



## East Niles Community Services District 2012 Water Quality Report for Groundwater and Surface Water

At East Niles Community Services District, we are committed to supplying our consumers with high-quality water. We are pleased to provide this annual water quality report, which includes information about where your water comes from, what it contains, and how it compares to state and federal standards.

### About Your Water Supply

East Niles Community Services District, has provided high-quality water utility services in the East Bakersfield area since 1955. To meet our customers' needs, we use a combination of local groundwater produced by 5 wells and imported surface water from the Kern County Water Agency and the California Water Service Company. If you have any questions, please contact: Larry White by phone at 661-871-2011 or on our website at [WWW.eastnilescsd.org](http://WWW.eastnilescsd.org)

1 Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer. Compliance with the uranium MCL is determined by calculating the average of four quarterly samples. The East Niles system is in compliance with the uranium MCL.

2. While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

3 Nitrate in drinking water at levels above 45 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 and result in 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 specific enzyme deficiencies. If you are caring for an infant or you are pregnant, you should ask advice from your health care provider.

4 For conventional surface water treatment plants, the treatment technique dictates that the turbidity level of the filtered water be less than or equal to 0.3 NTU (0.1 NTU for membrane plants) in 95% of the measurements taken each month and shall not exceed 1NTU at any time. The lowest monthly percent reported represents the lowest percentage of turbidity measurements that were less than or equal to 0.3 NTU in any given month. Turbidity is a measurement of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of filtration systems.

5 Secondary MCLs for iron, manganese, specific conductance, total dissolved solids, turbidity, and color were established entirely for aesthetic reasons. There is no negative health effect associated with these compounds.

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

### General Information About Water

The sources of drinking water (both tap and bottled) 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. 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 result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

### 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 storm water runoff, and septic systems.

**PESTICIDES and HERBICIDES**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

**RADIOACTIVE CONTAMINANTS**, which can be naturally occurring or be the result of oil and gas production and mining activities.

### Water Hardness

Water is considered soft if total hardness is less than 75 ppm; moderately hard at 75 to 150 ppm; hard at 150 to 300 ppm; and very hard at 300 ppm or higher. To determine total hardness of your water in grains per gallon, simply divide amount given in parts per million by 17.1.

**East Niles Community Services District convenes a regularly scheduled Board meeting on the third and fourth Monday of every month at our office located at 1417 Vale Street, Bakersfield, California 93306.**

**You are encouraged to attend.**

### Recommendation for Those Who May Have Special Water Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly people, 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 Drinking Water Hotline at 1-800-426-4791.

### Drinking Water Source Assessment and Protection Program (DWSAPP)

A source water assessment was conducted for six of the wells supplying groundwater to the East Niles CSD water system in June 2002. No contaminants have been detected in the water supply, however the source is considered most vulnerable to the following activities:

Sewer collection systems  
Historic gas stations  
Transportation corridors-Freeways/State Highways

A source water assessment was conducted for Well 21 in June 2008. The source is considered most vulnerable to the following activities :  
Septic Systems-low density (<1/acre)  
Wells-Agriculture/Irrigation

A copy of the assessment may be viewed at:  
East Niles Community Services District  
1417 Vale Street  
Bakersfield, California  
You may request a summary of the assessment be sent to you by contacting :  
Tim Ruiz, General Manager (661)871-2011

## LEAD

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. East Niles Community Services 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>.

### How to Read the Table

We test your water for more than 100 contaminants for which state and federal standards have been set. THIS TABLE LISTS ONLY THOSE THAT WERE DETECTED. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's (USEPA's) Safe Drinking Water Hotline at (800) 426-4791. The water quality test results shown in this table are divided into two main sections: those related to primary standards and those related to secondary standards. Primary standards protect public health by limiting the levels of contaminants in drinking water. Secondary standards are limits for substances that could affect the water's taste, odor, and appearance.

### Definitions of terms and abbreviations used in the table

**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.

**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.

**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 are economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**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. E.P.A.

**Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

**Notification Level (NL):** A health-based advisory level for an unregulated contaminant in drinking water. It is used by DHS to provide guidance to drinking water systems.

**Primary Drinking Water Standard or PDWS:** MCLs and MRDLs 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 which a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

