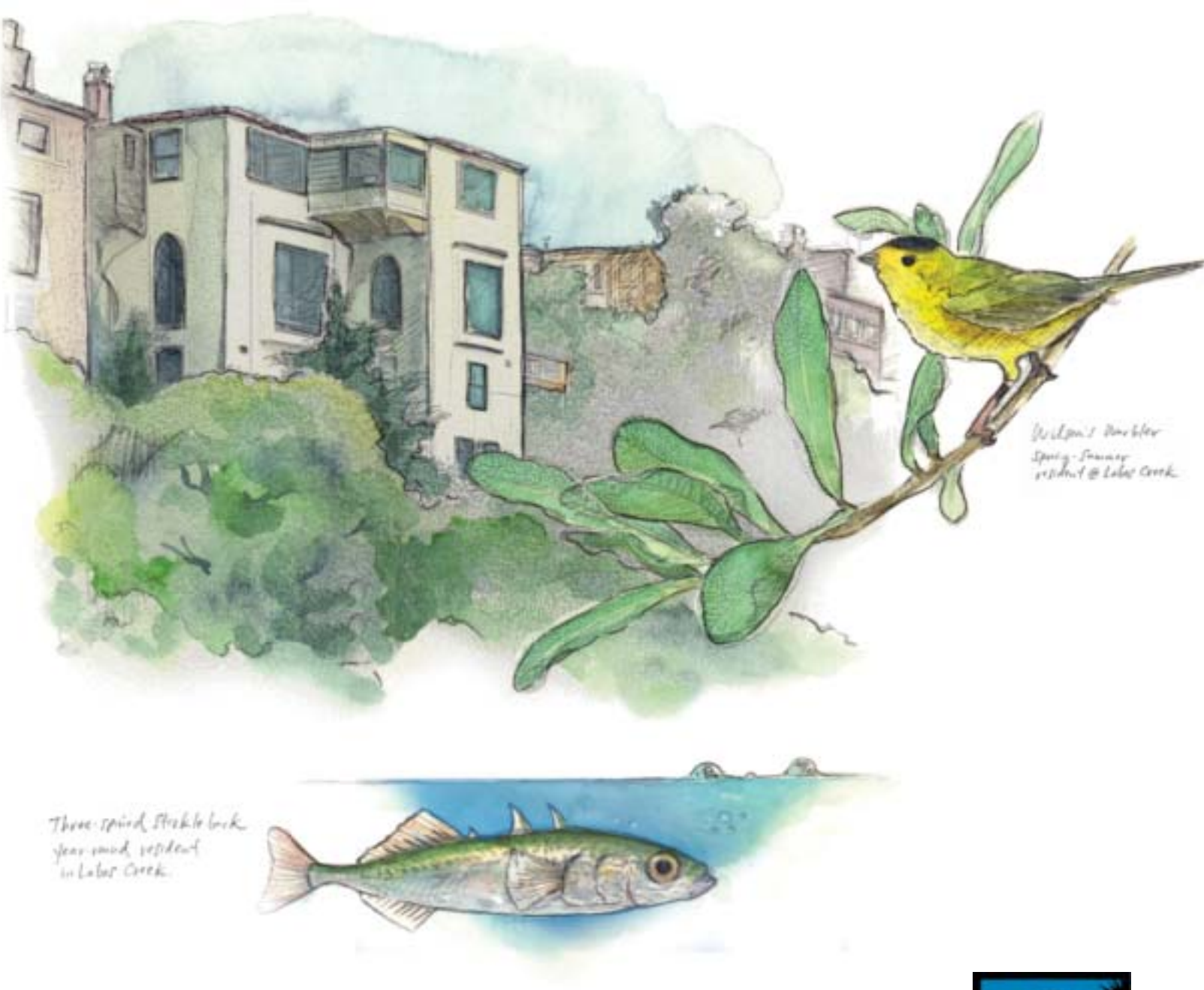
2007 Annual Water Quality Report

This report details where your water comes from and how its quality is measured. Presidio drinking water meets or exceeds the standards set by federal and state health protection agencies.



PRESIDIO OF SAN FRANCISCO

THE PRESIDIO TRUST

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

THE PRESIDIO WATER SUPPLY

The Presidio gets its water from two sources. Seventy to eighty percent is drawn from the Presidio's Lobos Creek, the last free-flowing natural spring in San Francisco. The remainder is purchased from the San Francisco Water Department. This water is drawn from the Hetch Hetchy Watershed, the Alameda County Watershed, and the Peninsula Watershed.

LOBOS CREEK

Most of the Presidio's potable water needs are met by a local surface water source, Lobos Creek, which runs along the Presidio's southwest corner. Daily flows in 2007 averaged 1.4 million gallons per day. The Presidio Water Treatment Plant draws approximately half of the flow, treats the water, and distributes it park-wide through approximately 1,000 service connections.

