Tap Water Testing Report Appendix

I. Additional Testing Information

- 142 different analytes were tested for at least once, with all analytes tested for shown below.
- The most frequent tests conducted (415 times each) in the effort were for:
- overall pH, Alkalinity (as CaCO3), Hardness, CSMR, Langelier Saturation Index, Grains per gallon, Sodium Adsorption Ratio, Total Dissolved Solids, Chloride, Flouride, Nitrate, Phosphorus, Sulfate, and for the following individual metals and metalloids: Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Potassium, Selenium, Sodium, Silver, Strontium, Thallium, Tin, Titanium Uranium, Vanadium, Zinc.
- The least frequent tests conducted in the effort were for: 1,2,3 Trichloropropane (1 test), Conductivity (1 test), Dibromochloropropane (1 test), Ethylene dibromide, Silica (2 tests) and Turbidity (2 tests).

Table 1: Number of tests by contaminant type

Contaminant	Tests	Contaminant	Т
1,1 Dichloroethane	210	Calcium	4
1,1 Dichloroethylene	210	Carbon Tetrachloride	2
1,1 Dichloropropene	210	Chlorate	78
1,1,1 Trichloroethane	210	Chloride	42
1,1,1,2 Tetrachloroethane	210	Chlorobenzene	23
1,1,2 Trichloroethane	210	Chloroethane	22
1,1,2,2 Tetrachloroethane	210	Chloroform	21
1,2 Dichlorobenzene	210	Chloromethane	21
1,2 Dichloroethane	210	Chlorotoluene 2	21
1,2 Dichloropropane	210	Chlorotoluene 4	21
1,2,3 Trichlorobenzene	210	Chromium (Total)	41
1,2,3 Trichloropropane	1	cis 1,2 Dichloroethylene	21
1,2,4 Trichlorobenzene	210	cis 1,3 Dichloropropene	21
1,2,4 Trimethylbenzene	210	Cobalt	41
1,3 Dichlorobenzene	210	Conductivity	1
1,3 Dichloropropane	210	Copper	41
1,3 Dichloropropene	209	CSMR	41
1,3,5 Trimethylbenzene	210	Dibromoacetic Acid (DBA)	78
1,4 Dichlorobenzene	210	Dibromochloromethane	21

2,2 Dichloropropane	210		Dibromochloropropane	1
4 Methyl 2 Pentanone	209		Dibromomethane	210
Alkalinity (as CaCO3)	415		Dichloroacetic Acid (DCA)	78
Aluminum	415		Dichlorodifluoromethane	210
Antimony	415		Dichloromethane	210
Arsenic	415		E. coli	52
Barium	415		Ethylbenzene	210
Benzene	210		Ethylene dibromide	1
Beryllium	415		Fluoride	415
bis(2-Chloroethyl) ether	209		Grains per gallon	415
Boron	415	•	Gross Alpha Activity	86
Bromobenzene	210	•	Gross Beta Activity	86
Bromochloromethane	210	•	Haloacetic Acids (Total)	78
Bromodichloromethane	210		Hardness	370
Bromoform	210		Hardness (Ca,Mg)	415
Bromomethane	210		Hardness (Total)	415
Cadmium	415		Hexachlorobutadiene	210
Iron	415		Selenium	415
Isopropylbenzene	210		Silica	2
Langelier Saturation Index	415		Silver	415
Lead	415		Sodium	415
Lithium	415		Sodium Adsorption Ratio	415
m,p Xylene	210		Specific conductivity	211
Magnesium	415		Strontium	415
Manganese	415		Styrene	210
Mercury	415		Sulfate	415
Methyl Ethyl Ketone	209		tert Butylbenzene	210
Methyl Tertiary Butyl Ether	210		Tetrachloroethylene	210
Molybdenum	415		Thallium	415
Monobromoacetic Acid (MBA)	78		Tin	415
Monochloroacetic Acid	78		Titanium	415
n Butylbenzene	210		Toluene	210
n Propylbenzene	210		Total Coliform	52
Naphthalene	210		Total Dissolved Solids	415
NEtFOSAA	70		Total THMs	210
Nickel	415		trans 1,2 Dichloroethylene	209
Nitrate (as N)	415		trans 1,3 Dichloropropene	210
Nitrite (as N)	212		Trichloroacetic Acid (TCA)	78
NMeFOSAA	70		Trichloroethylene	210
o Xylene	210		Trichlorofluoromethane	210
p Isopropyltoluene	210		Trichlorotrifluoroethane	209

