



JOSHUA BASIN WATER DISTRICT

Consumer Confidence Report

Provide

*a high standard of water quality
and customer service at
responsible cost.*

Protect

*the water resources of the
Joshua Basin Water District.*

Promote

*cooperation and respect with customers,
employees, neighboring communities and
public-private agencies.*

District Water Supply Meets All Federal and State Standards

The District's 2007 Annual Water Quality Report shows that our drinking water supply again meets the strict standards for purity set by the U.S. Environmental Protection Agency (EPA) and California Department of Public Health. The tables on the following pages show the results of the District's monitoring from January 1 to December 31, 2007.

The District routinely monitors the water supply to ensure that impurities remain at low levels to provide high quality, safe drinking water. While it is common to find impurities in most water sources – *including* bottled water – the federal and state governments set strict standards on the allowable level of impurities.

As indicated in the tables, the District did not exceed any maximum contaminant level or any other water quality standard. Some contaminants were not even detectable at the testing limit. The presence of contaminants does not necessarily indicate that the water poses a health risk.

The District's water supply comes from four District-owned wells located throughout the community that draw from underground aquifers. Small amounts of contaminants may seep into the groundwater from a variety of sources including erosion of natural mineral deposits, soil runoff, leaching from septic tanks and agricultural processes, and household plumbing system corrosion. seepage accounts for an extremely low amount of contaminants in the District's water supply.

"We are committed to ensuring a safe water supply for our customers," said Joe Guzzetta, the District's general manager. "One way we are doing this is through our contract with the United States Geological Survey (USGS)." USGS constructed and is testing a new monitoring well to determine the impact of septic tank leach fields on the aquifer and the potential to recharge the aquifer by percolating State Project Water. The results of these studies will provide the District with information that will be used to manage the quantity and quality of our water supply well into the future.

Additional Information

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800) 426-4791.

For more information on the District's water quality, please contact Joe Bocanegra, the District's Interim Chief of Operations, at (760) 366-8438. Additional copies of this report are available by contacting the District.

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

2007 Water Quality Report Highlights

The District's drinking water easily complies with all federal and state water quality standards.

The water supply did not exceed any maximum contaminant level or any other water quality standard.

Some contaminants were not even detectable at the testing limit.

In this report you will find many terms and abbreviations you may or may not be familiar with. To help you better understand these terms we've provided the following 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 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.

Primary Drinking Water Standard (PDWS): MCLs or 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

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

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

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).

The tables in this report list drinking water contaminants that were detected during the period January 1, 2007 through December 31, 2007. 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 do not change frequently.

Some of the data, though representative of the water quality, are more than one year old.

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	22	ND	None	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	22	.067	None	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	47.8	38-67.3	None	None	Generally found in ground & surface water.
Hardness (ppm)	81.6	65-112.5	None	None	Generally found in ground & surface water.

Contaminants that may be present in source water include:

- ◆ *Microbial contaminants*, such as viruses and bacteria, which 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*, 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, which are byproducts 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.

Certain minerals are radioactive and may emit forms of radiation known as alpha, photons and beta radiation. Some people who drink water containing alpha, beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

SAMPLING RESULTS FOR DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD					
Chemical or Constituent	Level Detected	Range of Detections	MCL or [MRDL]	PHG, (MCLG) [MRDLG]	Typical Source of Contaminant
Microbiological					
Turbidity	.39	ND-1.15	5	N/A	Soil Runoff
Radioactive					
Gross Alpha Particle Activity (pCi/L)	0.3	ND-0.8	15	(0)	Erosion of Natural Deposits
Inorganic					
Aluminum (ppm)	0.02	ND-0.06	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Chromium (ppb)	8.8	ND-18	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Flouride (ppm)	0.35	ND-0.69	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as nitrate, NO ₃) (ppm)	13.5	11-17	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (as nitrogen, N) (ppm)	0.05	ND-0.26	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Volatile Organic					
Methyl-tert-butyl ether (MTBE) (ppb)	ND	ND	13	13	Leakage from underground gasoline storage tanks and pipelines
Disinfection Byproducts, Residuals and Precursors					
TTHMs (Total Trihalomethanes) (ppb)	3.4	2.2-4.6	80	N/A	By-product of drinking water chlorination
Chlorine (ppm)	.61	.16-1.2	[4]	[4]	Drinking water disinfectant added for treatment

