Nitrate

Nitrate in drinking water at levels above 45 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 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.

Nitrate levels in SJWC water sources are shown in the enclosed table. In 2010, SJWC did not detect nitrate at or above 45 mg/L in any sources.

Fluoride

For information on fluoride in your drinking water please visit our website at www.sjwater.com





To Learn More about the Quality of Your Water

Reminder for Dialysis Patients and Aquarium Owners

Chloramine and chlorine may be present in the water provided by SJWC. These chemicals are used to protect public health by destroying disease-causing organisms. Except for a slight chlorinous taste or odor, these disinfectants will not cause any problems for the general public. However, home dialysis patients and aquarium owners must take special precautions before the water can be used in kidney dialysis machines or aquariums. Please consult your doctor or dialysis technician to be sure your home equipment is adequate and proper tests are being performed every time it is used. Before filling an aquarium or fish pond, the disinfectant must be removed. Your local tropical fish store can help determine the best water treatment for your fish.

Your drinking water is continually tested to ensure compliance with state and federal standards for quality and safety. This annual report summarizes the results of more than 17,000 water quality tests conducted throughout the year. If you have any questions about your water quality, service, or the information contained in this report, please call us at (408) 279-7900 during normal business hours (Monday through Friday between 8:00 a.m. and 5:30 p.m.). Or, you may contact the USEPA Safe Drinking Water Hotline at 1-800-426-4791 for additional public information about the Safe Drinking Water Act or USEPA's drinking water regulatory programs.

Drinking Water Information on the Internet

Detailed information about specific drinking water topics is available on the Internet. Visit our web site or any other of those listed below to find out more about water treatment, quality, and current regulations.

San Jose Water Company: www.sjwater.com

Santa Clara Valley Water District: www.valleywater.org

American Water Works Association: www.awwa.org

California Department of Public Health Division of Drinking Water and Environmental Management:

http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Regulations.aspx United States Environmental Protection Agency:

http://www.epa.gov/ebtpages/watedrinkingwater.html



110 West Taylor St., San Jose, CA 95110 (408) 279-7900 Se Habla Español www.sjwater.com

Printed on recycled paper using VOC-Free, Soy-based inks. 30316-I-0022

Source of Supply



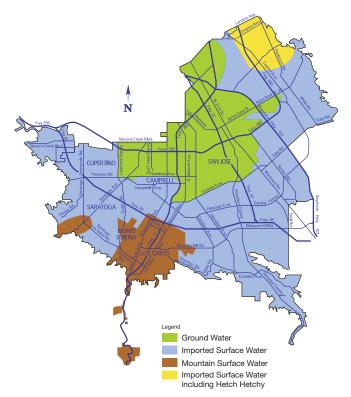
2010 Annual Water Quality Report



SJWC Service Area and Water Supply Sources

SJWC provides water from three major sources. The first source is groundwater, which is pumped from over 100 wells that draw water from the Santa Clara Valley Groundwater Basin. The second source is local mountain surface water, which is collected in our watershed in the Santa Cruz Mountains and treated at our two treatment plants. The third source, imported surface water, is provided by the Santa Clara Valley Water District, (SCVWD) our wholesale supplier. A majority of imported water originates as Sierra snowmelt and travels through the State and Federal water projects before treatment at SCVWD's three treatment plants. A smaller portion is impounded in local reservoirs in Santa Clara County.

For a period of time in December, a small area in the Northeast part of the system received some of its water from the Hetch Hetchy System while SCVWD was making improvements to one of its treatment plants. Water from this source is primarily snowmelt from the mountains above Yosemite National Park. This water is treated, but has been granted an exemption to the filtration requirement by CDPH and USEPA because of its high quality.



Drinking Water Regulation

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).

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, 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, 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 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, that can be naturally-occurring or be the result of oil and gas production and mining activities.

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

Lead in Drinking 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. SJWC 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 http://www.epa.gov/safewater/lead

Important Definitions

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 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 level of a disinfectant added for water treatment that may not be exceeded at consumer's tap.

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.

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.

One part per million (ppm): is the same as one milligram per liter (mg/L). One ppm corresponds to a single penny in \$10,000 or one minute in two years.

One part per billion (ppb): is the same as one microgram per liter (ug/L). One ppb corresponds to a single penny in \$10,000,000 or one minute in two thousand years.

Detection Limit for Purposes of Reporting (DLR): The lowest level of a constituent that the Department of Public Health requires to be reported.

