ANNUAL WATER QUALITY REPORT

- 2002 -

THE CITY OF PLEASANTON

Water quality is our top priority

This report is presented to you by the City of Pleasanton. It provides important information about where your water comes from and how we work to purify the water delivered to your tap. It also provides data about what is in your water and how it compares with state drinking water standards.

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 two local water treatment plants, with chemical and biological tests performed every four hours. In addition, there are 47 sampling points located throughout the City's distribution system that are monitored and tested daily. These daily samples 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 will provide the answers. We appreciate the time you take to read this report and welcome any further questions or comments you may have regarding your water supply. For further information, call the City's Water Quality Lab at 925-931-5510, or e-mail your questions to us through the City's web page at www.ci.pleasanton.ca.us.

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 standards that may have occurred. Tests performed on Pleasanton's water during 2002 confirmed that our water met all applicable drinking water standards without any violations.

This report also includes information regarding the delivery of safe and aesthetically acceptable drinking water to you, 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 इसका अनुवाद करायें ।

Included in this report:

Pleasanton water sources · Pleasanton's water quality · Improving water quality · Chemicals and minerals in water · How to get involved · Analytical data for Calendar Year 2002 · Facts about contaminants · Water quality definitions

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 Pleasanton. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site (see below).

Zone 7 Water Agency
925-484-2600 M-F 8:00 AM-5:00 PM
www.zone7water.com

How to contact us:

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

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 call Police Dispatch
925-931-5100

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

THE CITY OF PLEASANTON

For further questions, please visit the City's web site at www.ci.pleasanton.ca.us

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Pleasanton's water sources

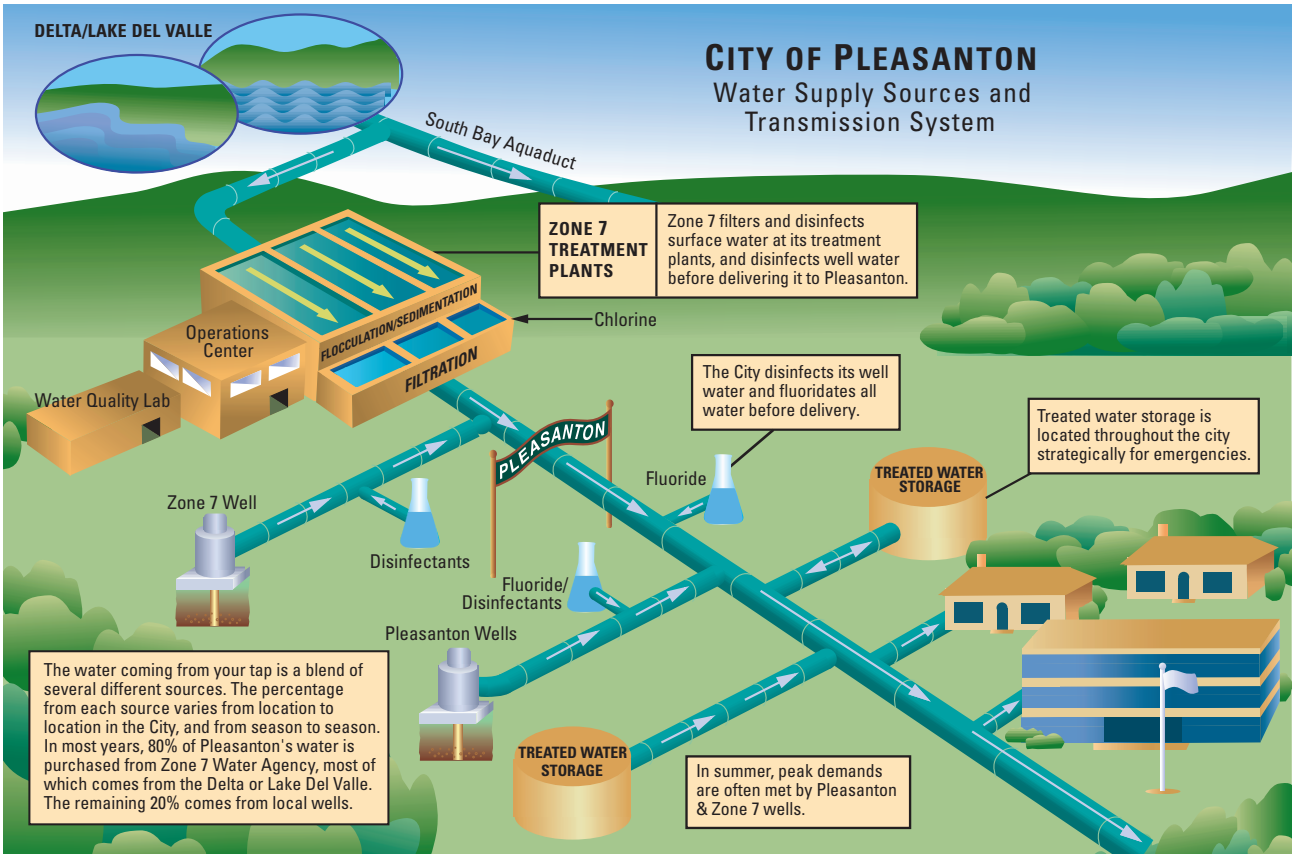
About 80% of Pleasanton's water is purchased from Zone 7 and is treated surface water blended with some local groundwater. Zone 7, the Valley's water wholesaler, provides water to four major Valley water retailers and a number of agricultural customers, as well as providing flood control and groundwater management. The remainder of Pleasanton's water supply 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.