To ensure healthy water, the Presidio Trust implements a Water Quality Management Plan that includes procedures to detect and remedy any potential sources of contaminants. The Trust also has a sampling program that requires quarterly Volatile Organic Compounds (VOC) testing. We also monitor the trend of Tetrachloroethylene (PCE) levels in Lobos Creek (for complete results, see tables beginning p. 4). Samples are taken throughout the entire delivery system.

A source water assessment of Lobos Creek was last updated in November 2006. Lobos Creek sample analysis results have detected low levels (.5 parts per billion) of Tetrachloroethylene (PCE) from dry cleaning establishments located throughout the neighboring Richmond District of San Francisco. However, treated samples from the drinking water supply have not detected any PCE. Lobos Creek also contains detectable levels of nitrate that may come from leaks in the San Francisco combined sewer/storm system. However, the nitrate level has never exceeded the Maximum Contaminant Level (MCL).

The Richmond Transport System, a combined storm and sanitary waste collection system that crosses beneath the creek near 25th Avenue and Lincoln Boulevard, is a Potential Contaminant Activity (PCA). However, the Richmond Transport System is beneath the creek and rarely flows full. Two other high PCAs include a former military missile site and a landfill, both located northeast of the creek. These sites are part of the Presidio Trust remediation program and preliminary data show no harmful contaminants.

Other PCAs with a high impact ranking are gas stations, landfills, chemical storage, metal fabrication and plastics producers. Though these types of activities exist within the watershed boundary, there is no evidence that they contaminate the water supply.

SAN FRANCISCO WATER DEPARTMENT

The Hetch Hetchy watershed is located in Yosemite National Park. Spring snowmelt runoff flows down the Tuolumne River and fills the Hetch Hetchy Reservoir. In Alameda, in the East Bay, water is captured in two reservoirs: Calaveras and San Antonio. The Peninsula watershed captures runoff in three reservoirs: Crystal Springs, San Andreas, and Pilarcitos.

The Hetch Hetchy water supply meets all federal and state purity criteria. As a result, the U.S. Environmental Protection Agency has exempted the Hetch Hetchy water source from filtration requirements. In 2005, a drinking water source assessment for all San Francisco Public Utilities Commission (SFPUC) source watersheds was completed by the SFPUC. It showed that SFPUC watersheds have very low levels of contaminants and those contaminants found are usually associated with wildlife and to a limited extent human recreational activity. A copy of the complete assessment is available at the offices of the SFPUC. Request one by calling (877) 737-8297.

THE PRESIDIO COMMUNITY

Located on the tip of the San Francisco peninsula, the Presidio was in constant use as a military post from 1776 to 1994. Today, it is a National Historic Landmark District and a distinct part of the Golden Gate National Recreation Area, the largest urban national park in the United States. People live and work in the Presidio as well as visit, making this a unique public park. The community is comprised of approximately 2,700 residents, 3,000 employees, and thousands of visitors. Their activities depend upon a healthy drinking water system.

QUESTIONS?

If you have questions about this report or Presidio drinking water, please contact the Presidio Trust Public Affairs Office at **(415) 561-5418**.

To learn more about drinking water regulations, visit the California Department of Public Health at **www.cdph.ca.gov** or the U.S. Environmental Protection Agency at **www.epa.gov**.

CONSERVE, CONSERVE, CONSERVE

2006 was one of the driest years on record, and rainfall averages for the 2007-8 winter season were also below normal. We all share a responsibility to use our water more efficiently.

- Keep your shower under 8 minutes or consider turning it off while soaping up or shampooing.
- While brushing your teeth or shaving, turn off the tap. You may save 2.5 gallons every minute.
- Running tap water while washing dishes can waste 2.5 gallons every minute. Fill the kitchen sink and dip dishes in water to wash or rinse.
- Only run the dishwasher when it's completely full. Each load uses about 15 gallons of water.

WATER QUALITY DATA

WHY TEST DRINKING WATER?

The Presidio Trust conducts extensive testing of the park's water supplies and distribution system to ensure that the Presidio's drinking water is safe and healthy. In all cases, Presidio drinking water meets or exceeds the standards set by federal and state health protection agencies.

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.

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 must 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 byproducts 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.

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

TABLE 1: INDIVIDUAL TAP MONITORING FOR LEAD AND COPPER

Monitoring of individual taps from locations within the water system is performed every three years and was last performed in June 2007 to verify that the delivered water does not contain lead or copper at levels that may have negative health effects.

This table summarizes the most recent monitoring for these constituents. **No site exceeded the regulatory action level.**

	NO. OF SAMPLES	90TH PERCENTILE LEVEL DETECTED	ACTION LEVEL	MCLG	TYPICAL SOURCE
Lead (ppb)	10	1.8	15	2	Corrosion of plumbing systems
Copper (ppm)	13	.446	1.3	.017	Corrosion of plumbing systems

TABLE 2: DISTRIBUTION SYSTEM MICROBIOLOGICAL SUMMARY

No detections of coliform in 2007.

