

THE CITY OF



PLEASANTON



Annual Water Quality Report

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1. Water quality is our top priority

The City of Pleasanton is pleased to present you this report to provide important information about where your water comes from and the work we do to assure the water delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and state drinking water standards during calendar year 2006.

Pleasanton's Water Quality

The City's goal is to continuously provide a dependable supply of high quality drinking water to its customers. To accomplish this, the treated surface water delivered to customers is continuously monitored at local water treatment plants. These plants also perform specific chemical and biological tests every four hours to check the purification process. In addition, there are 47 sampling points



located throughout the City's water distribution system that are monitored and tested daily, weekly and monthly, to assure the City's drinking water continuously complies with all federal and state drinking water standards. If you have questions regarding the quality of the water supplied to you by the City, this report should provide most of the answers. We appreciate the time you take to read this report and welcome any question or comment you may have regarding your water supply.

For further information on Pleasanton's water quality, call the City's Water Quality Lab at 925-931-5510, or email your questions to us through the City's web page at www.ci.pleasanton.ca.us.

2. Pleasanton's water sources

Zone 7, the Valley's water wholesaler, provides treated water to four major Valley water retailers and untreated water to a number of agricultural customers, as well as providing flood control and groundwater management in the Tri-Valley Area. About 80% of Pleasanton's water is purchased from Zone 7 and is treated surface water blended with some local groundwater. The remaining 20% comes from local groundwater pumped from wells owned and operated by the City.

Imported Surface Water:

The State Water Project (SWP) delivers water to Zone 7. The SWP water originates from the Feather River, where it is stored behind the Oroville Dam before being released into the Sacramento River/San Joaquin Delta. This water is pumped from the Delta to the South Bay Aqueduct System (SBA), which then flows to the Tri-Valley area, continues through Alameda County and into Santa Clara County.

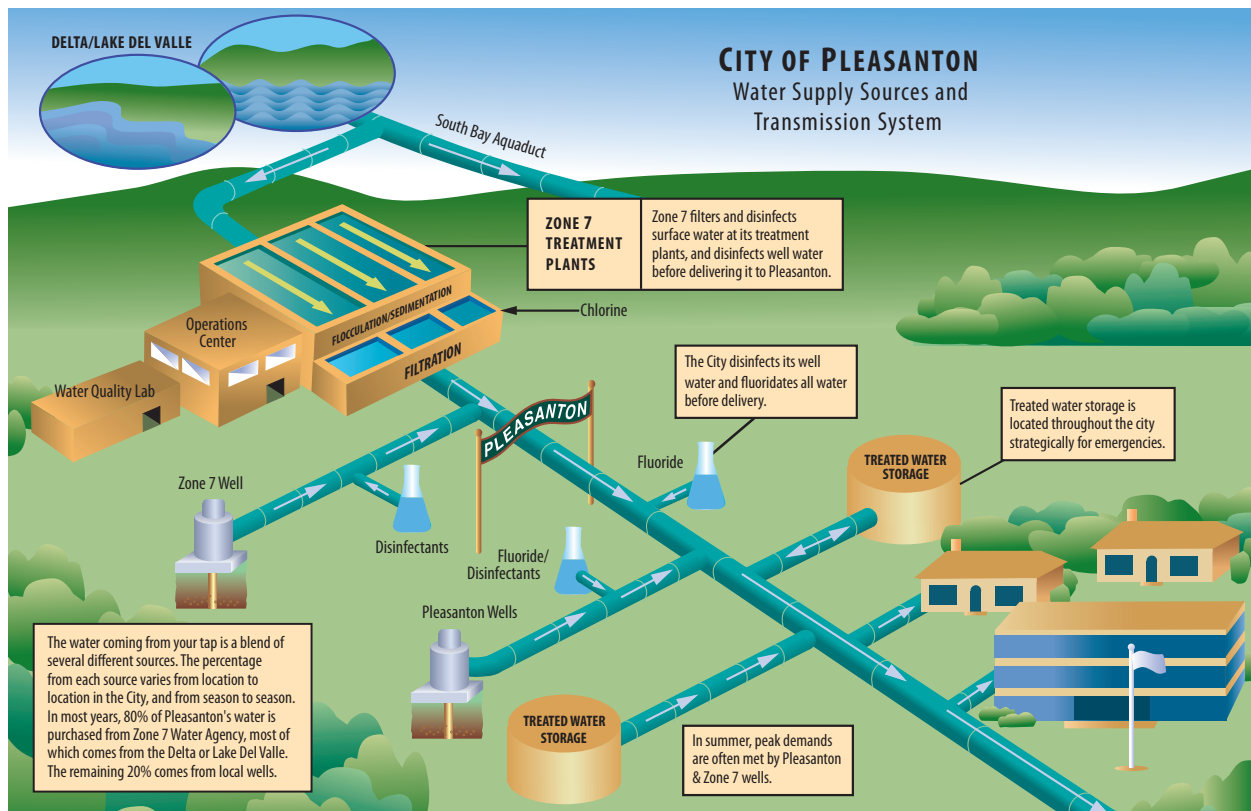
Local Surface Water:

