

Additional Information

This report provides details regarding our water quality and what it means. If you have any questions about this report, concerns regarding your water utility, or would like to learn more about the County's plans for the future water supply, please contact the Santa Fe County Water Utilities Division at 992-9870 or at www.santafecountynm.gov/public_works/utilities

We want you, our valued customers, to be informed about your water supply and your water utility. If you want to become more involved in issues of water supply in our area, you are encouraged to attend meetings of our governing body, the Santa Fe County Commission, which occur on the second and last Tuesday of each month starting at 2:00 PM and 1:00 PM, respectively. Meeting agendas are posted at:

www.santafecountynm.gov/committees/board_of_county_commissioners_bcc



**Santa Fe County
Utilities**

**West Sector
Public Water
System**

(NM3500926)

2013

**Water Quality
Report**

**West Sector Public Water System
2013 Water Quality Report**

Introduction

Santa Fe County Utilities (SFCU) is pleased to present the 2013 Water Quality Report for the West Sector Public Water System to our customers and the public. A safe and reliable water supply is vital to our community and is one of the primary missions of Santa Fe County. In 2013, the West Sector's drinking water met all U.S. Environmental Protection Agency (EPA) and State drinking water quality limits. The West Sector system supplies potable water to users outside of the western boundary of the City of Santa Fe and within the boundary of the Historic Village of Agua Fria. These areas include; Las Campanas Estates I & II, Aldea, El Prado, La Serena, Los Sueños, Sonrisa, the Northwest Ranches and the Vista Aurora Subdivision. This report is designed to inform customers about where our water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of the water quality during calendar year 2013.

Sources of Supply

The sources of water supply for both the City and County water systems are the same throughout the Santa Fe metropolitan area and include both ground and surface waters. In 2013, the West Sector system was served by four sources: (1) surface water from the Rio Grande which is treated through advanced processes at the Buckman Regional Water Treatment Plant, (2) ground water from 13 wells in the City's Buckman Well Field located approximately 15 miles northwest of Santa Fe, (3) surface water from the Santa Fe River, which is treated through conventional processes at the City's Canyon Road Water Treatment Plant, and; (4) ground water from 8 active wells in the City's Well Field (mostly located in close proximity to the Santa Fe River). As you will see from the data in this report, much of the water quality testing is done on the sources of supply, while some is done on the water in the distribution system itself.

Customer Transfer Between the City and County

In August of 2013, the Las Campanas I & II, Aldea and other Subdivision located west of the City limits were transferred from the City's Utility to the County's West Sector system as the result of a 2008 settlement agreement between the respective government bodies. Because the sources of supply did not change, this didn't affect your water quality, but SFCU recognizes that the transfer created inconvenience and complication for some customers. We want to you know that we are working hard to ensure that you receive the best service possible.

En Español

Este reporte contiene información sobre el agua calidad en el Condado de Santa Fe del oeste parte del el agua sistema cantidad. Si tiene alguna pregunta o duda sobre esta reporte, por favor llamar al Condado de Santa Fe Utilidad 505-992-9870.

Is My Water Safe?

We are proud to announce that in 2013 the West Sector's drinking water supply met all U.S. Environmental Protection Agency (EPA) and New Mexico drinking water quality standards.

Source Water Assessment & Availability:

The New Mexico Environment Department (NMED) completed a Source Water Assessment of the City's Water Utility, which includes the sources of supply for the West Sector system, to determine source water protection areas and inventory contaminant sources. NMED concluded: "The Susceptibility Analysis of the City of Santa Fe water utility reveals that the utility is well maintained and operated, and drinking water sources are generally protected from potential contamination..." The susceptibility rank of the City's system, which includes the sources of supply for the West Sector system, is **moderately low**. A copy of the Assessment is available by contacting NMED at 1-877-654-8720.



The Buckman Direct Diversion (BDD), which includes the Buckman Regional Water Treatment Plant, was constructed and is operated under a cooperative agreement between the City, the County and the Las Campanas Limited Partnership. The BDD came on-line in 2011 and has significantly improved the long-term sustainability of the area's water supply and also increases resilience under drought conditions. Using treated surface water as our primary supply reduces unsustainable ground-water pumping, which helps ensure ground water will be available during times of drought.

Why are there contaminants in my drinking water?

