NUMBER 59 JUNE 2018

CONSUMER CONFIDENCE REPORT

Monitoring Data & Test Results from Calendar Year 2017

A message from the United States Environmental Protection Agency (USEPA) and State Water Resources Control Board, (State Board): In order to ensure that tap water is safe to drink, the USEPA and the State Board prescribe regulations that limit the amounts of certain contaminants in water provided by public water systems. The State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

While Fern Valley Water District (FVWD) works hard to ensure that our water is safe and pleasing for our customers, all drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline 1-800-426-4791.

This yearly report describes where your water comes from, what is in it, and how its quality compares with the regulatory standards set by the Division of Drinking Water.

OUR PRECIOUS WATER SUPPLY is a function of the amount of precipitation that falls locally in the watershed. The District produced a total of 47.99 million gallons of water from our surface water and groundwater supplies. Under licenses issued by the California State Water Resources Control Board, 29.28 million gallons or 61% of the water delivered to you last year was obtained from Tahquitz Creek; and 7.8 million gallons or 16.25% was obtained from Strawberry Creek. These diversion sites are located at an elevation high above Fem Valley. We filter this water through our surface water treatment plant. The filtered water then enters a granular activated carbon adsorption facility, further removing a wide variety of potential contaminants. Chlorine disinfectant is added to protect you against microbial contaminants. A Source Water Assessment of FVWD's surface water supply was completed in 2012. A copy is available at the District office.

Groundwater supplies (Wells): When there is insufficient surface water supply, the District supplements your water supply from a combination of 11 vertical groundwater wells. Last year 10.87 million gallons or 22.65% of the water delivered to you was from wells. This deep well water is obtained from fractured rock, not from a large underground aquifer. An assessment of the drinking water sources for FVWD was completed in December 2002. The sources are most vulnerable to the following activities not associated with any detected contaminants: low density septic systems, campgrounds/recreational areas, and surface water streams. A copy of the complete assessment is available at the District office. You may also request a summary of the assessment be sent to you by contacting Office Manager, Jessica Priefer at (951) 659-2200.

The well water is aerated to remove carbon dioxide (CO2), a corrosive gas naturally present in groundwater. The aeration process removes the CO2, which in turn elevates the pH producing water that is less corrosive to the District's water system and your household plumbing. This reduces the risk of lead and copper from leaching into the water from your plumbing. 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. Fem Valley Water 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

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural lives tock 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.
- 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, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

Informational Statement

The sources of drinking water in 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. Water industry professionals are dedicated to removing any materials that might prove harmful to customers. FVWD uses effective, multi-barrier treatment processes to ensure our water continues to meet state and federal standards.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer that are 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. 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 (1-800-426-4791).

The following are definitions and notations used in this report:

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

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements, and water treatment requirements.

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 (CAL EPA).

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 (USEPA).

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.

Maximum Residual Disinfection 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 contaminants.

Maximum Residual Disinfection Level Goal (MRDLG): The level of 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.

LRAA: Locational Running Annual Average

N/A: Not applicable

None: The USEPA and CAL EPA, have not set a Public Health Goal or Maximum Contaminant Level for this substance.

(ND) Not detectable: At testing limit.

Nephelometric Turbidity Units (NTU): A measurement of the cloudiness of water.

Parts per million (ppm): Or milligrams per liter (mg/L). Parts per billion (ppb): Or micrograms per liter (ug/L). Picocuries per liter (pCi/L): A measure of radiation.

FERN VALLEY WATER DISTRICT

Monitoring Data & Test Results from Calendar Year 2017

All water produced and delivered by the District meets or exceeds standards for public drinking water established by the State Board and the USEPA.

In the following tables, you will find detailed information about the water that comes from your tap. Your water is regularly tested for more than 120 chemicals and other substances, as well as radioactivity. Only substances that were detected are listed in the tables. Unless otherwise noted, the data presented in the table is from testing done January 1 through December 31, 2017. The state allows us to 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 the water quality, may be from more than one year of sample results.