Perfluorobutane sulfonate	70	Turbidity	2
Perfluorodecanoic acid	70	Uranium	415
Perfluorododecanoic acid	70	Vanadium	415
Perfluoroheptanoic acid	70	Vinyl Chloride	210
Perfluorohexane sulfonic acid	70	Xylenes (Total)	209
Perfluorohexanoic acid	70	Zinc	415
Perfluorononanoic acid	70	Total	34,296
Perfluorooctane sulfonic acid	70		
Perfluorooctanoic acid	70		
Perfluorotetradecanoic acid	70		
Perfluorotridecanoic acid	70		
Perfluoroundecanoic acid	70		
рН	415		
Phosphorus	415		
Potassium	415		
sec Butylbenzene	210		

Table 2: Breakdown of PHG exceedances by Contaminant Type

Contaminant	Tests	PHG Exceedances	Within or exceeding 80% of PHG
Inorganic Chemicals	6,022	100	117
Aluminum	415	3	3
Antimony	415	1	3
Arsenic	415	49	49
Barium	415	0	0
Beryllium	415	0	0
Cadmium	415	7	8
Copper	415	8	11
Fluoride	415	1	5
Lead	415	22	25
Mercury	415	0	0
Nickel	415	7	11
Nitrate (as N)	415	1	1
Nitrite (as N)	212	1	1
Selenium	415	0	0
Thallium	415	0	0
Organic Chemicals **	6,509	524	524

Trichlorotrifluoroethane Vinyl Chloride	209 210	0 0	0 0
Trichlorofluoromethane	210	0	0
Trichloroethylene	210	0	0
trans 1,2 Dichloroethylene	209	0	0
Toluene	210	0	0
Tetrachloroethylene	210	0	0
Styrene	210	0	0
Methyl Tertiary Butyl Ether	210	0	0
Ethylene dibromide	1	0	0
Ethylbenzene	210	0	0
Dichloromethane	210	0	0
Dibromochloropropane	1	0	0
Dibromochloromethane	210	103	103
cis 1,2 Dichloroethylene	210	0	0
Chloroform	210	192	192
Chlorobenzene	210	0	0
Carbon Tetrachloride	210	0	0
Bromoform	210	38	38
Bromodichloromethane	210	191	191
Benzene	210	0	0
1,4 Dichlorobenzene	210	0	0
1,3 Dichloropropene	209	0	0
1,2,4 Trichlorobenzene	210	0	0
1,2,3 Trichloropropane	1	0	0
1,2 Dichloropropane	210	0	0
1,2 Dichloroethane	210	0	0
1,2 Dichlorobenzene	210	0	0
1,1,2,2 Tetrachloroethane	210	0	0
1,1,2 Trichloroethane	210	0	0
1,1,1 Trichloroethane	210	0	0
1,1 Dichloroethylene	210	0	0
1	210	0	0

Table 3: Individual testing kits with 5+ PHG hits are shown below

Outreach Partner	Kit ID Number	Contaminant	Unit	Test Value	MCL	PHG	MCL Standard?	Category
CIEA	BW7GFN	Chloroform	PPB	25	0	0.4	FALSE	Organic Chemicals
CIEA	BW7GFN	Arsenic	PPM	0.089	0.01	0.000004	TRUE	Inorganic Chemicals
CIEA	BW7GFN	Fluoride	PPM	1.5	2	1	TRUE	Inorganic Chemicals
CIEA	BW7GFN	Bromodichloromethane	PPB	4.6	0	0.06	FALSE	Organic Chemicals
CIEA	BW7GFN	Dibromochloromethane	PPB	0.67	0	0.1	FALSE	Organic Chemicals
CCRCD	E8CL5Y	Bromodichloromethane	PPB	3.1	0	0.06	FALSE	Organic Chemicals
CCRCD	E8CL5Y	Chloroform	PPB	2.7	0	0.4	FALSE	Organic Chemicals
CCRCD	E8CL5Y	Lead	PPM	0.0063	0.015	0.0002	TRUE	Inorganic Chemicals
CCRCD	E8CL5Y	Bromoform	PPB	7.2	0	0.5	FALSE	Organic Chemicals
CCRCD	E8CL5Y	Dibromochloromethane	PPB	6.7	0	0.1	FALSE	Organic Chemicals
CCRCD	E8CL5Y	Nickel	PPM	0.038	0.1	0.012	TRUE	Inorganic Chemicals
CCRCD	E8CL5Y	Aluminum	PPM	1.7	1	0.6	TRUE	Inorganic Chemicals
CIEA	2BK57K	Dibromochloromethane	PPB	1.5	0	0.1	FALSE	Organic Chemicals
CIEA	2BK57K	Chloroform	PPB	28	0	0.4	FALSE	Organic Chemicals
CIEA	2BK57K	Bromodichloromethane	PPB	6.3	0	0.06	FALSE	Organic Chemicals
CIEA	2BK57K	Copper	PPM	0.47	1.3	0.3	TRUE	Inorganic Chemicals
CIEA	2BK57K	Nickel	PPM	0.016	0.1	0.012	TRUE	Inorganic Chemicals

