

## CRESTVIEW MUTUAL WATER COMPANY

### Annual Water Quality Report June 2016

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

#### **Water Quality as a Priority**

Water quality is a priority for Crestview. Our mission since 1950 has been to provide our service area with a reliable supply of high quality locally produced and imported drinking water. The Staff of Crestview works diligently to ensure that Crestview's water supply meets all state and federal water quality standards. This report provides information about the sources and quality of water delivered by Crestview in 2015. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards.

During the year, multiple tests for over 150 drinking water contaminants were performed on Crestview's water supply to determine concentrations of mineral, physical, bacteriological, inorganic, organic, and radioactive constituents. **Once again, we are proud to report that our system met or exceeded all primary water quality standards.** For additional information about the quality of water delivered by Crestview, please contact Robert Eranio at (805) 482-2001.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including mineral and microscopic organic material. 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 (800) 426-4791.

#### **General Information about Source Water**

The sources of drinking water (both tap water and 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 naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it 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 stormwater 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 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, and septic systems.
- ✓ *Radioactive contaminants* which can be naturally-occurring or be the result of oil and gas production and mining activities.

## **Our Source Water**

Our primary water source is the Fox Canyon & Grimes Canyon Aquifers. This water is pumped by our deep wells, chlorinated, and delivered to your residence. Crestview has completed a "Source Water Assessment Survey" for our water sources. This assessment survey identified possible contaminants located within 2-year, 5-year, and 10-year radii of our wells. Copies of the report are available from the Crestview office; we can be reached at 482-2001.

Crestview also received 33.6% of our water supply during 2015 from the *Metropolitan Municipal Water District of Southern California (MWDSC)* through the *Calleguas Municipal Water District (CMWD)*. This imported water was delivered to you from January 1, 2015 to April 28, 2015. The MWDSC water supply contains about 2.0 parts per million chloramines as a disinfectant, instead of chlorine. This disinfectant has some advantages as compared to chlorine, such as fewer odors, better taste, and a reduction in the formation of carcinogenic trihalomethanes.

Originating in northern California, Calleguas' drinking water supply is conveyed over five hundred miles through the State Water Project's network of reservoirs, aqueducts, and pump stations. In December 2002, Metropolitan Water District of Southern California completed a source water assessment of its State Water Project supply. This source is considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850. The State Water Project supply is filtered and disinfected at the Metropolitan's Jensen Filtration Facility in Granada Hills. Following treatment, water is conveyed by pipeline through the San Fernando Valley to Calleguas' mile-long tunnel in the Santa Susana Mountains. The water is then distributed by Calleguas and its purveyors to over one-half million Ventura County residents, representing 80% of the County's population. Surplus supplies of this imported water are stored in Lake Bard in Thousand Oaks and the Las Posas Groundwater Storage facility in Moorpark.

## **Our Treated Water**

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

Crestview achieves these standards through vigilant watershed protection and the treatment techniques used at our water production facilities and within our water distribution system. A good indicator of the effectiveness of our well design is the measurement of turbidity. Turbidity, or the cloudiness of water, is listed in the tables included in this report.

## **Information for Customers with Special Water Needs**

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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. Environmental Protection Agency (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 (800) 426-4791.

## **Water Quality Data**

The tables below list all the drinking water contaminants that we detected during the 2015 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables is from testing done January 1 through December 31, 2015. The State requires that we monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of water quality, is more than one year old.

## More Information on Water Quality

<p>Calleguas Municipal Water District 2100 Olsen Road Thousand Oaks, CA 91360-6800 (805) 526-9323 <a href="http://www.calleguas.com">http://www.calleguas.com</a></p>	<p>State of California Department of Health Services Office of Drinking Water 601 North 7<sup>th</sup> Street Sacramento, CA 94234-7320 <a href="http://www.dhs.ca.gov/ps/ddwem/">http://www.dhs.ca.gov/ps/ddwem/</a></p>
<p>Metropolitan Water District of Southern California Public Affairs P.O. Box 54153 Los Angeles, CA 90054-0153 (800) CALL MWD <a href="http://www.mwdh2o.com/">www.mwdh2o.com/</a></p>	<p>U.S. Environmental Protection Agency (WH-550) Office of Ground Water &amp; Drinking Water 401 M. Street, S.W. Washington, D.C. 20460 Safe Drinking Water Hotline (800) 426-4791 <a href="http://www.epa.gov/ogwdw/">http://www.epa.gov/ogwdw/</a></p>

**For More Information:** for additional information or questions regarding this report, please contact Robert Eranio, Consulting General Manager, at (805) 482-2001. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings. They are usually held on the fourth Tuesday of each month at 4:00 pm at the Crestview office at 328 Valley Vista Drive.

