

Source Water Assessment

An assessment of the drinking water sources for the City of Whittier was completed in December 2002. The assessment concluded that the City of Whittier's sources are considered vulnerable to the following activities or facilities associated with contaminants detected in the water supply: research laboratory, known volatile organic chemical contamination plumes, and parking lots/mall. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: research laboratories and parks. A copy of the complete assessment is available at the City of Whittier Water Division at 13230 East Penn Street, Whittier, California 90602. You may request a summary of the assessment to be sent to you by contacting the City of Whittier Customer Service Department at (562) 567-9530.

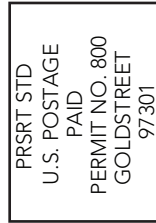


CITY OF SANTA FE SPRINGS
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City Council

Jay Sarno, Mayor
Juanita Trujillo, Mayor Pro Tem
Richard J. Moore, Councilmember
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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。

Visit us on the web at: www.santafesprings.org

Santa Fe Springs Water Utility Authority

2017 Annual Water Quality Report

This report is a snapshot of the tap water quality that we provided last year. Included are details about where your water comes from, how it is tested, what is in it, and how it compares with state and federal limits.

We strive to keep you informed about the quality of your water, and to provide a reliable and economical supply that meets all regulatory requirements.



CONSUMER CONFIDENCE REPORT



Where Does My Tap Water Come From?

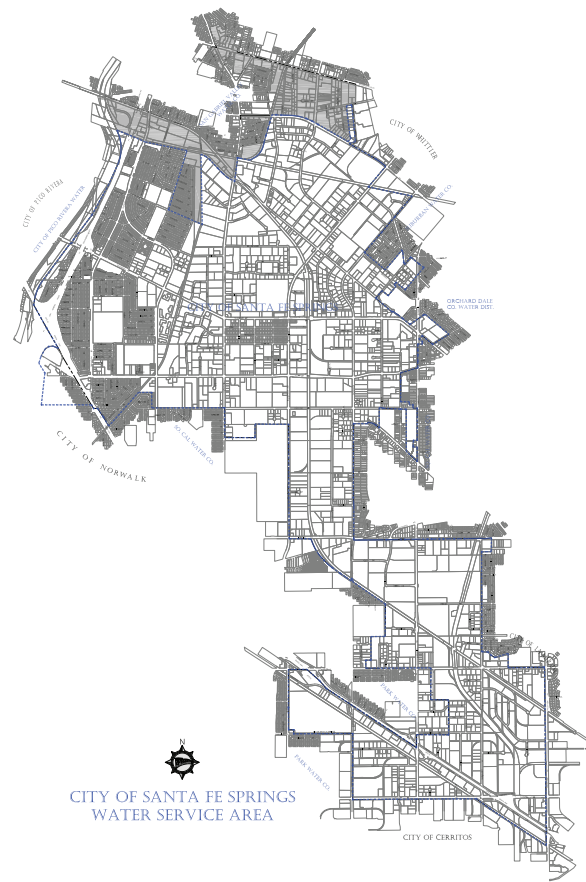
Santa Fe Springs Water Utility Authority (SFSWUA) tap water comes from 2 sources: groundwater and surface water.

Last year, SFSWUA obtained treated and disinfected groundwater through the City of Whittier from six (6) active deep wells located in the Whittier Narrows area. In addition, SFSWUA receives treated groundwater from the Central Basin Water Quality Protection Program facility located in the Central Basin, through the City of Whittier.



We also receive Metropolitan Water District of Southern California's (MWD) filtered and disinfected surface water, which is a blend of water from both the Colorado River and the State Water Project in Northern California.

These water sources supply our service area shown on the adjacent map. The quality of our treated groundwater and MWD's treated surface water supplies is presented in this report.



How is My Drinking Water Tested?

