

2010 Consumer Confidence Report

Where Our Water Comes From

All of the drinking water delivered by the North Coast County Water District (NCCWD) during 2010 was purchased from the San Francisco Public Utilities Commission (SFPUC). Nearly all of the supply for NCCWD comes from Crystal Springs and San Andreas Reservoirs. All the water stored in the local reservoirs is filtered and disinfected at the Harry Tracy Water Treatment Plant, located in Millbrae, prior to delivery to NCCWD. There, the water is tested and monitored to ensure that it meets the standards for clarity set by the U.S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH).

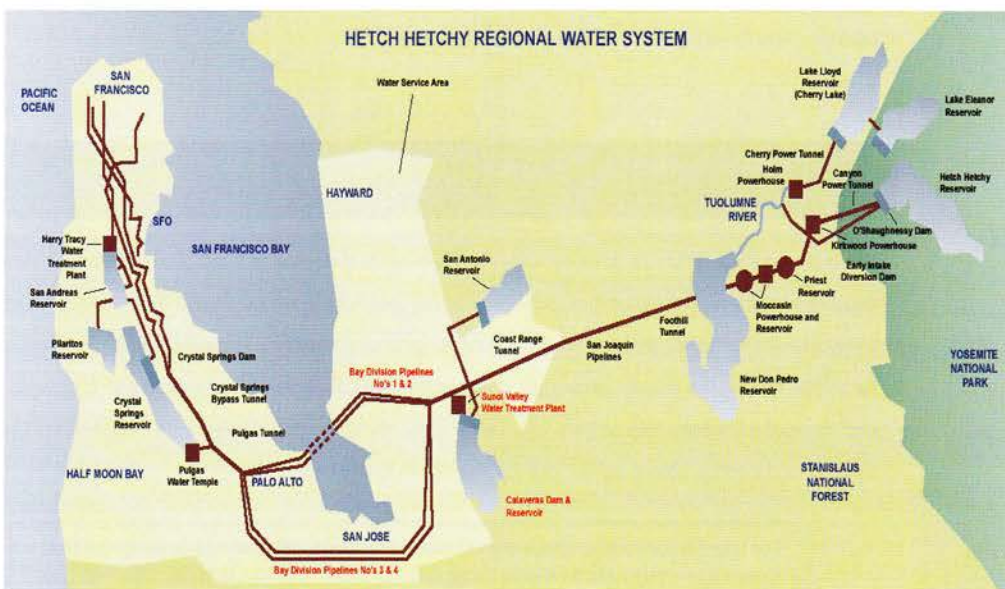
The major source of water for the SFPUC originates from spring snowmelt flowing down the Tuolumne River and is stored in the Hetch Hetchy Reservoir. This pristine water source is located in the well protected Sierra region and meets all federal and state criteria for watershed protection. Based on the SFPUC's disinfection treatment practice, extensive bacteriological quality monitoring, and high operational standards, the state has granted the Hetch Hetchy water source a filtration exemption. This means the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.

The Hetch Hetchy system is supplemented with a small percentage of water from rainfall and runoff captured in the 23,000 acre Peninsula Watershed, located in San Mateo County, and stored in three reservoirs: Crystal Springs, San Andreas, and Pilarcitos. The water from these reservoirs is treated at the Harry Tracy Water Treatment Plant. Treatment processes at the HTWTP include ozonation, coagulation, flocculation, filtration, disinfection, chloramination, fluoridation, and corrosion control treatment.



Contents

General Information About Water	2
How to Read the Water Quality Chart	2
Definitions of Terms Used	2
Water Quality Chart	3
Special Health Needs	4
Reducing Lead in Plumbing Fixtures	4



Our Mission Statement

It is the mission of the North Coast County Water District to serve our customers by delivering a sufficient quantity of the highest quality water available in the most cost-effective, reliable and environmentally sensitive manner. Furthermore, the Board, the staff and all employees of the District are committed to providing prompt, efficient and courteous customer service.

Definitions of Terms Used

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 (EPA).

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 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 the consumer's tap.

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

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.

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

Turbidity: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

General Information About Water

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 (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 provide the same protection for public health. In 2010, NCCWD's Certified Water Quality Lab collected and conducted thousands of water quality tests throughout the entire water distribution system. All results met or exceeded federal and state drinking water regulations.

Typically, the sources of drinking water (both bottled and tap) 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. Such substances are called contaminants. 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. Contaminants that may be present in source water include:

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

Inorganic Contaminants, such as salts and metals, 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, 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 gas stations, urban stormwater runoff, agricultural application and septic systems.

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

More Information about contaminants and potential health effects can be obtained by calling USEPA's Safe Drinking Water Hotline 1-800-426-4791.

How to Read the Water Quality Chart

The table on Page 3 lists all drinking water contaminants detected in 2010. Contaminants below detection limits such as arsenic, perchlorate, MTBE and others are not listed. The table contains the name of each contaminant, the applicable drinking water standards or action levels, the ideal goals for public health, the amount detected in water, the typical contaminant source and footnotes explaining the findings. We believe you have a right to know what is in your drinking water. The column to the left provides definitions for the terms in the chart.