Nephelometric Turbidity Units (NTU): This is a measure of the cloudiness of the water.

Not Detected (ND): If a constituent is not measured at or above a DLR, it is reported as ND.

Not Analyzed (NA): Source designated non-vulnerable or testing not required.

Source of Supply

Where does my water come from?

Silicon Valley is fortunate to have a diverse portfolio of water supplies. In an average year, half the water delivered to San Jose Water Company (SJWC) customers originates as snowmelt in the Sierra Nevada, is transported to the valley from the Sacramento/San Joaquin River Delta (Delta) through a complex network of rivers, pumps, and pipes, and is treated at water treatment plants owned and operated by Santa Clara Valley Water District (SCVWD). An additional forty percent comes from local groundwater wells owned



and operated by SJWC. The remaining ten percent comes from local Santa Cruz Mountain precipitation treated at water treatment plants owned and operated by SJWC.

SCVWD uses a combination of Delta water and local supplies to recharge (refill) the groundwater aquifer via streams and percolation ponds. This prevents overpumping of the aquifer, and allows for excess water to be banked for use in times of drought.

Additional reliability is provided through interconnections, or interties, with neighboring water systems. In December 2010, SCVWD used the intertie with San Francisco Public Utility Commission's Hetch Hetchy System to provide water during a water treatment plant construction outage. Water quality data for this water source can be located by visiting www.sfwater.org and typing "water quality report" in the search box.

This isn't your storybook drinking water well



When you hear the word well, do you think of a quaint wooden structure with a bucket hanging from a rope? SJWC wells are drilled hundreds of feet deep using modern construction methods, and pump water out of an aquifer naturally protected by a thick layer of clay. A small amount of chlorine is added to the water to maintain water quality between the well and the customer's tap.



Photos courtesy of SJWC and SCVWD

Water Quality Guidance

This report is being sent to you in compliance with the Safe Drinking Water Act. Landlords, businesses, and schools are encouraged to share this report with nonbilled water users at their locations. Additional copies are available free of charge by calling our office.

Éste informe contiene información importante sobre el agua que usted esta bebiendo. Platique con alguien que entienda la información ó que alguien tradusca la información contenida en éste informe.

Bản báo cáo này bao gồm những tài liệu quan trọng về nước uống của quý vị. Xin hãy tìm người thông dịch qua Việt ngữ hoặc nói chuyện với những ai hiểu được.

Source Water Assessment

An assessment of the drinking water sources for SJWC's water system was completed in December 2002. SJWC's wells are considered most vulnerable to one or more of the following activities, which have not been associated with any contaminants detected in the water supply: dry cleaners, automobile gas stations and repair shops, and underground storage tanks. Some of SJWC's wells are also considered vulnerable to metal plating and finishing, photo processing/printing, electrical/electronics manufacturing, chemical/petroleum processing/storage, known contaminant plumes, and plastics/synthetics producers. SJWC's surface supplies are considered most vulnerable to low density septic systems. Imported surface water purchased from Santa Clara Valley Water District (SCVWD) is considered most vulnerable to a variety of land use practices, such as agricultural and urban runoff, recreational activities, livestock grazing, as well as residential and industrial development. In addition, local sources are vulnerable to potential contamination from commercial stables and historic mining practices. Although these activities exist in areas near one or more of SJWC's or SCVWD's sources, physical barriers, treatment systems, and monitoring programs are in place to ensure that water supplied to our customers is not adversely affected. Customers seeking additional information may view a copy of the assessment during normal business hours at SJWC's offices at 110 West Taylor Street, San Jose.

Special 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, persons 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 (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. Additional information is available from the California Department of Public Health (CDPH) Division of Communicable Disease Control at (510) 540-2566 or the Santa Clara County Department of Environmental Health at (408) 918-3400.

This brochure provides a snapshot of last year's water quality data for SJWC. Included are details about where your water comes from and how your water quality compares to State standards. As you can see, in 2010, as in years past, your tap water met all USEPA and State primary drinking water health standards.



