SACRAMENTO COUNTY WATER AGENCY

2023 WATER QUALITY REPORT - HOOD & EAST WALNUT GROVE / DELTA ESTATES

DETECTED PRIMARY STANDARDS - Mandatory Health-Related Standards
Established by the State Water Resources Control Board (State Board)

CONSTITUENT	SAMPLE DATE (see # 1)	UNITS	PHG or (MCLG) or [MRDLG]	MCL OR [MRDL]	MAJOR SOURCES IN DRINKING WATER	HOOD RANGE (LO-HI)	HOOD WEIGHTED AVERAGE	EAST WALNUT GROVE RANGE (LO-HI)	EAST WALNUT GROVE WEIGHTED AVERAGE
INORGANIC CONTAMINANTS									
Arsenic	2021 - 2023	PPB	0.004	10	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.	ND	ND	ND - 7.4	5.1
Fluoride (Natural Source)	2023	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	ND	ND	0.16	0.2
Barium	2021 - 2023	PPM	2	1	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	0.38 - 0.39	0.39	ND	ND
RADIOACTIVE CONTAMINANTS									
2 Uranium	2015 - 2022	pCi/L	0.43	20	Erosion of natural deposits.	ND - 1.1	ND	ND	ND
DISTRIBUTION SYSTEM									
Chlorine Residuals	2023	PPM	[4]	[4.0]	Drinking water disinfectant added for treatment.	0.6 - 1.52	1.3	0.4 - 2	1.5
3 TTHMs [Total Trihalomethanes]	2023	PPB	n/a	80	Byproduct of drinking water disinfection.	20 - 24	22.5	16 - 46	30.3
4 HAA5 [Sum of 5 Haloacetic Acids]	2023	PPB	n/a	60	Byproduct of drinking water disinfection.	3.5 - 5.4	4.1	6.1 - 11	8.9
5 Fluoride (Treatment - Distribution)	2023	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	0.57 - 0.9	0.78	0.62 - 0.93	0.78
MICROBIOLOGICAL CONTAMINANTS						**LEVEL FOUND**		**LEVEL FOUND**	
Total Coliform Bacteria	2023	# of Positive Samples	(0)	>1	Naturally present in the envirionment.	0		0	

NOTES:

1. The State Water Resources Control Board Division of Drinking Water (SWRCB DDW) allows Sacramento County Water Agency (SCWA) to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.
2. The SWRCB allows the measurementof gross alpha radiation as a surrogate ofr Uranium.
3. Total Trihalomethanes are the sum of Four Regulated THMs, i.e., Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform.
4. Haloacetic Acids are the Sum of Five Regulated HAAs, i.e., Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Dibromoacetic Acid, and Trichloroacetic Acid.
5. The **Hood** and **East Walnut Grove** water systems are fluoridated to reduce tooth decay in children. Studies show that water fluoridation reduces tooth decay by 20 to 40 percent. The SWRCB DDW advised SCWA to implement the CDC's recommended optimal fluoride content of 0.7 mg/L and control range of 0.6 mg/L – 1.2 mg/L. Information about fluoridation, oral health and current issues is available from **http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml**

SECONDARY STANDARDS - Aesthetic Standards
Established by the State Water Resources Control Board (State Board)

CONSTITUENT	SAMPLE DATE:	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	MAJOR SOURCES IN DRINKING WATER	HOOD RANGE (LO-HI)	HOOD WEIGHTED AVERAGE	EAST WALNUT GROVE RANGE (LO-HI)	EAST WALNUT GROVE WEIGHTED AVERAGE
Manganese	2020 - 2023	PPB	n/a	50	Leaching from natural deposits.	ND	ND	37	37
6 Odor-Threshold	2020 - 2023	Units	n/a	3	Naturally-occurring organic materials.	**4 - 8**	**6.0**	**3 - 4.3**	**3.7**
Turbidity	2020 - 2023	Units	n/a	5	Soil runoff.	0.14 - 0.86	0.5	0.17	0.17
Total Dissolved Solids	2020 - 2023	PPM	n/a	1000	Runoff/leaching from natural deposits.	440	440	410 - 450	430
Specific Conductance (E.C.)	2020 - 2023	umhos/cm	n/a	1600	Substances that form ions when in water; seawater influence.	760 - 800	780	730 - 750	740
Chloride	2020 - 2023	PPM	n/a	500	Runoff/leaching from natural deposits; seawater influence.	50 - 57	54	120	120
Sulfate	2020 - 2023	PPM	n/a	500	Runoff/leaching from natural deposits; industrial wastes.	21 - 22	22	ND	ND
OTHER CONSTITUENTS ANALYZED									
pH	2020 - 2023	Units	n/a	MO		8	8	8.2	8.2
7 Total Hardness (as CaCO3)	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	280	280	44 - 45	45
8 Total Hardness (as CaCO3)	2020 - 2023	Grains	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	16.4	16.4	2.59 - 2.63	2.6
Total Alkalinity (as CaCO3)	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	310	310	190	190
Bicarbonate (as HCO3)	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	380	380	190 - 230	210
Sodium	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	48 - 53	51	130 - 140	135
Calcium	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	59 - 60	60	11	11
Magnesium	2020 - 2023	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	31 - 32	32	4.2 - 4.4	4.3