Local Surface Water: Lake Del Valle is owned and operated by the State Department of Water Resources (DWR) as a water supply reservoir, and also provides 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 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 filtration and is treated according to Department of Health Services (DOHS) regulations. After filtration, the water is disinfected and delivered to the City and other valley retailers.

Local Groundwater: Groundwater comes from wells and springs. Both the City and Zone 7 use 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 supplied may be groundwater. All city water sources are fluoridated and disinfected before being delivered to your tap.



Improving our water quality

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

You may know that our local groundwater can contain naturally occurring minerals such as calcium and magnesium. These minerals are not a health concern at present levels. However, the water is said to be "hard" because making lather or suds for washing is difficult.

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, recently completed an extensive study—the Water Quality Management Program (WQMP)—recommending changes to surface and groundwater treatment. The financing and timing for implementation of these changes are currently being reviewed. Once these changes are implemented, the facilities constructed will improve delivered drinking water quality.

Additionally, the City recently completed a project to change the disinfectant used on its local well water, matching that used by Zone 7. Now all water delivered to city customers has a consistent disinfectant (chloramines). This project reduces most of the taste and odor compounds that occurred in the past when two different disinfectants were being used.

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 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 Safe Drinking Water Hotline (800-426-4791).

Chemicals and minerals in water

The sources of drinking water (both tap and bottled water) 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 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. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's (USEPA) Safe Drinking Water Hotline (1-800-426-4791).

Use of disinfectants in our drinking water. Chloramine, (a combination of chlorine and ammonia) is used to disinfect city water. This disinfectant is used to protect public health by destroying disease-causing organisms which may be present in water supplies. This disinfectant, at the levels used, will not cause any problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before the water can be used in aquariums or kidney dialysis machines.

Between July 1997 and December 1998, Zone 7 initiated an 18-month data collection effort to comply with EPA's Information Collection Rule (ICR). This data will be used for future regulations. Monitoring requirements under the ICR included those for Cryptosporidium, Giardia, Viruses, Disinfectants/Disinfection Byproducts (D/DBPs), miscellaneous water quality parameters, and treatment plant operational data. DBP data from ICR monitoring is summarized below.