The sources of all drinking water (tap water and even bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves or suspends naturally occurring and man-made substances. These substances can 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 may 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, which are by-products 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, man-made from nuclear facilities and atmospheric deposition from former above ground testing, or be the result of oil and gas production and mining activities.

Intentionally added substances: Water from all four supply sources for the West Sector system is disinfected with chlorine to protect against waterborne pathogens. Fluoride is also added to protect consumers' teeth at levels generally recommended by public health professionals.

In order to ensure that tap water is safe to drink, state and federal regulations limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection of public health.

Do I need to take special precautions?

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. Health care providers should advise you about certain risks associated with tap water if you have an immune compromising condition. EPA/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)**.

Important Drinking Water Definitions:

MCL: Maximum Contaminant Level - 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.

MCLG: Maximum Contaminant Level Goal - 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.

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

TT: Treatment Technique - a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

ppm: Parts per million or milligrams per liter (mg/L) - one part (contaminant) in a million parts (water).

ppb: Parts per billion (ppb) or micrograms per liter (µg/l) one part (contaminant) in a billion parts (water).

Contaminant Specific Information:

Arsenic

The drinking water standard for arsenic is 10 ppb. The West Sector's drinking water supply met this standard throughout 2013 (please see Table 3 on page 4 of this document for the levels of arsenic measured in 2013). Arsenic occurs naturally in the earth's crust. When these arsenic-containing rocks, minerals, and soil erode, they release arsenic into ground water. While our drink-

ing water meets EPA's standard for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA 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.

Nitrates

The West Sector's drinking water supply meets the federal drinking water standard of 10 ppm for nitrates. Nitrates have been detected in some of the City Wells above 5 ppm. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Microbial and Disinfection By-products Rule

The Microbial and Disinfection By-products Rule is a set of interrelated regulations that address risks from microbial pathogens and disinfection byproducts (DBPs). The rule focuses on public health protection by limiting exposure to known carcinogenic DBPs, specifically total trihalomethanes (TTHM) and five haloacetic acids (HAA5), which can form in water through disinfectants (e.g. chlorine) used to control microbial pathogens. In 2012, the NMED reduced the required testing schedule for disinfection-by-products for the West Sector system from quarterly to an annual schedule due to prior-year test results being consistently low. However, NMED's

(Continued on page 3)

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reduction of our sampling frequency did not comply with the Stage II Disinfectant/Disinfection By-Product Rule and resulted in a monitoring violation for the West Sector system (please see the information on page 4 of this document for more details). In 2013, the West Sector system had one compliance sampling location for TTHM and HAA5 and this location was sampled once during the period of June—Sept (sample collected on 8/20/13). Under the Stage II Rule, we should have collected samples each quarter and at locations specific to TTHMs and HAA5s. The analytical results for DBPs must be below the MCL (0.060 ppm for HAA5 and 0.080 ppm for TTHM). Based upon the samples that were collected, the data in Table 1 indicates that the West Sector system's water met the MCL standards.

TABLE 1—Results of Disinfection By-Product Testing for 2013

West Sector Disinfection By-Product Results	Units	MCL	MCLG	Results	Range		Typical Source
					Low	High	
Total Haloacetic Acids (HAA5)	ppb	60	NA	0.00	0.00	0.00	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM)	ppb	80	NA	0.00	0.00	0.00	By-product of drinking water chlorination.

Lead and Copper Testing

Tests for lead and copper are taken from customer taps located throughout the West Sector system. Samples were last collected in 2011 and the results of those samples are reported in Table 2 below. Samples for lead and copper analysis will be collected in 2014 and the results of those samples will be reported in our 2014 Water Quality Report next year.

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 house plumbing. Santa Fe County Utilities 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 a period between 30 seconds and 2 minutes, before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have its quality 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>