Your drinking water is tested by State Water Resources Control Board, Division of Drinking Water (DDW) certified water system operators and laboratories to ensure its safety. SFSWUA drinking water from wells, treatment facilities, and distribution system pipes are routinely tested for bacterial, radiological and chemical constituents. The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2017 or from the most recent tests. DDW allows some constituents to be tested less than once per year because the concentrations of these constituents do not change frequently. Some of our data, although representative, are more than one year old. The chart lists all the constituents detected in your drinking water regulated by federal and state drinking water standards. Detected unregulated constituents requiring monitoring and of interest are also included. We are proud to report that during 2017, the drinking water provided by SFSWUA

to your home met or surpassed all federal and state drinking water standards. We remain dedicated to providing you with a reliable supply of high quality drinking water.

Should I Take Additional Precautions?

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. The USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection of Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Lead in Tap Water

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. SFSWUA 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 USEPA Safe Drinking Water Hotline or at: <https://www.epa.gov/lead>.

Source Water Assessment

Every five years, MWD is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. The most recent watershed sanitary surveys for MWD's source waters are the Colorado River Watershed Sanitary Survey – 2015 Update, and the State Water Project Watershed Sanitary Survey – 2011 Update. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. USEPA also requires MWD to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWD completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling MWD at (800) CALL-MWD.

CITY OF SANTA FE SPRINGS WATER AUTHORITY 2017 ANNUAL WATER QUALITY REPORT

How Do I Read the Water Quality Table?

The first column of the water quality table lists substances detected in your water. The next columns list the average concentration and range of concentrations found in your drinking water. Following are columns that list the MCL and PHG or MCLG, as appropriate. The last column describes the likely sources of these substances in drinking water.

To review the quality of your drinking water, compare the highest

concentration and the MCL. Check for substances greater than the MCL. Exceedance of a primary MCL does not usually constitute an immediate health threat. Rather, it requires testing the source water more frequently for a short duration. If test results show that the water continues to exceed the MCL, the water must be treated to remove the substance, or the source must be removed from service.

Results are from the most recent testing performed in accordance with State and Federal drinking water regulations							
PRIMARY STANDARDS MONITORED AT THE SOURCE - MANDATED FOR PUBLIC HEALTH							
CONSTITUENTS AND UNITS	SFSWUA GROUNDWATER		MWD SURFACE WATER		MCL	PHG OR (MCLG)	SOURCES IN DRINKING WATER
	AVERAGE	RANGE	AVERAGE	RANGE			
ORGANIC CHEMICALS Tested in 2017							
Tetrachloroethylene (µg/l)	0.58	ND - 3.4	ND	ND	5	0.06	Degreasing sites and other industries
INORGANIC CHEMICALS Tested in 2017							
Aluminum (mg/l)	ND	ND	0.17	ND - 0.21	1	0.6	Residue from water treatment processes
Fluoride (mg/l) Naturally-occurring	0.23	0.2 - 0.33	NR	NR	2	1	Erosion of natural deposits
Fluoride (mg/l) Treatment-related	NR	NR	0.7	0.5 - .9	*Control Range 0.6-1.2 Optimal 0.7		Water additive for dental health
Nitrate (mg/l as N)	3	1.8 - 3.8	ND	ND	10	10	Runoff and Leaching from fertilizer/septic tanks/sewage
RADIOLOGICALS Tested in 2017							
Gross Alpha (pCi/l)	3.1	ND - 11.4	ND	ND	15	(0)	Erosion of natural deposits
Uranium (pCi/l)	1.9	1.2 - 2.9	ND	ND	20	0.43	Erosion of natural deposits

PRIMARY STANDARDS MONITORED IN THE DISTRIBUTION SYSTEM - MANDATED FOR PUBLIC HEALTH					
DISINFECTION BY-PRODUCTS (a)	AVERAGE	RANGE	MCL	MCLG	SOURCES IN DRINKING WATER
Trihalomethanes (µg/l) Tested quarterly	62	15 - 84	80	-	Byproduct of drinking water disinfection
Haloacetic Acids (µg/l) Tested quarterly	22	5.3 - 28	60	-	Byproduct of drinking water disinfection
Total Chlorine Residual (mg/l) Tested weekly	1.4	0.08 - 2.3	4.0 (b)	4.0 (c)	Disinfectant added for treatment
MICROBIOLOGICAL					
Total Coliform Tested weekly	0%	--	5.0%	(0)	Naturally Present in the Environment
AT-THE-TAP LEAD AND COPPER, Tested in 2016	90th PERCENTILE	# OF SITES ABOVE THE ACTION LEVEL	ACTION LEVEL	PHG	SOURCES IN DRINKING WATER
Copper (mg/l)	0.32 (d)	0 out of 30 sites	1.3	0.3	Internal corrosion of household plumbing
Lead (µg/l)	ND (d)	0 out of 30 sites	15	0.2	Internal corrosion of household plumbing

