City of Hemet

Drinking Water Quality Report ~ 2009

What is in this Report?

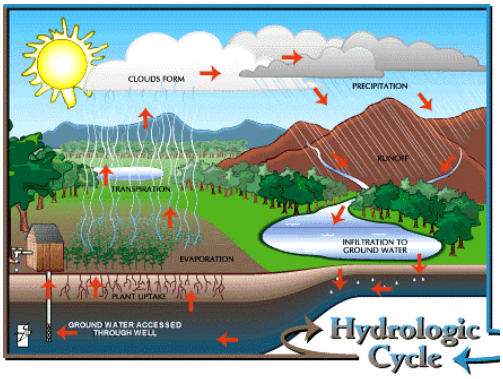
The purpose of this report is to inform City of Hemet water customers about the sources and quality of our drinking water. The report includes details about where the City of Hemet's water originates, what it contains, and how it compares to standards set by regulartoy agencies. All water suppliers are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

Last year, tests were conducted in our drinking water system for over 80 contaminants and only one contaminant was detected at a level higher than the State allows. Water from one of the wells operated by Eastern Municipal Water District exceeded the Maximum Contaminant Level (MCL) for Manganese in violation of State standards. For more information, see *2009 Water Quality Data Table Footnotes* on Page 4.

The City of Hemet received a notice of violation from the California Department of Public Health (CDPH) because Well No. 13 was not monitored for nitrate during the 2009 calendar year as required by California law. This well was sampled in 2008 and the sample result was below the detection level for reporting, which is consistent with past levels detected at this well. In additiion, this well was only in service for two months during 2009. As a result, CDPH determined the monitoring deficiency did not result in a risk to public health. Well No. 13 was monitored for nitrate in January 2010 and the results showed the nitrate level was below the detection level for reporting.

Our Water Sources

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.

Report prepared by

City of Hemet Water Department
3777 Industrial Avenue
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951 765-3710

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.

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.

Need More Information?

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

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).

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.

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.

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.

Lead in Drinking Water: 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 Hemet Water Department is responsible for providing high quality drinking water, but cannot 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.

2009 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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		EMWD CONNECTIONS		VIOLATION	YEAR SAMPLED	TYPICAL SOURCE OF CONTAMINANT
		STATE MCL/AL	PHG (MCLG)	AVERAGE	RANGE	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; 1 sample postive [1]		N/A	N/A	NO	2009	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
Inorganic Contaminants										
Aluminum	ppb	1000	600	51.3	0.05-110	ND	ND	NO	2008-2010	Erosion of natural deposits; residue from some surface water treatment processes.
Arsenic	ppb	10	4	2.3	2-3.4	ND	ND	NO	2008-2010	Erosion of natural deposits; runoff from orchards, glass/electronics production wastes.
Cadmium	ppb	5	40	1.3	1-3	ND	ND	NO	2008-2010	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.
Fluoride	ppm	2	1	0.4	0.2-0.7	0.35	0.3-0.4	NO	2008-2010	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (N03)	ppm	45	45	15.6	2-35	ND	ND	[2] YES	2008-2010	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 capactiy 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.
Selenium	ppb	50	50	5.6	5-7.7	ND	ND	NO	2008-2010	Discharge from petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines/chemical manufacturers; runoff from livestock lots.
SECONDARY STANDARDS - Aesthectic Standards Established by California Department of Health Services										
Chloride	ppm	500	NS	164	45-500	18.5	18-19	NO	2008-2010	Leaching from natural sources; industrial wastes.
Iron	ppb	300	NS	130	<100-240	28	1-117	NO	2005-2006	Leaching from natural sources; industrial wastes.
Manganese	ppb	50	NS	ND	ND	64	38-90	[3] YES	2008-2010	Leaching from natural deposits.
Specific Conductance	micromhos	1600	NS	1050	740-1900	445	430-460	NO	2008-2010	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	NS	166	110-240	34	21-48	NO	2008-2010	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	NS	647	470-1200	315	300-330	NO	2008-2010	Runoff/leaching from natural deposits.
METALS - As a by-product of corrosion of consumer's plumbing										
Copper	ppb	AL = 1300	300	90th percentile of 30 samples: 190 ppb		90th percentile of 50 samples: 200 ppb		NO	2007 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 every three years. 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		90th percentile of 500 samples: <5 ppb One sample exceed the AL		NO	2007 2008	
ADDITIONAL CONSTITUENTS ANALYZED										
Hardness	ppm	NS		231	77-360	125	123-130	N/A	2008-2010	
pH	pH units	NS		7.8	7.4-8.4	7.95	7.9-8	N/A	2008-2010	
Potassium	ppm	NS		5.4	3.3-7.5	<5	<5	N/A	2008-2010	
Fluoride	ppm	NS		117	78-260	47	42-53	N/A	2008-2010	

WATER QUALITY MEASUREMENTS
Trace chemicals in water are measured in parts per million (ppm)or parts per billion (ppb).
Parts per million = 1 drop in 10 gallons
Parts per billion = 1 drop in 10,000 gallons

FOOTNOTES

[1][2][3] See next page.

