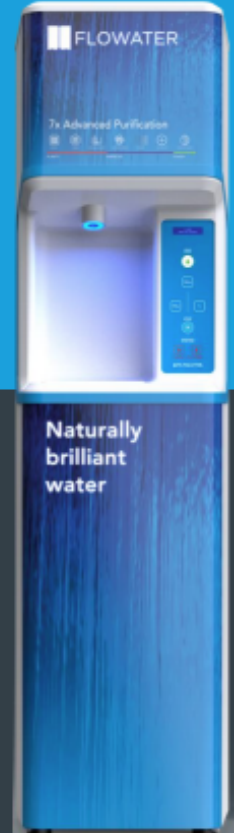


Electrolyte Enhanced

FINISH →



Coconut Carbon



Filtered Water Station Installation Progress

Why FloWater?

- FloWater adopted as the **district standard** for filtered water stations on March 18, 2025.
- All FloWater units have tested **<1.00 ppb lead**— well below EPA (15 ppb), state, and internal OUSD (5 ppb) action thresholds

District Progress

- **193 FloWater stations** installed since 2024
- **88 new units purchased** to support hydration access
- Updated goal: **1 filtered water station per 100 students** (previously 200:1)

Installation Timeline

- **Phase I: Summer 2025**
 - Site assessments, plumbing, and electrical work completed
 - **60 units** to be installed before the start of the school year



Water Filling Station Service Request

QR codes are placed on every FloWater unit. When an issue is reported using the QR code, the form is sent to internal staff, who then coordinate directly with FloWater to arrange repairs and monitor the progress.



Water Filling Station Service Request

Questions Responses Settings

Have you reported this issue through School Dude?

Yes

No

Please choose the issue from the categories listed below

Clogged Filter (Drainage issues)

