



City of Healdsburg 2011 Consumer Confidence Report

Healdsburg Water Meets or Exceeds All State & Federal Standards – PWS ID # 4910005

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

We are pleased to provide you with this year's Annual Consumer Confidence Report. In 2011, the City of Healdsburg 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. We are pleased to inform you that your water met or surpassed all state & federal water quality standards during this reporting period.

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.

Where Does My Tap Water Come From?

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 other matter, and in some cases radioactive material. This runoff water can pick up substances resulting from the presence of animals or from human activity. The City of Healdsburg delivers treated water to its customers from two well fields located along the Russian River and one located along Dry Creek.

The City of Healdsburg prepared a "Drinking Water Source Assessment" in December 2001. Prepared in accordance with guidelines issued by the State Department of Public Health Services, the purpose of the Source Assessment is to determine if the water sources of the community are vulnerable to contamination.



Where Does My Tap Water Come From? (continued)

Ground-water supplies are considered most vulnerable to automobile gas stations, chemical/petroleum processing/storage yards, parks, freeway/state highway transportation corridors, herbicide use in road rights-of-way, water supply wells, drycleaners, metal plating/finishing/fabricating, automobile repair shops, utility station maintenance areas, and wastewater treatment plants. The Source Assessment is available for review at the Community Development Center, 435 Allan Court.

What Does the EPA Say About Drinking Water Quality?

To ensure that tap water is safe to drink the EPA & CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The City of Healdsburg conducts regular testing as prescribed by the state and federal agencies to ensure that none of the contaminants listed below are detected at levels considered to be unsafe by the health agencies. 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 can result from urban storm-water runoff, industrial or domestic wastewater discharges, oil and gas production, oil leaks from vehicle engines, mining, or farming;
- **Pesticides and Herbicides**, that 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban storm-water runoff, agricultural applications, and septic systems;
- **Radioactive Contaminants** that can be naturally occurring or can be the result of oil and gas production and mining activities.

What Affects the Contents of water?

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. As water travels over the surface of the land or through the ground, it can pick up substances resulting from the presence of animals or from human activity. 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791. You can get more information on tap water by logging on to the following helpful website: www.epa.gov/OGWDW (Federal EPA's website)

Should I Take Additional Precautions?

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791.

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 401 Grove Street, Healdsburg or by calling (707) 431-3346. Citizens may also present comments directly to the Healdsburg City Council, which meets on the first and third Monday of each month at 6:00 p.m., at 401 Grove Street. City Council meetings are open to the public. www.ci.healdsburg.ca.us

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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 2011 testing performed in Healdsburg was <1300 ppb. The MCL, or action level for copper is 1300 ppb. One of the thirty-three test sites exceeded the action level.

Fluoridation - Healdsburg's water is dosed with fluoride for dental benefits pursuant to a 1952 City of Healdsburg voter initiative (Ordinance No. 1952-14). The water is dosed to a concentration of 0.8 milligrams per liter in accordance with CDPH regulations. Knowing that the water is fluoridated could potentially affect decisions for you and your family regarding fluoride supplements and other dental treatments.*For more information on Fluoridation, please visit the CDPH website at www.cdph.ca/certlic/drinkingwater/Pages/Fluoridation.aspx.

Lead - The governing regulation to determine whether lead 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 2008 testing performed in Healdsburg was < 5 ppb. The maximum contaminant level, or action level for lead is <15 ppb. None of the thirty-three test sites exceeded the action level.

Manganese - The concentration in some production wells exceeds the secondary MCL. Manganese in excess of the secondary MCL can chemically react with the chlorine added to disinfect the water and form a dark colored precipitate. This precipitate can stain plumbing fixtures such as sinks and toilet bowls, and may cause staining of light colored laundry. By blending water from a number of sources, the average manganese concentration was <20 ppb in 2011. The MCL for Manganese is 50 ppb.

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.

Maximum Contaminant Level Goal (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

Maximum Residual Level Disinfectant Level (MRDL) - The level of disinfectant 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. MRDLGs are set by the U.S. EPA.

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 contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the U.S. EPA.

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

Secondary Maximum Contaminant Level (SMCL) - The level set to protect the odor, taste, and appearance of drinking water.

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

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How Do I Read the Water Quality Table?

