

Green Valley County Water District 2005 Consumer Confidence Report

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2005.

Our only water source is from eight wells located throughout the valley.

Listed below is the location of sources:

Well No. 2a - Calle Cascada	Well No. 7 - Calle Hermosa
Well No. 4 - Shoreline Drive	Well No. 9 - Calle Laguna
Well No. 5 - Calle Cascada (District Office)	Well No. 11 - Calle Berro
Well No. 6 - Calle Aqua Feliz	Well No. 12 - Pastel Walk

Drinking Water Source Assessment information:

The Green Valley County Water District conducted a Source Water Assessment Protection Program (SWAP) on our water system on October 2001 on all of the wells listed above. The goal of this program is to identify, develop and implement measures that advance the protection of our drinking water. Nitrates were detected in all the groundwater sources; however, no PCA (possible contaminating activities) has been determined responsible for the occurrence of this contaminant. Nevertheless, these sources are considered most vulnerable to the activity of high density septic systems. A copy of this report is available at the District Office.

Time and place of regularly scheduled board meetings for public participation:

Our regularly scheduled meetings are held on the second Thursday of every month at 7:00 PM at the District office located at 39520 Calle Cascada, Green Valley, CA 91390.

For more information , please contact Gary Almsted 661-270-0836.

We want our valued customers to be informed about their water utility

TERMS USED IN THIS REPORT:

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.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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 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 (USEPA).

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. MRDLGs are set by the U.S. Environmental Protection Agency.

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 which a water system must follow.

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

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*, which 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, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- *Total Coliform*: Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.

In order to ensure that tap water is safe to drink, USEPA and the state Department of Health Services (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.

The tables starting at the bottom of this page and continued on pages 3 and 4 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

As indicated in the Table on page 3, our water system had one violation in 2005. The quarterly sample collected from Well 11 in June 2005 indicated an elevated nitrate level of 47 mg/l, which exceeded the nitrate MCL of 45 mg/l. The District immediately took the well offline. After a thorough investigation, the District determined that no customers had received the water directly from Well 11 alone, due to blending with low nitrate water from another well prior to reaching to the customers. This well pumped nearly two times the water capacity as Well 11. Based on this data, the nitrate level in the blended water serving the customers was calculated to be below the nitrate MCL. Well 11 has remained offline since then and has been closely monitored for nitrate level.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The Green Valley County Water District tests for over 150 drinking water contaminants, only the ones detected appear in the following tables. We would like to thank all our customers help us protect our water sources.

Distribution System Samples							
Parameter	MCL (AL)	PHG (MCLG)	Units	Year Tested	Result	Violation	Major Sources In Drinking Water
Microbiological Contaminants							
Total Coliform Bacteria	2 or more positive samples per month	0	No. of positive samples per month	2005	0	No	Naturally present in the environment
Fecal Coliform and E.coli	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E.coli positive	0	No. of positive sampler per year	2005	0	No	Human and animal fecal waste

Disinfectant Byproducts					Range	Average	
Total Trihalomethanes (TTHMs)	80	N/A	ppb	2005	6.1	one annual sample 6.1	By-product of drinking water chlorination
Chlorine Residual	MRDL=4.0	MRDLG=4.0	ppm	2005	0.4 - 0.5	0.47	Drinking water disinfectant added for treatment
Groundwater Samples							
Parameter	MCL (AL)	PHG (MCLG)	Units	Year Tested	Range	Average	Major Sources in Drinking Water
Radioactive Contaminants							
Gross Alpha particle activity	15	N/A	PCi/L	2003	0.61 - 7.8	2.07	Erosion of natural deposits
Inorganics							
Chromium (Total)	50	(100)	ppb	2005	0 - 2	0.38	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Barium	1000	0.2	ppb	2005	11.6 - 95.6	47.1	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	2.0	1	ppm	2005	0.2 - 0.8	0.65	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO ₃)	45 *		ppm	2005	9.3 - 47.2	23.5	Runoff and leaching from fertilizer use; leaching from septic tanks and sewer; erosion of natural deposits
Unregulated Contaminants							
Vanadium	(50)	N/A	ppm	2005	3.0 - 3.0	3	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
Chromium VI	N/A	N/A	ppb	2005	0 - 2.2	0.5	
Additional Constituents Analyzed (Groundwater Samples)							
Parameter	MCL (AL)	PHG (MCLG)	Units	Year Tested	Range	Average	Major Sources in Drinking Water
pH	No Standard		Std units	2005	6.7 - 6.9	6.8	
Hardness	No Standard		mg/L	2005	191 - 307	277	
Sodium	No Standard		mg/L	2005	25 - 29	27	
Calcium	No Standard		mg/L	2005	47 - 73	64	
Potassium	No Standard		mg/L	2005	0 - 2	1.3	
Magnesium	No Standard		mg/L	2005	18 - 34	28.1	
Specific Conductance (E.C.)	1600		umho/cm	2005	474 - 704	628.8	Substances that form ions when in water; sewer
Total Alkalinity (as CaCO ₃)	No Standard		mg/L	2005	170 - 280	235	
Bicarbonate	No Standard		mg/L	2005	200 - 340	287.5	
Turbidity	TT	N/A		2005	ND	ND	Soil runoff
Secondary Standards - Aesthetic Standard Established by the State of California, Dept. of Health Services							
Aluminium	1000		ug/L	2005	0 - 170	21.3	Erosion of natural deposits
Chloride	500		mg/L	2005	16 - 27	22	Runoff/leaching from natural deposits
Iron	300		ug/L	2005	0 - 70	8.8	Leaching from natural deposits, industrial wastes
Lead	50		ug/L	2005	0 - 0.6	0.13	
Manganese	50		ug/L	2005	0 - 10	2.5	Leaching from natural deposits
Mercury	2		ug/L	2005	0 - .01	0.006	
Sulfate	500		mg/L	2005	16 - 49	36.3	
Zinc	500		ug/L	2005	0 - 60	7.5	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	1000		mg/L	2005	320 - 450	400	Runoff/leaching from natural

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.

Additional General Information On Drinking Water

Lead and Copper Monitoring Program							
Contaminant	AL = Action Level	No. of samples collected	Unit Measurement	Year Tested	90th percentile level detected	Number of samples that exceeded AL	Likely Source of Contamination
Lead (ppb)	15	10	ppb	2004	12.7	1 of 10	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits; leaching from wood preservatives
Copper (ppm)	1.3	10	ppm	2004	0.76	1 of 10	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

Lead: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).

All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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, people 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).

Nitrate: Nitrate in drinking water at levels above 45 mg/L 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L 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.

Vanadium: Babies of some pregnant women who drink water containing vanadium in excess of the action level may have an increased risk of developmental effects, based on studies in laboratory animals.

TTHMs [Total Trihalomethanes]: Some people who use water containing trihalomethanes in excess of the MCL over many years.

The Green Valley County Water District
 District office is located at: 39520 Calle Cascada
 Green Valley, CA 91390
 (661) 270-0836
 Office Hours:
 Mon. thru Thurs. 8AM to 4PM, Friday 8AM to 12:00PM