# 2008 CITY OF HEMET DRINKING WATER QUALITY REPORT

The City of Hemet is pleased to provide customers with this information about the quality of our drinking water. This annual report tells you where our water comes from, what our tests show about the water, and other important information. The safety of our water supply is our top priority.

**QUESTIONS?**
If you have questions about this report, contact Armando Torres, Water Quality / Conservation Specialist at (951) 765-3711 or by email atorres@cityofhemet.org.

**ESPANOL**
Este informe contiene informacion muy importante sobre la calidad de su agua de beber. Favor de leerlo a hablar con alguien que lo entienda bien. Para asestencia en espanol llame 765-3710.

## In this issue



## What is the report about?

The purpose of this report is to inform City of Hemet water customers about the sources and quality of our drinking water. The report includes details about where the City of Hemet's water originates, what it contains, and how it compares to standards set by regulatory agencies. All water suppliers are required by federal and state law to prepare and deliver to their customers a brief annual water quality report.

In 2008, we conducted tests for over 80 contaminants, and detected only one contaminant at a level higher than the State allows. As we told you at the time, our water temporarily exceeded drinking water standards due to a nitrate reading that exceeded the Maximum Contaminant Level (MCL) of 45 mg/L [milligrams per liter—equivalent to parts per million (ppm)], in violation of State standards. Our tests showed a nitrate level of 48 ppm in the water distrubtion system. The well producing this water was immediately taken out of service, and remains out of service. For more information about the health risks associated with nitrate, refer to "Important Health Information" on page 2 and the 2008 Water Quality Data Table on page 3.

The City of Hemet has two water supply sources. Local groundwater is pumped from both the Hemet and San Jacinto Groundwater Basins by eleven deep wells. Nine wells are in the Hemet Groundwater Basin and two wells are in the San Jacinto Groudwater Basin. Stormwater collected in basins infiltrates into the soil to eventually replenish our groundwater supply. In addition, the City of Hemet has one connection with Eastern Municipal Water District. This connection is used only as needed to supplement our water supply.

### Source water assessment

An assessment of the drinking water sources for the City of Hemet was completed in June 2002. City of Hemet wells are not considered vulnerable to any potential activities associated with contaminants detected in the water supply. The wells are considered most vulnerable to the following activities: sewer collection systems, a fire station, high density housing, and transportation corridors or road right of ways. To review a copy of this report, contact Ron Proze, City of Hemet Water Superintendent at (951) 765-3710.

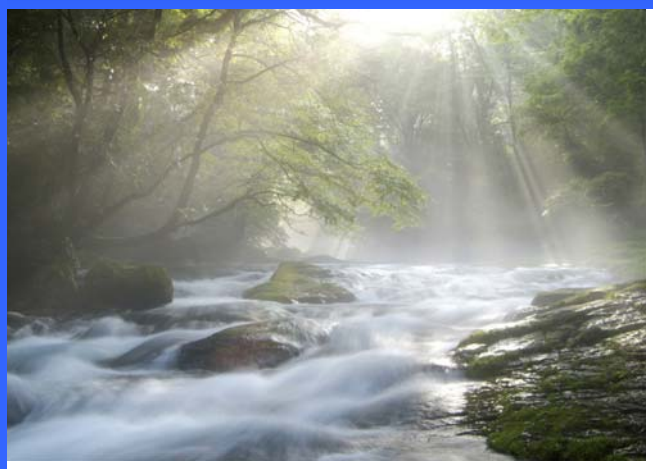
City of Hemet

## Why is there anything in drinking water?

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## Special precautions to those vulnerable to contaminants

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 Water Drinking Hotline (1-800-426-4791).



## How do drinking water sources become polluted?

The sources of drinking water (both tap water and bottled water) includes 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.

## Contaminant sources 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, 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, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
**Radioactive contaminants**, can be naturally-occurring or be the result of oil /gas production and mining activities.

