

SACRAMENTO COUNTY WATER AGENCY

2016 WATER QUALITY REPORT - HOOD & EAST WALNUT GROVE/ DELTA ESTATES (See Note #1)

DETECTED PRIMARY STANDARDS - Mandatory Health-Related 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		EAST WALNUT GROVE	
						RANGE (LO-HI)	WEIGHTED AVERAGE	RANGE (LO-HI)	WEIGHTED AVERAGE
INORGANIC CONTAMINANTS									
2 Arsenic	2016	PPB	0.004	10	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.	ND	ND	ND - 10	7.9
Barium	2008 - 2015	PPM	2	1	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.	ND - 0.21	ND	ND	ND
Fluoride (Natural Source)	2014 - 2016	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	ND	ND	0.16	0.16
Selenium	2008 - 2011	PPB	30	50	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)	ND - 9.7	9.58	ND	ND

DISTRIBUTION SYSTEM

Chlorine Residuals	2016	PPM	[4]	[4.0]	Drinking water disinfectant added for treatment.	0.81 - 1.98	1.06	0.59 - 1.17	0.91
3 Total Trihalomethanes	2016	PPB	n/a	80	Byproduct of drinking water disinfection.	n/a	78	33 - 69	47
4 Haloacetic Acids	2016	PPB	n/a	60	Byproduct of drinking water disinfection.	n/a	16	8.4 - 13	10
5 Fluoride (Treatment Related - Distribution)	2016	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	0.83 - 1.1	0.93	0.81 - 0.97	0.87

MICROBIOLOGICAL CONTAMINANTS

		# of Positive Samples				LEVEL FOUND	LEVEL FOUND
Total Coliform Bacteria	2016	(0)	>1	Naturally present in the environment.		0	0

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		EAST WALNUT GROVE	
						RANGE	WTD. AVG.	RANGE	WTD. AVG.
Color	2014 - 2015	Units	n/a	15	Naturally-occurring organic materials.	5 - 10	5	5	5
6 Iron	2014 - 2015	PPB	n/a	300	Leaching from natural deposits; industrial wastes	ND - 580	ND	ND	ND
7 Manganese	2014 - 2016	PPB	n/a	50	Leaching from natural deposits.	210 - 300	221	39	39
Odor-Threshold	2014 - 2015	Units	n/a	3	Naturally-occurring organic materials.	1 - 2.5	2.5	2	2
Turbidity	2014 - 2015	Units	n/a	5	Soil runoff.	ND - 3.5	ND	ND	ND
Zinc	2014 - 2015	PPM	n/a	5	Runoff / leaching from natural deposits; industrial wastes	ND - 71	70	ND	ND
Total Dissolved Solids	2014 - 2015	PPM	n/a	1000	Runoff/leaching from natural deposits.	280 - 630	626	450	450
Specific Conductance (E.C.)	2014 - 2015	umhos/cm	n/a	1600	Substances that form ions when in water; seawater influence.	500 - 1100	1092	760	760
Chloride	2014 - 2015	PPM	n/a	500	Runoff/leaching from natural deposits; seawater influence.	49 - 220	218	130	130
Sulfate	2014 - 2015	PPM	n/a	500	Runoff / leaching from natural deposits; industrial wastes	ND - 4.7	ND	ND	ND
Aggressive Index	2006 - 2008	AI	n/a	non-corrosive		12	12	11.75	11.75
Corrosivity (Langelier Index at 60° C)	2006 - 2008	LI	n/a	non-corrosive	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water, affected by temperature and other factors.	0.1 - 0.6	0.59	-0.1	-0.1

OTHER CONSTITUENTS ANALYZED

pH	2014 - 2015	Units	n/a	MO		7.9 - 8	8	8.4	8.4
Total Hardness (as CaCO3)	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	190 - 280	279	47	47
Total Hardness (as CaCO3)	2014 - 2015	Grains	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	11 - 16.4	16.3	2.75	2.75
Total Alkalinity (as CaCO3)	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	180 - 210	210	200	200
Bicarbonate (as HCO3)	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	220 - 250	250	240	240
Carbonate (as CO3)	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	ND	ND	5.3	5.3
Sodium	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	26 - 110	109	150	150
Calcium	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	36 - 77	76	11	11
Magnesium	2014 - 2015	PPM	n/a	MO	Due to chemicals naturally occurring in the soil below the earth's surface.	22	22	4.6	4.6