If you have additional questions or concerns regarding the quality of your water, please contact Victor Jimenez, General Manager at (951) 659-2200.

PRIMARY DRINKING WATER STANDARDS

| Parameter | Range of Detection | Average | Unit Measurement | MCL | PHG (MCLG) | Typical Sources in Drinking Water |
|---|-----------------------|---------|---------------------|-----|---------------|--------------------------------------|
| Radionuclides | | | | | | |
| Gross Alpha Activity Groundwater (2012-2016) | 0.12 - 5.14 | 1.9 | pCi/L | 15 | (0) | Erosion of natural deposits |
| Uranium Groundwater (2010) | 2.4 - 8.9 | 5.7 | pCi/L | 20 | 0.43 | Erosion of natural deposits |

| Household Lead and Copper | No. of Samples | 90th Percentile | Number of | AL | MC | Typical Source in Drinking Water |
|---------------------------|----------------|-----------------|--------------|-----|-----|--|
| Test Results (2016) | Collected | level detected | sites exceed | | LG | |
| | | | action level | | | |
| Lead (ppb) | 10 | ND | None | 15 | 0.2 | Internal corrosion of household plumbing |
| | | | | | | systems; erosion of natural deposits |
| Copper (ppm) | 10 | ND | None | 1.3 | 0.3 | Internal corrosion of household plumbing |
| | | | | | | systems; erosion of natural deposits |

| Disinfection Byproducts | Range of Detections | Highest LRAA | Unit Measurement | MCL [MRDL] | PHG (MCLG) [MRDLG] | Typical Sources in Drinking Water |
|-------------------------------|------------------------|-----------------|---------------------|-----------------|--------------------------|---|
| Total Trihalomethanes (TTHMs) | 3.8 - 61 | 31.5 | ppb | 80 | None | By-product of drinking water chlorination |
| Halo acetic Acids (HAA5) | 2 - 38 | 18 | ppb | 60 | None | By-product of drinking water chlorination |
| Total Chlorine Residual | 0.45 - 0.6 | 0.55 | ppm | [4.0 as Cl2] | [4 as Cl2] | Disinfectant added for treatment |

| Sampling Results for Microbiolog | ical | | | | |
|----------------------------------|------------------------------|----------------------------|--|------|--------------------------------------|
| Microbiological Contaminants | Highest No. of Detections | No. of months in violation | MCL | MCLG | Typical Source of Bacteria |
| Total Coliform Bacteria | 0 (in one month) | 0 | 1 positive monthly sample | 0 | Naturally present in the environment |
| Fecal Coliform or E. coli | 0 (in the year) | 0 | A routine sample & a repeat sample detect total coliform & either sample also detects fecal coliform or E.coli | 0 | Human and animal fecal waste |

SECONDARY DRINKING WATER STANDARDS

Groundwater (2015 sampling results)

| Parameter | Range of Detections | Average | Unit of Measurement | SMCL | PHG | Typical Sources in Drinking Water |
|------------------------|---------------------|---------|---------------------|------|------|---|
| Calcium | 9.2 - 16 | 12.2 | ppm | None | None | Naturally-occurring |
| Chloride | 1.7 - 3.5 | 2.7 | ppm | 500 | None | Naturally-occurring organic materials |
| Iron | <100 - 200 | < 100 | ppb | 300 | None | Runnoff/ leaching from natural deposits |
| Sodium | 8.4 – 12 | 10.5 | ppm | None | None | Salt present in the water and is generally naturally occuring |
| Specific Conductance | 110 - 150 | 126 | μS/cm | 1600 | None | Substances that form ions when in water |
| Sulfate | 0 - 1.2 | 0.7 | ppm | 500 | None | Runoff/ leaching from natural deposits |
| Total Hardness | 29 - 48 | 37.4 | ppm | None | None | Naturally-occurring |
| Total Dissolved Solids | 79 - 93 | 86.8 | ppm | 1000 | None | Runoff/ leaching from natural deposits |
| Turbidity | < 0.2 - 0.58 | 0.1 | NTU | 5 | None | Soil runoff |