Lake Del Valle, our local water storage lake, is owned and operated by the State Department of Water Resources (DWR) as a water supply reservoir and also provides local flood control and recreation. The water stored at Lake Del Valle comes from local rainfall and from the SWP. Zone 7 treats water from Lake Del Valle and the SBA prior to distributing this water to its retailers.

Water from Zone 7's two water treatment plants (Del Valle and Patterson Pass) undergoes several stages of treatment according to Department of Health Services (DHS) regulations. Following the treatment process, the water is disinfected and delivered to the City and other Valley water retailers.

Local Groundwater:

Groundwater comes from wells and springs. Both the City and Zone 7's own groundwater wells use the local groundwater to increase the volume of drinking water available, mostly during the hot summer months when demand for water rises. On any given summer day, over 50% of the water in the City may be groundwater. As noted City water sources are fluoridated and disinfected before being delivered to your tap.



3. Your water meets all safe drinking water standards

The technical and analytical water quality information presented in this report is required by State health regulations.

These regulations require water suppliers to inform customers where their water comes from; what is in their water; and any violation of safe drinking water standards that may have occurred during the reporting period.

This report provides results of all tests required to be performed on Pleasanton's water supplies during 2006. We are happy to report that all water quality tests performed during 2006 confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report also includes information regarding steps taken by the City and Zone 7 to improve drinking water delivered to its customers in 2006, and opportunities for the public to participate in decisions that affect their drinking water quality. Phone numbers and web page addresses of the City and other public agencies responsible for water billing, delivery, supply, and water quality are also presented herein.

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

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।
कृपा करके किसी से :सका अनुवाद कराये ।



9. Public involvement

Zone 7, the Valley's water wholesaler, provides several ways any citizen may become involved in local water issues and water quality topics.

One way is to attend Zone 7's regular board meetings, which are held the third Wednesday of each month at 7:00 p.m. at the Zone 7 offices in Livermore, 100 North Canyons Parkway. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site at www.zone7water.com.

Contact Information:

Water Quality Information 925-931-5510
M-F 7:00 AM-3:30 PM
sclough@ci.pleasanton.ca.us

Para informacion en español, llamar al telefono: 925-931-5500

Utility Billing Information/ Water Conservation Material & Programs 925-931-5425
M-F 7:30 AM-5:30 PM

Emergency Water Service 925-931-5500
M-F 7:00 AM-3:30 PM

Or after hours and weekends, call Pleasanton Police Dispatch:
925-931-5100

Zone 7 Water Agency 925-454-5000
M-F 8:00 AM-5:00 PM
www.zone7water.com

Household Hazardous Waste Collection Sites 510-670-6460
M-F 8:30 AM-5:00 PM
www.household-hazwaste.org

EPA Hotline 1-800-426-4791
www.epa.gov/safewater

EPA Radon Hotline 1-800-767-7236
www.epa.gov/radon

To view the Water Quality Report online, please visit
www.ci.pleasanton.ca.us/pdf/awqr06.pdf

Included in this report:

- 1] Pleasanton's Water Quality
- 2] Pleasanton's Water Sources
- 3] Safe Drinking Water Standards
- 4] Improving Our Water Quality
- 5] Chemicals and Minerals in Your Drinking Water
- 6] Definition of Terms
- 7] Understanding the Summary
- 8] 2006 Water Quality Results
- 9] Public Involvement & Contact Information



For any further questions you may have regarding the City's water supplies or quality, you can contact us by visiting the City's web site at www.ci.pleasanton.ca.us.

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4. Improving our water quality

What is being done to improve the hardness, taste, and odor of our water supplies?