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

## Important health information

**Nitrate**: Nitrate in drinking water at levels above 45 mg/L [milligrams per liter—equivalent to parts per million (ppm)] 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

**Trichloropropane (1,2,3-TCP):** California Department of Public Health (Department) describes 1,2,3-TCP as having various industrial uses and historic pesticide uses, with the primary possible contaminating activity appearing to be hazardous waste sites. Department drinking water notification level for 1,2,3-TCP, first established in 1999, is 0.005 micrograms per liter (µg/L)-equivalent to parts per billion (ppb). The average level of 1,2,3-TCP in our system was 0.03 µg/L (ppb) in 2006. Some people who use water containing 1,2,3-TCP in excess of the notification level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

## Public participation opportunity

The Hemet City Council meets twice each month on the second Tuesday at 1:00 PM and on the fourth Tuesday at 7:00 PM at 450 E. Latham Avenue.

Public comment is accepted during "Communications from the Public" on the agenda.

City of Hemet

# 2008 WATER QUALITY DATA TABLE

## KEY TO ABBREVIATIONS

| | |
|---|---|
| AL | Regulatory Action Level |
| MCL | Maximum Contaminant Level |
| MCLG | Maximum Contaminant Level Goal |
| Micromhos | A measure of conductivity (electric current in water) |
| NC | Not Collected |
| ND | Not Detected |
| NS | No Standard |
| NTU | Nephelometric Turbidity Unit (a measure of water cloudiness) |
| pCi/L | Picocuries per liter (a measure of radioactivity) |
| PHG | Public Health Goal |
| ppb | Parts per billion |
| ppm | Parts per million |

## IMPORTANT DRINKING WATER DEFINITIONS

**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.

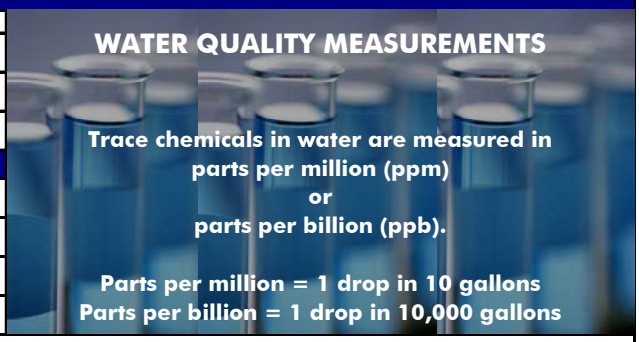
**Maximum Contaminant Level Goal (MCLG)**: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Proectection Agency.

**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.

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

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

| CONTAMINANT | UNIT | STANDARDS | | CITY OF HEMET WELL WATER | | VIOLATION | YEAR SAMPLED | TYPICAL SOURCE OF CONTAMINANT |
|---|---|---|---|---|---|---|---|---|
| | | STATE MCL/AL | PHG (MCLG) | AVERAGE | RANGE | | | |
| **PRIMARY STANDARDS - Mandatory Health Related Standards by California Department of Health Services** | | | | | | | | |
| **Microbiological Contaminants** | | | | | | | | |
| Total Coliform Bacteria | Sample | MCL = More than 5.0% of monthly samples positive | | 572 samples collected; 2 samples positive ● | | NO | 2008 | Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. |
| **Radioactive Contaminants** | | | | | | | | |
| Gross Alpha particle activity | pCi/L | 15 | NS | 2.9 | .08-8.82 | NO | 2007-08 | Erosion of natural deposits. |
| **Inorganic Contaminants** | | | | | | | | |
| Aluminum | ppb | 1000 | 600 | 83 | ND-100 | NO | 2007-08 | Erosion of natural deposits; residue from some surface water treatment processes. |
| Arsenic | ppb | 10 | 4 | 2 | 2.0-2.0 | NO | 2007-08 | Erosion of natural deposits; runoff from orchards, glass/electronics production wastes. |
| Barium | ppb | 1000 | 2000 | 83 | ND-100 | NO | 2007-08 | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits. |
| Fluoride | ppm | 2 | 1 | 0.3 | 0.2-0.5 | NO | 2007-08 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |
| **Nitrate (N03)** | **ppm** | **45** | **45** | **30** | **15-48** | ◆ **YES** | **2008** | **Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits** |
| Selenium | ppb | 50 | 50 | 5.5 | 5.0-6.6 | NO | 2007-08 | Discharge from petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines/chemical manufacturers; runoff from livestock lots (feed additive). |
| **Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors** | | | | | | | | |
| Total Trihalomethanes | ppb | 80 | N/A | Single Sample Results: 1.8 | | NO | 2008 | Byproduct of drinking water disinfection. Some people who use water containing trihalomethanes 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. |
| **SECONDARY STANDARDS - Aesthetic Standards Established by California Department of Health Services** | | | | | | | | |
| Iron | ppb | 300 | NS | 66 | ND-100 | NO | 2007-08 | Leaching from natural sources; industrial wastes. |
| **METALS - As a by-product of corrosion of consumer's plumbing** | | | | | | | | |
| Copper | ppb | AL = 1300 | 300 | 90th percentile of 30 samples: 190 ppb | | NO | 2008 | Lead and copper are regulated in a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumer's tap. The federal action level (AL), which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1300 ppb for copper and 15 ppb for lead. |
| Lead | ppb | AL = 15 | 2 | 90th percentile of 30 samples: ND | | NO | 2008 | |
| **OTHER CHEMICAL COMPOUNDS - Unregulated, for monitoring only** | | | | | | | | |
| | | NOTIFICATION LEVEL | | | | | | |
| Boron | ppb | 1000 | | 75 | ND-100 | N/A | 2007-08 | |
| 1,2,3-Trichloropropane | ppb | 0.005 | | 0.03 | 0-0.17 | N/A | 2005-06 | |
| Vanadium | ppb | 50 | | 7.1 | ND-57 | N/A | 2005-06 | |
| **ADDITIONAL CONSTITUENTS ANALYZED** | | | | | | | | |
| Hardness | ppm | NS | | 241 | 78-330 | N/A | 2007-08 | |
| pH | pH units | NS | | 7.7 | 7.4-8.3 | N/A | 2007-08 | |
| Potassium | ppm | NS | | 5.9 | 3.7-7.8 | N/A | 2007-08 | |
| Sodium | ppm | NS | | 90 | 73-120 | N/A | 2007-08 | |