LEAD & COPPER

	CONTAMINANT	SAMPLE DATE	UNITS	PHG or (MCLG)	ACTION LEVEL	MAJOR SOURCES IN DRINKING WATER	NUMBER OF SAMPLES	90TH % LEVEL DETECTED	NUMBER EXCEEDING AL
HOOD See # 8	Lead	2016	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	6	ND	0
	Copper	2016	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	6	0.11	0
EWG See # 9	Lead	2016	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	16	0.0059	1
	Copper	2016	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	16	0.34	0

EXCEEDENCE:

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

CONTAMINANT:	SAMPLE DATE	UNITS	PHG or (MCLG)	MCL or (MRDL)	QUALITY EFFECTS / SOURCE OF CONTAMINANT:	RESULT:	LOCATION:
Iron	2/26/2014	PPB	n/a	300	Leaching from natural deposits; industrial wastes	580	Hood-Franklin (W-20)
Manganese	2/26/2014	PPB	n/a	50	Leaching from natural deposits	300	Hood-Franklin (W-20)
Manganese	2/10/2016	PPB	n/a	50	Leaching from natural deposits.	220	Third Street Well (W-19)
Manganese	5/16/2016	PPB	n/a	50	Leaching from natural deposits.	230	Third Street Well (W-19)
Manganese	8/10/2016	PPB	n/a	50	Leaching from natural deposits.	210	Third Street Well (W-19)
Manganese	11/1/2016	PPB	n/a	50	Leaching from natural deposits.	220	Third Street Well (W-19)

LEGEND

AI.....Aggressive Index	MPN.....Most Probable Number	NR.....Not Required	PPT.....Parts per trillion, or Nanograms per liter
AL.....Regulatory Action Level	NA.....Not Analyzed	NTU.....Nephelometric Turbidity Units	TOC.....Total Organic Carbon
LI.....Langelier Index	n/a.....Not Applicable	pCi/L.....Pico Curies per liter	TT.....Treatment Technique
MFL.....Million Fibers Per Liter	ND.....Non Detectable	PPB.....Parts per billion (ug/l)	WTP.....Water Treatment Plant
MO.....Monitored Only	NL.....Notification Level	PPM.....Parts per million (mg/l)	

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 and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment 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: 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.

NOTES:

- The state allows SCWA to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.
- SCWA closely monitors the Arsenic levels in the East Walnut Grove water system. Monthly samples are collected to test for Arsenic at the Grove Street Well (W-108), the well filters and a point in the distribution system.
- Total Trihalomethanes = sum of results for Chloroform, Bromoform, Dibromochloromethane, & Bromodichloromethane.
- Haloacetic Acids = sum of results for Bromochloroacetic acid, Dibromoacetic acid, Dichloroacetic acid, Monochloroacetic acid, & Trichloroacetic acid
- The East Walnut Grove water system is fluoridated to reduce tooth decay in children. Studies show that water fluoridation reduces tooth decay by 20 to 40 percent. The California State Water Resources Control Board 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/certificdrinkingwater/Fluoridation.shtml.
- On February 26, 2014, an iron monitoring sample taken at W-20 returned 580 PPB, which exceeds the secondary standard MCL of 300 PPB. W-20 is primarily a standby well and produced 1% of all water for the Hood water system. The weighted average for iron in the Hood system is Non-Detect. The Iron MCL was set to protect against unpleasant aesthetic effects (e.g., color, taste and odor) which may stain household fixtures (e.g., tubs and sinks).
- Manganese exceeded the MCL of 50 PPB in the Hood water system. Water naturally contains small amounts of manganese. Manganese in food or drinking water presents few adverse effects; however, elevated concentrations of manganese in water may stain laundry, produce an undesirable odor and taste, contribute to microbial growth and turbidity, or form a coating inside pipes which can peel off as solid precipitates.
- Hood's Lead and Copper concentrations were obtained from the 90th percentile of six (6) tap water samples taken throughout the distribution system. The MCLs for lead and copper are set at "Action Levels."
- East Walnut Grove's Lead and Copper concentrations were obtained from the 90th percentile of sixteen (16) tap water samples taken throughout the distribution system. The MCLs for lead and copper are set at "Action Levels." Customers who exceeded the Action Levels for Lead and Copper were given the information on testing their water, as well as the names of laboratories.

For more detailed information regarding SCWA water quality, call Aaron Wyley @ (916) 875-5815.

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>.