Table 4: Breakdown of Secondary MCL test numbers by outreach partner

Row Labels	All Positives Possible	CCRCD	CIEA	FGEHED	ISPSA	MCCRHJ	META LLC	Multi- Cultural Center of Marin	Nuestra Casa	Friends of Sausal Creek	Sonoma Ecology Center	The Watershed Project	Grand Total
Aluminum	34	11	70	28	7	25	74	78	39	10	16	23	415
Chloride	34	11	70	28	7	25	74	78	39	10	16	23	415
Copper	34	11	70	28	7	25	74	78	39	10	16	23	415
Fluoride	34	11	70	28	7	25	74	78	39	10	16	23	415
Iron	34	11	70	28	7	25	74	78	39	10	16	23	415
Manganes e	34	11	70	28	7	25	74	78	39	10	16	23	415
pH	34	11	70	28	7	25	74	78 	39	10	16 	23	415
Silver	34	11	70	28	7	25	74	78	39	10	16	23	415
Sulfate	34	11	70	28	7	25	74	78	39	10	16	23	415
Total Dissolved Solids	34	11	70	28	7	25	74	78	39	10	16	23	415
Zinc	34	11	70	28	7	25	74	78	39	10	16	23	415
Grand Total	374	121	770	308	77	275	814	858	429	110	176	253	4,565

II. Simple Lab Testing Panels

- 1. Essential City Water Test
- 2. Essential Well Test
- 3. Advanced City Water Test
- 4. Extended City Water Test
- 5. Full Radiation Test
- 6. PFAS Test
- 7. Chlorine Test Strips
- 8. Coliform and E. coli Test

Simple Lab Test		
Name	Essential City Water Test	Essential Well Test
	Recommended for most participants as it will test for	Recommended for participants on well water as it includes
Test Use Case	analytes that could indicate poor premise plumbing and will	
	provide basic info about the water supply.	including E. coli.
		Alkalinity (as CaCO3)
		Aluminum
	· · · · · · · · · · · · · · · · · · ·	Antimony
		Arsenic
		Barium
		Beryllium
		Boron
	Cadmium Calcium	Cadmium Calcium
	Chloride	Chloride
		Chromium (Total)
	Cobalt	Cobalt
		Conductivity
		Copper
		E. coli
		Fluoride
		Grains per gallon
		Hardness
		Hardness (Ca,Mg)
		Hardness (Total)
	Lead	Iron
	Lithium	Langelier Saturation Index
Analytes	Magnesium	Lead
אַ	Manganese	Lithium
>	Mercury	Magnesium
<u></u>	Molybdenum	Manganese
Ë	Nickel	Mercury
⋖		Molybdenum
•	·	Nickel
		Nitrate (as N)
		Nitrite (as N)
		Phosphorous
		Potassium
	Sodium Adsorption Ratio	Selenium
	Strontium	Silica
		Silver
		Sodium
		Sodium Adsorption Ratio
		Strontium
		Sulfate Thallium
		Tin
		Titanium
	pH	Total Coliform
	γ'	Total Dissolved Solids
		Turbidity
		Uranium
		Vanadium
		Zinc