TABLE 2—Most Recent Results of Lead and Copper Testing

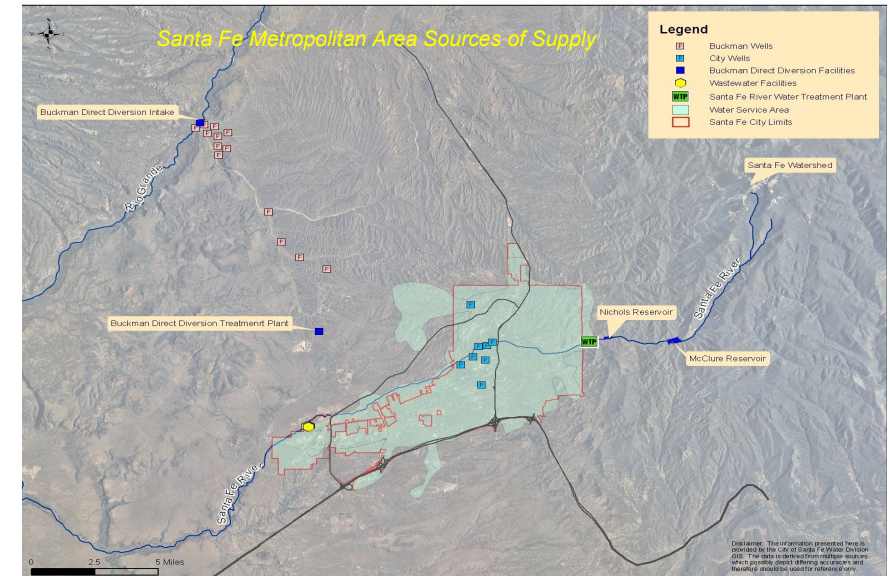
West Sector Lead & Copper Results	Units	MCL	MCLG	Your Water (90th percentile)	No. of Samples Exceeding the AL	Sample Date	Violation	Typical Source
Copper	ppm	AL = 1.3	1.3	0.0195	0 of 5	6/28/2011	No	Erosion of natural deposits, corrosion of household plumbing systems.
Lead	ppb	AL = 15	0	0.00	0 of 5	6/28/2011	No	Erosion of natural deposits, corrosion of household plumbing systems.

Lead and Copper Action Level

The lead and copper levels reported are values for the 90th percentile which in this case is the average of the 4th and 5th samples. For example, if 10 samples are collected, the results for the 9th sample represent the 90th percentile.

Cryptosporidium

Cryptosporidium is a protozoan parasite that is common in surface waters. In the environment, it primarily exists as an oocyst (microscopic egg), which is the transmission stage of the organism. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. *Cryptosporidium* is introduced into our source waters via wild animal populations. Although the organism is readily removed by the advanced treatment process utilized at the BDD facility, the oocyst is resistant to chemical disinfectants like chlorine and the primary reason for testing for it is to determine if additional treatment is required. Any new water system treating surface water such as BDD is required to monitor *Cryptosporidium* for 24 consecutive months. At the BDD, the untreated raw Rio Grande water *Cryptosporidium* test results range from 0 to 0.4 oocysts/L.



2013 West Sector System Source of Supply Water Quality Table (Next Page)

Table 3 on the following page presents a list of contaminants which:

- 1) have associated primary Maximum Contaminant Levels (MCLs) that are regulated, and;
- 2) were detected in the West Sector source of supply in testing conducted by the City and New Mexico Environment Department.

The table includes only those constituents found above detection limits during 2013 sampling, or during sampling in previous years if not analyzed during 2013. The EPA requires monitoring for certain contaminants less than once per year because the concentrations are not expected to vary significantly from year to year. As the producer of the source of supply, the City is required to test for over 80 contaminants, and **the vast majority of these contaminants were not found above detection limits.** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800) 426-4791, or visiting www.epa.gov/safewater.