INFORMATION COLLECTION RULE (ICR) DISINFECTION BYPRODUCTS (DBPs)

July 1997-December 1998		Del Valle Water Treatment Plant		Patterson Pass Water Treatment Plant	
DBP	Units	Range	Average	Range	Average
Trihalomethanes (THM4)	µg/L	32 - 51	41	34 - 93	58
Haloacetic acids (HAA5)	µg/L	14 - 40	24	22 - 50	30
Haloacetonitriles (HAN)	µg/L	3.0 - 7.5	5.5	4.5 - 11	7.7
Haloketones (HK)	µg/L	0.5 - 2.7	1.7	ND - 2.2	1.6
Chloropicrin	µg/L	0.5 - 1.8	0.6	ND - 1.0	0.6
Chloral hydrate	µg/L	ND - 2.4	1.3	ND - 2.1	1.0
Total Organic Halides (TOX)	µg/L	105 - 175	135	105 - 220	142
Cyanogen chloride	µg/L	2.7 - 4.2	3.3	2.6 - 7.4	4.9
Chlorate	µg/L	70 - 134	94	NA	NA
Disinfectant residual (total chlorine)	mg/L	1.87 - 2.80	2.22	1.96 - 2.70	2.35

2002 Water Quality Results

The following is a list of contaminates 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 2002.[3]

PRIMARY STANDARDS—Mandatory Health-Related Standards, established by the State of California Department of Health Services

Distribution System Sampling Results

Parameters	MCL	PHG MCLG* MRDLG**	Zone 7 Water Agency[1]		City of Pleasanton[2]		Sources
			Highest Running Annual Average	Range of Individual Samples	Highest Running Annual Average	Range of Individual Samples	
Total Trihalomethanes (TTHMs) (µg/L)	80	NA	37	ND - 76	32	ND - 72	By-product of drinking water chlorination
Haloacetic acids (HAAs) (µg/L)	60	NA	12	ND - 30	11	ND - 24	By-product of drinking water chlorination
			Highest percentage of monthly positive samples		Highest percentage of monthly positive samples		
Total Coliform Bacteria	5% of monthly samples are positive	0*	0%		0.70%		Naturally present in the environment
			Running Annual Average (RAA)	Range of Monthly Average Chloramines			
Chloramines Residual (mg/L as Chlorine)	Maximum Residual Disinfectant Level (MRDL) = 4.0	4.0**	1.5	1.4 - 1.6			

EPA/State Lead Copper Rule—Monitored At Customers Tap—9/2001			No. Collected	90th Percentile	Number of Samples > Action Level	
Lead (µg/L)	AL = 15	2	37	3.43	1 out of 37	Internal corrosion of household plumbing
Copper (µg/L)	AL = 1.3	0.17	37	0.414	0 out of 37	Internal corrosion of household plumbing