● In 2008, the City of Hemet collected 572 bacteriological samples to test for the presence of bacteria, including total coliform bacteria and E. coli. Two of the 572 bacteriological samples, one taken on April 23, 2008 and the other taken on May 1, 2008, tested positive for total coliform, but negative for E. Coli. Per procedures prescribed by the California Department of Public Health, resampling was conducted and all samples were negative. As a precaution, chlorine is added to the drinking water system to maintain a "residual" of 0.4 ppm to eliminate any bacteria that may enter the system.

◆ On July 14, 2008, the City of Hemet received notification that a sample taken from the water distribution system on July 9, 2008 had a nitrate level of 48 ppm, which exceeded the MCL of 45 ppm. To address this exceedance / violation, the well producing the water was immediately removed from service and remains out of service. All high nitrate wells in our system are sampled monthly and the water from these wells is blended to meet Federal and State standards. Potential adverse health effects: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

## Water Wise Landscaping

Give your hose a rest! Use less-than-thirsty plants in your garden. Keep turf grass (the thirstiest plant of all!) to a minimum. Look for plants that are well-suited to regional and local conditions.

# Water Saving Tips

**California's main water sources have been severely impacted by record dry conditions.** And we're already using our reserves to supply our everyday water. Our water situation is serious.

But here's how you can help.

## INDOOR

| *What you can do:* | *How much you can save:* |
|---|---|
| Turn off the water when you brush your teeth | 3 gallons per day |
| Shorten your showers by one or two minutes | 5 gallons per day |
| Fix leaky faucets | 20 gallons per day |
| Wash only full loads of laundry | 15 to 50 gallons per load |

*Talk to your family and friends about saving water.*
*If everyone does a little, we all benefit a lot.*

## OUTDOOR

| *What you can do:* | *How much you can save:* |
|---|---|
| Water your yard only before 6 a.m. to reduce evaporation and interference from wind. | 25 gallons per day |
| Install a smart sprinkler controller. | 40 gallons per day |
| Use a broom instead of a hose to clean driveways and sidewalks. | 150 gallons each time. |
| Check your sprinkler system for leaks, overspray and broken sprinkler heads. | 500 gallons a month. |

*Mulch! Save hundreds of gallons a year by using organic mulch around plants to reduce evaporation.*

For more information about saving water visit www.bewaterwise.com

City of Hemet