TABLE 3—West Sector System Source of Supply 2013 Water Quality

Contaminant	Units	MCL	MCLG	City Well Field ^{c, e}	Sample Year	Buckman Tank ^{c, f}	Sample Year	Canyon Road WTP	Sample Year	Buckman RWTP ^c	Sample Year	Violation	Typical Source
Inorganic Contaminants													
Arsenic	ppb	10	0	4.6 (1.2 - 4.6)	2011	1.6	2011	ND	2013	ND	2013	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium	ppm	2	2	0.8 (0.24 - 0.8)	2011	0.073	2011	ND	2013	ND	2013	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	ppb	100	100	ND	2011	ND	2011	ND	2013	1	2013	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	ppm	4	4	0.18 (0.10 - 0.18)	2011	0.25	2011	0.12	2013	0.49	2013	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Selenium	ppb	50	50	1.7 (ND - 1.7)	2011	ND	2011	ND	2013	ND	2013	No	Discharge from steel/metals factories; Discharge from plastic and fertilizer factories
Nitrate [as N]	ppm	10	10	7.9 (2.7 - 7.9)	2013	0.14	2013	ND	2013	0.19	2013	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits
Radioactive Contaminants (Compliance period 2011 to 2013)													
Gross Alpha Emitters	pCi/L	15	0	1.3 (1.2 - 1.3)	2013	0.1	2013	0.6	2011	0.9 (0 - 0.9)	2011	No	Erosion of natural deposits
Gross Beta/Photon Emitters	pCi/L	50 ^a	NA	4.4 (1.1 - 4.4)	2013	2.1	2013	0.7	2011	3.3 (1.9 - 3.3)	2011	No	Decay of natural and man-made deposits.
Radium 226/228	pCi/L	5	0	0.45 (0.20 - 0.45)	2013	0	2013	0	2011	0.42 (0 - 0.42)	2011	No	Erosion of natural deposits
Uranium	ppb	30	0	3.0 (1.0 - 3.0)	2013	1.0	2013	ND	2011	1.0 (ND - 1.0)	2011	No	Erosion of natural deposits;
Surface Water Contaminants													
Turbidity ^d (highest single measurement)	NTU	TT = 1.0	0	NA	NA	NA	NA	0.62	2013	0.4	2013	No	Soil Runoff
Turbidity ^d (toWest monthly % meeting limits)	NTU	TT = % <0.3 NTU	0	NA	NA	NA	NA	99.4%	2013	99.2%	2013	No	Soil Runoff
Total Organic Carbon (TOC)	NA	TT (35%-45% Removal)	NA	NA	NA	NA	NA	44% to 88% removal ^b	2013	NA	NA	No	Naturally present in the environment

Table 3 Notes:

- a. EPA considers 50 pCi/L to be the level of concern for beta particles.
- b. Alternative compliance criteria used to meet TOC removal requirements.
- c. The range represents the highest and low values within the Compliance Period indicated. Range values are not given if only one sample was taken during the range period.
- d. Turbidity is a measure of the cloudiness of water. It is monitored as a good indicator of the effectiveness of filtration and to meet regulatory requirements.
- e. City well field: Alto, Agua Fria, Ferguson, Osage, Santa Fe, St. Michaels & Torreon.
- f. The Buckman tank contains water from Buckman Wells 1-13, the Buckman Regional Water Treatment Plant and the NorthWest Well.

Key to Units, Terms and Abbreviations in Table 3:

- NA: Not Applicable
- ND: Not Detected
- NTU: Nephelometric Turbidity Units
- ppm: parts per million, or milligrams per liter (mg/L)
- ppb: parts per billion, or micrograms per liter (µg/L)
- pCi/L: picocuries per liter (a measure of radioactivity)
- TT: A *Treatment Technique* standard was set instead of a *Maximum Contaminant Level*

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for the Santa Fe County

West Sector Water System

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

We recently became aware that our system failed to collect monitoring samples required by the Stage 2 Disinfectant/Disinfection Byproducts Rule. Although this incident was not an emergency, as our customers, you have the right to know what happened and what we are doing to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of the regular monitoring are an indicator of whether or not our drinking water meets health standards. Table 4 lists the contaminants and the compliance periods for which we did not monitor correctly. Because these samples were not collected, we cannot be sure of the quality of our drinking water during the compliance period listed below.

Table 4– Incorrectly monitored contaminants and compliance periods

Constituent	Sample Location	Compliance Period
Total Trihalomethanes	TTHM-IND (31 Coppermallow)	4th Quarter-2012, 1st, 2nd, 3rd and 4th Quarter-2013
Haloacetic Acids	HAA5-IND (29 Rabbit Brush)	4th Quarter-2012, 1st, 2nd, 3rd and 4th Quarter-2013

What should you do? There is nothing you need to do. You do not need to boil your water or take other corrective actions. You may continue to drink the water. If a situation arises where the water is not longer safe to drink, you will be notified within 24-hours.

What is being done? We have begun collecting the correct number of samples at the correct locations and will continue to do so throughout 2014 to ensure that we comply with the Disinfection By-products Rule. The sample results will be published in our 2014 Water Quality Report next year.

For more information about this compliance issue or about this Water Quality Report, please contact:

Robert J. George at **505-992-3046**, Santa Fe County Utilities, West Sector Public Water System (NM3500926), P.O. Box 276, Santa Fe, NM 87504

** Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posing this notice in a public place or distributing copies by hand or mail.**