Hardness Mitigation

You may know that our local groundwater does contain naturally occurring minerals such as calcium and magnesium. These minerals are not a health concern at the low levels in the local water sources, however, the water is said to be “hard” because making lather or suds for washing is difficult. In addition, hard water can leave spots on windows, glassware, china, plumbing fixtures, etc. To better manage the hardness and improve the taste and odor of our drinking water, Zone 7 along with Pleasanton and the other Valley water retailers, completed an extensive study—the Water Quality Management Program (WQMP)—to recommend improvements to surface and groundwater treatment. Design of a portion of the recommended facilities needed to improve water quality is complete and construction contracts for this work are currently in process. Once these facilities are constructed, delivered drinking water quality in the City will improve. Zone 7’s timetable for completion of the initial phases of these hardness mitigation project facilities is in 2009.

Taste and Odor in Tap Water

Treated surface water imported from the Sacramento-San Joaquin Delta or captured as rainfall in Lake Del Valle can occasionally have an earthy-musty taste or smell by the time it reaches your tap. These tastes and odors generally occur as a result of a very slight increase in organic compounds in the surface water supply due to warmer temperatures and increased sunlight. The organic compounds that exist, while harmless, can be tasted in water at concentrations as low as five parts per trillion. Most of these compounds are removed by Zone 7’s treatment facilities, but even very small amounts of these harmless compounds can add taste or odor to the treated water. Zone 7 conducts frequent tests to detect and treat taste and odor causing organic compounds before they reach the treatment plants. In 2006, Zone 7 installed temporary treatment facilities for reducing taste and odor in our water. Permanent facilities are being evaluated and are slated to be online by 2011, if not sooner. Future Zone 7 treatment plant improvement projects include upgrades for enhanced removal of these organic compounds.

5. Chemicals and minerals in water

The sources of most drinking water (both tap and bottled water) in this country include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the land surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances that result from the presence of animals or human activity. Drinking water, including many bottled waters, may reasonably be expected to contain at least small amounts of some minerals or contaminants. The presence of these contaminants does not necessarily indicate that the drinking water poses a health risk especially at low levels. More information about contaminants and potential health effects can be obtained by calling the USEPA Safe Drinking Water Hotline (1-800-426-4791). The disinfectant, Chloramine (a combination of chlorine and ammonia), is used to disinfect both Zone 7 and the City’s water. This disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. Chloramines, at the low levels used, will not cause any health problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before chloraminated water can be used in aquariums or home kidney dialysis machines, due to the very small amount of ammonia present in the water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. These include immuno-compromised people such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants. These people may be at additional risk from infections and should seek advice about their drinking water from their physicians. The USEPA/Centers for Disease Control (CDC) guidelines on appropriate ways to reduce the risk of infection by *Cryptosporidium* and other microscopic contaminants are available from the United States Environmental Protection Agency’s (USEPA) Safe Drinking Water Hotline (800-426-4791).

6. Definition of terms

The following terms are used in the water industry to define contaminant levels. Pleasanton's drinking water is tested at the levels in the table to the right.

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 water of a contaminant in drinking water below which there is no known or expected risk to health—set by the USEPA.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant that is allowed in drinking water.

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

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 EPA.

Primary Drinking Water Standard (PDWS): MCLs for contaminants that affect health, along with their monitoring, reporting, 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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

Turbidity: A measure of the cloudiness of the water. We monitor turbidity since it is a good indicator of the effectiveness of the treatment plant's filtration system.

The following contaminants may also be found in drinking water:

TTHMs (Total Trihalomethanes): TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer. Pleasanton's water sources are below the MCLs for TTHMs.

MTBE (Methyl Tertiary Butyl Ether): Pleasanton's well water sources were monitored once for MTBE in 2005, and it was not detected (next monitoring in 2008). Zone 7's sources were monitored twice in 2006. The current detection limit for reporting purposes is 3 parts per billion (ppb). MTBE was not detected in any of Zone 7's sources in the past year.

Radon: A radioactive gas found throughout the United States that you cannot see, taste, or smell. Currently, there is no federal regulation on radon levels in drinking water. The California Department of Health Services is awaiting action by the USEPA on a proposed radon level in drinking water. For additional information, call your State Radon Program at 916-324-2208 or call EPA's Radon Hotline at 800-767-7236. Radon was found in the City and Zone 7's groundwater wells at levels of 160 to 350 pico Curies per liter (pCi/L).