Detected substances that exceed a Public Health Goal (PHG) or Maximum Contaminant Level Goal (MCLG) must be reported. PHGs are set by the California EPA. PHGs provide more information on the quality of drinking water to customers, and are similar to their federal counterparts MCLGs. Both PHGs and MCLGs are levels that are of an advisory nature only and non-enforceable. Both PHGs and MCLGs are concentrations of a substance for which there are no known or expected health risks. The regulations require a listing of the PHG and/or MCLG for each detected chemical contaminant, a definition of terms, information on violations and a statement about health concerns of chemicals detected above regulatory limits. Some additional substances of interest are listed even though no PHG or MCLG have been established.

The table in this report lists all of the contaminants for which state or federal standards have been set that the City detected during the current reporting period. The presence of these contaminants does not necessarily mean that the water poses a health risk. To review the quality of your drinking water, compare the highest concentration detected and the corresponding MCL. As you can see, none of the levels reported exceeded those considered harmful by state and federal agencies.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Healdsburg is responsible for providing high quality drinking water, but can not control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water you may wish to have your water tested. Information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water hotline, or at <http://www.epa.gov/safewater/lead>.

What Are Drinking Water Standards?

There are over 100 standards set by the California Department of Public Health Services (CDPH) for compounds that could be found in drinking water. The City has sampled for most of the compounds and if they were not detected they are still included in the Water Quality Table.

There are two types of limits, known as standards. Primary standards set limits for substances that may be harmful to humans if consumed in large quantities over certain periods of time. Secondary standards are limits for substances that could affect the water's taste, odor, and appearance. Regulations set a Maximum Contaminant Level (MCL) for each of the primary and secondary standards. The MCL is the highest level of a substance that is allowed in drinking water.

Abbreviations

ppm- Parts per million
ppb- Parts per billion
N/A- Not applicable
NS- No Standard

NTU- Nephelometric turbidity units- clarity of water
pCi/l- A measure of radiation
ND- Constituent not found in reporting limit
µs/cm- A unit expressing the amount of electrical conductivity of a solution

Healdsburg Water Utility facts:

- *We produced over 650 million gallons of water in 2011.*
- *The highest water production month was July, with 84 million gallons produced.*
- *There is approximately 40+ miles of underground water pipe delivering water to residences and businesses.*
- *The City operates 13 wells, 7 reservoirs, 4 pump stations, 6 pressure reducing stations and 3 treatment facilities to produce your water.*
- *There are 4386 water utility connections in Healdsburg.*

TREATED WATER QUALITY SUMMARY - Listed below are 27 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. For certain substances with concentrations that do not change frequently, the State allows the City to monitor less frequently than once a year. In these cases the most recent sample data are included.