SAMPLING RESULTS FOR DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD					
Chemical or Constituent	Level Detected	Range of Detections	MCL	PHG	Typical Source of Contaminant
Aluminum (ppb)	15	ND-59	200		Erosion of natural deposits; residual from some surface water treatment processes
Color (units)	ND	ND	15		Naturally-Occurring organic materials
Copper (ppm)	0.067	ND-0.084	1.0		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Corrosivity	11.72	11.63-11.86	Non-Corrosive		Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Foaming Agents (MBAS) (ppb)	ND	ND	500		Municipal and industrial waste discharges
Iron (ppb)	51.3	ND-196.6	300		Leaching from natural deposits; industrial wastes
Manganese (ppb)	ND	ND	50		Leaching from natural deposits
Methyl-tert-butyl ether (MTBE) (ppb)	ND	ND	5		Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor-Threshold (units)	1	1-1	3		Naturally-Occurring organic materials
Turbidity (units)	0.39	ND-1.15	5		Soil runoff
Total Dissolved Solids (TDS) (ppm)	219	170-345	1000		Runoff/leaching from natural deposits
Specific Conductance (micromhos)	341	260-525	1600		Substances that form ions when in water; seawater influence
Chloride (ppm)	15	12-20	500		Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	49	12-150	500		Runoff/leaching from natural deposits; industrial wastes
There are no PHGs or MCLGs for constituents with secondary drinking water standards because secondary drinking water standards are set to protect the aesthetics of the water and PHG/MCLGs are based on health concern.					

DETECTION OF UNREGULATED CONTAMINANTS			
Chemical or Constituent	Level Detected	Notification Level	Health Effects Language
Chromium VI (Hexavalent chromium)	11-18	N/A	None
Vanadium (ppb)	10-15	50	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



JOSHUA BASIN WATER DISTRICT

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Regular Meetings of the Joshua Basin Water District Board of Directors

Are held on the first and third Wednesday of each month at 7:00 pm at the District Office

In September of 2007, the district conducted a lead and copper sample survey based off of a random pole of property locations within the district boundaries. The results of such testing, found on page 2, indicates that the district is compliant with the Department of Public Health regulations. 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. Joshua Basin Water District 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>."

Drinking Water Source Assessment Results

The California Department of Public Health completed a drinking water source assessment for Joshua Basin Water District on August 24, 2001. This assessment examined the District's Well 10 and 14 and determined these sources are most vulnerable to high-density residential septic systems. Septic systems can leach nitrates and other contaminants, and these impurities are compounded in highly populated developments.

The District completed a drinking water source assessment for Well 15 in February 2005. This assessment determined that Well 15 is most vulnerable to low-density septic systems. In this environment, septic systems are not always properly sited or properly maintained, contributing to contaminant leaching. Additionally, agricultural uses and pesticides contribute to the water source's vulnerability. A drinking water source assessment for Well 17 completed in December 2006 determined that the Well is most vulnerable to low-density septic systems, transportation corridors and NPDES/WDR permitted discharges.

The District has also completed several studies in association with the United States Geological Survey (USGS). The purpose of these studies was threefold: (1) improve the understanding of the geohydrologic framework of the Joshua Tree and Copper Mountain groundwater subbasins; (2) determine the distribution and quantity of recharge using field and numerical techniques; and (3) develop a groundwater flow model that can be used to help manage the water resources of the region.

Please contact Joe Bocanegra, Interim Chief of Operations, at (760) 366-8438 for more information. A summary of the assessment may be requested by contacting the sanitary engineer at (909) 383-4308 or (909) 383.4745 (fax). A copy of each source's complete assessment may be viewed at the Joshua Basin Water District office or at: DHS San Bernardino District Office, Government Center 4th Floor, 464 West Fourth Street, Suite 437, San Bernardino, California 92401.

Joshua Basin Water District is an equal opportunity provider.