### TERMS AND ABBREVIATIONS USED IN THIS REPORT

<i>Non-Detects (ND) - Not Required (NR)-</i>	Laboratory analysis indicates that the constituent is not present. The water district is not required to collect these because samples are collected by other districts on our behalf.
<i>Parts per million (ppm) or Milligrams per liter (mg/l)</i>	One part per million corresponds to one minute in two years or a single penny in \$10,000.
<i>Parts per billion (ppb) or Micrograms per liter -</i>	One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
<i>Parts per trillion (ppt) or Nanograms per liter (nanograms/l) -</i>	One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
<i>Parts per quadrillion (ppq) or Picograms per liter (picograms/l)</i>	One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
<i>Picocuries per liter (pCi/L)</i>	Picocuries per liter is a measure of the radioactivity in water.
<i>Millirems per year (mrem/yr)</i>	Measure of radiation absorbed by the body.
<i>Million Fibers per Liter (MFL)</i>	Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
<i>Nephelometric Turbidity Unit (NTU)</i>	Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
<i>Regulatory Action Level</i>	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
<i>Maximum Contaminant Level (MCL)</i>	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.
<i>Public Health Goal or PHG</i>	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.
<i>Treatment Technique (TT) -</i>	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

## Constituents Tested For and Not Detected

In addition to the information provided in the Summary of Water Quality Results, Calleguas and / or Crestview monitored for, but did not detect, the following contaminants during 2015:

1,1,1-Trichloroethane	Ethyl-tert-butyl-ether (ETBE)
1,1,2,2-Tetrachloroethane	Foaming Agents-MBAS
1,1,2-Trichloro-1,2,2-trifluoroethane	Fonofos
1,1,2-Trichloroethane	Glyphosate
1,1-Dichloroethane	Gross Beta
2,4-Dinitrotoluene	Heptachlor
2,6-Dinitrotoluene	Heptachlor epoxide
1,1-Dichloroethylene	Hexachlorobenzene
1,2,3-Trichloropropane	Hexachlorocyclopentadiene
1,2,4-Trichlorobenzene	Lead
1,2-Dichloroethane	Lindane
1,2-Dichloropropane	Methoxychlor
1,3-Dichloropropene	Molinate (Ordram)
2,3,7,8-TCDD (Dioxin)	Monochlorobenzene
2,4,5-TP (Silvex)	MTBE
2,4-D	Nickel
4,4'-DDE	Nitrobenzene
Acetochlor	o-Dichlorobenzene
Alachlor	Oxamyl (Vydate)
Antimony	p-Dichlorobenzene
Arsenic	Pentachlorophenol
Asbestos	Perchlorate
Atrazine	Picloram
Bentazon	Proeton
Benzene	Radon
Benzo(a)pyrene	Selenium
Beryllium	Silver
Cadmium	Simazine
Carbofuran	Strontium-90
Carbon Tetrachloride	Styrene
Chlordane	Terbacil
Chromium	Terbufos
Chromium 6	tert-Amyl-methyl-ether (TAME)
cis-1,2-Di-chloroethylene	Tetrachloroethylene (PCE)
Combined Radium	Thallium
Cyanide	Thiobencarb
Dalapon	Toxaphene
Diazinon	trans-1,2-Di-chloroethylene
Di(2-ethylhexyl) adipate	Trichloroethylene (TCE)
Di(2-ethylhexyl) phthalate	Trichlorofluoromethane
Dibromochloropropane	Tritium
Dichlorodifluoromethane	Uranium
Dichloromethane	Vanadium
Dinoseb	Vinyl chloride
Disulfoton	Xylenes
Diquat	
Diuron	
Endothall	
Endrin	
EPTC	
Ethylbenzene	
Ethylene dibromide (EDB)	

