

Annual Water Quality Report 2013

Consumer Confidence Report



Sacramento Suburban Water District (District) is pleased to present this detailed report on the 2013 water quality. The District has two service areas: North and South. This report contains a summary of the detected constituents in the District's water supply from samples collected between 2005 and 2013 as well as other water quality information. Providing customers with high quality and a reliable water supply is the District's top priority.

Source of Water

The District's systems utilize both groundwater and surface water as the primary water supplies. The South Service Area (SSA) primarily provides water from local groundwater wells, with treated surface water from the City of Sacramento providing the remaining water. In 2013, the North Service Area (NSA) was primarily provided water from local groundwater wells with treated surface water from San Juan Water District (SJWD) providing the remaining water. After water is pumped from the wells, it is chlorinated per California Department of Public Health (CDPH) requirements to protect you from potential microbiological contaminants. All facilities are operated and maintained by state certified operators. To assure your water meets all state and federal regulations, the District conducts regular water quality testing of the water from the source and in the distribution system.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases radioactive material and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the US Environmental Protection Agency (USEPA) and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (800.426.4791).



Important Information About...

Nitrate: Nitrate in drinking water at levels above 45 milligrams per liter (mg/l) is a health risk for infants 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 45 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.

Arsenic: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The standard balances the

Continued on the next page

Important Water Information Enclosed

Source Water Assessments

An assessment of potential contaminating activities in the recharge area of the supply wells, conducted according to state guidelines, was completed for the District's groundwater wells in December 2002. A copy of the complete assessment is available at the District's office. The results of the assessment indicated that both the SSA and NSA are considered most vulnerable to dry cleaners, gas stations, leaking underground storage tanks, petroleum transmission pipelines, sewer collection systems, contamination caused by illegal activities or dumping, and general urban commercial activities such as automobile repair facilities and photo processors. The NSA is considered vulnerable to the historic McClellan Air Force Base. Both service areas are also vulnerable to industrial activities such as electronic, plastic and metal manufacturing, petroleum storage facilities, and known groundwater contaminant plumes. The SSA may also be vulnerable to recreation activities associated with the American River.

Contaminants That May Be Present In Source Water Include:

Microbial Contaminants such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

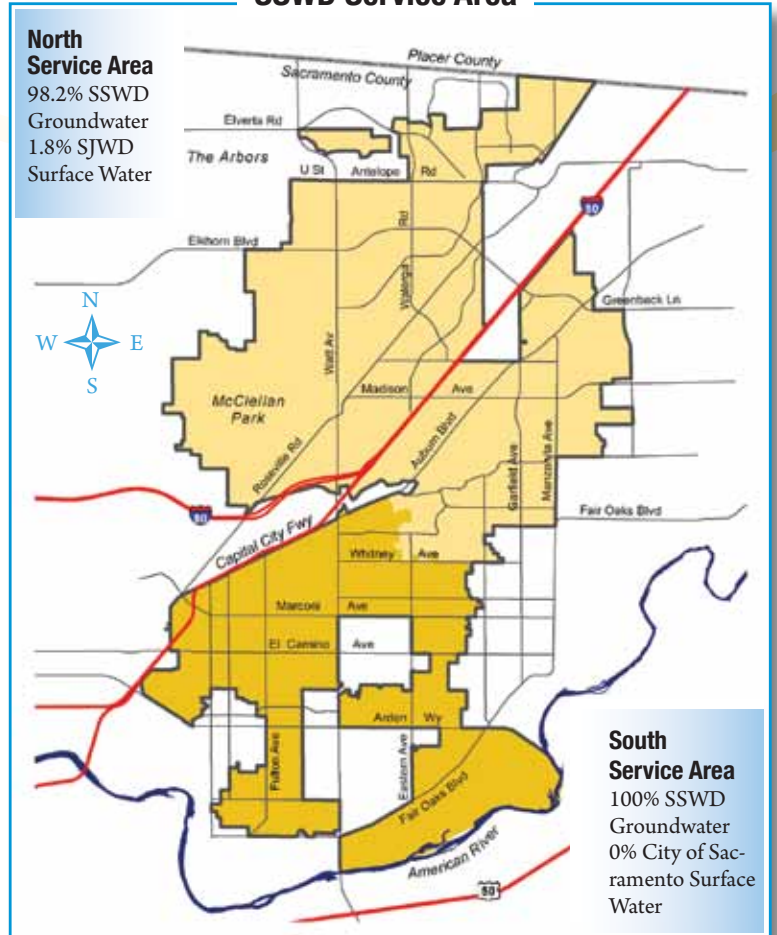
Inorganic Contaminants such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic Chemical Contaminants including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive Contaminants which can be naturally-occurring or be the result of oil and gas production and mining activities.

