SACRAMENTO COUNTY WATER AGENCY

2016 WATER QUALITY REPORT - ARDEN PARK VISTA, NORTHGATE & SOUTHWEST TRACT (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	ARDEN PARK VISTA RANGE (LO-HI)	ARDEN PARK VISTA WEIGHTED AVERAGE	NORTHGATE RANGE (LO-HI)	NORTHGATE WEIGHTED AVERAGE	SWT (SEE #2) RANGE (LO-HI)	SWT (SEE #2) WEIGHTED AVERAGE
	INORGANIC CONTAMINANTS											
	Aluminum	2008 - 2015	PPM	0.6	1	Erosion of natural deposits; residue from some surface water treatment processes.	ND - 0.42	ND	ND	ND	ND	ND
	Arsenic	2008 - 2016	PPB	0.004	10	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.	ND - 2.8	ND	2.7 - 6	3.9	ND - 7	2.6
	Barium	2008 - 2016	PPM	2	1	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.	ND	ND	ND - 0.13	ND	ND - 0.26	ND
	Chromium (Total Cr)	2008 - 2016	PPB	(100)	50	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.	ND	ND	ND - 12	ND	ND - 12	ND
	Hexavalent Chromium	2014 - 2016	PPB	0.02	10	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.	ND - 5	2.4	6.2 - 9.6	8.9	ND - 10	4.9
	Fluoride (Natural Source)	2008 - 2016	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	ND - 0.26	ND	0.14 - 0.17	0.16	ND	ND
	Nitrate (as N)	2014 - 2016	PPM	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.	ND - 5.3	1.60	0.5 - 2.9	1.0	ND - 7	3.5
	REGULATED ORGANIC CHEMICALS											
	Carbon Tetrachloride	2016	PPT	100	500	Discharge from chemical plants and other industrial activities.	ND	ND	ND	ND	ND - **530**	ND
	Tetrachloroethylene (PCE)	2016	PPB	0.06	5	Discharge from factories, dry cleaners and auto shops (metal degreaser).	ND	ND	ND	ND	ND - 0.94	ND
	Trichloroethylene (TCE)	2016	PPB	1.7	5	Discharge from metal degreasing sites and other factories.	ND	ND	ND	ND	ND - 1.1	ND
	RADIOACTIVE CONTAMINANTS											
	Gross Alpha Activity	2006 - 2016	pCi/L	(0)	15	Erosion of natural deposits.	ND - 3.6	ND	ND - 7.95	ND	ND - 10.8	5.3
3	Uranium	2006 - 2016	pC/L	0.43	20	Erosion of natural deposits.	ND - 1.8	ND	ND - 4.1	1.35	ND - 6.3	3.2
	Radium 228	2006 - 2008	pCi/L	0.019	n/a	Erosion of natural deposits	ND - 1.98	ND	ND	ND	ND - 1.35	ND
	DISTRIBUTION SYSTEM											
	Chlorine Residuals	2016	PPM	[4]	[4.0]	Drinking water disinfectant added for treatment.	0.82 - 1	0.89	0.66 - 1.67	1.13	0.39 - 1.85	0.74
4	Total Trihalomethanes	2014 - 2016	PPB	n/a	80	Byproduct of drinking water disinfection.	ND	ND	ND - 3.8	1.3	5.2	5.2
5	Haloacetic Acids	2014 - 2016	PPB	n/a	60	Byproduct of drinking water disinfection.	ND	ND	ND - 4	1.6	ND	ND
6	Fluoride (Treatment Related- Distribution)	2016	PPM	1	2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.	0.72 - 0.86	0.82	NA	NA	NA	NA
	MICROBIOLOGICAL CONTAMINANTS						**LEVEL FOUND**		**LEVEL FOUND**		**LEVEL FOUND**	
7	Total Coliform Bacteria	2016	# of Positive Samples	(0)	>1	Naturally present in the envirionment.	0		0		0	

