

2004 CONSUMER CONFIDENCE REPORT FOR THE CITY OF HEALDSBURG

Healdsburg's Drinking Water Continues to Meet All Health Standards



We are pleased to provide you with this year's Annual Water Confidence Report. In 2004, the City tested hundreds of water samples from our source water wells and sample stations situated throughout the City. Independent, certified laboratories analyzed samples for more than 100 water quality constituents and characteristics. Those tests show that **Healdsburg's drinking water meets all State and Federal health standards.** We want to keep you informed about the excellent water and services we deliver to you. We are committed to providing our customers with a safe, palatable and dependable supply of drinking water.

Included in this report is a summary of results from water quality tests as well as an explanation of where our water comes from and information on how to interpret the data. This "Consumer Confidence Report" is required by law and, we are proud to share our results with you. Please read them carefully. For more information about this report contact Jim Flugum or Bill Robertson of the Public Works Department at 431-3346.

Special Information Available

Some people may be more vulnerable to constituents in drinking water than the general population. Immunocompromised persons such as individuals 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 EPA Safe Drinking Water Hotline (1-800-426-4791). More research for this information can be found on the EPA website at www.epa.gov/safewater/hfacts.html. California action levels are available on the Department of Health Services website at www.dhs.ca.gov/ps/ddwem/index.htm.



New Water Treatment Facility Under Construction

The City began construction in June 2004 of the new Gauntlett/Fitch Water Treatment Facility located at the end of Sunnyvale Drive. The treatment facilities, which are housed in a newly constructed 4,900 square-foot building just above the City's Panorama Reservoir, are expected to start operating in July of 2005. The project will use relatively new microfiltration technology to screen out particles even smaller than bacteria. Once completed, this treatment facility will allow the City to use its Gauntlett and Fitch well fields on the Russian River year-round. At present, these well fields can only be used in the dry season because of inadequate filtration through the streambed gravel during winter floods. Restoring the year-round use of these wells will fix a potential production shortfall during parts of the year. In addition, the treatment will insure that the City can meet pending water quality regulations.

En Español

Este reporte contiene información importante acerca de el sistema de agua de la Ciudad de Healdsburg y la seguridad de su agua potable. Usted podría solicitar una copia de este 431-3346. Horas de Oficina son de las 8:30 a.m. a las 5:00 p.m., lunes a viernes, o deje un mensaje con su domicilio y una copia del reporte será mandada por correo.



TREATED WATER QUALITY SUMMARY

Listed below are 21 substances or water quality characteristics detected in Healdsburg's drinking water. There are nearly 100 organic and inorganic substances that the City tested for but did not detect. The State allows the City to monitor for some