MICROBIOLOGICAL CONTAMINANTS	HIGHEST NO. OF DETECTIONS	MCL	MCLG	TYPICAL SOURCE OF BACTERIA
Total Coliform	0	More than one sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. coli	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. coli	0	Human and animal fecal waste

TABLE 3: DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

CHEMICAL OR CONSTITUENT (REPORTING UNITS)	SAMPLE DATE	LEVEL DETECTED	RANGE OF DETECTIONS	MCL	PHG (MCLG)	TYPICAL SOURCE OF CONTAMINANT
Nitrate (ppm)	2007	37	36-38	45	45	Erosion of natural deposits, soil run-off
PCE (ppb)	2007	.5	0 - .5	5	0	Leaching from PVC pipes, discharge from factories, dry cleaners and auto shops (metal degreaser)

Nitrate in drinking water at levels above 45 ppm 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 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. **The PCE results are from Lobos Creek. Treated water samples show no detection of PCE.**

TABLE 4: SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

TREATMENT TECHNIQUE*	CONVENTIONAL FILTRATION
Turbidity Performance Standards**	**Turbidity of the filtered water must:** 1 - Be less than or equal to 0.5 NTU in 95% of measurements in a month. 2 - Not to exceed one NTU for more than eight consecutive hours. 3 - Not to exceed five NTU at any time
Lowest monthly % of samples that met Turbidity Performance Standard No. 1	98% percent
Highest single turbidity measurement during the year	0.06 NTU
The number of violations of any surface water treatment requirements	None

* A required process intended to reduce the level of a contaminant in drinking water

** Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results that meet performance standards are considered to be in compliance with filtration requirements.

SAN FRANCISCO TREATED WATER:

Turbidity	– Harry Tracy Treatment Plant	2007	<.3 - 95% of the time
Turbidity	– Sunol Treatment Plant	2007	<.3 - 95% of the time

Filtered water must be less than .3 NTU 95% of the time. Both Harry Tracy and Sunol Water Treatment Plants met this standard 100% of the time.

These tables list all drinking water contaminants detected in the Presidio in 2007. Presidio drinking water met or suprassed all state and federal water quality requirements.

KEY TERMS

Maximum Contaminant Level (MCL): The highest level of a contaminant 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.

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 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 water treatment below which there is no known or expected risk to health. MRLDGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards: 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: The concentration of contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

...WATER QUALITY DATA CONTINUED

TABLE 5: SECONDARY STANDARDS

No MCLG for secondary constituents.

Typical source of contaminant for the following is run off/leaching from natural deposits.

PRESIDIO WATER:

	DATE OF TEST	LEVEL DETECTED	SECONDARY MCL
Hardness	2007	210 ppm	none set
Sodium	2007	31 ppm	none set
Sulfate	2007	40 ppm	250 ppm
Iron	2007	317 ppb	300 ppb
Manganese	2007	75 ppb	50 ppb
Chloride	2007	48 ppm	500 ppm
Color	2007	12 units	15 units
Conductivity	2007	600 uS/cm	1600 uS/cm
TDS	2007	337 ppm	1000 ppm

SAN FRANCISCO WATER:

	DATE OF TEST	RANGE	AVERAGE	SECONDARY MCL
Hardness	2007	8-116	61 ppm	none set
Sodium	2007	3-22	14 ppm	none set
Sulfate	2007	.8-37	20 ppm	500 ppm
Iron	2007	ND	ND	300 ppb
Manganese	2007	ND	ND	50 ppb
Chloride	2007	0-17	9 ppm	500 ppm
Color	2007			
Conductivity	2007	32-320	185 uS/cm	1600 uS/cm
TDS	2007	25-193	109 ppm	1000 ppm

Iron and Manganese

We routinely detect high levels of minerals, iron and manganese (see analyses) in Lobos Creek. However, treated water testing results were well below the Secondary MCL. Iron and manganese are secondary constituents that affect the aesthetic quality of water (i.e. taste, color and odor), but do not pose a health threat. Manganese has a tendency to discolor water. Periodically, your water may appear yellowish-brown. If you experience this, let your water run for several minutes or until the color goes away. If the problem persists, please call the Water Treatment Plant at (415) 561-4134.

Radiological Water Quality

Results of most recent test for radiological constituents: Below MCL: All, Date: 2006

Disinfection and Fluoridation

The Presidio Water Treatment Plant used chlorine and chloramines as a disinfectant in 2007. The San Francisco Water Department used chlorine, chloramines, and ozone. Chloramines are a combination of chlorine and ammonia. Chloramines are disinfectants that are believed to reduce potentially harmful by-products of chlorine alone. Chloramines may be toxic to some pet fish and kidney dialysis patients. Water used at the Presidio is fluoridated. Fluoride concentrations are required to stay within a control range of .9 - 1.5 ppm for the Presidio. The average for the year 2007 was 1.0 ppm.

Special Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants are 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) or at www.epa.gov/safewater.

Illustrations by Ryan Jones