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

							Arden Park Vista RANGE	Arden Park Vista WTD. AVG.	Northgate RANGE	Northgate WTD. AVG.	Southwest Tract RANGE	Southwest Tract WTD. AVG.
8	Aluminum	2008 - 2015	PPB	n/a	200	Erosion of natural deposits; residual from some surface water treatment processes	ND - **420**	ND	ND	ND	ND	ND
9	Color	2008 - 2016	Units	n/a	15	Naturally-occurring organic materials.	ND - 5	0.25	ND - **20**	0.03	ND - 5	0.0
	Iron	2008 - 2016	PPB	n/a	300	Leaching from natural deposits; industrial wastes.	ND	ND	ND	ND	ND - 290	ND
	Manganese	2008 - 2016	PPB	n/a	50	Leaching from natural deposits.	ND	ND	ND	ND	ND - **61**	ND
10	Odor-Threshold	2008 - 2016	Units	n/a	3	Naturally-occurring organic materials.	ND	ND	ND - **4**	ND	ND	ND
	Turbidity	2008 - 2016	Units	n/a	5	Soil runoff.	ND	ND	ND - 0.65	0.11	ND - 1.2	ND
	Total Dissolved Solids	2008 - 2016	PPM	n/a	1000	Runoff/leaching from natural deposits.	90 - 310	180	176 - 490	325.7	65 - 450	276
	Specific Conductance (E.C.)	2014 - 2016	umhos/cm	n/a	1600	Substances that form ions when in water; seawater influence.	82 - 460	261	250 - 710	476	96 - 700	402
	Chloride	2008 - 2016	PPM	n/a	500	Runoff/leaching from natural deposits; seawater influence.	2.1 - 25	8.3	18 - 76	44	ND - 77	22
	Sulfate	2008 - 2016	PPM	n/a	500	Runoff/leaching from natural deposits; industrial wastes.	2.7 - 24	10.1	3.9 - 29	15.9	ND - 40	17
	Aggressive Index	2006 - 2014	AL	n/a	non-corrosive		11 - 12	12	11 - 12	11.75	NR	NR
	Corrosivity (Langelier Index at 60° C)	2006 - 2014	LI	n/a	non-corrosive	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors.	-1.3 / 0.2	-0.3	-0.5 / 0.94	0.33	NR	NR
	OTHER CONSTITUENTS ANALYZED											
	pH	2008 - 2016	Units	n/a	MO		7.5 - 8.1	7.9	7.8 - 8.1	7.96	NR	NR
	Total Hardness (as CaCO3)	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	33 - 220	106	71 - 350	189.3	40 - 360	185
	Total Hardness (as CaCO3)	2008 - 2016	Grains	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	2 - 13	6	4 - 20.5	11.1	2 - 21	10.8
	Total Alkalinity (as CaCO3)	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	40 - 170	105	74 - 250	158.8	NR	NR
	Bicarbonate (as HCO3)	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	49 - 200	132	90 - 300	189.1	NR	NR
	Sodium	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	3.7 - 15	9.3	23 - 33	28.2	3 - 29	17
	Calcium	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	5.7 - 41	23	14 - 63	35	NR	NR
	Magnesium	2008 - 2016	PPM	n/a	MO	Due to chemicals naturally occuring in the soil below the earth's surface.	4.5 - 28	13	8.7 - 47	24.7	NR	NR

LEAD & COPPER (See Note 11)

	CONTAMINANT	SAMPLE DATE	UNITS	PHG or (MCLG)	ACTION LEVEL	MAJOR SOURCES IN DRINKING WATER	NUMBER OF SAMPLES	90TH % LEVEL DETECTED	NUMBER EXCEEDING AL
APV	Lead	2016	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	35	ND	1
	Copper	2016	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	35	0.19	0
NORTHGATE	Lead	2016	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	18	ND	**0**
	Copper	2016	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	18	0.36	0
SWT	Lead	2016	PPB	(0.2)	15	Internal corrosion of household water plumbing systems; discharges from industrial manufactures; erosion of natural deposits.	5	ND	0
	Copper	2016	PPM	(0.3)	1.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	5	0.054	0

UNREGULATED CONTAMINANT MONITORING RULE (UCMR 3) - Established by USEPA (See 12)

CONTAMINANT	SAMPLE DATE	UNITS	PHG	Notification Level	HEALTH EFFECTS LANGUAGE	Arden Park Vista RANGE	Arden Park Vista WTD. AVG.	Northgate RANGE	Northgate WTD. AVG.	Southwest Tract RANGE	Southwest Tract WTD. AVG.
Chloroform (Trichloromethane)	2016	PPB	n/a	n/a		NR	NR	NR	NR	ND - 3.8	ND
Dichlorodifluoromethane (Freon 12)	2016	PPM	n/a	1	Some people who drink water containing dichlorodifluoromethane far in excess of the notification level may experience neurological and cardiac effects. Long-term exposures to dichlorodifluoromethane resulted in smaller body weight in laboratory animals.	NR	NR	NR	NR	ND - 0.0026	ND
Trichloropropane (1,2,3-TCP)	2016	PPT	n/a	5	Some people who use water containing 1,2,3-trichloropropate in excess of the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.	NR	NR	NR	NR	ND - 37	ND
Vanadium	2016	PPB	n/a	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increaed risk of developmental effects, based on studies in laboratory animals.	NR	NR	NR	NR	ND - 23	15
Strontium	2016	PPB	n/a	n/a		NR	NR	NR	NR	48 - 730	426
Chlorate	2016	PPB	n/a	800		NR	NR	NR	NR	ND - 570	169
Molybdenum	2016	PPB	n/a	n/a		NR	NR	NR	NR	ND - 3	0.6