Simple Lab					
Test Name	Advanced C	ity Water Test	Extended C	ity Water Test	
Test Use Case	concerned with chlorir byproducts (THMs), TCE, as to plastic piping, nearby ir	nt for participants specifically ne and related disinfection well as contamination related ndustrial activity, dry cleaning or agriculture.	Address all of the same concerns as the Advanced City Water test PLUS adds on additional testing for more chlorine/chloramine related disinfection byproducts as well as a screen for natural radiological contamination.		
Analytes	1,1 Dichloroethane 1,1 Dichloroethylene 1,1 Dichloropropene 1,1,1 Trichloroethane 1,1,2 Tetrachloroethane 1,1,2 Tetrachloroethane 1,1,2,2 Tetrachloroethane 1,2 Dichlorobenzene 1,2 Dichloroethane 1,2 Dichloropropane 1,2,3 Trichloropropane 1,2,4 Trichlorobenzene 1,2,4 Trichlorobenzene 1,3 Dichlorobenzene 1,3 Dichloropropane 1,3,5 Trimethylbenzene 1,3 Dichloropropane 1,4 Dichlorobenzene 2,2 Dichloropropane 4,4 Dichlorobenzene 2,2 Dichloropropane Alkalinity (as CaCO3) Aluminum Antimony Arsenic Barium Benzene Beryllium Boron Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane Cadmium Calcium Carbon Tetrachloride Chloride Chlorobenzene Chlorotoluene 2 Chlorotoluene 2 Chlorotoluene 4 Chromium (Total) cis 1,2 Dichloroethylene cis 1,3 Dichloropropene Cobalt Conductivity Copper Dibromochloromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichlorodifluoromethane Dichloromethane Dichloromethane	Ethylbenzene Ethylene dibromide Fluoride Grains per gallon Hardness Hardness (Ca,Mg) Hardness (Total) Hexachlorobutadiene Iron Isopropylbenzene Langelier Saturation Index Lead Lithium m,p Xylene Magnesium Manganese Mercury Methyl Tertiary Butyl Ether Molybdenum n Butylbenzene n Propylbenzene Naphthalene Nickel Nitrate (as N) Nitrite (as N) o Xylene p Isopropyltoluene pH Phosphorous Potassium sec Butylbenzene Selenium Silver Sodium Adsorption Ratio Strontium Styrene Sulfate tert Butylbenzene Tetrachloroethylene Thallium Tin Titanium Toluene Total Dissolved Solids Total THMs trans 1,3 Dichloropropene Trichlorofluoromethane Uranium Vanadium Vinyl Chloride Zinc	1,1 Dichloroethane 1,1 Dichloroethylene 1,1 Dichloropropene 1,1,1 Trichloroethane 1,1,2 Tetrachloroethane 1,1,2 Trichloroethane 1,1,2,2 Tetrachloroethane 1,2 Dichlorobenzene 1,2 Dichloroethane 1,2 Dichloropropane 1,2,3 Trichlorobenzene 1,2,3 Trichlorobenzene 1,2,4 Trichlorobenzene 1,2,4 Trichlorobenzene 1,3 Dichloropropane 1,3,5 Trimethylbenzene 1,3 Dichloropropane 1,3,5 Trimethylbenzene 1,4 Dichlorobenzene 2,2 Dichloropropane Alkalinity (as CaCO3) Aluminum Antimony Arsenic Barium Benzene Beryllium Boron Bromobenzene Bromochloromethane Bromodichloromethane Bromoform Bromomethane Cadmium Calcium Carbon Tetrachloride Chloride Chlorode Chlorotoluene 2 Chlorotoluene 4 Chromium (Total) cis 1,2 Dichloropropene Cobalt Conductivity Copper Dibromochloromethane Dichlorodifluoromethane Dibromochloromethane	Hardness (Ca,Mg) Hardness (Total) Hexachlorobutadiene Iron Isopropylbenzene Langelier Saturation Index Lead Lithium m,p Xylene Magnesium Manganese Mercury Methyl Tertiary Butyl Ether Molybdenum n Butylbenzene n Propylbenzene Naphthalene Nickel Nitrate (as N) Nitrite (as N) o Xylene p Isopropyltoluene pH Phosphorous Potassium sec Butylbenzene Selenium Silver Sodium Adsorption Ratio Strontium Styrene Sulfate tert Butylbenzene Tetrachloroethylene Thallium Tin Titanium Toluene Total Dissolved Solids Total THMs trans 1,3 Dichloropropene Trichlorofluoromethane Uranium Vanadium Vinyl Chloride Zinc Gross alpha radiation Gross beta radiation Bromochloroacetic Acid (DEA) Dichloroacetic Acid (DCA) Haloacetic Acids (Total) Monobromoacetic Acid (MBA) Monochloroacetic Acid Trichloroacetic Acid (TCA)	