SMCL = Secondary MCL

Surface water (2017 sampling results)

| Parameter | Range of Detections | Average | Unit of Measurement | SMCL | PHG | Typical Sources in Drinking Water |
|------------------------|---------------------|---------|------------------------|------|------|--|
| Calcium | 3.8 - 4.1 | 4.0 | ppm | None | None | Naturally-occurring |
| Chloride | 1.8 – 2.2 | 2.0 | ppm | 500 | None | Naturally-occurring organic materials |
| Color | 5 - 5 | 5 | Units | 15 | None | Naturally-occurring organic materials |
| Total Hardness | 12 - 13 | 12.5 | ppm | None | None | Erosion of natural deposits |
| Sodium | 3.8 - 6.4 | 5.1 | ppm | None | None | Salt present in the water is generally naturally occurring |
| Specific Conductance | 47 - 60 | 53.5 | μS/cm | 1600 | None | Substances that form ions when in water |
| Sulfate | 0.5 – 1.0 | 0.75 | ppm | 500 | None | Runoff/ leaching from natural deposits |
| Total Dissolved Solids | 33 - 61 | 47 | ppm | 1000 | None | Runoff/ leaching from natural deposits |

| Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our surface water filtration system. | | | | | |
|--|--|--|--|--|--|
| Treatment Technique (a) Alternative Technology Filtration | EPD (Environmental Products Division) two stage pressure filter | | | | |
| Turbidity Performance Standards (b) (that must be met through the water treatment process) | Turbidity of the filtered water must: 1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time. | | | | |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100% | | | | |
| Highest single turbidity measurement during the year | 0.18 | | | | |
| Number of violations of any surface water treatment requirements | 0 | | | | |

- (a) A required process intended to reduce the level of a contaminant in drinking water.
- (b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Did you know?

Due to the dynamics involved in supplying water to properties in mountain communities, pressure is very difficult to regulate from one property to the next. Pressure increases or decreases by a little less than half a pound of pressure for every foot of elevation change. This means a home that is at an elevation 50 feet higher than another home down the street being supplied by the same water pipeline, will experience a reduction in pressure of approximately 22 psi. Likewise a home that is 50 feet lower in elevation than another home up the street being supplied by the same water pipeline, will experience an increase in pressure of approximately 22 psi.

It is suggested that pressure regulators be inspected annually and rebuilt or replaced every 3-5 years. Water pressure can be tested at a hose bib with a pressure gauge that can be purchased at most hardware stores. The pressure in your residential plumbing should be regulated between 50 psi-70 psi and should never exceed 80 psi. Pressure over 80 psi could damage appliances, fixtures and plumbing, resulting in costly repairs and damage.

This configuration is recommended when reducing higher pressures such as those that we can experience in Fern Valley.

Two-Stage Serial Reduction

Configuration



The two-stage serial reduction approach uses two valves in series to reduce or eliminate extreme variations between the water main's inflow pressure and the desired, final reduced pressure. Two stage reduction is recommended when initial pressures are 200psi or greater, or when the desired pressure reduction ratio is greater than 4:1, e.g., from 200psi to 50psi, or where the inflow pressure fluctuates greatly. The advantage of two-stage serial reduction is that neither valve is subjected to extreme pressure differentials, thus prolonging valve life and delivering more precise pressure regulation.

Stage 2 Water Restrictions in Effect

Dear Customer,

On June 15, 2018 the Fern Valley Board of Directors approved the most recent stage increase to Stage 2 due to the extremely low precipitation this year.