For more information about the contents of this report, contact Kevin O'Connell, General Manager of the North Coast County Water District at (650) 355-3462, or visit us online at www.nccwd.com. Board Meetings are held the third Wednesday of every month at 7:00pm at the District Offices.

North Coast County Water District - Water Quality Data for Year 2010 ⁽¹⁾

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
TURBIDITY						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 ⁽²⁾	[4.9] ⁽³⁾	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 ⁽⁴⁾	N/A	-	[0.54]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU ⁽⁴⁾	N/A	97.6% - 100%	-	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 ⁽⁴⁾	N/A	-	[0.19]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU ⁽⁴⁾	N/A	100%	-	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes	ppb	80	N/A	14 - 92	[40] ⁽⁵⁾	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	7 - 55	[25] ⁽⁵⁾	Byproduct of drinking water chlorination
Total Organic Carbon ⁽⁶⁾	ppm	TT	N/A	2.4 - 3.2	2.7	Various natural and man-made sources
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	11.1-49.1	23.10 ⁽⁵⁾	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	5.0-37.0	15.5 ⁽⁵⁾	Byproduct of drinking water chlorination
Total Organic Carbon ⁽⁶⁾	ppm	N/A	N/A	2.4-3.2	2.7	Various natural and man-made sources
MICROBIOLOGICAL						
Total Coliform ⁽⁷⁾	-	≤ 5.0% of monthly samples	(0)	-	0	Naturally present in the environment
<i>Giardia lamblia</i>	cyst/L	TT	(0)	ND - 0.06	[0.06]	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) ⁽⁸⁾	ppm	2.0	1	ND - 0.7	0.3 ⁽⁹⁾	Erosion of natural deposits
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	1.31-1.89	1.62 ⁽⁵⁾	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Typical Sources of Contaminant
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff

LEAD AND COPPER	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	17.1-264.5 ⁽¹⁰⁾	199.3	Corrosion of household plumbing systems
Lead	ppb	15	0.2	<1-7.2 ⁽¹¹⁾	4.4	Corrosion of household plumbing systems

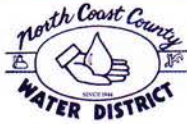
OTHER WATER QUALITY PARAMETERS	Unit	ORL	Range	Average
Alkalinity (as CaCO ₃)	ppm	N/A	8 - 98	49
Bromide	ppb	N/A	<10 - 17	<10
Calcium (as Ca)	ppm	N/A	2 - 26	12
Chlorate ⁽¹²⁾	ppb	(800) NL	92 - 357	150
Hardness (as CaCO ₃)	ppm	N/A	8 - 104	53
Magnesium	ppm	N/A	0.3 - 9	4.6
pH	-	N/A	8.2 - 8.7	8.5
Potassium	ppm	N/A	0.34 - 1.2	0.6
Silica	ppm	N/A	4.1 - 7.6	5.7
Sodium	ppm	N/A	3 - 22	13

KEY:
< / ≤ = less than / less than or equal to
AL = Action Level
Max = Maximum
Min = Minimum
N/A = Not Available
ND = Non-detect
NL = Notification Level
NTU = Nephelometric Turbidity Unit
ORL = Other Regulatory Level
ppb = part per billion
ppm = part per million
µS/cm = microSiemens / centimeter

Notes:

- (1) All results met State and Federal drinking water health standards.
- (2) Turbidity is measured every four hours. These are monthly average turbidity values.
- (3) This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines. The turbidity spike was not observed further downstream at Alameda East.
- (4) There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.
- (5) This is the highest quarterly running annual average value.
- (6) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
- (8) The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively.
- (9) The naturally occurring fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.
- (10) The most recent Lead and Copper Rule monitoring was in 2010. 0 of 35 water samples collected at consumer taps had copper concentrations above the Action Level.
- (11) The most recent Lead and Copper Rule monitoring was in 2010. 0 of 35 water samples collected at consumer taps had lead concentrations above the Action Level.
- (12) There were no chlorate detected in the raw water sources except the Crystal Springs and San Andreas reservoirs, where the detected chlorate were 81 ppb and 57 ppb, respectively. The chlorate levels in both reservoirs are due to the transfer of the disinfected Hetch Hetchy water and SVWTP effluent into the Crystal Springs Reservoir. The detected chlorate in treated water is a degradation byproduct of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it. Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.



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North Coast County Water District

2400 Francisco Boulevard
PO Box 1039
Pacifica, CA 94044

(650) 355-3462 Phone
(650) 355-0735 Fax
info@nccwd.com Email

Safe Drinking Water is Our Business!

Find us on the Web:
www.nccwd.com

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Special Health Needs



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 (1-800-426-4791) or at www.epa.gov/safewater.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for waterborne pathogens, and found *cryptosporidium* at very low levels in source and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. If ingested, these parasites may produce symptoms of nausea, stomach cramps, diarrhea, and associated headaches.

Reducing Lead in Plumbing Fixtures



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 NCCWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in your household or building 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 at 800-426-4791, or at www.epa.gov/safewater/lead.