Key to Tables

AL	Action Level
MCL/MCLG	Maximum Contaminant Level/Maximum Contaminant Level Goal
DLR	Detection Limit for Purpose of Reporting (DHS established)
SMCL	Secondary Maximum Contaminant Level
MRDL/MRDLG	Max. Residual Disinfectant Level/Max. Residual Disinfection Level Goal
MRL	Minimum Reporting Limit
PHG	Public Health Goal
pCi/L	Picocuries Per Liter
mg/L	Milograms Per Liter or Parts Per million
µg/L	Micrograms per liter or parts per billion
NA	Not Applicable
NL	Notification Level
ND	Monitored for but not detected at or above DLR or MRL. ND or value in the range column indicates that more than one analysis performed
TT	Treatment Technique
NTU	Nephelometric Turbidity Units
umhos/cm	A measure of specific conductance

7. Understanding the Summary

There are two types of standards that are regulated in drinking water:

Primary Standards are set after considerable research and data have been analyzed by health experts. These standards, called **Maximum Contaminant Levels (MCLs)** are set by USEPA and strictly enforced by the California Department of Health Services (DHS).

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards set limits on substances that may influence customer acceptance of the water and are established by the DHS.

Detected Contaminants: The table at left shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2006 calendar year (Range).

In addition to the regulated contaminants, Zone 7 and the City monitor "unregulated contaminants". Unregulated contaminant monitoring helps EPA and DHS to determine where certain contaminants occurred and whether the contaminants need to be regulated in the future. The unregulated organic compounds are monitored on the same schedule as the regulated contaminants.

All the unregulated organic compounds tested were not detected (ND).

Sources of Contaminants: In order to ensure that tap water is safe to drink, USEPA and the DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: 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 storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

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

Sampling Frequency: Pleasanton sampling frequency meets, and for some parameters, is more stringent than DHS requirements. DHS allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Hence, some of our data, though representative, are more than one year old.

A Drinking Water Source Assessment and Protection Program (DWSAP) was conducted for the City of Pleasanton Wells #5, #6 and #8 in December 2002. No contaminants have been detected in the City's groundwater supply. However, all groundwater sources are considered vulnerable to activities located near the drinking water supply source. DWSAP is updated once every five years. The next scheduled DWSAP update will be in 2007. A completed copy of the assessment may be viewed at the City Clerk Office, 123 Main Street, Pleasanton.

8. 2006 water quality results

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemical analyses required by the USEPA and DHS for Pleasanton's water supply during calendar year 2006.³