## Summary of Water Quality Results For 2015

Parameter	Imported Surface Water Treated at Metropolitan's Jensen Plant		Crestview Local well water Range		Major Sources in Drinking Water	
	Percent of Supply		33.6%			66.4%
	MCL [MRDL]	PHG (MCLG) [MRDLG]	Average	Range		Average

### PRIMARY DRINKING WATER STANDARDS—Mandatory Health-Related Standards

#### CLARITY (a)

Turbidity (NTU) (TT)	Highest Single Value	0.09	ND	Soil runoff
	% of samples ≤0.3 NTU	100%	100%	

#### DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS

Parameter	MCL [MRDL]	PHG (MCLG) [MRDLG]	Imported Surface Water	Crestview Local well water	Major Sources in Drinking Water		
Bromate (ppb) (b)	10	0.1	8.0	1.1 - 13.0	n/a	n/a	By-product of drinking water disinfection
Haloacetic Acids (ppb) (c)	60	n/a	Highest LRAA = 7.8, Range = 3.0 - 14.0		3	3 - 4	By-product of drinking water disinfection
Total Chlorine Residual (ppm)	[4]	[4]	Highest Running Annual Average = 2.2, Range = 1.2 - 2.7		1.5	0.5 - 2.5	Drinking water disinfectant added for treatment
Total Trihalomethanes (ppb) (c)	80	n/a	Highest LRAA = 34.4, Range = 21.1 - 48.9		16	15.8 - 16.3	By-product of drinking water disinfection

#### INORGANIC CHEMICALS

Parameter	MCL [MRDL]	PHG (MCLG) [MRDLG]	Imported Surface Water	Crestview Local well water	Major Sources in Drinking Water		
Aluminum (ppb)	1,000	600	ND	ND - 84	10	ND - 20	Erosion of natural deposits, residual from water treatment process
Arsenic (ppb)	10	0.004	3.3	3.3	ND	ND	Erosion of natural deposits, runoff from orchards
Barium (ppm)	1	2	ND	ND	ND	ND	Erosion of natural deposits; oil and metal refineries
Fluoride - Distribution System (ppm) (d)	2.0	1	Highest Running Annual Average = 0.9, Range = 0.7 - 1.0		0.2	0.2	Water additive that promotes strong teeth
Nitrate (as N) (ppm)	10	10	0.8	0.6 - 0.9	ND	ND	Runoff & leaching from fertilizer & sewage
Selenium (ppb)	50	30	ND	ND	ND	ND	Erosion of natural deposits; discharge from refineries

#### RADIOLOGICALS (e)

Parameter	MCL [MRDL]	PHG (MCLG) [MRDLG]	Imported Surface Water	Crestview Local well water	Major Sources in Drinking Water		
Gross Alpha Particle Activity (pCi/L)	15	(0)	3	ND - 5	0.65	0.336 - 1.06	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	ND	ND - 5	ND	ND	Decay of natural and manmade deposits
Uranium (pCi/L)	20	0.43	2	2 - 3	ND	ND	Erosion of natural deposits

### ABBREVIATIONS, DEFINITIONS, and NOTES

LRAA = Locational Running Annual Average      ND = None Detected      ppm = parts per million, or milli pCi/L = PicoCuries per Liter  
n/a = not applicable      NTU = Nephelometric Turbidity Units      ppb = parts per billion, or micrograms per liter (µg/L)

**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.

**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 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 pathogens.

**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.

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

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

- (a) The turbidity level of filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.
- (b) Compliance for treatment plants that use ozone is based on a running annual average of monthly samples. The Weymouth plant does not add ozone; therefore, bromate sampling is not required.
- (c) Compliance is based on the LRAA of data collected at distribution system-wide monitoring locations. The range of all samples collected is included.
- (d) The Metropolitan Water District treats their water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.6 - 1.2 ppm, as required by State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW).
- (e) MWD collects four consecutive quarters of radiological monitoring triennially. The last sample was collected in 2014. Crestview is required to test every 9 years, last samples collected in 2007