

The City of Stockton and OMI/Thames Water Stockton, Inc. have prepared this 2003 Drinking Water Quality Report to inform you about the safety of water we deliver to you every day. In calendar year 2003, the Water System delivered about 10.9 billion gallons of water to over 39,000 individual service connections serving approximately 119,600 persons residing in north and south Stockton. Approximately 41 percent of the water supplied to the system originated from the wells owned by the City, with the remainder being treated surface water supplied by the Stockton East Water District (SEWD).

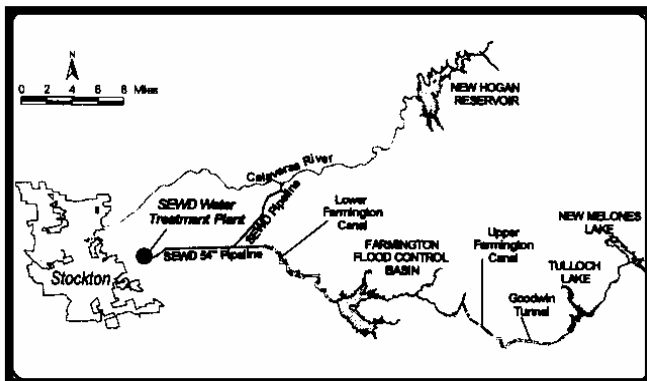
SEWD receives the surface water it supplies to the Stockton area from two separate sources. The first source of surface water comes from the Calaveras River system which includes the New Hogan Reservoir. Water from this source is diverted into a pipeline from the river at Bellota and brought to SEWD's modern water treatment plant located at 7676 East Main Street. The second source of surface water comes from the Stanislaus River system which includes the New Melones Reservoir. Water from this source is diverted from the river at Goodwin Dam and brought to SEWD's water treatment plant through the Goodwin Tunnel and upper and lower Farmington canals.

The use of surface water from SEWD has enabled the City to reduce its dependence on groundwater to meet the needs of our customers. Eastern San Joaquin County has a problem with declining groundwater levels, and use of surface water has generally improved the groundwater levels under the City's water service areas, helping to conserve this valuable water resource. The blending of treated surface water with our groundwater supply varies from point to point throughout our system due to the seasonal demands and customer location relative to City wells. Treated surface water and ground water have different characteristics as many of our customers have noticed. Water hardness, taste and odor are but a few of these characteristics that may differ over the course of the year.

The quality of the water delivered to you, our customers, meets all requirements set by the State and Federal government.

The people that operate your City of Stockton Water System are committed to providing you with the highest quality water available, with the most effective customer service, at the lowest possible cost, consistent with all applicable State and Federal regulations and requirements. The Stockton City Council serves as the governing board for the City of Stockton Water System. They meet every Tuesday night at 5:30 p.m. at 425 N. El Dorado Street. The public is welcome.

Stockton Surface Water Sources



Should you wish additional copies of this brochure or desire further information about your water utility, please contact:

DENNIS DECOITE, Director of Operations
 OMI/Thames Water Stockton, Inc.
 P.O. Box 6249, Stockton CA 95206

Telephone: (209) 937-8757

Email: ddecoite@omithames.com

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

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

**Chi tiết này thật quan trọng.
 Xin nhờ người dịch cho quý vị.**

ລາຍງານນີ້ມີຂໍ້ມູນສໍາຄັນກ່ຽວກັບນໍ້າປະປາຂອງທ່ານ. ຈົ່ງໃຫ້ຄົນອື່ນຮູ້ເລີຍເຖິງຄວາມໃຫ້ທ່ານ, ຫລືໃຫ້ປຶກສາກັບຄົນໃດຄົນໜຶ່ງທີ່ເຂົ້າໃຈເລີຍ.

Table 1b: Detected Constituents with Secondary Drinking Water Standards – regulated for aesthetic qualities

Constituent	units	Secondary MCL	Ground Sources		Surface Source	Typical Source of Constituent
			Range	Average	Average	
Aluminum	ug/L	200	<50 – 820	<50	<50	Erosion of natural deposits
Chloride	mg/L	500	6.6 – 84	33	3	Runoff/leaching from natural deposits; seawater influence
Color	units	15	0 – 5	0	<5	Naturally occurring organic materials
Copper	mg/L	1	<0.05 – 0.12	<0.05	<0.05	Leaching from natural deposits; discharge from industrial waste;
Iron	ug/L	300	<100 – 3300	158	<100	Leaching from natural deposits; industrial wastes
Manganese	ug/L	50	<20 – 240	46	<20	Leaching from natural deposits
Specific Conductivity	umhos/cm	1600	260 – 700	454	99	Substances that form ions when in water ; industrial wastes
Sulfate	mg/L	500	4.0 – 41	23	8	Runoff/leaching from natural deposits; seawater influence
Total Dissolved Solids	mg/L	1000	170 – 430	304	60	Runoff/leaching from natural deposits
Turbidity	NTU	5	<0.5 – 2.5	<0.5	1.9	Soil runoff
Zinc	mg/L	5	<0.05 – 0.084	<0.05	<0.05	Runoff/leaching from natural deposits

Table 1c: Detected Unregulated Constituents – Unregulated monitoring helps EPA and the California Department of Health Services to determine where certain contaminants occur and whether the contaminants need to be regulated.