PRIMARY STANDARDS—Mandatory Health-Related Standards, established by the State of California Department of Health Services									
Distribution System Sampling Results									
Contaminant	MCL	PHG MCLG* MRDLG**	Zone 7 Water Agency ¹				City of Pleasanton ²		Sources
			Highest Quarterly Average	Range of Individual Samples	Highest Quarterly Average	Range of Individual Samples			
Total Trihalomethanes (TTHMs) (µg/L)	80	NA	35	20–41			31	ND–42	By-product of drinking water chlorination
Haloacetic Acids (five) (HAA5) (µg/L)	60	NA	22	9.2–27			17	ND–27	
			Highest % of Monthly Positive Samples		Highest % of Monthly Positive Samples				
Total Coliform Bacteria	More than 5% of monthly samples are positive	0*	0%		0.84%				Naturally present in the environment
Chloramines as Chlorine (mg/L)	Maximum Residual Disinfectant Level (MRDL)=4.0	4**	Running Annual Average (RAA) 2.2	Range of Monthly Avg. Chloramines 1.7–2.3	Running Annual Average (RAA) 1.8		Range of Individual Samples 1.3–2.1	Drinking water disinfectant added for treatment	
EPA/State Lead Copper Rule—Monitored at Customers Tap⁴—2004									
Lead (µg/L)	AL=15	2			No. Collected 41	90th Percentile 4.98	No. of Samples > Action Level 1 out of 41	Internal corrosion of household plumbing	
Copper (mg/L)	AL=1.3	0.17			41	0.946	1 out of 41	Internal corrosion of household plumbing	
Water Supply Sources									
Contaminant	MCL	PHG MCLG*	Treated Surface Water		Groundwater		Groundwater		Sources
			Average	Range of Individual Samples	Average	Range of Individual Samples			
Turbidity	TT=1 NTU Maximum TT=95% of Samples ≤ 0.3 NTU	NA	Highest Level Found=0.30 NTU		0.14	0.05–0.68	0.17	0.15–0.20	Soil runoff
		NA	% of Samples ≤ 0.3 NTU=100		Not Applicable		Not Applicable		
Total Organic Carbon (mg/L)	TT=Quarterly RAA Removal Ratio ≥ 1.0	NA	Lowest Quarterly RAA Ratio=1.45		Not Applicable		Not Applicable		Runoff/leaching from natural deposits
Inorganic Chemicals									
Barium (µg/L)	1000	2000	ND	ND	203	120–370	173	140–210	Erosion of natural deposits
Chromium (µg/L)	50	100*	ND	ND	4	ND–11	ND	ND	Erosion of natural deposits [CONFIRM]
Selenium (µg/L)	50	50*	ND	ND	ND	ND–6	ND	ND	Erosion of natural deposits
Fluoride (mg/L) (Naturally Occurring) ⁷	2	1	ND	ND–0.1	0.1	0.1	ND	ND–0.11	Erosion of natural deposits
Nitrate (as NO ₃) (mg/L)	45	45	ND	ND–3.8	24	10–32	13	8–18	Erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	10	NA	NA	NA	NA	NA	3	2–4	Erosion of natural deposits
Radionuclides⁵									
Gross Alpha (pCi/L)	15	0*	ND	ND	ND	ND–3	ND	ND	Erosion of natural deposits
Gross Beta (pCi/L)	50	0*	ND	ND	ND	ND–12	ND	ND	Decay of natural deposits and manmade
Uranium (pCi/L) (tested in 2004)	20	0.43	ND	ND	ND	ND–3	ND	ND	Erosion of natural deposits
Regulated Contaminants with Secondary MCLs, established by the State of California Department of Health Services									
Corrosivity (Units) ⁶	Non-corrosive >12	--	12.2	11.2–12.9	12.4	12.2–12.7	12	12–13	Runoff/leaching from natural deposits
Conductivity (µmhos/cm)	1600	--	312	188–526	787	627–1146	826	685–960	Substances that form ions in water
Chloride (mg/L)	500	--	43	24–95	66	41–126	67	51–79	Naturally occurring organic materials
Odor Threshold (Units)	3	--	ND	ND	ND	ND	1	1–2	Runoff/leaching from natural deposits
Sulfate (mg/L)	500	--	26	11–43	53	34–99	49	43–54	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	1000	--	192	114–324	487	376–688	492	416–558	Runoff/leaching from natural deposits
Unregulated Contaminants Requiring Monitoring, established by the State of California Department of Health Services									
Boron (µg/L)	NL=1000	--	ND	ND–170	437	260–600	340	330–360	Runoff/leaching from natural deposits
Vanadium (µg/L)	NL=50	--	ND	ND	3	ND–6	3	ND–4	Erosion of natural deposits
Additional Parameters, included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.									
Alkalinity (as CaCO ₃)(mg/L)	--	--	72	34–147	278	231–352	178	144–201	Runoff/leaching from natural deposits
Hardness (as CaCO ₃)(mg/L)	--	--	72	41–144	317	242–463	340	270–390	Runoff/leaching from natural deposits
Calcium (mg/L)	--	--	18	9–35	67	46–110	76	65–87	Runoff/leaching from natural deposits
Magnesium (mg/L)	--	--	7	3–15	36	22–53	36	27–42	Runoff/leaching from natural deposits
Potassium (mg/L)	--	--	1.7	0.7–3.0	1.9	1.5–2.6	1.8	1.7–2.0	Runoff/leaching from natural deposits
Sodium (mg/L)	--	--	39	22–71	55	31–73	41	36–47	Runoff/leaching from natural deposits
pH (Units)	--	--	8.7	8.3–9.1	7.6	7.4–7.8	7.7	7.5–7.9	Runoff/leaching from natural deposits
Silica (mg/L)	--	--	10	5–15	22	21–26	24	21–25	Runoff/leaching from natural deposits
Total Radon (pCi/L) ⁵	--	--	NA	NA	267	160–320	276	205–350	Runoff/leaching from natural deposits

¹ Zone 7 Water Agency supplies surface and groundwater to the City of Pleasanton. For more information regarding this source, call 925-447-0533. ² The City of Pleasanton owns and operates three groundwater wells for drinking water purposes. For more information on this source, please call 925-931-5510. ³ Pleasanton and Zone 7 also test for a number of additional constituents in the water supply sources. Test results for all of these constituents were non-detected and therefore not included in the table. A complete list of all constituents tested during 2006 is available upon request. ⁴ Tested every 3 years; next scheduled testing in 2007. ⁵ Tested every 4 years; next scheduled testing for Zone 7 in 2008, for Pleasanton in 2010. ⁶ Zone 7 strives to supply non-aggressive water (corrosivity >12) by pH adjustment on surface treated water. ⁷ The City treats the water delivered to your tap by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 to 1.3 ppm, as required by DHS regulations.