LEAD & COPPER (see #9)

	CONTAMINANT	SAMPLE DATE	UNITS	PHG or (MCLG)	ACTION LEVEL	MAJOR SOURCES IN DRINKING WATER	NUMBER OF SAMPLES	90TH % LEVEL DETECTED	NUMBER EXCEEDING AL
HOOD	Lead	2021	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	10	ND	0
	Copper	2021	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	10	0.14	0
EWG	Lead (see #10)	2022	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	7	15	**1**
	Copper	2022	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	7	0.28	0

NOTES:

6. **Odor** exceeded the threshold of 3 Units when monitoring analysis was done at both the raw water (source wells) and treated water (WT-13) sample sites at the Hood and East Walnut Grove water systems. Odor itself **does not** represent a human health hazard. Although standards are established for odor in drinking water based on aesthetic criteria, odor can be indicative of water contamination or problems with water treatment, which may have associated health concerns.
7. Hardness units are PPM. General guidelines for classification of water hardness are: 0 - 60 PPM as **soft**; 61 - 120 PPM as **moderately hard**; 121 - 180 PPM as **hard**; and greater than 180 PPM as **very hard**.
8. Most commercial companies use "grain" units. Conversion: 17.1 PPM = 1 grain.
9. The levels for Lead & Copper concentrations were obtained from the 90th percentile sampling of ten (10) homes at the tap for Hood and seven (7) for EWG. The MCLs for lead and copper are set at "Action Levels" (AL). None of the samples taken in Hood exceeded the Action Level for Copper or Lead. Please refer to the educational information on Lead in drinking water.
10. One EWG sample exceeded and one sample was at the Action Level for lead. Both samples were taken from taps which were unused for more than the 12 hour maximum (according to state and federal guidelines for sampling at the tap). Resamples were taken in both locations and returned non-detect.

EXCEEDENCE:

Every year, we conducted more than 40 test to analyze over 40 contaminants per test. The following contaminants exceeded the primary and secondary standards maximum contaminant level.

CONTAMINANT:	SAMPLE DATE	UNITS	PHG or (MCLG)	MCL or [MRDL]	HEALTH EFFECTS / SOURCE OF CONTAMINANT:	RESULT:	LOCATION:
Odor	5/12/2021	TON	n/a	3	Naturally-occurring organic materials.	4	Hood On-Site Well (W-25)
Odor	5/12/2021	TON	n/a	3	Naturally-occurring organic materials.	8	Hood WTP (WT-13)
Odor	5/7/2020	TON	n/a	3	Naturally-occurring organic materials.	4.3	Grove St Well (W-108)
Odor	5/1/2023	TON	n/a	3	Naturally-occurring organic materials.	3	Grove St Well (W-108)

PER- & POLYFLUOROALKYL SUBSTANCES (PFAS) - See # 11

The State Water Resources Control Board Division of Drinking Water (SWRCB DDW) established new drinking water guidelines for water agencies to follow in detecting and reporting the presence of perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), perfluorohexane sulfonic acid (PFHxS), and perfluorobutane sulfonic acid (PFBS) – four members of a large family of chemicals known as per- and polyfluoroalkyl substances (PFAS). Until PFOA and PFOS were phased out in the 2000s due to health concerns, these chemicals were widely used in grease and stain resistant coatings for consumer products and firefighting foams. Drinking water containing PFAS has become an increasing concern due to the persistence of these chemicals in the environment and their tendency to accumulate in groundwater. Long-term exposure to PFAS over certain levels is associated with adverse health effects that include cancer and developmental harm. SWRCB DDW has identified analytical methods capable of detecting the following twenty-five (25) perfluorinated compounds in drinking water:

PERFLUOROBUTANE SULFONIC ACID (PFBS)	HEXAFLUOROPROPYLENE OXIDE DIMER ACID (HFPO-DA)	11-CHLOROEICOSAFLUORO-3-OXAUNDECANE-1-SULFONIC ACID (11Cl-PF3OUdS)	perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)
PERFLUOROHEPTANOIC ACID (PFHpA)	PERFLUOROUNDECANOIC ACID (PFUnA)	1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	perfluoro-3-methoxypropanoic acid (PFMPA)
PERFLUOROHEXANE SULFONIC ACID (PFHxS)	PERFLUORODECANOIC ACID (PFDA)	1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	perfluoro-4-methoxybutanoic acid (PFMBA)
PERFLUORONONANOIC ACID (PFNA)	PERFLUORODODECANOIC ACID (PFDoA)	1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	perfluorobutanoic acid (PFBA)
PERFLUOROOCTYL SULFONIC ACID (PFOS)	PERFLUOROHEXANOIC ACID (PFHxA)	9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl- PF3ONS)	perfluoroheptanesulfonic acid (PFHpS)
PERFLUOROOCTANOIC ACID (PFOA)	4,8-DIOXA-3H-PERFLUORONONANOIC ACID (ADONA)	nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	perfluoropentanesulfonic acid (PFPeS)
			perfluoropentanoic acid (PFPeA)