<p>umhos/cm = measure of specific conductance  pCi/L = picoCuries per liter  (measure of radioactivity)  ppm = parts per million (milligrams per liter)  NTU = nephelometric turbidity unit  ppb = parts per billion (micrograms per liter)  SMCL = secondary maximum contaminant level  ND = none detected  n/a = not applicable</p>
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Primary Drinking Water Standards	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	East Niles CSD Groundwater		Imported Surface Water		Source of Substance
						Level Detected	Average	Result Range	Average	
<b>RADIOLOGICAL</b>										
Gross Alpha Particle Activity	2010-2012	pCi/L	15	(0)	No	3.32-6.65	4.0	ND-04.7	1.2	Erosion of natural deposits
Uranium <sup>1</sup>	2004-2012	pCi/L	20	0.43	No	1.63-6.5	2.0	ND-21	3.3	Erosion of natural deposits
Radium 228	2004-2012	pCi/L	5	(0)	No	0.4	0.4	ND-1.9	.01	Erosion of natural deposits
<b>INORGANIC CHEMICALS</b>										
Aluminum	2010 - 2012	ppm	1	0.6	No	ND	ND	ND-.18	.10	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic <sup>2</sup>	2012	ppb	10	0.004	No	4-11	8	ND	ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	2010 - 2012	ppm	1	2	No	0.04-0.15	0.06	ND	ND	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	2010 - 2012	ppm	2.0	1	No	N/D -.13	0.09	ND-0.3	0.2	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrite+Nitrate (sum as Nitrogen, N)	2012	ppm	10.0	10	No	N/D	N/D	1.85	0.46	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Nitrate (as NO <sub>3</sub> ) <sup>3</sup>	2012	ppm	45	45	No	18-24	21	ND-8.1	2.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Selenium	2010 - 2012	ppb	50	(50)	No	2 - 5	3	ND	ND	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
	Year Range	Reporting Units	MCL (SMCL)	PHG (MCLG)	Violation	Highest Level	Lowest Monthly Percent	Highest Level	Lowest Monthly Percent	Source of Substance
Turbidity (Surface water requiring filtration) <sup>4</sup>	2012	NTU	TT	n/a	No	n/a	n/a	.11	97.5	Soil runoff
<b>DISINFECTION BY-PRODUCTS</b>										
Total Haloacetic Acids (HAA5)	2012	ppb	60	n/a	No	2-22		22		By-product of drinking water chlorination
Total Trihalomethane (TTHM)	2012	ppb	80	n/a	No	3-35		35		By-product of drinking water chlorination
<b>DISINFECTANT</b>										
Chlorine (as Cl <sub>2</sub> )	2012	ppm	4.0	4	No	.7-2.0		1.3		Drinking water disinfectant added for treatment.
<b>MICROBIOLOGICAL</b>										
Total Coliform	2012	P/A	> 5.0 % of samples present for Coliform Bacteria in one month		No	2				Naturally present in the environment
<b>OTHER REGULATED SUBSTANCES</b>										
Copper	2010	ppm	1.3	0.17	No	0.15		0 of 30		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	2010	ppb	15	2	No	2		0 of 30		Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
<b>Secondary Drinking Water Standards and Unregulated Compounds</b>										
<b>INORGANIC CHEMICALS</b>										
Boron	2010 - 2012	ppb	NL=1000	n/a	No	200 - 300	140	ND-.14	N/A	Erosion of natural deposits
Calcium	2010 - 2012	ppm	n/a	n/a	No	72-130	98	12-36	21	Erosion of natural deposits
Chloride	2010 - 2012	ppm	(500)	n/a	No	100-140	112	7-134	45	Runoff/leaching from natural deposits; seawater influence
Color <sup>5</sup>	2010 - 2012	UNITS	(15)	n/a	No	N/D-1	0.8	ND	ND	Naturally-occurring organic materials
Hardness	2010 - 2012	ppm	n/a	n/a	No	250 - 350	290	40-101	72	Erosion of natural deposits
Magnesium	2010 - 2012	ppm	n/a	n/a	No	3.5-18	12	2-14	5	Erosion of natural deposits
Odor	2010 - 2012	T.O.N.	(3)	n/a	No	ND	ND	1-2	2	Naturally-occurring organic materials
pH	2010 - 2012	UNITS	n/a	n/a	No	7.7 - 7.9	8	7-8	8	Inherent characteristic of water
Potassium	2010 - 2012	ppm	n/a	n/a	No	5-6	5.0	1-3	2	Erosion of natural deposits
Sodium	2010 - 2012	ppm	n/a	n/a	No	61-110	93	14-72	32	Erosion of natural deposits; seawater influence
Specific Conductance (E.C.) <sup>5</sup>	2010 - 2012	umhos/cm	(1600)	n/a	No	856-1100	1004	183-598	318	Substances that form natural deposits; seawater influence
Sulfate	2010 - 2012	ppm	(500)	n/a	No	78-360	216	16-47	30	Leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) <sup>5</sup>	2010 - 2012	ppm	(1000)	n/a	No	520-860	692	90-317	179	Runoff/leaching from natural deposits; seawater influence
Turbidity <sup>5</sup>	2010 - 2012	NTU	(5)	n/a	No	.15 - .3	0.2	.04-.06	.05	Soil runoff
Zinc	2010 - 2012	ppm	(5)	n/a	No	N/D	N/D	ND-.05	0.02	Leaching from natural deposits; industrial wastes
<b>ORGANIC CHEMICALS</b>										
Endothall	2011	ppb	100	n/a	No	64	64	n/a	n/a	Runoff from herbicide use for terrestrial and aquatic weeds; defoliant