SECONDARY STANDARDS MONITORED AT THE SOURCE - FOR AESTHETIC PURPOSES							
INORGANIC CHEMICALS AND UNITS	SFSWUA GROUNDWATER		MWD SURFACE WATER		MCL	PHG	SOURCES IN DRINKING WATER
Tested in 2017	AVERAGE	RANGE	AVERAGE	RANGE			
Aluminum (µg/l) (e)	ND	ND	170	ND - 210	200	600	Surface water treatment process residue
Chloride (mg/l)	110	90 - 120	48	29 - 66	500	-	Runoff/leaching from natural deposits
Color (color units)	ND	ND	2	2	15	-	Naturally-occurring organic materials
Conductivity (umhos/cm)	980	860 - 1,100	460	299 - 621	1,600	-	Substances that form ions when in water
Foaming Agents (MBAS) (µg/l)	<50	ND - 56	ND	ND	500	-	Municipal and industrial waste discharges
Odor (threshold odor number)	1	1 - 2	3	3	3	-	Naturally-occurring organic materials
Sulfate (mg/l)	140	110 - 190	84	46 - 123	500	-	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/l)	560	520 - 670	272	179 - 364	1,000	-	Runoff/leaching from natural deposits
Turbidity (ntu)	<0.1	ND - 0.24	ND	ND	5	-	Runoff/leaching from natural deposits

SECONDARY STANDARDS MONITORED IN THE DISTRIBUTION SYSTEM - FOR AESTHETIC PURPOSES					
GENERAL PHYSICAL CONSTITUENTS	AVERAGE	RANGE	MCL	PHG	SOURCES IN DRINKING WATER
Odor (threshold odor number)	1	1 - 2	3	-	Naturally-occurring organic materials
Turbidity (NTU) Tested monthly	0.13	ND - 1.7	5	-	Runoff/leaching from natural deposits

UNREGULATED CHEMICALS REQUIRING MONITORING AT THE ENTRY POINTS TO THE DISTRIBUTION SYSTEM						
CONSTITUENTS AND UNITS	SFSWUA GROUNDWATER		MWD SURFACE WATER		NL	PHG OR (MCLG)
Tested in 2017	AVERAGE	RANGE	AVERAGE	RANGE		
1,4-Dioxane (µg/l)	0.49	0.48 - 0.49	ND	ND	1	-
Chlorate (µg/l)	37	35 - 39	42	42	800	-
Chromium, Hexavalent (µg/l) (f)	0.65	0.6 - 0.69	0.04	0.04	-	0.02
Chromium, Total (µg/l) (g)	0.65	0.5 - 0.8	ND	ND	MCL = 50	(100)
Cobalt, Total (µg/l)	2.3	2.2 - 2.3	ND	ND	-	-
Molybdenum (µg/l)	1.6	1.5 - 1.6	4.3	4.3	-	-
Strontium (µg/l)	560	540 - 570	950	950	-	-
Vanadium (µg/l)	3.2	3 - 3.3	2.5	2.5	50	

UNREGULATED CHEMICALS REQUIRING MONITORING IN THE DISTRIBUTION SYSTEM				
CONSTITUENTS AND UNITS	SFSWA GROUNDWATER	MWD SURFACE WATER		
TESTED IN 2014	AVERAGE	RANGE		NL
Chlorate (µg/l)	35	35		800
Chromium, Hexavalent (µg/l) (f)	0.35	0.12 - 0.58		MCL = 10
Chromium, Total (µg/l) (g)	0.6	0.6		MCL = 50
Cobalt, Total (µg/l)	2.6	2.6		-
Molybdenum (µg/l)	1.7	1.7		-
Strontium (µg/l)	570	570		-
Vanadium (µg/l)	3.5	3.5		50