| SUBSTANCE | YEAR SAMPLED | 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 | 2011 | 1.30 PPM | 0.76 PPM | 0.14 - 3.80 PPM | < 1.30 PPM | Internal corrosion of household plumbing systems. | 3.80 PPM |
| LEAD | 2011 | 15 PPB | < 5.0 PPB | < 5.0 to 29 PPB | < 0.2 PPB | Internal corrosion of household plumbing systems. | 29 PPB |
| REGULATED IN THE DISTRIBUTION SYSTEM | | | | | | | |
| TOTAL TRIHALOMETHANES | 2011 | 80 PPB | 21.2 | 2.65 - 45.38 PPB | NS | Disinfection by-products | 45.38 PPB |
| HALOACETIC ACIDS | 2011 | 60 PPB | 14.15 PPB | <1.0 - 40.10 PPB | NS | Disinfection by-products | 40.1 PPB |
| CHLORINE | 2011 | 4 PPM | 0.78 PPM | 0.20 - 1.46 PPM | 4 PPM | Disinfectant added for drinking water treatment | 1.46 PPM |
| REGULATED DURING TREATMENT | | | | | | | |
| FLUORIDE | 2011 | 2 PPM | 0.89 PPM | 0.0.09 - 1.10 PPM | 1 PPM | Leaching from natural deposits. Our water system treats your water by adding fluoride in order to help prevent dental caries. The fluoride levels in the treated water are maintained within a range of 0.70 to 1.30 ppm as required by Department regulations. | 1.10 PPM |
| NITRATE (as NO3) | 2011 | 45 PPM | 2.20 PPM | <2.0 - 6.2 PPM | < 45 PPM | Runoff and leaching from fertilizer use, septic tanks, and erosion of natural deposits | 6.2 PPM |
| GROSS ALPHA EMITTERS | 2011 | 15 pCi/L | 4.26 | 0.0 - 4.26 pCi/L | 0 | Erosion of natural deposits. | 4.26 pCi/L |
| Radium 228 | 2006 | 5 pCi/L | ND | ND | < 0.019 pCi/L | Erosion of natural deposits. | ND |
| TURBIDITY-Dry Creek Well Field (Groundwater) | 2011 | TT =95% of samples <1.0 NTU | 0.05 NTU | 0.02 - 0.32 NTU | N/A | The typical source of turbidity is soil runoff. | 0.32 NTU |
| TURBIDITY-Fitch Mtn. Well Field (Groundwater Under Surface Water Influence) | 2011 | TT =95% of samples <0.30 NTU | 0.07 NTU | 0.03 - 0.28 NTU | N/A | The typical source of turbidity is soil runoff. | 0.28 NTU |
| TURBIDITY-Gauntlett/Fitch Micro-Filtration Facility | 2011 | TT =95% of samples <0.10 NTU | 0.03 NTU | 0.01 - 1.0 NTU | N/A | The typical source of turbidity is soil runoff. | 1.0 NTU |
| SECONDARY STANDARDS and ADDITIONAL CONSTITUENTS ANALYZED TO GIVE AN IDEA OF QUALITY. | | | | | | | |
| ALKALINITY | 2011 | NS | 131 PPM | 74 - 180 PPM | Not regulated | Natural geology | 180 PPM |
| ALUMINUM | 2011 | 1000 PPB | <50 PPB | <50 - 140 PPB | 200 PPB | Erosion of natural deposits. | 140 PPB |
| ARSENIC | 2011 | 10 PPB | <2 PPB | ND - <2 | .004 PPB | Erosion of natural deposits, runoff from orchards, and glass and electronics production wastes | <2 PPB |
| BARIUM | 2011 | 1000 PPB | 82 PPB | <100 - 140 PPB | < 2000 PPB | Erosion of natural deposits. | 140 PPB |
| BICARBONATE | 2011 | NS | 158 PPM | 98 - 210 PPM | Not regulated | Natural geology | 210 PPM |
| CALCIUM | 2011 | NS | 19.6 PPM | 15 - 27 PPM | Not regulated | Natural geology | 27 PPM |
| CHLORIDE | 2011 | 500 PPM | 7.88 PPM | 6.0 - 11 PPM | < 500 PPM | Runoff / Leaching from natural deposits. | 11 PPM |
| HARDNESS | 2011 | NS | 130 PPM | 75 - 173 PPM | Not regulated | Natural geology | 173 PPM |
| IRON | 2011 | 300 PPB | <100 PPB | ND - 350 PPB | < 300 PPB | Leaching from natural deposits | 350 PPB |
| MANGANESE | 2011 | 50 PPB | <20 PPB | ND - 90 PPB | < 50 PPB | Leaching from natural deposits | 90 PPB |
| MAGNESIUM | 2011 | NS | 18.48 PPM | 11 - 30 PPM | Not regulated | Natural geology | 30 PPM |
| pH units | 2011 | 6.5 to 8.5 pH units | 7.04 pH units | 6.84 - 7.22 pH units | 6.5 to 8.5 pH units | A measure of the acidity of water | 7.22 pH Units |
| SODIUM | 2011 | NS | 7.95 PPM | 6.3 - 9.4 PPM | Not regulated | Natural geology | 9.4 PPM |
| SPECIFIC CONDUCTANCE | 2011 | 1600 umhos/cm | 306 umhos/cm | 190 - 390 umhos/cm | < 1600 umhos/cm | A measure of substances that form ions when in water. | 390 umhos/cm |
| SULFATE | 2011 | 500 PPM | 18.5 PPM | 14 - 32 PPM | < 500 PPM | Runoff / Leaching from natural deposits. | 32 PPM |
| TOTAL DISSOLVED SOLIDS | 2011 | 1000 PPM | 163.5 PPM | 87 - 220 PPM | < 1000 PPM | Runoff / Leaching from natural deposits. | 220 PPM |
| ZINC | 2011 | 5000 PPB | <50 PPB | <50 - 120 PPB | NS | Runoff / Leaching from natural deposits, industrial wastes. | 120 PPB |