Constituent	units	Ground Sources		Surface Source
		Range	Average	Average
Total Hardness (as CaCO ₃) ⁽¹⁾	mg/L	63 – 300	190	32.3
Boron	mg/L	<100 – 400	<100	<100
Chromium, Hexavalent	ug/L	<1.0 – 7.0	1.9	<1.0
Perchlorate	ug/L	<4.0 – 19	<4.0	<4.0
Sodium	mg/L	14 – 56	26	6
1,2,3-Trichloropropane	ug/L	<0.005 – 0.015	<0.005	<0.005
Vanadium	ug/L	<3.0 – 33	15	<3.0

(1) Conversion: Hardness (grains per gallon) = Hardness as CaCO₃ (mg/L) multiplied by 0.0584

Other Constituents Measured – Table 2

Constituent	units	Ground Sources		Surface Source
		Range	Average	Average
Total Alkalinity	mg/L	110 – 300	157	40
Calcium	mg/L	17 – 70	45	8
Magnesium	mg/L	5.1 – 32	19	3
Potassium	mg/L	2.9 – 6.5	4.8	<1
Radon	pCi/L	---	717 ⁽¹⁾	NR

(1) Result is from one source sampled in 2000.

Definitions

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

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).

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap. MRDLs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health.

Primary Drinking Water Standard (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.

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

The following general information is provided in order to comply with California regulations [Chapter 15, Article 20], California Health and Safety Code [Section 116470] and the federal Consumer Confidence Rule [40 CFR Part 141 Subpart O].

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Health Services (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 provide the same protection for public health.

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.

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 the 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 at 1-800-426-4791.

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 (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are also available from the Safe Drinking Water Hotline at 1-800-426-4791.

Radon is a radioactive gas that occurs naturally in some groundwater. It may pose a health risk when the gas is released from water into air, as occurs during showering, bathing, or washing dishes and clothes. Radon gas released from drinking water is a relatively small part of the total radon in air. There is no federal regulation for radon levels in drinking water at present.

The United States Environmental Protection Agency (USEPA) reduced the maximum contaminant level (MCL) for arsenic from 50 ug/L to 10 ug/L in 2001. The compliance date for this new standard is January 23, 2006. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. There are eight (8) wells that contain arsenic above the new 10 ug/L standard. The City of Stockton and OMI Thames Water Stockton, Inc. are currently evaluating treatment alternatives for these wells to meet the new arsenic standard in 2006.

There are 25 wells that meet the new 10 ug/L arsenic standard. While these wells meet the current standard, they do contain low levels of arsenic. The standard balances the current understanding of arsenic's health effects against the costs of removing arsenic from drinking water. The California Department of Health Services 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.

Elevated levels of nitrate were detected in two wells in the North System, although the levels never exceeded the maximum amount allowed. In 2003, the amount of nitrate measured in our wells averaged 8.5 mg/L and never exceeded 29 mg/L. 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

In 2003, our system violated drinking water standards because we did not complete the required monitoring and testing for radiochemicals in two wells, SSS3 and Walnut Plant No. 1. Every four years, we are required to collect quarterly samples and test for radiochemicals. Although the samples were collected as required, they were lost during shipment to the laboratory. Because the samples were not analyzed, we cannot be sure of the water quality at that time, and the health effects are unknown. Follow-up samples for each well were collected during the fourth quarter of 2003 and the first quarter of 2004. The last two samples for each well are scheduled to be collected during May and August 2004. The State Department of Health Services has informed us that additional notification is not required.

In 2001, The City of Stockton, in cooperation with the State Department of Health Services, completed the Drinking Water Source Assessment and Protection Assessment for the City Well system. The following information is presented as a result of this assessment.

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

- ◆ Automobile - Gas Stations
- ◆ Plastics/synthetics producers
- ◆ Automobile - repair shops
- ◆ Fleet/truck/bus terminals
- ◆ Airports - Maintenance/fueling areas
- ◆ Underground storage tanks - Confirmed leaking tanks
- ◆ Chemical/Petroleum processing/storage
- ◆ NPDES/WDR permitted discharges
- ◆ Photo processing/printing
- ◆ Housing - high density
- ◆ Agricultural drainage

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

- ◆ Metal plating/finishing/fabricating activities can be associated with the detected aluminum and tetrachloroethylene. Aluminum can also occur naturally in the environment as well.
- ◆ Sewer collection systems, septic systems (high density) and animal operations can be associated with nitrates detected.
- ◆ Electrical/electronic manufacturing activities can be associated with aluminum contaminants detected in the water supply

A copy of the complete assessment may be viewed at:

Department of Health Services
Drinking Water Field Operations Branch—Stockton District Office
31 E Channel Street, Room 270
Stockton, California 95202 (209) 948-7696

You may request a summary of the assessment be sent to you by contacting: Joseph O. Spano, P.E., District Engineer