Water Supply Sampling Results

Parameters	MCL	PHG (MCLG)*	Treated Surface Water		Groundwater		Groundwater		
					Average	Range of Individual Samples	Average	Range of Individual Samples	
Turbidity	TT = 5 NTU	NA	Highest Level Found = 0.14 NTU		0.25	0.05 - 1.0	0.13	0.10 - 0.15	Soil runoff
	TT = percentage of samples < 0.5 NTU	NA	100%		Not Applicable		Not Applicable		
Inorganic Chemicals			Average	Range of Individual Samples	Average	Range of Individual Samples	Average	Range of Individual Samples	
Arsenic (µg/L)	50	NA	ND	ND	ND	ND - 2	ND	ND	Erosion of natural deposits
Barium (µg/L)	1000	2000*	ND	ND	198	100 - 280	180	150 - 200	Erosion of natural deposits
Chromium Total (µg/L)	50	100*	ND	ND	ND	ND - 13	ND	ND	Erosion of natural deposits
Fluoride (mg/L)	2	1	0.1	ND - 0.1	0.1	0.1 - 0.2	0.13	0.12 - 0.14	Erosion of natural deposits
Nitrate (as NO3) (mg/L)	45	45	ND	ND - 2.8	13	7.2 - 20	13	9 - 16	Erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	10	NA	NA	NA	NA	NA	2.9	2 - 3.7	Erosion of natural deposits
Radionuclides									
Gross Alpha (pCi/L)	15	NA	ND	ND - 2.4	3.8	1.2 - 7.0	3	ND - 5.1	Erosion of natural deposits
Gross Beta (pCi/L)	50	NA	ND	ND - 4.0	ND	ND - 4.5	NA	NA	Decay of natural deposits and manmade
Uranium (pCi/L) Tested in 2000	20	0.5	ND	ND	ND	ND - 4.5	NA	NA	Erosion of natural deposits
SECONDARY STANDARDS									
Regulated Contaminants with Secondary MCLs, established by the State of California Department of Health Services									
Chloride (mg/L)	500	--	97	64 - 154	66	40 - 136	69	54 - 80	Runoff/leaching from natural deposits
Color (Units)	15	--	ND	ND	ND	ND	3	3	Naturally occurring organic materials
Conductivity (umhos/cm)	1600	--	525	316 - 735	744	550 - 1223	763	652 - 839	Substances that form ions in water
Odor Threshold (Units)	3	--	ND	ND	ND	ND	1	1	Runoff/leaching from natural deposits
Sulfate (mg/L)	500	--	32	14 - 43	53	32 - 119	51	45 - 55	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	1000	--	304	218 - 386	465	391 - 772	470	400 - 500	Runoff/leaching from natural deposits
Unregulated Chemicals Requiring Monitoring, established by the State of California Department of Health Services									
Boron (µg/L)	AL = 1000	NA	132	82 - 180	378	230 - 790	318	280 - 380	Runoff/leaching from natural deposits
Chromium 6 (µg/L)	N/A	NA	ND	NA	8	6 - 8	6	4.0 - 7.0	Erosion of natural deposits
Vanadium (µg/L)	AL = 50	NA	ND	ND	5	ND - 8	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 CaCO3) (mg/L)	--	--	90	66 - 152	267	204 - 368	249	215 - 277	Runoff/leaching from natural deposits
Calcium (mg/L)	--	--	25	18 - 40	70	48 - 103	78	65 - 80	Runoff/leaching from natural deposits
Corrosivity (Units)	(a)	--	12.5	12.1 - 12.9	12.5	12.1 - 12.8	12.3	12.3 - 12.4	Natural balance of hydrogen, carbon and oxygen
Hardness (as CaCO3) (mg/L)	--	--	113	78 - 166	306	209 - 534	340	273 - 395	Runoff/leaching from natural deposits
Magnesium (mg/L)	--	--	13	7.8 - 19	32	21 - 67	35	27 - 42	Runoff/leaching from natural deposits
Potassium (mg/L)	--	--	2.4	1.3 - 4.0	1.6	1.1 - 2.3	1.9	1.7 - 2	Runoff/leaching from natural deposits
pH (Units)	--	--	8.7	8.5 - 9.0	7.8	7.4 - 8.1	7.6	7.5 - 7.7	Runoff/leaching from natural deposits
Silica (mg/L)	--	--	12.2	9.86 - 14.6	24.4	13.7 - 30.0	12.1	12.1 - 12.2	Runoff/leaching from natural deposits
Sodium (mg/L)	--	--	65	43 - 98	53	29 - 76	40	35 - 44	Runoff/leaching from natural deposits
Total Organic Carbon (mg/L)	--	--	1.7	1.0 - 2.3	0.5	ND - 1.8	0.42	ND - 0.70	Runoff/leaching from natural deposits
Total Radon (pCi/L)	--	--	NA	NA	265	180 - 340	288	220 - 340	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 2002 is available upon request.

Definition of terms

The following terms are used in the water industry to define contaminant levels in drinking water. Pleasanton's drinking water is tested and compared to these 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 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: Pleasanton's well water sources were monitored two times for MTBE in 2001, and Zone 7's sources were monitored two times in 2002. The current detection limit for reporting purposes is 3 parts per billion (ppb). MTBE was not detected in any of Pleasanton or Zone 7's sources.

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 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 180 to 340 pico Curies per liter (pCi/L).

Key To Tables	
AL	Action Level
MCL/MCLG	Maximum Contaminate Level/Maximum Contaminate Level Goal
DLR	Detection Limit for Purpose of Reporting (DHS established)
SMCL	Secondary Maximum Contaminate Level
MRDL/MRDLG	Maximum Residual Disinfectant Level/Maximum Residual Disinfectant 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 Available
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

Understanding this water quality 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 2002 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 occured 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, exceeds DHS requirements. DHS allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. 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. A completed copy of the assessment may be viewed at the City Clerk Office, 123 Main Street, Pleasanton.