Leakage

Error Message Displayed

Filter Change Reminder

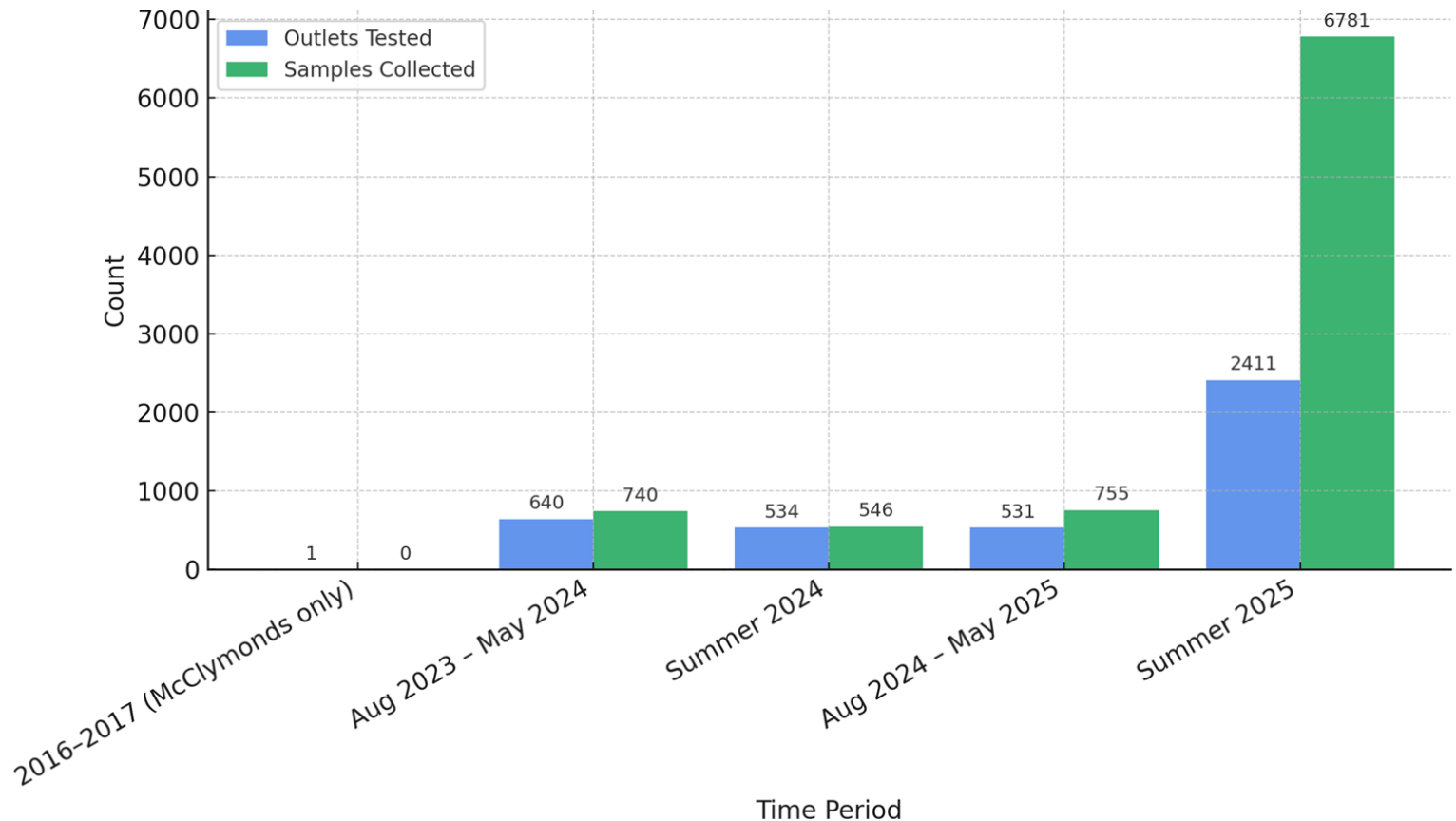
No Water Dispensed

No power/Not plugged



Strategy 2: Comprehensive Diagnostic Testing

Testing Data for Recent Testing Windows



Water Quality Outlet Testing and Sample Collection

Testing Protocol

Environmental Protection Agency (EPA) Guidelines

- OUSD follows EPA guidelines for school water quality testing
- Developed district-wide protocol to ensure consistency and accuracy

Sequential Testing Protocol (Drinking Fountains and Kitchens)

- Three samples collected per fountain:
 - 125 mL – Bubbler (tests outlet)
 - 125 mL – Angle Stop (tests behind fixture)
 - 250 mL – In-Wall Piping (tests upstream plumbing)
- Allows precise identification of lead source if levels are elevated

Filtered Water Stations

- Single 250 mL sample collected per unit
- Assesses filter effectiveness and water quality at point of use

Fixture Labeling & Tracking

- Unique nomenclature system created for **every** drinking fountain and filtered station
- Labels are matched to test results for targeted repairs
- Enables clear tracking of what's elevated, where it is, and how to fix it

Module 4: Developing a Sampling Plan
Develop a Code System for Samples

Code each outlet using a system that will allow each unique outlet to be identified by location, type and other relevant characteristics. The text below provides examples for coding by fixture type and sample type. The following is an example template that can be used to designate unique samples in single-buildings.

Floor-Room Number-Outlet Type-Sample Number

The following is an example that uses the structure above and the example codes to the right. A first draw sample (F) was taken at a drinking water fountain (DW) on the 3rd floor (003) outside of room 312 (312) and is the 15th outlet counted (015). This sample would be coded as:

003-312-DW-F-015

If multiple buildings are being sampled, include the building number as well.

Building Number-Floor-Room Number-Outlet Type-Sample Number

Thus, if that same drinking water fountain was located in building 1 (01), it would be coded as:

01-003-312-DW-F-015

Important Note: when taking sequential samples, be sure to add a number to the sample to indicate the order the samples were taken in.