Typical Sources of Chemical Constituents

1 Erosion of natural deposits 2 Runoff and leaching from fertilizer use
3 Runoff and leaching of natural deposits 4 Residue from some surface
water treatment processes 5 Industrial waste 6 Seawater influence
7 Discharge from industrial chemical factories 8 Discharge from metal
degreasing sites and other factories 9 Glass and electronics production
waste 10 By-product of drinking water disinfection 11 Naturally present
in the environment 12 Soil erosion and stream sediments 13 Naturally
occurring organic materials 14 Substances that form ions when in water
15 Fumigant 16 Internal corrosion of household plumbing systems
17 Dry cleaning solvent 18 Human or animal fecal waste
19 Discharge from metal factories 20 Municipal and industrial waste
discharges 21 Extraction and degreasing solvent

2010 SJWC Annual Water Quality Report

SJWC tests your water supplies for over 200 possible contaminants. Only those contaminants that were detected in any of our water sources appear in this table. Primary standards relate to public health, while secondary standards relate to aesthetic qualities such as taste, odor and color. CDPH allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of the data reported below, although representative, are more than one year old. Data for radionuclides, microbiological, turbidity, secondary standards and inorganic and organic chemicals are all from testing performed in 2010.

PRIMARY STANDARDS — MANDATORY HEALTH-RELATED STANDARDS

| n . | 1.00 | 146 | DUIC | | Groundwater Imported Surface Water Mountain Surface Water | | C 14/ - | T 1 1 | | |
|-------------------------------------|---------|----------------------|----------------------|---|---|---|---------------------------|--------------------------------------|-------------|--------------------|
| Parameter | Units | MCL | PHG or MCLG | | dwater Range | Imported Surface Water Average Range | | Mountain Surface Water Average Range | | Typical Sources |
| INORGANIC CHEMICALS | | | MCEG | Average | naliye | Average | naliye | Average | nalige | Jources |
| | | 1 | 0.6 | 0.05 | ND - 1.3 | 0.02 | ND - 0.13 | 0.03 | ND - 0.06 | 1, 4 |
| Aluminum | ppm | 1 | 2 | 0.03 | ND - 1.3 ND - 0.30 | ND | ND - 0.13 | ND | ND - 0.06 | 1, 4 |
| Barium Chromium | ppm | 50 | 100 | ND ND | ND - 0.30 | ND ND | ND ND | 0.12 | 0.11 - 0.14 | 1, 16, 17 |
| | ppb | | | 0.13 | ND - 0.27 | ND ND | ND - 0.2 | ND | ND ND | 1, 16, 17 |
| Fluoride | ppm | 2 | 1 | | | | | | | <u> </u> |
| Nickel | ppb | 100 | 12 | 1.0 | ND - 18 | ND | ND | ND | ND | 1, 19 |
| Nitrate (as NO ₃) | ppm | 45 | 45 | 18 | ND - 33 | ND | ND - 6 | ND | ND - 1.0 | 1, 2 |
| Selenium | ppb | 50 | 30 | 0.4 | ND - 5 | ND | ND | ND | ND | 1 |
| RADIONUCLIDES | | | | | | | | | | |
| Gross Alpha Activity | pCi/L | 15 | 0 | 2.7 | ND - 11 | ND | ND | 0.63 | ND - 1.27 | 1 |
| Radium 228 | pCi/L | 5 | 0.019 | 0.7 | ND - 1.9 | ND | ND | ND | ND | 1 |
| VOLATILE ORGANIC CHEMICALS | | | | | | | | | | |
| 1,1- Dichlorethylene | ppb | 6 | 10 | 0.5 | ND - 5.7 | ND | ND | ND | ND | 7 |
| 1,1,1-Trichlorethane | ppb | 200 | 1000 | 0.4 | ND - 4 | ND | ND | ND | ND | 8 |
| CLARITY | | | | | | Level | ound Level Found | | | |
| Turbidity | NTU | TT = 1 NTU | none | | NA | 0.09 100% | | 0.13 | | 12 |
| | NTU | TT = 95% | none | 1 | NA | | | 100% | | 12 |
| | | of samples | | | | | | | | |
| | | ≤0.3 NTU | | | | | | | | |
| MICROBIOLOGICAL | 1 | | | Groun | dwater | Imported Surface Water | | Mountain Surface Water | | |
| Giardia | cysts/L | TT | 0 | ND | ND | ND | ND - 1 | ND | ND | 11 |
| | | • | • | | SJWC Distribution System | | | | | |
| | | | | | Range Highest Level Detected | | | | | |
| | | >5% of | | | | | | | | |
| Coliform Bacteria | % | monthly | 0 | | ND - 0.98% | 0.98% | | | 11 | |
| | " | samples positive | | | | | | | | |
| | | | | | | Rai | nge Sample Date Violation | | | |
| E.Coli (in the distribution system) | 1 | 0 | 0 | 4 nositi | ve samnles | | 1-4 | Feb 2010 | NO | 18 |
| LEAD AND COPPER | | AL | PHG | 4 positive samples ND -4 Feb 2010 NO SJWC at the tap Sampling (2008) | | | | 10 | | |
| LLAD AND COFFER | | AL. | 11110 | | | | | | | |
| Lead | ppb | 15 | 0.2 | 90th Percentile Level | | 0 of 55 | | 1, 16 | | |
| Copper | ppm | 1.3 | 0.3 | N/D 0.16 | | 0 of 55 | | 1, 16 | | |
| DISINFECTION BYPRODUCTS | ppiii | MCL | PHG or | U.16 | | | 0 01 55 | | 1,10 | |
| DISINFECTION BYPKUDUCIS | | IVICE | MCLG | Compliance Level | | rel | Range | | | |
| Total Trihalomethanes | ppb | 80 | none | 42.0 | | | ND - 93.7 | | | 10 |
| Haloacetic Acids | ppb | 60 | none | | 20.9 | | | ND - 59.3 | | 10 |
| DISINFECTION | hhn | MRDL | MRDLG | | | ictribution Cucto | n Running Annu | | | 10 |
| | | | | SJWC Distribution System Running Annual Average | | | | | - | |
| Total Chlorine | ppm | 4 as Cl ₂ | 4 as Cl ₂ | 0.99 | | | | | | |