2009 WATER QUALITY DATA TABLE FOOTNOTES

❶ In 2009, the City of Hemet collected 572 bacteriological samples to test for the presence of bacteria, including total coliform bacteria and E. coli. One of the 572 bacteriological samples, taken on May 20, 2009 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.

❷ In 2009, the City of Hemet received a notice of violation from the California Department of Public Health (CDPH) because Well No. 13 was not monitored for nitrate during the 2009calendar year as required by California law. This well as sampled in 2008 and the sample result was below the detection level for reporting, which is consistent with past levels detected at this well. As a result, the CDPH determined that the monitoring deficiency did not result in a risk to public health. Well No. 13 was monitored for nitrate in January 2010 and the results showed the nitrate level was below the detection level for reporting.

❸ In 2009, samples taken at one of Eastern Municipal Water District East Valley Wells exceeded the Maximum Contaminate Level for manganese of 50 ppb. This standard was established to address issues of aesthetics (discoloration), not health concerns. However, manganese at very high levels can pose a neurotoxic risk (Agency for Toxic Substances and Disease Registry (ATSDR), 2000; US EPA, 1996). Manganese is a required nutrient. A healthful diet provides adequate manganese for good nutrition. Typical dietary intake of about 1–10 mg manganese per day appears adequate for daily needs, according to ATSDR (2000).

But It Rained!

Why is California Still Facing Water Shortages?

Source: *California's Drought Update—March 1, 2010* published by the Department of Water Resources; Save Our Water – www.saveourh20.org

Although California has experienced significant precipitation in 2010, drought planning continues because defining when a drought is over depends on a variety of factors.

We know from past hydrologic records that it is not uncommon to have one or more average years within a continuing drought. Generally drought is a gradual crisis that takes several years to develop as stored water supplies are exhausted. Correspondingly, recovery from a drought would most likely take several years to replace stored water.

The current drought period beginning in 2007 has left a significant deficit in state reservoir's carry-over supplies. Water Year 2008-09 ended with 65 percent of average statewide runoff. Based on storage for key reservoirs at the end of the last three water years, the state entered the 2009-2010 Water Year, beginning October 1, with its key supply reservoirs at only 69 percent of average and 42 percent of capacity. The recent storms have raised reservoir levels a little. However, most major reservoirs are well below the historical averages for mid-winter storage.

While drought has played a large role in California's water shortage over the past few years, additional impacts have also contributed to the State's water challenges:

Population Growth—More people means more demand for water.

Climate Change—Warming temperatures, changing rain and snowfall patterns and rising sea levels are expected to affect the state's ability to manage water supplies. California's mountain snow pack—a key source of water—is expected to decline by 25% by 2050.

Environmental Problems—New court-ordered measures imposed to protect fish species are limiting water deliveries for many California cities, farms and businesses.

Aging Water Delivery System—Constructed primarily in the mid-20th century, our water delivery systems are struggling to keep up with the population growth and new environmental requirements.

Water for Tomorrow

With all of these challenges **we can no longer take a reliable water supply for granted**. State and local water managers are working on long-term solutions, but there is an immediate need for Californians to reduce their water use NOW.

Conservation is one of the key strategies of a comprehensive solution to the state's water challenges – and it's something we can all do today. Your efforts to save water can make a difference. Rethinking the way you use water – both indoors and outdoors – will help stretch limited supplies and ensure water is there when we need it.

10 Water Conservation Tips

1. Take shorter showers
2. Turn off the faucet when brushing teeth
3. Water your lawn only when it needs it
4. Use a broom to clean driveways and sidewalks
5. Adjust sprinklers so they don't water driveways and sidewalks
6. Only wash full loads of laundry
7. Run the dishwasher only when full
8. Fix leaky faucets and toilets
9. Use a shut-off nozzle on your hose
10. Plant California-friendly trees and plants

Learn more at the Save Our Water website www.saveourh2o.org.