Simple Lab Test Name	Full Radiation	PFAS	Chlorine Test Strips	Coliform and E. coli
Test Use Case	Recommended for participants near toxic waste, brownfield, military, and nuclear facilities.	Suggested for participants specifically concerned about these emerging contaminants of concern. Highest near waste processing facilities and industrial activity.	To test for total and free chlorine	To test for the presence of bacteria common in fecal mater and E. coli.
	Gross alpha radiation Gross beta radiation	NEtFOSAA NMeFOSAA	Free Chlorine Total Chlorine	Total Coliform E. coli
Analytes		Perfluorobutane sulfonate Perfluorodecanoic acid Perfluorododecanoic acid Perfluoroheptanoic acid Perfluorohexane sulfonic acid Perfluorohexanoic acid Perfluorononanoic acid Perfluorooctane sulfonic acid Perfluorooctanoic acid Perfluorotetradecanoic acid Perfluorotridecanoic acid Perfluoroundecanoic acid		

III. Outreach Materials

- 1. Drinking Water Testing Requirements and Standards Informational Document
- 2. Water Terms Informational Flyer
- 3. Tap Water Testing Survey Residential
- 4. Tap Water Testing Survey Facility

Drinking Water Quality Testing Requirements and Standards: Your Water System, Your Tap Water & Bottled Water

How does my local water system oversee the drinking water provided to my home?

The U.S. Safe Drinking Water Act sets standards for drinking water quality served through local water systems to homes across the country. This law classifies potential contaminants (like lead or arsenic) into different categories. It is important to note that water which is most healthy for you contains some minerals, whereas water advertised as completely "pure" may be less healthy.

The "primary" category of contaminants established in the Act pose both severe and long-term health risks, and these contaminants are often hard to detect except through testing. On the other hand, "secondary" contaminants tend to be more noticeable in drinking water, causing taste, smell, or color impacts. But these contaminants are not considered harmful to health except at very high levels."

Your local water system is required to:

- test for nearly 100 primary, potentially health-harming contaminants in the water your local system serves to your home and your neighbors,
- treat the water to ensure any contaminants are below legal "maximum contaminant levels" (MCLs)
- immediately improve the water quality if it exceeds a primary MCL.

How can I find information about my water quality?

Your local water system should send you information regarding the quality of water served to you each year in the form of a Consumer Confidence Report. If you are a renter but do not directly pay a water bill, the report can be found on your local water system's website.ⁱⁱⁱ

Your local water system, however, does not test water within every home, and it is not legally responsible for any contamination to water that may occur in the plumbing inside your home. Properly-maintained plumbing is unlikely to contribute contaminants. However, testing the faucets in your home can tell you if your water meets safe drinking standards.

What are the different standards for drinking water quality?

There are two key scientific terms to understand in interpreting your water quality: maximum contaminant levels (MCLs) and public health goals (PHGs). MCLs and PHGs are benchmarks set for contaminants (like lead or arsenic) against which you can compare your

water quality testing results. MCLs are often set at higher levels than PHGs, which are more conservative. MCLs are health protective drinking water standards that account for financial and technical feasibility of treatment, whereas PHGs represent more ambitious goals that California's public water systems should strive to achieve if it is feasible to do so.

Water systems are legally required to meet MCLs but not PHGs. According to the California health agency that sets PHGs, "As long as drinking water complies with all MCLs, it is considered safe to drink, even if some contaminants exceed PHG levels."

The achievement of PHGs is often hindered by available water testing technology that can't measure down to very low PHGs and especially by water treatment costs. In other words, if your water system worked to meet PHGs for all contaminants, your water bill could be much higher than it is now. By comparison, MCLs are set as close to the PHG as possible while factoring in cost and available technology.

Is bottled water safer than the water coming out of my tap?

Bottled water is best used as an emergency stop gap if your tap water is found to be unsafe or is temporarily unavailable. Contrary to what bottled water companies often claim, however, as long as your water system does not violate MCLs and your plumbing is maintained, there is little reason to think that bottled water will be safer than the drinking water from your home's faucets. Bottled water companies do not oversee water quality in the same way or as closely as your local water system, since bottled water has less transparent testing and reporting practices.^{vi}

When testing of bottled water is done by scientific investigators, local tap water is usually found to be equally or more safe than bottled water. Bottled water is also at least hundreds of times more expensive than tap water and it harms the environment.^{vii}

ⁱ The main categories are: primary, secondary, and unregulated but of potential concern. For more information, see https://www.epa.gov/sdwa/how-epa-regulates-drinking-water-contaminants

[&]quot;See: https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals

iii If you do not know who your local water system is, this tool from Community Water Center can be help: https://drinkingwatertool.communitywatercenter.org/your-water/