- 155= First sequential sample
- 255= Second sequential sample

For example, the first 125-mL sequential sample taken at that same drinking water fountain, would be coded as:

003-312-DW-155-015

The coding should be identified on a site map, accompanied by a narrative that describes the observable conditions of each sampling location. It is also important to document any special conditions for the sampling, such as whether it was conducted after a remedy was implemented (e.g., after fixture/plumbing replacement, after POU filter installation), during a flushing evaluation (e.g., XX hours after morning flushing), or after aerator or inlet strainer cleaning so that results can be interpreted in the future.

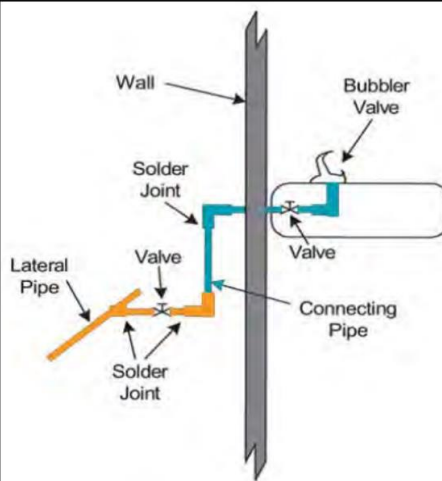
Coding examples can include:

- DW= drinking water fountain
- WC= water cooler (chiller unit)
- CF= classroom faucet
- KF= kitchen faucet
- BF= bathroom faucet
- NS= nurse's office sink
- SC= service connector

As well as the type of sample taken:

- F= primary or first draw sample
- F= follow-up flush sample
- SS= sequential sample

Office of Water (4606M)
EPA 815-F-18-021
October 2018



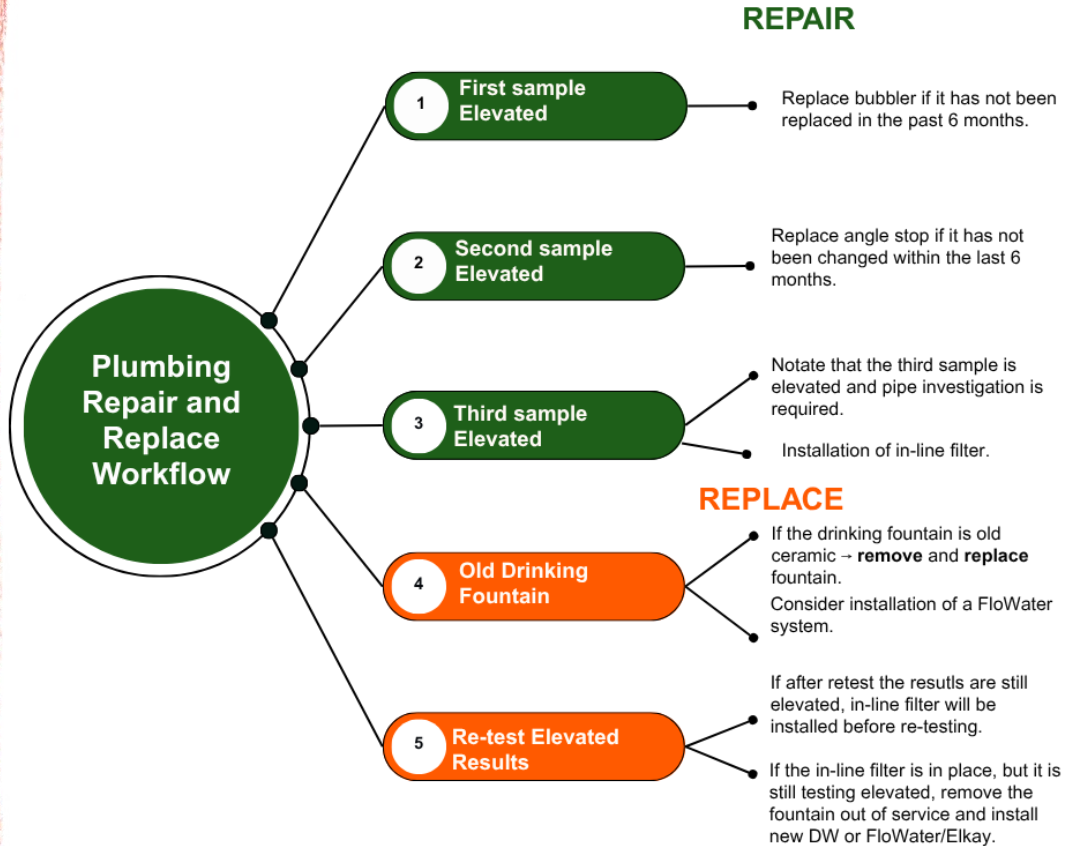
The diagram illustrates the plumbing for a drinking water fountain. It shows a vertical wall with a bubbler valve protruding from it. A connecting pipe runs horizontally from the bubbler valve to a valve. From this valve, a lateral pipe runs horizontally to the left, then turns vertically down to another valve. A solder joint is shown at the connection between the lateral pipe and the vertical pipe. The diagram is color-coded: the bubbler valve and connecting pipe are blue, the lateral pipe is orange, and the vertical pipe and second valve are red.