ADDITIONAL UNREGULATED CHEMICALS OF INTEREST							
CONSTITUENTS AND UNITS	SFSWUA GROUNDWATER		MWD SURFACE WATER		MCL	PHG	SOURCES IN DRINKING WATER
Tested in 2017	AVERAGE	RANGE	AVERAGE	RANGE			
Alkalinity (mg/l as CaCO3)	180	150 - 200	57	43 - 71	-	-	Runoff/leaching from natural deposits
Calcium (mg/l)	91	77 - 110	24	14 - 35	-	-	Runoff/leaching from natural deposits
Magnesium (mg/l)	17	15 - 19	11	6.2 - 16	-	-	Runoff/leaching from natural deposits
pH (standard unit)	7.8	7.6 - 7.9	8.5	8.4 - 8.7	-	-	Runoff/leaching from natural deposits
Sodium (mg/l)	77	64 - 95	50	35 - 64	-	-	Runoff/leaching from natural deposits
Total Hardness (mg/l as CaCO3)	300	260 - 360	105	58 - 152	-	-	Runoff/leaching from natural deposits
Total Organic Carbon (mg/l)	NR	NR	2.5	2 - 2.9	TT	-	Naturally-occurring organic materials

METROPOLITAN WATER DISTRICT SURFACE WATER FILTRATION TREATMENT (WEYMOUTH PLANT)				
Turbidity Combined Filter Effluent Treatment Technique (TT) tested continuously	TT	Turbidity Measurements	TT Violation?	Typical Source
1) Highest single turbidity measurement	0.3 NTU	0.04	No	Runoff
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Runoff
Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan’s treated water is a good indicator of effective filtration. Filtration is called a “treatment technique.” A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly.				

FOOTNOTES

(a) Running annual average used to calculate MCL compliance

(b) Maximum Residual Disinfectant Level (MRDL)

(c) Maximum Residual Disinfectant Level Goal (MRDLG)

(d) 90th percentile from the most recent sampling

(e) Aluminum has primary and secondary standards

(f) Hexavalent chromium is regulated with an MCL of 10 µg/l but was not detected in MWD surface water and in the distribution system, based on the detection limit for purposes of reporting of 1 µg/l. Hexavalent chromium was included as part of the unregulated chemicals requiring monitoring.

(g) Total chromium is regulated with an MCL of 50 µg/l but was not detected, based on the detection limit for purposes of reporting of 10 µg/l. Total chromium was included as part of the unregulated chemicals requiring monitoring.

Why Do I See So Much Coverage in the News About the Quality of Tap Water and Bottled Water?

All 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 (1-800-426-4791). You can also get more information on tap water by logging on to these helpful web sites: <https://www.epa.gov/your-drinking-water> (USEPA web site) or http://www.waterboards.ca.gov/drinking_water/cert/cdrinkingwater/publicwatersystems.shtml (DDW web site).

The sources of drinking water (both tap water 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.

- Contaminants that may be present in source water include:
- Microbial contaminants, including 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, that 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 byproducts of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application, and septic systems;
 - Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

What Are Water Quality Standards?

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

The chart in this report shows the following types of water quality standards:

- 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 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 pathogens.
- Primary Drinking Water Standard: 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.
- Notification Level (NL): An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. City Council, County Board of Supervisors).

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- 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 USEPA.
- Maximum Residual Disinfectant Level Goal (MRDLG): The level of a 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.
- 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.

TERMS USED IN THIS REPORT

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 (USEPA).

Public Health Goal (PHG): California Public Health Goal; 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 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.

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

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

mg/l = milligram per liter or parts-per-million;

pCi/L = picoCuries per liter;

NTU = nephelometric turbidity units; µmho/cm = micromhos per centimeter;

TT = treatment technique;

NL = Notification Level;

< = average is less than the detection limit for reporting

ND: not detectable at testing limit

NR = not required to be tested;

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

µS/cm: a measure of specific conductance

µg/l = microgram per liter or parts-per-billion