SUBSTANCE	HIGHEST LEVEL ALLOWED (EPA'S MCL, MCLG & MRDL)	AVERAGE LEVEL DETECTED	RANGE OF LEVELS DETECTED	PUBLIC HEALTH GOALS (MCLG) or (MRDLG)	SOURCES OF CONTAMINANT	HIGHEST LEVEL DETECTED
REGULATED AT THE CUSTOMERS' TAP						
COPPER	1300 PPB	571 PPB	ND - 1100 PPB	< 1300 PPB	Internal corrosion of household plumbing systems. (Results are from testing done in 2002)	1100 PPB
REGULATED IN THE DISTRIBUTION SYSTEM						
TOTAL TRIHALOMETHANES	80 PPB	12.4 PPB	7.0 - 19.0 PPB	NS	Disinfection by-products	19.0 PPB
HALOACETIC ACIDS	60 PPB	2.1 PPB	ND - 5.0 PPB	NS	Disinfection by-products	5.0 PPB
CHLORINE	4 PPM	0.67 PPM	0.21 - 1.60 PPM	4 PPM	Disinfectant added for drinking water treatment	1.60 PPM
REGULATED DURING TREATMENT						
FLUORIDE	2 PPM	0.78 PPM	0.59 - 0.99 PPM	1 PPM	Leaches from natural deposits. Fluoride is also used in Healdsburg as an additive to promote strong teeth, particularly in children. The City doses fluoride at 0.8 PPM, which is the optimal level identified by the State Department of Health.	0.99 PPM
NITRATE (as NO ₃)	45 PPM	1.18 PPM	ND - 3.20 PPM	< 45 PPM	Runoff and leaching from fertilizer use, septic tanks, and natural deposits	3.20 PPM
GROSS ALPHA EMITTERS	15 pCi/L	0.47 pCi/L	0.08 - 0.75 pCi/L	n/a	Erosion of natural deposits. (Results are from testing done in 2002)	0.75 pCi/L
SECONDARY STANDARDS and ADDITIONAL CONSTITUENTS ANALYZED TO GIVE AN IDEA OF QUALITY.						
CHLORIDE	500 PPM	6.54 PPM	4.80 - 9.40 PPM	< 500 PPM	Runoff / Leaching from natural deposits.	9.40 PPM
MANGANESE	50 PPB	80 PPB	ND -270 PPB	< 50 PPB	Leaching from natural deposits	270 PPB
SULFATE	500 PPM	12.38 PPM	8.90 - 16.00 PPM	< 500 PPM	Runoff / Leaching from natural deposits.	16 PPM
TOTAL DISSOLVED SOLIDS	1000 PPM	141 PPM	100 - 200 PPM	< 1000 PPM	Runoff / Leaching from natural deposits.	200 PPM
ALKALINITY	NS	103 PPM	68 - 160 PPM	Not regulated	Natural geology	160 PPM
BICARBONATE	NS	125 PPM	83 - 190 PPM	Not regulated	Natural geology	190 PPM
CALCIUM	NS	18 PPM	14 - 25 PPM	Not regulated	Natural geology	25 PPM
HARDNESS	NS	106 PPM	74 -153 PPM	Not regulated	Natural geology	153 PPM
MAGNESIUM	NS	14.72 PPM	9.50 - 25 PPM	Not regulated	Natural geology	25 PPM
POTASSIUM	NS	0.24 PPM	ND -1.10 PPM	Not regulated	Natural geology	1.10 PPM
SODIUM	NS	7.42 PPM	6.70 - 8.20 PPM	Not regulated	Natural geology	8.20 PPM
BARIUM	1000 PPB	23 PPB	ND - 110 PPB	<2000 PPB	Natural geology	110 PPB
pH units	6.5 to 8.5 pH units	6.78 pH units	6.4 - 7.0 pH units	6.5 to 8.5 pH units	A measure of the acidity of water	7.0 pH Units
SPECIFIC CONDUCTANCE	1600 umhos/cm	262 umhos/cm	210 -350 umhos/cm	< 1600 umhos/cm	A measure of substances that form ions when in water.	350 umhos/cm
TURBIDITY						
Water Production Site	Performance Standard (Treatment Technique)			Highest Single Measurement (NTU)	Lowest Monthly % of Samples Meeting Turbidity Limits	
Dry Creek Well Field	≤1.0 NTU in 95% of the measurements taken each month, and shall not exceed 5.0 NTU at any time			0.58	100%	
Fitch Mountain Well Field *Gauntlett Well Field (Under Surface Water Influence)	≤0.5 NTU in 95% of the measurements taken each month, and shall not exceed 5.0 NTU at any time			0.55	99.96%	
* Gauntlett Well Field was not used in 2004 due to upgrades to the wells and electrical equipment						
Manganese average level result determined by production wells sampling results. Water received by customers is blended from wells with varying concentrations of manganese. Blending results in an average manganese concentration of 20 PPB less than the MCL of 50 PPB for manganese.						

Abbreviations

~ - Average Rule

< - Less than

ND - Not detected at the lowest value detectable by the test procedure

NS - No standard set at this time

NTU - Nephelometric Turbidity Unit

pCi/L - Pico-curies per liter is a measure of radiation

PPB - Parts per billion, or micrograms per liter

PPM - Parts per million, or milligrams per liter

umho/cm - micromhos per centimeter

DEFINITIONS

Copper - The governing regulation to determine whether copper is present above or below the standard is based on the 90th percentile value for the most recent testing. The 90th percentile is the ninth highest value measured of ten test results. The 90th percentile value for the 2002 testing performed in Healdsburg was 840 ppb. The maximum contaminant level, or action level for copper is 1300 ppb. None of the 30 Healdsburg test sites exceeded the action level.

Fluoridation - Water is dosed with fluoride for dental benefit. The water is dosed to a concentration of 0.8 milligrams per liter per Health Department regulation. Knowing that the water is fluoridated could potentially affect decisions for you and your family regarding fluoride supplements and treatments.

Manganese - The concentration in some production wells exceeds the secondary MCL. Manganese in excess of the MCL can chemically react with the chlorine added to disinfect the water and form a dark colored precipitate. The precipitate can stain plumbing fixtures such as sinks and toilet bowls, and may cause staining of light colored laundry. Water received by customers is blended with varying concentrations of manganese. Blending is an average manganese concentration of 31 ppb, less than the MCL of 50 ppb for manganese.

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

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

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of disinfectant added for water treatment below which there is no known or expected risk to health. MRDL's are set by the U.S. Environmental Protection Agency.

Nephelometric Turbidity Unit - (NTU) A turbidity unit is a measurement of the clarity of the water.

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

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.