^{iv} Water is often perceived as unclean when it has color, taste or smell issues. Many of these issues can occur in the plumbing in your home, but also do not make the water unsafe. See: https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals

v See: https://oehha.ca.gov/media/downloads/faqs/oehhaphgguide2015.pdf

vi See: https://www.consumerreports.org/bottled-water/the-fda-knew-the-bottled-water-was-contaminated-the-public-didnt/; Gregory Pierce and Larry Lai (2019) "Toward a Comprehensive Explanatory Model of Reliance on Alternatives to the Tap: Evidence from California's Retail Water Stores." *Journal of Water and Health.*

vii See: Gleick, P. H. (2010). Bottled and Sold: The Story Behind our Obsession with Bottled Water. Island Press, Washington, DC; Ariana Javidi and Gregory Pierce (2018) "Negative Drinking Water Perception's Severe Consequences: Examining Constrained Alternative Choices to the Tap." *Water Resources Research*.



Water Quality Standards – How to Interpret Your Results

Maximum Contaminant Levels (MCL)

Water systems are legally required to meet these standards for all potential contaminants. As long as drinking water complies with all MCLs, it is considered safe to drink, even if some contaminants exceed PHG levels. MCLs are set as close to the PHGs as possible while taking into account what is economically and technically feasible.

Public Health Goals (PHG)

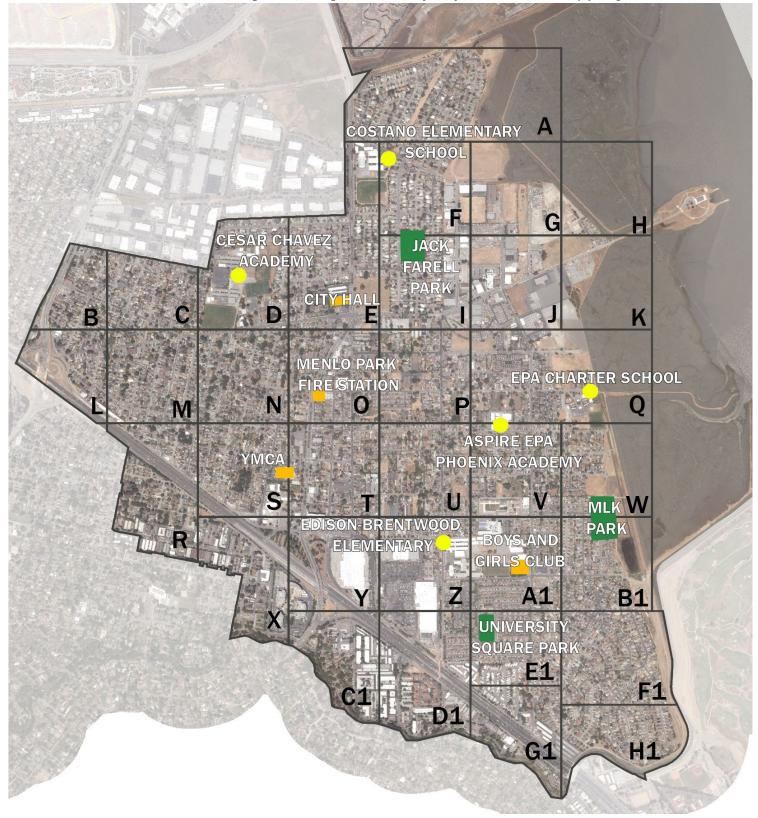
Standards that California's public water systems should strive to achieve if it is feasible to do so. These may not be feasible if technology isn't available to meet the PHG, or if the cost of meeting PHGs would make the water unaffordable.

2021 Household Tap Water Experience Survey

THIS SURVEY IS COMPLETELY VOLUNTARY. ALL INFORMATION WILL REMAIN CONFIDENTIAL

Please fill out ONLY ONE survey per household.

1. Which area below best corresponds with part of the City do you live in? Mark (X) on grid below



2. How many days during the <u>past TWO weeks</u> did you or someone in your household experience the following (1-14)? For those issues your household has not experienced, you can leave the box blank. For health impacts, mark yes or no.

Please make your best guess and describe all that apply. For health impacts, mark yes or no.

