Consumer Confidence Report Arrowbear Park County Water District July 1, 2017

We are pleased to present to you this past year's Annual Consumer Confidence Report for 2016. This report is designed to inform you about the quality of water 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 understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Water Supply

Our water is drawn from five groundwater wells located northeast of Arrowbear Lake. One well has been in service since 1954; another was drilled in 1981; Well #3 was put in service in 1993. In 1995 we added a fourth well which is now operational, and finally Well #2 was reactivated in 2012. We are proud of the excellent quality of water we extract for our Arrowbear residents.

Source Water Assessment Report

A source water assessment was conducted for Wells 1, 2, 3, 4, and 5 of the Arrowbear Park County Water District Water System in December 2001 and is summarized in the table below:

Source Number	Source ID	Most Vulnerable Activities (PCA)	Chemical Detected
001	Well 01	Utility Stations - maintenance areas	None
002	Well 02	Utility Stations - maintenance areas	None
003	Well 03	Utility Stations - maintenance areas	None
004	Well 04	Utility Stations - maintenance areas	None
005	Well 05	Utility Stations - maintenance areas	None

A copy of the complete assessment as well as laboratory reports by source that make up the data presented in this report may be viewed at the Arrowbear Park County Water District office or at State Water Resources Control Board (SWRCB), San Bernardino District Office, 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessment be sent to you by contacting the SWRCB District Engineer at (909) 383-4328.

To safeguard our water supply, we continually monitor for potential contaminants that can be present in source water prior to treatment. Contaminants 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, which 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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- **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 stormwater runoff, and septic systems.

Water Treatment

In April of 1989, Arrowbear Park County Water District started the first treatment facility in the state for removal of trace amounts of naturally occurring uranium from drinking water. By approving this treatment facility, your Board of Directors provided for safe water to be produced years before any standards were mandated. Now regulated, our treated water consistently falls below all USEPA and California State Water Resources Control Board (SWRCB) contaminant level requirements.

Water Quality Data

Arrowbear Park County Water District routinely monitors for contaminants in your drinking water according to Federal and State laws. All testing for bacteriological, chemical, physical, and any special testing are done by Clinical Laboratory of San Bernardino, Inc., a State certified lab. They also do our radiological testing. Of the many constituents that can be present in a water supply, Arrowbear's test results reveal that only a few were detected in Arrowbear's treated water. Of those detected, none exceeded the maximum contaminant level prescribed by State and Federal regulations. The following table on the reverse side of this page shows the test results for the only constituents detected during our monitoring period of January 1st to December 31st, 2016.

Water Quality Definitions

The following table contains several terms and abbreviations which may be unfamiliar to you. To help you understand these terms we've provided the following definitions:

- MCL: Maximum Contaminant Level 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.
- MCLG: Maximum Contaminant Level Goal 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.
- **PHG:** Public Health Goal 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.
- **PDWS:** Primary Drinking Water Standard MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

- **Range:** Lowest to Highest.
- **mg/l:** Milligrams per liter (parts per million).
- **ug/l:** Micrograms per liter (parts per billion).
- **pCi/l:** picoCuries per liter, a measure of the radioactivity in water.
- NTU: Nephelometric Turbidity Units- A measure of the clarity of water. Turbidity is the measure of particles suspended in water. Higher quality water has low turbidity.
- NS: No Standard.
- ND: Monitored for but Not Detected.
- N/A: Not Available or Not Applicable.
- **TT:** Treatment Technique A required process intended to reduce the level of a contaminant in drinking water.
- **uS:** mircomh, a unit of measure for specific conductance or the ability of a solution (water) to carry an electric current. A mircomh is one millionth of an OHM.



Contaminant Column	Violation Y/N	Avg. Level Detected	Range	Unit of Measure- ment	MCL	PHG (MCLG)	Likely Source of Contamination
Microbiological Contamin	ants						
Turbidity**	N	0.117	0.1 - 0.2	NTU	5	NS	Soil runoff.
Radioactive Contaminant	S						
Alpha Activity, Gross	N	2.09	0.0 - 11.0	pCi/l	15	NS	Erosion of natural deposits.
Uranium	N	0.766	0.0 - 4.0	pCi/l	20	NS	Erosion of natural deposits.
Inorganic Chemical Conta	aminants	5					
Perchlorate (as ClO4)	N	ND	None	ug/l	6	1	Industrial manufacturing waste.
Nitrate (as NO3)	Ν	ND	None	mg/l	45	45	Runoff from fertilizer use.
Nitrate as N (NO3-N)	N	ND	None	mg/l	10	10	Runoff from fertilizer use.
lron*	N	ND	None	ug/l	300	NS	Erosion of natural deposits.
Fluoride*	N	0.112	0.0 - 0.21	mg/l	2	1	Erosion of natural deposits.
Disinfection Byproducts (Frihalon	nethanes	s/Haloaceti	c Acids)			
Bromodichloromethane	Ν	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Bromoform	Ν	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Chloroform (Trichloromethane)	N	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Dibromochloromethane	Ν	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Total Triholomethanes (TTHM)	N	ND	None	ug/l	80	80	Organic reaction with chlorines
Dibromoacetic Acid	Ν	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Dichloroacetic Acid	Ν	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Monobromoacetic Acid	N	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Monochloroacetic Acid	N	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Trichloroacetic Acid	N	ND	None	ug/l	NS	NS	Organic reaction with chlorines
Total Haloacetic Acids (HAA5)	N	ND	None	ug/l	60	60	Organic reaction with chlorines
Secondary Standards							
Chloride*	Ν	2.96	1.8 - 6.3	mg/l	500	NS	Erosion of natural deposits.
Sulfate*	N	2.08	2.0 - 2.3	mg/l	500	NS	Erosion of natural deposits.
Specific Conductance*	N	264	250 - 280	uS	1600	NS	Erosion of natural deposits.
Odor Threshold	N	1.08	1 - 2	Units	3	NS	Naturally occurring or leachates
Total Dissolved Solids*	N	168	140 - 180	mg/l	1000	NS	Erosion of natural deposits.
Other Constituents							
Calcium*	N	39.4	33 - 45	mg/l	NS	NS	Erosion of natural deposits.
Magnesium*	N	2.32	2.0 - 2.7	mg/l	NS	NS	Erosion of natural deposits.
Sodium*	N	14.8	12.0 - 16.0	mg/l	NS	NS	Erosion of natural deposits.
Potassium*	N	ND	None	mg/l	NS	NS	Erosion of natural deposits.
Total Hardness*	N	106.4	92 - 120	mg/l	NS	NS	Erosion of natural deposits.

** Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

As you can see by the table, Arrowbear Park County Water District did **NOT** experience a single water quality violation in 2016. We are proud that the quality of your drinking water exceeds all State and Federal requirements. We have learned through our monitoring/testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.

Additional Information

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. EPA/CDC 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).

Operations/Questions

In our continuing efforts to maintain a safe and dependable water supply, it will be necessary to make improvements in your water system over the next several years. The costs for these improvements may be reflected in the rate structure, because rate adjustments may be necessary in order to make these improvements. Great efforts are being made to efficiently plan our expenditures, so our rates will always be at their lowest possible levels while providing the best possible service to you, our valued customers.

If you have any questions about this report or any questions concerning your water utility, please contact the General Manager at (909) 867-2704. We want you, our valued customers, to be informed about your water utility. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the third Thursday of each month at 6:30 pm at the District Office, located at 2365 Fir Drive, Arrowbear, CA 92382. This Consumer Confidence Report as well as changes to meetings, minutes, and agendas will be posted on our website: arrowbearwater.org