

Readers' Guide to the Annual Water Quality Report

The following questions and answers are provided to help Sacramento Suburban Water District (SSWD) customers understand and interpret the District's Annual Water Quality Report (AWQR). Further information about the water system is available at www.sswd.org or at SSWD's office at 3701 Marconi Avenue in Sacramento.

1. What is the purpose of the Annual Water Quality Report?

Public water agencies such as SSWD are required by law to provide water quality information annually to their customers. This report was prepared in accordance with state and federal regulations and includes information about the major sources of SSWD's drinking water supplies, what contaminants, if any, are in those supplies, and how those contaminants may affect public health. It also indicates how the District's water supplies compare with state and federal safe drinking water standards.

2. What are the major sources of water delivered by SSWD?

SSWD delivers water from several sources. In the District's South Service Area (SSA), the primary source is groundwater pumped from 47 active wells. Treated surface water from the American River, purchased from the City of Sacramento, supplements the SSA supply. In the District's North Service Area (NSA), the primary source of water is groundwater pumped from 41 local groundwater wells. Surface water purchased from Placer County Water Agency and treated by the San Juan Water District supplements the NSA water supply.

3. What kinds of contaminants are found in drinking water?

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the California Department of Public Health (DPH) have established standards that limit the amount of certain contaminants in drinking water provided by public water systems.

Most drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, many of which are naturally occurring. Contaminants such as microscopic organisms (bacteria, algae and viruses), and certain minerals can enter water as it travels over land surfaces or through the ground. The presence of contaminants does not necessarily mean the water poses a health risk.

Per the latest AWQR, SSWD's water continues to meet all state and federal drinking water standards.



SSWD Administrative Office

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4. How do contaminants get into the water supply?

Some contaminants are natural and enter the water supply from the environment. Others come from cities, farms and certain industrial land uses and processes, including dry cleaning and rocket fuel manufacturing. Some contaminants are byproducts of the water disinfection process.

For each contaminant detected in SSWD's supplies, the Annual Water Quality Report indicates the most likely source of that contaminant. Examples include erosion of natural mineral deposits, contact with naturally occurring organic materials such as leaves, waste discharges from municipal and industrial sites, leaching from fertilizer use or septic tanks, or runoff from livestock feedlots.

5. How are contaminants measured and reported in the Annual Water Quality Report?

Contaminants are measured and reported in extremely small quantities such as parts per million, parts per billion and in some cases parts per trillion. The "units" column of the Annual Water Quality Report tables identifies the quantity for each individual contaminant tested. All analyses are performed by a state certified laboratory to meet detection limit requirements.

If these measurements are difficult to imagine, think about these comparisons¹:

Parts per million:	Parts per billion:	Parts per trillion:
1 drop in 14 gallons	1 drop in 14,000 gallons	10 drops in enough water to fill the Rose Bowl
1 second in 12 days	1 second in 32 years	1 second in 32,000 years
1 inch in 16 miles	1 inch in 16,000 miles	1 inch in 16 million miles

A large bathtub holds about 42 gallons. An average swimming pool holds about 14,000 gallons.

6. What are the maximum allowed levels for contaminants in drinking water?

EPA and DPH have set maximum contaminant levels (MCLs) for various contaminants to ensure that drinking water is safe. The MCL listed for each contaminant is the maximum permissible level of that contaminant in the drinking water.

The column next to the MCL in the report reflects the Public Health Goal (PHG) for each contaminant. The PHG for each contaminant defines the level at which the contaminant poses no known risk to public health. In many cases, it is not possible to remove or reduce a contaminant to the level represented by the PHG because the technology may not yet exist or may be so costly that it would make tap water unaffordable.

7. Some contaminants are listed as "Primary Drinking Water Constituents" while others are listed as "Secondary Drinking Water Constituents." What is the difference?

Contaminants listed in the "primary" section are believed to pose a risk to public health if detected at levels greater than the MCL. Constituents listed in the "secondary" group can affect the appearance, taste and/or smell of water without affecting the safety of the water (unless they also have a primary standard.) In other words, primary constituents are thought to have health-related impacts above the MCL, while secondary constituents have aesthetic impacts above the MCL.

8. Why does the 2009 report have a 2008 date?

Federal regulations state that the report must be received by customers by July 1 of each year. Therefore a complete year of sampling is only available for the previous year. The report released in 2009 reflects that the samples were taken throughout the year of 2008.

¹Golden State Water Company, Water Quality Report 2008.

9. Some sample dates listed in the report are older than others. Why isn't all the data current?

DPH allows water systems such as SSWD to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. In some of these cases the data, though still representative, may be more than a year old.

10. What does SSWD do to ensure the safety of the drinking water it provides?

Providing customers with high-quality, reliable water is SSWD's top priority. SSWD conducts regular water quality testing of its water supplies, both directly at the source and in the distribution system. Your water is tested about 7,000 times a year to ensure quality.

The District tests and maintains 88 groundwater production wells and more than 700 miles of water mains. SSWD serves nearly 160,000 people in a 36-square-mile area with more than 44,000 service connections.

11. How do I know if I am receiving surface water or groundwater?

SSWD supplies water based on availability. Some parts of the District's service area may change from surface water to groundwater on relatively short notice in response to notifications from San Juan Water District or the City of Sacramento, both of which provide surface water to SSWD.

Customers should assume that the contaminants identified in the report may be present at very small amounts at any given time.

12. Is it possible to get specific data for water that enters my home?

Specific water quality data may be available in your area. Customers can contact Doug Cater, Superintendent Field Services, at 916.679.2887 for details or more information.

Customers are encouraged to visit SSWD's web site at www.sswd.org to view the latest Annual Water Quality Report.

Glossary of Terms – Constituents

Coliform and Total Coliform Bacteria: Microscopic organisms in water that are used as indicators of possible contamination.

Hardness: Hardness in water is caused by dissolved mineral compounds. It is expressed in milligrams per liter (mg/l) of calcium carbonate (CaCO₃). Water softening systems often express hardness as grains per gallon (grains/gal).

THMs: THMs, or trihalomethanes, are by-products of chlorine disinfection. They are formed when chlorine reacts with certain naturally occurring organic substances in water.

Turbidity: Turbidity in water is caused by suspended matter such as clay, silt, finely divided inorganic and organic matter, and biological material. The turbidity measurement indicates how effective the treatment process is at removing the suspended matter.