U.S. Environmental Protection Agency. (2021). *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities: Revised Technical Guidance*. Retrieved from [EPA Guidelines](#), pp. 62



Strategy 3: Replace Identified Fixtures

Replacement and Repair of Fixtures



REPAIR





Strategy 4: Signage and Visible Cues

Improved Notification for Community



Link to reports for individual validation

Punch outs that signify the date of the last test that was below 5 ppb.



Strategy 5: Replace Kitchen Plumbing Systems

Overview and Progress

Goal: Upgrade kitchen plumbing for safe, reliable water in compliance with health standards

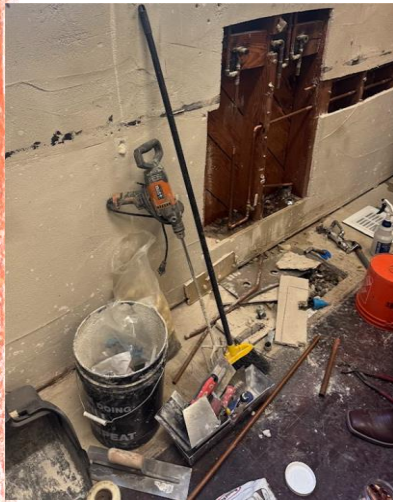
Key Upgrades

- New Fixtures: sinks, faucets, hand-wash stations
- Pipe Replacement: up to 20 ft per site
- Restored Hot/Cold Access
- Better Water Points for Food Safety
- Completed Before Staff/Student Return

Sites With Plumbing Upgrades

- ✓ Acorn CDC
- ✓ Allendale ES
- ✓ Bella Vista ES
- ✓ Castlemont HS
- ✓ Centro Infantil
- ✓ Edna Brewer MS
- ✓ Hillcrest ES
- ✓ Jefferson CDC
- ✓ Lincoln ES
- ✓ Madison Primary
- ✓ McClymonds HS
- ✓ Sequoia ES
- ✓ Skyline HS

Kitchen Pipe and Fixture Replacement



Hillcrest K-8



Sequoia ES



Allendale ES



McClymonds HS

Strategy 6: Improve Communication Systems



Internal Communicating and Tracking Repairs

Internal Tracking

- Each elevated fixture is logged in our **central tracking spreadsheet**. A **SchoolDude ticket** is created for the specific school site and assigned to OUSD plumbers.
- Once repairs are completed, the ticket is marked closed.
- The water quality team is notified and then schedules **retesting** for the repaired fixture.

Dashboard in Development (Fall 2025)

- A searchable, public-facing dashboard is being built to display fixture-level test results by school.

How Schools Are Notified

- **Principals are notified within 24 hours** of any elevated results.
- Communication is sent via email by **OUSD Risk Management Officer**.
- Schools receive clear information on affected fixtures and next steps.
- We are currently developing an **automated notification system** to streamline this process.