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

CONTAMINANT:	SAMPLE DATE	UNITS	PHG	MCL	QUALITY EFFECTS / SOURCE OF CONTAMINANT	RESULT	LOCATION
Aluminum	2/5/2014	PPB	n/a	200	Erosion of natural deposits; residual from some surface water treatment processes.	420	Latham Well (W-09)
Color	5/15/2007	Units	n/a	15	Naturally-occurring organic materials.	20	North Freeway Well (W-15)
Odor	5/15/2007	Units	n/a	3	Naturally-occurring organic materials.	4	North Freeway Well (W-15)

LEGEND

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

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:

1 The state allows SCWA to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.
2 Southwest Tract (SWT) receives its water from Fruitridge Vista Water Company which received 0.04% of its water from the City of Sacramento. Data which is reported by Fruitridge Vista Water Company for 2016 does include water quality data from the City of Sacramento. Please call Beth Arnoldy with Fruitridge Vista Water Company at (916) 443-2607 with questions regarding this data.
3 The State Water Resources Control Board (State Board) allows the measurement of gross alpha radiation as a surrogate for Uranium.
4 Total Trihalomethanes = sum of results for Chloroform, Bromoform, Dibromochloromethane, & Bromodichloromethane.
5 Haloacetic Acids = sum of results for Bromochloroacetic acid, Dibromoacetic acid, Dichloroacetic acid, Monochloroacetic acid, & Trichloroacetic acid
6 The Arden Park Vista water system's facilities are 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://waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.**
7 On Systems that collect less than 40 samples per month, the Total Coliform Bacteria MCL is no more than one (1) monthly sample return total coliform positive, per the Total Coliform Rule (TCR). A positive TC sample triggers collection of samples for E. coli at the source (i.e., groundwater wells) per the federal Ground Water Rule (GWR). In 2016, all samples taken per the GWR returned negative (absent) for E. coli.
8 On February 5, 2014, a Latham Well (W-09) water sample for **aluminum** returned 420 PPB which exceeded the secondary standard MCL of 200 PPB. The secondary MCL for aluminum was established because increased residual concentrations lead to undesireable color and turbidity in water. The average result for aluminum samples taken were non-detect and no results returned over the primary standards MCL (1000 PPB).
9 **Color** exceeded the MCL of 15 Units in the Northgate water system. The average reading for color in Northgate is much lower (0.01 Units). Colored drinking water usually**does not** itself represent any hazard to human health. Guidelines are often established for color in drinking water based on aesthetic criteria. Color generally indicates the presence of dissolved organic carbon, which is a precursor for the formation of disinfection by-products.
10 **Odor** exceeded the threshold of 3 Units in the Northgate water system. The average reading for Odor in Northgate is non-detect (ND). 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.
11 SCWA Level for Lead & Copper is measured at the 90th percentile sampling of thirty-five (35) homes at the tap for Arden Park Vista (APV), sixteen (16) for Northgate & five (5) for Southwest Tract (SWT).
12 Unregulated Contaminants Monitoring Rule (UCMR 3 / 2013 - 2015 Monitoring) with notification levels help to determine where certain contaminants occur and whether they need to be regulated. All contaminants tested for during the screening survey conducted in the Arden Park Vista water system returned non-detect. Our Northgate water system was not required to sample for the UCMR3. For more information on the levels of unregulated contaminants found in Fruitridge Vista Water Company's samples, please call Fruitridge Vista Water Company at (916) 443-2607.

For more information regarding Fruitridge Vista Water Company water quality data, please call Beth Arnoldy @ (916) 443-2607.

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

State Mandated Information for Nitrate, Arsenic & Lead:

Nitrate:

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

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 and young children. 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 of materials used in plumbing components. 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. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/lead.