<u>Water Conservation Stage 1</u> Upon implementation of Water Conservation Stage 1

- (1) Users of District water shall prohibit irrigation runoff and shall eliminate water leaks on their property.
- (2) Users of District water shall voluntarily limit the quantity of water used to that quantity, absolutely necessary for domestic and business purposes.
- (3) Users of District Water shall take all steps necessary to prevent waste of water and to assure that all water is beneficially used to the maximum extent possible.
- (4) Users of District water shall not wash hard or paved surface areas, including driveways, parking areas, patios, tennis courts, and similar impermeable surfaces, and shall not sprinkle unplanted areas for dust control or other purposes, except to alleviate immediate fire or sanitary hazards.

<u>Water Conservation Stage 2</u> Upon implementation of Water Conservation Stage 2, Users of District water shall continue to follow water conservation measures under Water Conservation Stage 1 in addition to the further measures under Water Conservation Stage 2, as follows:

- (1) Users of District water shall only irrigate outdoor plants and gardens between the hours of 6 p.m. and 8 a.m. and shall prohibit irrigation runoff.
- (2) Restaurants shall provide drinking water to patrons only upon request
- (3) Users of District water may wash automobiles, trucks, trailers, and other types of mobile equipment at any time, but only with a hand-held bucket and a hand-held hose equipped with an automatic, positive, shut-off nozzle. Such users shall not permit continuous flow during washing and rinsing. Such washings are exempted from these regulations where the health and safety, and welfare of the public is contingent upon frequent vehicle cleanings, such as ambulances, garbage trucks and vehicles used to transport food and perishables.

<u>Water Conservation Stage 3</u> Upon implementation of Water Conservation Stage 3, Users of District water shall continue to follow water conservation measures under Water Conservation Stages 1 and 2 in addition to the further measures under Water Conservation Stage 3, as follows:

- (1) Users of District water shall not fill or refill swimming pook, except to replace evaporation losses.
- (2) Users of District water shall not use water from fire hydrants except for emergencies, the maintenance of system water quality, or the delivery of construction water.

Violations: All violations of the water use restrictions and prohibitions set forth herein shall result in the following actions.

- (1) First Violation Notice of Violation. The General Manager is authorized and directed to issue a written notice of violation to any person who fails or refuses to comply with the water use restrictions set forth herein. The notice shall specify a reasonable period of time in which compliance is to be achieved.
- (2) Second Violation Excessive Use Charge. For a second violation of the water use restrictions set forth herein, an excessive water use charge shall be imposed. The excessive use charge shall be a fine in the amount of \$100, which shall be added to the water bill for the period in which the violation occurred. Failure to make payment of the entire amount due, including the excessive use charge, shall subject the person to the normal consequences for failure to timely pay a water bill as set forth in the District's Rules and Regulations.
- (3) Third Violation -Extreme Use Charge. For a third violation of the water use restrictions set forth herein, an extreme water use charge shall be imposed. The extreme use charge shall be a fine in the amount of \$200, which shall be added to the water bill for the period in which the third violation occurred. Failure to make payment of the entire amount due, including the extreme use charge, shall subject the person to the normal consequences for failure to timely pay a water bill as set forth in the District's Rules and Regulations.
- (4) Fourth Violation Termination of Service. For a fourth violation of the water use restrictions set forth herein, the General Manager has the authority to impose an additional fine in amount of \$200 and to terminate service to the premises involved.

The District's online bill pay is up and running. Go to fervalleywater.com and click on:



EASY WAYS TO SAVE WATER

LAUNDRY ROOM

• Use washing machine for full loads only.

LANDSCAPE

- Irrigate early in the morning (before 8AM) and evening (after 6PM) when temperatures are cooler.
- Check your sprinkler system frequently to make sure it is functioning properly, and there is no run-off.
- Water deeply but less frequently, put mulch around trees and plants. Plant drought-resistant trees and plans.

KITCHEN

Wash vegetables in container, not under running water. Use dishwasher for full loads only.

BATHROOM

• Install low flow shower heads. Take shorter showers. Install a low flow toilet. Turn water off when brushing teeth.