SSWD Service Area



Continued from page 1

current understanding of arsenic's possible health effects against the cost 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 District 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 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 www.epa.gov/safewater/lead.



Water Quality Definitions

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.

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.

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 Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

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.

Notification Level (NL): This is a non-regulatory health-based advisory level set for constituents that have no MCL but may be a candidate for regulation in the future.

SSA Water Fluoridation

Water fluoridation is the process of adjusting the concentration of the naturally occurring levels of fluoride in the water to optimal levels. At optimal levels, water fluoridation is a safe, cost-effective and proven way of preventing tooth decay. The practice of water fluoridation is strongly supported by an extensive list of leading health organizations.

Surface water received from the City of Sacramento is fluoridated in accordance with CDPH standards. To maintain an optimal fluoride level and meet CDPH standards in its SSA water supply, SSWD is fluoridating its SSA groundwater supply.

A Note for Sensitive Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800.426.4791).



2013 Summary of Detected Constituents



How to Use This Table

1. Find your service area along the top of the chart (you will need to look at both surface water and groundwater supplies).
2. Compare levels from your system's water to the state and federal standards (MCL) if applicable.

DETECTED PRIMARY DRINKING WATER CONSTITUENTS – regulated to protect your health													
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	NORTH Service Area						SOUTH Service Area			MAJOR SOURCES
				SSWD (groundwater)			SJWD (surface water)			SSWD (groundwater)			
				RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	
Aluminum	PPM	1	0.06	ND-.19	0.005	2013	ND	ND	2013	ND	ND	2011-13	Erosion of natural deposits, residual from some surface water treatment processes
Arsenic	PPB	10	0.004	ND-3.3	ND	2013	ND	ND	2013	ND - 3	ND	2011-13	Erosion of natural deposits
Barium	PPB	1000	200	53-150	ND	2013	ND	ND	2013	ND - 200	ND	2011-13	Erosion of natural deposits
Beryllium	PPB	4	1	ND	ND	2013	0.12	0.12	2013	ND	ND	2011-13	Wastes from metal refineries and electrical, aerospace, and defense industries
Chromium (total)	PPB	50	(100)	ND-15	ND	2013	ND	ND	2013	ND-11	ND	2011-13	Erosion of natural deposits
Fluoride {A}	PPM	2	1	ND-0.31	0.16	2013	ND	ND	2013	ND-0.36	ND	2013	Erosion of natural deposits
Nitrate (as NO3)	PPM	45	45	ND-22.8	5.2	2013	ND	ND	2013	ND-31	11	2013	Leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate	PPB	6	6	ND-3.3	ND	2013	ND	ND	2013	ND	ND	2011-13	An inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Tetrachloroethylene (PCE)	PPB	5	0.06	ND-1.5	ND	2013	ND	ND	2013	ND-0.67	ND	2011-13	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Trichloroethylene (TCE)	PPB	5	0.8	ND-1.95	ND	2013	ND	ND	2013	ND	ND	2011-13	Discharge from metal degreasing sites and other factories
Gross Alpha particle activity	pCi/L	15	(0)	ND-7.3	ND	2005-13	ND	ND	2013	ND-4.82	ND	2011-13	Erosion of natural deposits
Uranium	pCi/L	20	0.43	ND-1.66	ND	2005-13	ND	ND	2013	ND-2.9	ND	2011-13	Erosion of natural deposits
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Control of Disinfection By-Product precursors (TOC) {B}	PPM	NA	Treatment requirement if average TOC > 2		NR		1.0-1.9	1.4	2013		NR		Various natural and man-made sources
Turbidity {B}	NTU	NA	TT = 1 NTU		NR		0.065		2013		NR		Soil runoff
		NA	TT = 95% of samples ≤ 0.3 NTU		NR		100%				NR		

2013 Summary of Detected Constituents (continued)



DISTRIBUTION SYSTEM				NORTH Service Area		SOUTH Service Area			
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	SSWD (groundwater)	SJWD (surface water)	SSWD (groundwater)		MAJOR SOURCES	
				HIGHEST MONTHLY RESULT	# MONTHS WITH POSITIVE RESULTS	SAMPLE DATE			
Total Coliform Bacteria (distribution system)	% Tests Positive	>5% of mo. samples are positive	(0)	.81%	1 months	2013		Naturally present in the environment	
CONSTITUENT	UNITS	MCL [MRDL]	PHG or (MCLG)	90 TH PERCENTILE RESULT	NUMBER OF SAMPLES/ NUMBER EXCEEDING ACTION LEVEL	SAMPLE DATE		MAJOR SOURCES	
Copper (at tap)	PPB	1,300	300	40	50/0	2013		Internal corrosion of household plumbing systems; discharge from refineries and factories; erosion of natural deposits	
CONSTITUENT	UNITS	MCL [MRDL]	PHG or [MRDLG]	RANGE	AVERAGE	SAMPLE DATE		MAJOR SOURCES	
Chlorine Residual (distribution system)	PPM	[4]	[4]	0.64-0.91	0.77	2013		Drinking water disinfectant added for treatment	
Trihalomethanes (distribution system)	PPB	80	None	ND-46	5.9	2013		By-product of drinking water chlorination	
Haloacetic Acids (distribution system)	PPB	60	None	ND-50	5.2	2013		By-product of drinking water chlorination	