	How often? (1-14 days) *make your best guess	Description (if relevant; for example: has this issue changed over time? Does this issue exist from all taps in the home?)
Unusual appearance of water from the tap		
Rusty brown, orange, or reddish color		
Brownish-black color		
Other color or tinted water (describe)		
Frothy or cloudy water		
Sediment or larger deposits		
Dark black staining of sink or shower fixtures		
Blue-green staining of sink or shower fixtures		
Other color staining of sink or shower fixtures		
Corroded pipes or fixtures		
Bad smell of water from the tap		
Rotten or musty smell		
Chemical smell (describe)		
Other smell (describe)		
Bad taste of water from the tap		
Salty taste		
Bitter taste		
Metallic taste		
Fruity/plastic taste		
Other undesirable taste (describe)		
Unusual feel of water from the tap		
Bubbly or soda-like feel		
Hardness (symptoms: feeling film on your		
hands after washing them; spots on glasses or		
silverware; mineral stains on clothing; less		
water pressure in your home)		
Slippery feel	_	
Health or physical issues potentially related to		er
Skin discoloration or rash, itchiness, dryness	Yes □ No □	
Upset stomach or diarrhea	Yes □ No □	
Impacts on clothing	Yes 🗆 No 🗆	
Hair texture or other issues	Yes □ No □	
Teeth staining or other issues	Yes □ No □	
Graying of the white part of the eyes	Yes □ No □	
3. Are there any other concerns with your ta	p water you wo	ould like to share?

4. What i	s the primary source of drinking water used where you live? Mark (X) UNE box
	Unfiltered tap water
	Filtered tap Water
	Bottled water or other non-tap water sources
5. If not t	ap water, why don't you use your tap water as your main source of drinking water where you
Mark	(X) ONE box
	I don't trust any tap water
	I don't trust my tap water because I am concerned about the safety of drinking it
	I don't trust my tap water because I received official notice of poor water quality
	I don't drink my tap water because I prefer alternate drinking water sources/ I don't like the taste of my tap water
	I don't trust my tap water for another reason (please specify)
describe	(X) all that apply
	-//
	The problem would require major comes account
	- · · · · · · · · · · · · · · · · · · ·

7. Please fill out the following table about the amount of water your household buys **EACH WEEK**.

Please make your best guess and circle/fill out all options that apply:

Во	ttled water type	How many of these do you buy per week?	Cost each time you buy	
	Individual Bottle of water		\$	
- Secretary	Package of bottled water from the grocery or convenience store		\$	
	5-Gallon container (bought new each time)		\$	
	Re-fill of 5-Gallon container		\$	
	Other (please describe)		\$	
8. Do you always have enough water? See Yes If no, please describe in your opinion why not:				
9. Have you experienced water shut offs or service interruptions in the past 5 years? $\hfill\Box$ No				
□ Yes				
If yes, do you receive notice before the shut off? Yes \square No \square				
 I don't know / Other (please specify): I am worried about having my water shut off due to unpaid bills once the COVID-19 moratorium shut offs is lifted 				
10. Have you ever contacted the customer service line or e-mail at your water provider? □ No				

If yes, how was your experience? _____

□ Yes

11. Which best describes where you live in right now? Mark (X) ONE box			
□ A single family home			
□ A mobile home			
□ In-law or Backyard Unit/Cottage			
□ A duplex			
□ An apartment building with 3-4 units			
□ An apartment building with 5-19 units			
□ An apartment building with 20+ units			
12. How long have you lived here? Years: or Months (if less than 1 yr):			
13. Do you rent or own? Mark (X) ONE box			
□ Own			
□ Rent			
14. Do you know about how old your building is?			
□years			
□ I don't know			
15. How many people live in your household? Adults: Children:			
16. Are there any other concerns or thoughts you would like to share that we haven't asked about (related to tap water quality, supply, affordability?) (open response)			
17. Please choose one or more that best describe your race/ethnicity:			
□ White			
☐ Hispanic/Latina/o/Latinx			
□ Black			
□ Asian			
□ Pacific Islander			
□ Native American□ Other (please specify:)			
Other (please specify:)			

	Less than \$42,737
	Between \$42,737 and \$56,982
	Between \$56,983 and \$71,228
	Above \$71,229
	No household income working due to COVID
	No household income due to disability
	No household income for another reason
19. What	is the highest level of formal education you have received?
	Some high school or less
	High school diploma or GED
	AA or Technical degree/certification
	Undergraduate college degree
	Graduate degree or more
20. What	is your SimpleLab test kit ID (so that your results can be compared with your experiences)?

18. Which category best describes your current household income?

FOR INTERNAL PURPOSES ONLY			
Survey response number:			
Interviewer:			
Date: Time: KIT ID #:			
Notes:			

2021 Facility Tap Water Experience Survey

THIS SURVEY IS COMPLETELY VOLUNTARY. ALL INFORMATION WILL REMAIN CONFIDENTIAL

Please fill out ONLY ONE survey per facility.

