

ANNUAL WATER QUALITY REPORT

Water testing performed in 2007



Presented By:
SOUTH FEATHER WATER
AND
POWER AGENCY

PWS ID#: 0410006

Letter from Mike Glaze, General Manager

South Feather Water and Power Agency's (SFWPA) highest priority is to produce a dependable supply of top-quality drinking water for its customers. Not only have we replaced all of our old steel pipes in order to improve the quality of water from the treatment plant to your tap, but we are constantly upgrading the plant's equipment and technology to make it as efficient and effective as possible. Recently we commenced a planning and engineering project that will result in expansion of the treatment plant to assure the highest quality of water and to accommodate our community's growth for many years to come. As part of our efforts to keep your water supply dependable, SFWPA has backup generators at all of the Agency's primary facilities to ensure that water is available to our customers even during the power outages that occur occasionally in our area. Additionally, we operate a photovoltaic generating system at the treatment plant that protects us against future spikes in the cost of energy. Even though we use the solar-energy system to generate much of the electricity needed at the treatment plant, we are still asking our customers to reduce their water usage from noon to six o'clock in the evening to make our water treatment and electricity generation as efficient and inexpensive as possible. We are fortunate to have an abundant and pristine water source as well as substantial storage facilities. We ask that all of our customers help protect the streams and reservoirs that comprise the Agency's water supply system, including being vigilant and reporting any suspicious activity that occurs in the vicinity of Agency facilities. The assistance of our customers will enable us to maintain and guarantee the exceptional water quality we enjoy, now and into the future.

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2007. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Where Does My Water Come From?

The raw water source for the South Feather Water Power Agency's distribution system is derived from the watershed of the South Fork of the Feather River and the upper portion of the Slate Creek watershed. Through a series of dams, canals, and tunnels, water is delivered to the Miners Ranch Reservoir and is extracted directly for the treatment plant.

Community Participation

We want our customers to be informed about their water utility. If you want to learn more, please call us or attend any of our regularly scheduled board of directors' meetings. They are held on the fourth Tuesday of each month at 2:00 p.m. in the Agency's boardroom, 2310 Oro-Quincy Highway, Oroville, California.

“WELL-INFORMED CUSTOMERS
ARE OUR BEST ALLIES.”

Substances That Could Be in Water

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 (U.S. EPA) and the State 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. 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, 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 can 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

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

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at 1-(800) 426-4791.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25% of bottled water is actually just bottled tap water (40% according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70% of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Questions?

For more information about this report, or for any questions relating to your drinking water, please call Jim Coffelt, Water Treatment Superintendent, at (530) 589-0212.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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.



Contamination from Cross-Connections

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.



Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed all industrial, commercial, and institutional facilities in the service area to make sure that all potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test each backflow preventer to make sure that it is providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at www.epa.gov/safewater/crossconnection.html. You can also call the Safe Drinking Water Hotline at 1-(800) 426-4791

Source Water Assessment

An assessment has been completed for the water sources serving the Miners Ranch Water Treatment Plant. Our pristine water source is considered most vulnerable to active and historic mining operations but not associated with any detected contaminants.

For a copy of the complete assessment please contact Richard Hinrichs at the DPHS Valley District Office, 415 Knollcrest Drive, Suite 110, Redding, CA 96002, or call (530) 224-4867. You may also contact Michael Glaze at South Feather Water and Power, 2310 Oro-Quincy Hwy., Oroville, CA 95966, or call (530) 533-4578.



Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2007	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	0.88	0.7–1.24	No	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (ppm)	2007	TT	NA	0.6	0.5–0.8	No	Various natural and man-made sources
Haloacetic Acids (ppb)	2007	60	NA	15.8	12.2–18	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	2007	80	NA	15.2	9–22	No	By-product of drinking water chlorination
Total Coliform Bacteria (# positive samples)	2007	No more than 1 positive monthly sample	(0)	1	NA	No	Naturally present in the environment
Turbidity ¹ (NTU)	2007	TT	NA	0.17	0.02–0.17	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2007	TT	NA	99.4	NA	No	Soil runoff

Tap water samples were collected from 30 sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005	1.3	0.17	0.58	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2005	15	2	6.4	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2007	500	NS	3.2	2.8–4.5	No	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2002	500	NS	5.1	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2005	1,000	NS	58	NA	No	Runoff/leaching from natural deposits

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Hardness (ppm)	2007	22	16–28
Sodium (ppm)	2002	2	NA

¹Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Definitions

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

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. EPA.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

PHG (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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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