DETECTED SECONDARY DRINKING WATER CONSTITUENTS – regulated for aesthetic qualities

CONSTITUENT	UNITS	MCL	PHG OR (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Aluminum	PPB	200	60	ND-190	ND	2013	ND	ND	2013	ND	ND	2011-13	Erosion of natural deposits, residual from some surface water treatment processes
Chloride	PPM	500	None	3.6-69	32.5	2013	2.8	2.8	2013	3.1-96	23	2011-13	Runoff/leaching from natural deposits
Color	UNITS	15	None	ND-10	ND	2013	ND	ND	2013	ND	ND	2011-13	Naturally - occurring organic materials
Copper	PPB	1000	170	ND-190	ND	2013	ND	ND	2013	ND-19	ND	2011-13	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron	PPB	300	None	ND-0.27	ND	2013	ND	ND	2013	ND-86	ND	2011-13	Leaching from natural deposits
Manganese {C}	PPB	50	None	ND-125	ND	2013	ND	ND	2013	ND-43	ND	2011-13	Naturally - occurring organic materials
Odor	TON	3	None	ND	ND	2013	2	2	2013	ND	ND	2011-13	Naturally - occurring organic materials
Specific Conductance	µmhos	1600	None	170-520	331	2013	58-84	72	2013	50-730	329	2011-13	Substances that form ions when in water
Sulfate	PPM	500	None	ND-20	6.8	2013	4.8	4.8	2013	ND-44	8.1	2011-13	Runoff/leaching from natural; deposits; industrial wastes
Total Dissolved Solids	PPM	1000	None	160-370	253	2010-13	41	41	2013	130-450	238	2011-13	Runoff/leaching from natural deposits
Turbidity	NTU	5	None	ND-3.9	0.13	2013	.021-.065	0.033	2013	ND-0.85	0.05	2011-13	Soil runoff and leaching

DETECTED UNREGULATED DRINKING WATER CONSTITUENTS (D)

CONSTITUENT	UNITS	MCL	PHG OR (MCLG)	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	RANGE	AVERAGE	SAMPLE DATE	MAJOR SOURCES
Hardness	grains/gallon	No Standard	None	3.7-12.2	6.5	2013	1.7	1.7	2013	3.0-19.9	7.8	2011-13	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium.
	PPM	No Standard	None	64-210	111		20	20		52-340	133		
Sodium	PPM	No Standard	None	11-54	26	2013	2.5	2.5	2013	7.4-45	15.1	2011-13	Naturally-occurring salt in water

2013 Summary of Detected Constituents (continued)



Key to Abbreviations

N/A	Not applicable
ND	Not detected
NR	Not required
NTU	Nephelometric Turbidity Units (a measure of clarity)
TOC	Total Organic Carbon
pCi/L	Picocuries per liter (a measure of radiation)
PPM	Parts per million or milligrams per liter (mg/l)
PPB	Parts per billion or micrograms per liter (µg/l)
µmhos/cm	Microhms per centimeter
DBP	Disinfection by-products

Measurements

PPM (parts per million):

3 drops in 42 gallons
1 second in 12 days
1 inch in 16 miles

PPB (parts per billion):

1 drop in 14,000 gallons
1 second in 32 years
1 inch in 16,000 miles

PPT (parts per trillion):

1 drop in 14 million gallons
1 second in 32,000 years
1 inch in 16 million miles

NOTE: The State allows SSWD to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old.

- {A} SSWD's fluoridation program provides the addition of fluoride to all of SSWD's South Service Area's drinking water. SSWD adjusts the natural levels of fluoride to the CDPH recommended optimal fluoride level in the water supply.
- {B} Only surface water sources must comply with primary drinking water standards for control of Disinfection By-Product Precursors and Turbidity.
- {C} Manganese was discovered in three groundwater sources in excess of the secondary MCL. These sources were subsequently taken out of service. The District is exploring rehabilitation and treatment options at these sources.
- {D} Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.

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Monthly Board Meetings

3rd Monday of every month, 6:30 p.m.
3701 Marconi Ave., Suite 100
Sacramento

Visit Our Website at:
sswd.org

Once again, your drinking water continues to meet all state and federal drinking water standards.

Need More Information?

For questions about this report, or to request additional copies:
Call Doug Cater at 916.679.2884

EPA Safe Drinking Water Hotline:
www.epa.gov/safewater

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