- 1. Please provide the zip code and name of the facility being tested:
- 2. To your knowledge, how many days during the <u>past TWO weeks</u> did anyone using the facility experience the following issues with tap water at the facility? For those issues not experienced, you can leave the box blank.

Please make your best guess and describe all that apply. For health impacts, mark yes or no.

	How often? (1-14 days) *make your best guess	Description (if relevant; for example: has this issue changed over time? Does this issue exist from all taps in the facility?)
Unusual appearance of water from the tap		
Rusty brown, orange, or reddish color		
Brownish-black color		
Other color or tinted water (describe)		
Frothy or cloudy water		
Sediment or larger deposits		
Dark black staining of sink or shower fixtures		
Blue-green staining of sink or shower fixtures		
Other color staining of sink or shower fixtures		
Corroded pipes or fixtures		
Bad smell of water from the tap		
Rotten or musty smell		
Chemical smell (describe)		
Other smell (describe)		
Bad taste of water from the tap		
Salty taste		
Bitter taste		
Metallic taste		
Fruity/plastic taste		
Other undesirable taste (describe)		
Unusual feel of water from the tap		
Bubbly or soda-like feel		
Hardness (symptoms: feeling film on your		
hands after washing them; spots on glasses or		
silverware; mineral stains on clothing; less		
water pressure in your home)		
Slippery feel		
Health or physical issues potentially related to		er
Skin discoloration or rash, itchiness, dryness	Yes □ No □	
Upset stomach or diarrhea	Yes □ No □	
Impacts on clothing	Yes □ No □	
Hair texture or other issues	Yes □ No □	
Teeth staining or other issues	Yes □ No □	
Graving of the white part of the eyes	Yes □ No □	

3. Are then	re any other concerns with the facility's tap water you would like to share?
4 What is	the primary source of drinking water used at the facility? Mark (X) ONE box
	Unfiltered tap water
	Filtered tap water
	Drinking water fountain/bubbler
	Bottled water or other non-tap water sources
of drinkin	p water, why do you think people using the facility do not use the tap water as the main source g water? X) ONE box
	They don't trust any tap water
	They don't trust its tap water because of safety concerns about drinking it
	They don't trust its tap water because it received official notice of poor water quality They don't drink its tap water because they prefer alternate drinking water sources/ They don't like the taste of its tap water
	They don't trust its tap water for another reason (please specify
	est of your knowledge, do people specifically use this facility to access clean drinking water, k of trusted water available elsewhere?
	Yes
	No
If yo	es, please explain:

7. Please fill out the following table about the amount of water that the facility buys **EACH WEEK**.

Please make your best guess and circle/fill out all options that apply:

Bottled water type		How many of these do you buy per week?	Cost each time you buy
	Individual Bottle of water		\$
	Package of bottle water from the grocery or convenience store		\$
	5-Gallon container (bought new each time)		\$
	Re-fill of 5-Gallon container		\$
	Other (please describe)		\$

0.5	.,			
8. Does		e facility always have enough water?		
		Yes		
		No		
		If no, please describe in your opinion why not:		
9. Has t	the	facility experienced water shut offs or service interruptions in the past 5 years?		
		No		
		Yes		
		If yes, do you receive notice before the shut off? Yes \square No \square		
		I don't know / Other (please specify):		
10. Do	you	know about how old the building facility is?		
		years		
		I don't know		

11. To the best of your knowledge how many people use the facility on a daily or weekly basis (pleas circle either <u>daily</u> or <u>weekly</u>)? Adults: Children:
12. Are there any other concerns or thoughts you would like to share that we haven't asked about (related to tap water quality, supply, affordability?) (open response)?
13. Is this facility aimed at serving any underserved/disadvantaged groups? If so, to the best of your ability, please describe the facility users by race, income, and educational levels:
Race
□ White
□ Hispanic/Latina/o/Latinx
□ Black
□ Asian
□ Pacific Islander □ Native American
□ Other (please specify:)
Household income?
□ Less than \$42,737
□ Between \$42,737 and \$56,982
□ Between \$56,983 and \$71,228
□ Above \$71,229
□ No household income working due to COVID
□ No household income due to disability
□ No household income for another reason
Level of formal education?
□ Some high school or less
□ High school diploma or GED
□ AA or Technical degree/certification
□ Undergraduate college degree
□ Graduate degree or more
14. What is your SimpleLab test kit ID (so that facility test results can be compared with your experiences)?

FOR INTERNAL PURPOSES ONLY			
Survey response number:			
Interviewer:			
Date:	Time:	KIT ID #:	
Notes:			