Annual

JOSHUA BASIN WATER DISTRICT

Water Quality Report

Water Testing Performed in 2009

District Water Supply Meets All Federal and State Standards

Dear Joshua Basin Water District Customer:

We are pleased to present to you this year's Annual Water Quality Report. We're proud that your drinking water meets or exceeds all Federal and State requirements with no violations.

This report, required by State law, is designed to inform you about the water quality and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to be aware of the efforts we make to continually improve and protect our water resources. We are committed to ensuring the quality of your water.

The sources of drinking water in general (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells, though not all of these sources apply to Joshua Tree. Our water source comes from District-owned wells located throughout the community that draw from underground aquifers.

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. A source water assessment plan is available from our office that provides more information such as potential sources of contamination. We have learned through our monitoring and testing that some constituents have been detected, as in nearly all water systems. The EPA has determined that your water IS SAFE at these levels.

Contaminants that may be present in source water in general, not necessarily in Joshua Tree, 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 naturally occur or result from urban stormwater 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 stormwater 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 stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (DPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Joshua Basin Water District routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1st to December 31st, 2009. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Maximum Contamination Levels, (MCL`s) are very stringent limits set by State and Federal law which may not be exceeded. They are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was

developed) drinking two liters of water every day for a lifetime, only one of those people may experience the described health effect.

While Joshua Basin Water District is responsible for providing high quality drinking water, we cannot control the variety of materials, such as lead, used in plumbing components in homes and businesses. 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. When your water has been sitting for several hours, you can minimize the potential for lead exposure from your own water pipes 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 due to your own private water lines, 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.

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. The Environmental Protection Agency, and the Center for Disease Control provides guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 Well 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 2008 determined that Well 17 is most vulnerable to low-density septic systems, transportation corridors and National Pollutant Discharge Elimination System/Water Discharge Regulation permitted discharges.

Additional copies of this report are available by contacting the District. Please contact Randy Little, Production Supervisor, at 760-366-8438 for more information. A summary of the assessment may be requested by contacting the Districts 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: CDPH San Bernardino District Office, Government Center 4th Floor, 464 West Fourth Street, Suite 437 San Bernardino, CA 92401.

Joshua Basin Water District has completed several scientific studies in association with the Unites States Geological Survey (USGS). The purpose of these studies has been threefold: (1) improve the understanding of the geohydrologic framework of the water in the Joshua Tree and Copper Mountain groundwater sub-basins; (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. Our partnership with USGS in understanding our aquifer through these scientific studies, assures that we can continue delivering a high quality and dependable source of water in the future.

If you have questions about this water quality report, please call me or Randy Little at 760-366-8438. We at Joshua Basin Water District work around the clock to provide top quality water to every tap. We ask that all of our customers help us along the way. You can help preserve water quality by taking toxic cleaners, paint, oil and other chemicals to an authorized disposal site rather than putting them into the septic tank. Help preserve water quantity by conserving whenever you can, and by notifying the District if you suspect a mainline leak. Thank you for allowing us to continue providing your family with clean, quality water this year.

Sincerely,
Joe Guzzetta
General Manager

DEFINITIONS:

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

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

Maximum Contaminant Level (MCL) - (mandatory language) The `Maximum Allowed` (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - (mandatory language) The `Goal`(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL) - (mandatory language) 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) - (mandatory language) 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.

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 and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Secondary MCLs are set on the basis of aesthetics.

Test Results							
Contaminant	Violation Y/N	Level Detected	Unit of Measure	Range of Detection	MCLG	MCL	Likely Source of Contamination
Primary Drinking Water Standard							
Chromium (total)	N	15.33	Ppb	11-18	100	50	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	N	0.7	Ppm	0.56-0.89	1	2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as NO3)	N	14.33	Ppm	11-21	10	45	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite+Nitrate (measured as N)	N	3300	Ppb	2500-4800	n/a	10,000	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Disinfection Byproducts							
Total Trihalomethanes (TTHMs)	N	6.4	Ppb	5.5-7.3	n/a	80	By-product of drinking water disinfection
Chlorine (ppm)	N	0.69	Ppm	0.31-0.87	4	4	Drinking water disinfectant added for treatment
Secondary Drinking Water Standard							
Odor Threshold	N	0.99	Units	0-1	n/a	3	Naturally-occurring organic materials
Turbidity	N	0.06	Units	0-0.7	n/a	5	Soil Runoff
Unregulated Contaminants							
Vanadium	N	13.33	ug/l	11-15	n/a	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level (MCL) may have an increased risk of developmental effects, based on studies in laboratory animals.

Constituents Tested which were found to be Non-Detected in the Water Supply include:

1.Haloacetic acids (HAA5)
2.Antimony
3.Arsenic
4.Barium
5.Beryllium
6.Cadmium
7.Cyanide
8.Lead
9.Mercury
10.Nitrite (measured as Nitrogen)
11.Selenium
12.Thallium
13.Nickel
15.Total Coliforms
16.Radium 228
17.Aluminum
18.Silver
19. Color
20.Perchlorate

Este es un informe anual que contiene información muy importante sobre su agua potable. La calidad de esta agua conforma con todos los requerimientos legales del gobierno y del estado federal. Si desea mayor información, o tiene preguntas, por favor contáctenos a 760-366-8438.