WHEN YOU GO AWAY

It is always a good idea to shut your water off at the customer valve, located near the meter, when you leave your property for any length of time. Pipes can break from earth movement in the summer and freeze during the winter. If you have a sprinkler system and leave it on, make sure you have someone check on it periodically and ensure that it is functioning properly.

SHUT-OFF VALVE

The District has provided you with a shut off valve as a courtesy to you.

METER STAKES

The District has placed three foot green/white stakes at each meter location to assist you locating your meter and customer valve. If your stake is missing, please notify the office as soon as possible so that we can replace it.

CHECKLIST

Make a check list and leave instructions for guests. It is also a good idea to have the name and phone number of a plumber h andy as well as the District's phone number.

UPDATE INFORMATION

Make sure the District has your current email, address, phone number, or a number where you can be reached in an emergency. Should there be a problem at your property, we will make every attempt to reach you. If we can't reach you, we will turn off the water at the customer valve and attempt to leave you a message or note at your property.

TIPS ON LEAKS

Lots of water can be lost by little leaks. A small drip can waste 70 gallons of water in a day and more than 1,000 gallons a day can pour through a steady leak of one-sixteenth inch in size. Fix leaky faucets and toilets right away. When hot water is dripping, energy is also being wasted. Since a leak can be a major water waster, always fix it right away.

PIPE LEAKS

To detect any unseen leaks, read your water meter. Don't run any water for one hour and then read the meter again. If the meter has moved, you may have a leak.

FAUCET LEAKS

Many are in the faucets and most are mainly due to wom washers.

TOILET LEAKS

Put food coloring or a dye tablet in your toilet tank and let the toilet stand for 20 minutes. If the color seeps into the toilet bowl, you have a leak. It is usually a simple washer in the tank, and a do-it-yourself manual may help you fix it.

DISTRICT LEAKS

We do our best to locate and repair any District leaks as quickly as possible, but if we miss one and you see it, please call us day or night and let us know. If you see any signs of water leaking from a meter box or coming up through the street or hillside, give us a call and we will get on it. We appreciate any help we can get in saving water.

WHAT'S NEW

Last year the District started the first year of a two-year meter change-out program working toward replacing all water meters with state of the art smart meters and will purchase the remainder of the meters needed this year. The District has also started a fire hydrant upgrade program which will upgrade 39 hydrants from 4 inch hydrants to 6 inch commercial hydrants. The District also passed a rate increase, which went into affect January 1, 2018, in order to meet the District's revenue requirements.

WHAT'S COMING

The District has been evaluating current operations and infrastructure needs and will be performing tank inspection/cleanings, filter plant upgrades, evaluating and possibly installing pressure reducing stations and a variety of preventive maintenance activities over the next year to ensure maximum efficiency and quality. The District will also be expanding the District Office Boardroom to accommodate visitors who would like to attend the monthly Board Meetings, held on the third Friday of each month.



FERN VALLEY WATER DISTRICT

BOARD OF DIRECTORS

TRISCHA CLARK, President RICHARD SCHNETZER, Vice President ROBERT KRIEGER, Secretary/Treasurer JAMES REES, Director GEORGE ROWELL, Director

STAFF

VICTOR JIMENEZ, General Manager JESSICA PRIEFER, Office Manager JIM NUTTER, Field Operator CAMERON CLARK, Field Operator

P OBOX 3039

55790 S. CIRCLE, IDYLLWILD CA 92549

PH: (951) 659-2200 - FAX: (951) 659-0350 - EMAIL fwd@verizon.net - Website: www.fernvalleywater.com

It is our policy to be responsive to our customers' needs, and we are available for emergency assistance 24 hours a day. Our emergency phone number is (951) 659-2200.

Our office hours are 8:30 a.m. - 4:00 p.m. Monday through Friday.

Closed from 12:00p.m. - 12:30 p.m. for lunch

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