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

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

Turbidity - A measure of the clarity of water. A higher turbidity value indicates more particles in the water. The particles in themselves are not usually a health concern, but they may shield microorganisms from the effects of disinfection (chlorination). Turbidity is monitored because it is a good indicator of water quality. In 2004, the turbidity measured at the City's groundwater wells was less than the MCL standard in all 6014 report periods. The turbidity measured at the City's surface water influenced wells was less than the MCL standard in 2522 of 2523, or 99.96% of the report periods.

Customer Views Welcome

If you are interested in learning more about your water utility or water quality, you can direct your questions, concerns or comments to the Public Works Department at (707) 431-3346.

Citizens may also address comments directly to the Healdsburg City Council, which meets the first and third Mondays of each month, 7:00 pm at 401 Grove Street. City Council meetings are open to the public.

HEALDSBURG'S DRINKING WATER

Healdsburg delivers treated water to its customers from two well fields located along the Russian River and one located along Dry Creek. In 2004 the City's Gauntlett Well Field was not used as a water source. The sources of drinking water (both tap water & 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 other matter, and in some cases radioactive material and can pick up substances resulting from the presence of animals or from human activity.

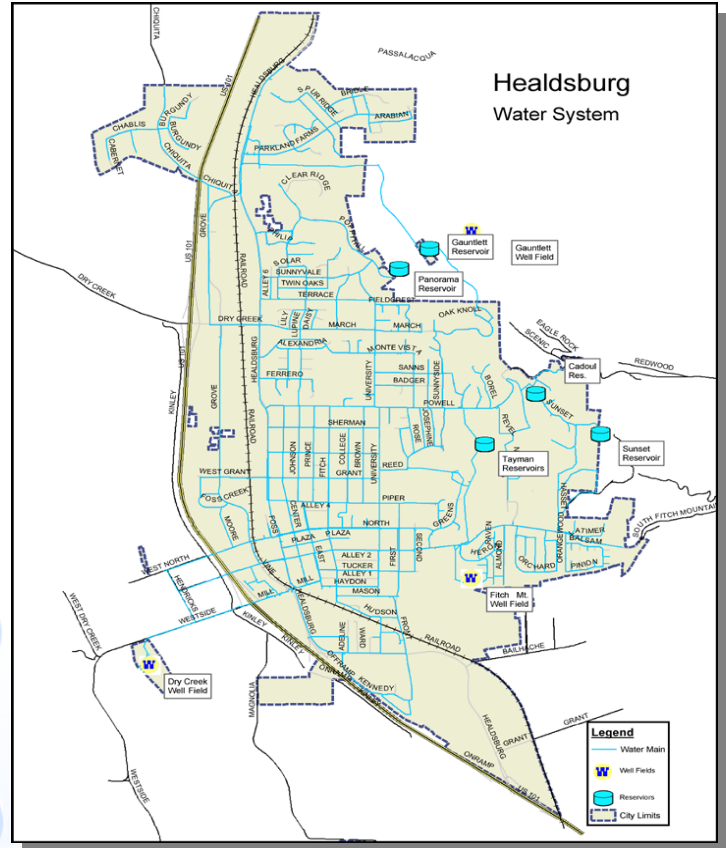
Contaminants that may typically be present in untreated source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from agricultural livestock operations, wildlife, septic systems and sewage treatment plants.
- Inorganic contaminants, such as salts, and metals, that 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, which 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, that 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, which can be naturally occurring or be the result of oil and gas production and mining activities.

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 USEPA and the California Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants present in water provided by public water systems. Food and Drug Administration (FDA) regulations also establish limits for contaminants in bottled water.

Capital Improvement Projects

Gauntlett Well Field: Because the City's Gauntlett Well Field will be operated year-round once the new Gauntlett/Fitch Water Treatment facility is finished (see page 1), the City completed several projects in 2004 to modernize the electrical equipment, pumps and wells. This included rehabilitating the wells, pumps and motors and installation of new modernized electrical controls to operate the wells.



Drinking Water Source Assessment

The City of Healdsburg prepared a "Drinking Water Source Assessment" in December 2001. Prepared in accordance with guidelines issued by the State Department of Health Services, the purpose of the Source Assessment is to determine if the water sources of the community are vulnerable to contamination. The Source Assessment is available for review at the Community Development Center, 435 Allan Court. The Source Assessment concludes that the water supply is vulnerable to the following:

VULNERABILITIES	HAZARDS
Illegal dumping/spills	Chemical/biological
Transportation corridors	Chemical
Leaking tanks	Chemical
Agricultural activities/drainage	Chemical/biological/turbidity
Sewer/septic systems	Biological
Animal operations	Biological/turbidity
Repair shops	Chemical
Gravel mining	Turbidity
Government equipment/maintenance yard	Chemical