NOTES:

11. In the 2nd Quarter of 2019 and the 4th quarter of 2020, the SWRCB DDW directed SCWA to complete four quarters of sampling in four of our water systems. SCWA tested for PFAS at groundwater wells near locations where the chemicals are believed to be especially prevalent. After completing the required monitoring for PFAS, SCWA began (in 2020) testing for these chemicals at water sources located in the EWG and Hood water systems. The analysis results at EWG and Hood returned Non-Detect. For more information on PFAS, PFOA and PFOS, please visit the SWRCB DDW's resource page: **https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/pfas.html**

PARTS PER MILLION (PPM) OR MILLIGRAMS PER LITER (mg/L)

Parts per million (PPM) and milligrams per liter (mg/L) are units of measurement to determine the amount of a chemical in water. If we thought of each "part" or "milligram" as a second in a period of time, the following time frames would be an appropriate or accurate comparison:

1 milligram per liter (mg/L)	or	1 part per million (PPM)	=1 second in 11.5 days
1 microgram per liter (µg/L)	or	1 part per billion (PPB)	=1 second in nearly 32 years
1 nanogram per liter (ng/L)	or	1 part per trillion (PPT)	=1 second in nearly 32,000 years
1 picogram per liter (pg/L)	or	1 part per quadrillion (PPQ)	=1 second in nearly 32,000,000 years

100% of the water for the East Walnut grove and Hood community water systems comes from groundwater wells. For more detailed information regarding SCWA water quality, please call Aaron Wyley @ (916) 875-5815.

LEGEND:

AL…Regulatory Action Level	NA…Not Analyzed	NR…Not Required	PPB…Parts per Billion (ug/l)	TOC…Total Organic Carbon
MFL…Million Fibers Per Liter	n/a…Not Applicable	NTU…Nephelometric Turbidity Units	PPM…Parts per Million (mg/l)	TT…Treatment Technique
MO…Monitored Only	ND…Non-Detected	PDWS…Primary Drinking Water Standard	PPT…Parts per Trillion (ng/l)	WTP…Water Treatment Plant
MPN…Most Probable Number	NL…Notification Level	pCi/L…Pico Curies per Liter	RL….Response Level	

SACRAMENTO COUNTY WATER AGENCY

2023 WATER QUALITY REPORT - HOOD & EAST WALNUT GROVE / DELTA ESTATES

DEFINITIONS

Average: The annual average of all tests for a particular substance.

Detection Limit for Reporting: The limit at or above which a contaminant is detected.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Range (Lo - Hi): The range between the lowest and highest values of a specific substance measured throughout the course of the year.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Weighted Average (WTD AVG): An average of water quality samples in which each sample is assigned a weight. Each sample's contribution (or weight) is based on the amount of water the corresponding water source produces for the whole system. Instead of each of the sample results contributing equally to the final average, some of the results contribute more than others.

State Mandated Information for Nitrate, Arsenic & Lead:

Arsenic:

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants and young children; as they are typically more vulnerable to lead in drinking water than the general population. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Sacramento County Water Agency is responsible for providing high quality drinking water, but cannot control the variety for materials used in plumbing components. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. Additional information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/lead.

SOURCE WATER ASSESSMENT

To help protect the quality of existing and future groundwater supplies, the Drinking Water Source Assessment and Protection (DWSAP) program calls for examining the vulnerability of drinking water sources to potential contamination. The Water Agency completed its latest comprehensive report in May 2019. The Water Agency's report identified the following potential contamination results:

Arden Park Vista & Northgate:

Most vulnerable to commercial types of activities such as the dry cleaning business, gas stations, a sewer collection system and a leaking underground storage tank, electronic manufacturers and photo processors.

Central & South Service Area (CSA & SSA)

Most vulnerabe to activities including automobile-gas stations; boat services/ repair/ refinishing; chemical/ petroleum pipelines; dry cleaners; fleet/ truck/ bus terminal; grazing; historic waste dumps/ landfills; leaking underground storage tanks; other animal operations; pesticides/ fertilizer/ petroleum storage transfer areas; plastics/ synthetics producers; research laboratory; wells-agricultural/ irrigation types; wells-oil, gas, and geothermal types; wood preserving/ treating

Hood, East Walnut Grove and Delta Estates:

Most vulnerable to irrigated crops and septic systems.

North Service Area (NSA):

Most vulnerable to commercial types of activities such as grazing, known contaminant plumes, low-density septic systems, sewer collection systems and wells-agricultural irrigation types