Updated Website

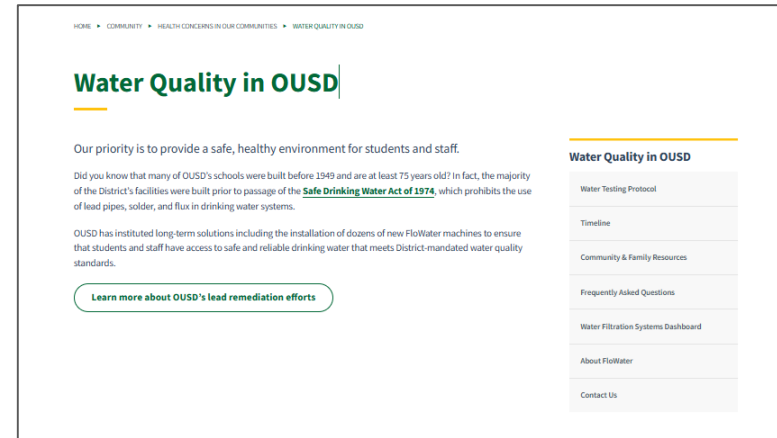
We've established multiple communication channels to ensure students, school staff, families, and the community are informed with the work happening to improve water quality across the District.

ParentSquare: Our main hub to share with parents and caregivers about the work happening across the District.

Website: All water test results from across the District are stored here, along with updates on the work we are doing to ensure access to safe, clean drinking water for our schools. Updates are made daily. www.ousd.org/waterquality

Board Presentations: Consistently updating the Board on our progress.

Contact Us: Contact your school principal or the Risk Management Office at waterquality@ousd.org



Improving Water Testing Visibility with Stickers

To help students and staff easily identify water safety at school



Placed on water fixtures that meet OUSD's water quality standards.



Placed on **classroom sinks** to clarify that these fixtures are **not intended for drinking**, helping students and staff make informed choices.



Signage is posted at **out-of-order drinking fountains**. Water to these fixtures is also **shut off** for repairs

Messaging: How We Talk about the Work

A message was shared via Parent Square on Sunday, August 10, 2025 to announce that all schools have FloWater and other water filtration stations for students to use. We clearly communicated that all fixtures that have tested above the District standard have been shut off and will remain out of service until they are repaired or replaced and retested.

FloWater Machines

- FloWater machines are safe; it is a misconception that the water from the machines is contaminated.
- Not a single FloWater machine has ever tested above the District Standard of 5 parts per billion (ppb) for lead. In fact, none has even tested above 1 ppb.

School Culture and Climate

- School leadership and staff will be key in reminding students and families about the safety and effectiveness of the machines.
- We currently have 40,000 water bottles ready to go to school sites, and they will be transported in the coming days for students to use.

Strategy

- Because replacing piping inside our older schools will take years and cost tens of millions of dollars, the best, quickest, and most efficient method of making sure OUSD students are drinking safe and clean water is to install FloWater machines and take faucets and drinking fountains with elevated lead levels (>5 ppb) out of service.

Challenges

Limited Access to Water Connections

- A major barrier to installation has been the **lack of readily accessible water lines** at some sites

Conversion of Existing Fixtures

- Most current installations have replaced existing **drinking fountains** to utilize pre-existing plumbing

Phase 2 Complexity

- Upcoming installations in Phase 2 will require connecting to **in-wall water lines**, which involves
 - Wall modifications
 - More extensive plumbing work
 - Coordination with external vendors





Next Steps

Looking Ahead to SY 2025-2026

Water Testing & Faucet Repairs

Schedule repairs based on test results and number of elevated fixtures per site

Retest after repairs

Final step: relabel fixtures and determine next steps

In-House Sampling

2 certified OUSD staff now trained to collect water samples

Enables quicker response and long-term sustainability

Communications

Address misinformation about FloWater machines

Educate school communities on filter use and repairs

Update website with accurate info and resources

Public Dashboard

Develop searchable tool for viewing water test results by school/fixture

Improves access for families and staff

FloWater Installations – Phase 2

Ongoing installs of FloWater and Elkay stations

Phase 2 includes major plumbing to connect to building pipes