SECONDARY STANDARDS — **AESTHETIC STANDARDS**

| Parameter | Units | MCL | PHG or MCLG | Groundwater Imported Surface Water Average Range Average Range | | Mountain Surface Water Average Range | | Typical Sources | | |
|----------------------------------|----------|----------|----------------|--|------------|--------------------------------------|-----------|--------------------|-----------|-------|
| Color | 15 Units | 15 Units | none | 0.2 | ND - 6 | ND | ND | ND | ND | 13 |
| Odor – Threshold | 3 Units | 3 Units | none | ND | ND | 1 | 1-1 | ND | ND | 13 |
| Hardness (as CaCO ₃) | ppm | NA | none | 295 | 184 - 527 | 112 | 54 - 144 | 195 | 173 - 216 | 1 |
| Chloride | ppm | 500 | none | 52 | 33 - 120 | 70 | 34 - 107 | 12 | 11 - 14 | 3,6 |
| Iron* | ppb | 300 | none | 64 | ND - 320 | ND | ND | ND | ND | 3,5 |
| Manganese | ppb | 50 | none | ND | ND - 47 | ND | ND | ND | ND | 3 |
| Sodium | ppm | NA | none | 37 | 15 - 170 | 56 | 29 - 84 | 16 | 17 -18 | 1 |
| Sulfate | ppm | 500 | none | 51 | 29 - 81 | 51 | 19 - 70 | 33 | 26 - 40 | 3, 5 |
| Total Dissolved Solids | ppm | 1000 | none | 415 | 270 - 660 | 285 | 158 - 372 | 215 | 140 - 250 | 3 |
| Specific Conductance | uS/cm | 1600 | none | 735 | 470 - 1000 | 506 | 255 - 669 | 405 | 360 - 450 | 6, 14 |
| Zinc | ppm | 5.0 | none | ND | ND - 0.06 | ND | ND | ND | ND | 3, 5 |
| Foaming Agents (MBAS) | ppb | 500 | none | 106 | ND - 210 | ND | ND | ND | ND | 20 |

*The MCL for iron was exceeded at three of our wells during 2010. Iron is a secondary standard regulated for aesthetic reasons only. These wells were taken out of service for remedial action.

UNREGULATED CONTAMINANTS

| Parameter | Units | Notification | PHG or | Groun | dwater | Imported Surface Water | | Moi | untain Surface Water |
|-------------------------------|-------|--------------|--------|---------|------------|------------------------|------------|---------|----------------------|
| | | Level | MCLG | Average | Range | Average | Range | Average | Range |
| Vandium | ppb | 50 | none | 5 | ND - 11 | ND | ND - 4 | ND | ND |
| N-nitrosodimethylamine (NDMA) | ppb | none | none | ND | ND - 0.003 | ND | ND - 0.007 | ND | ND |
| N-nitrosodiethylamine (NDEA) | daa | none | none | ND | ND | ND | ND | ND | ND - 0.005 |

Unregulated contaminant monitoring helps EPA and the California Department of Public Health to determine where certain contaminants occur and whether the contaminants need to be regulated.