

# *West Kern Water District*

## *2018 Annual Water Quality Report*

Water Testing Performed  
January 1 – December 31, 2018  
and may include earlier monitoring data.

*This brochure is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards. We are committed to providing you with information because informed customers are our best allies.*



**Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.** (This report contains important information about your drinking water. Translate it, or speak with someone who understands it.)

The State Water Resources Control Board Division of Drinking Water (DDW) requires community water systems to publish and make available an annual Consumer Confidence Report to provide background on the quality of your water and to show compliance with federal and state drinking water standards.

This 2018 Annual Water Quality Report describes in detail the quality of your water during 2018. As in previous years, your water met all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards. You will find further explanation of the requirements and test results in the accompanying pages.

*West Kern Water District (WKWD)* is located in western Kern County and serves the following eight communities: Taft, Maricopa, McKittrick, Derby Acres, Fellows, Valley Acres, Dustin Acres, & Tupman. WKWD also serves the unincorporated communities of South Taft, Taft Heights, & Ford City,

*Water* is one of our most valuable resources. West Kern's water supply comes from a contract with the Kern County Water Agency for State Water Project water. The water is transported through the California aqueduct, where it is recharged into the ground through our spreading ponds. Your water is extracted from the Tulare Lake aquifer from 13 groundwater wells located in the northeast corner of the District in the underflow of the Kern River Sub-basin and from an area north and adjacent to the State of California's Tule Elk Reserve. The water is then transported through a 36" transmission pipeline to our Station A facility located at the corner of Highway 119 and Golf Course Road where it is treated with chlorine before being disseminated to 318 miles of pipeline, 26 above ground water storage reservoirs and 15 booster pump stations. The District has one of the most complex systems in California and our employees are dedicated in ensuring you have a reliable and high quality water service at a reasonable cost.



### SGMA

The Sustainable Groundwater Management Act of 2014 (SGMA) requires that the Kern subbasin form a Groundwater Sustainability Agency (GSA). The Kern Groundwater Authority was formed on April 26, 2017, and has 16 members comprised of Kern County basin water districts and municipalities, including West Kern. Although West Kern is a member of the KGA it is also its own GSA. The District is in the process of developing and implementing a groundwater sustainability plan (GSP), in conjunction with the KGA, to achieve and manage groundwater sustainability by 2040. West Kern's GSP will be a chapter in the umbrella GSP being prepared by the KGA for the Kern subbasin. The public will have an opportunity to review and comment on the GSPs beginning August 31, 2019 through October 31, 2019.

## Public Participation

West Kern Water District's Board of Directors meet on the fourth Tuesday of each month at 6:00 p.m. in the District Board Room located at 800 Kern Street, Taft. Meeting agendas are posted at the District office as well as on the District's website and the public is encouraged to attend.

### Drinking Water Source Water Assessment

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs & wells. As water travels over the surface of the land or through the ground, it can dissolve naturally-occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity.

An assessment of West Kern's drinking water sources was completed in May 2001. The sources are considered the most vulnerable during artificial recharge activities in spreading basins, but these activities have not been associated with any detected contaminants. For more information contact Wendy Adams-Rosenberger at 661-763-3151.

## Contaminants that may be present in source water include:

### Microbial contaminants

Such as viruses & bacteria, can be naturally occurring or come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

### Pesticides and herbicides

May come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

### Radioactive contaminants

Can be naturally-occurring or be the result of oil and gas production and mining activities.

### Inorganic contaminants

Such as salts & metals, can be naturally occurring or result from urban storm water run-off, industrial or domestic wastewater discharge, oil and gas production, mining, or farming.

### 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.

In order to ensure that tap water is safe to drink, U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations which limit the amount of certain contaminants in the water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health website (<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx>).

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline 800-426-4791.

## Water Hardness

**Hardness** is a measure of the amount of minerals, generally calcium & magnesium, water contains. Hard water is generally not a health concern, but it can lead to mineral buildup in pipes, water heaters, and swamp coolers. Water is considered soft if it is less than 75 ppm and very hard at 300 ppm. West Kern's water shows an average of 102 ppm.

## Turbidity

**Turbidity** is a measure of the cloudiness of the water. It has no health effects but we monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

## Are you at risk?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, and 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.

EPA/Centers for Disease Control and Prevention (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.

## To interpret the tables, you may need the following definitions

**AL: Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other required action by the water provider.

**MCL: Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. Primary MCL's protect public health and are set as close to the PHGs or MCLGs as are economically and technologically feasible. Secondary MCLs relate to 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 United States Environmental Protection Agency (EPA) and allow a margin of safety.

**MRDL: Maximum Residual Disinfectant Level:** 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.

**MRDLG: Maximum Residual Disinfectant Level Goal:** 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.

**N/A: Not Applicable**

**ND: Not Detected**

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

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

**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 EPA without regard to cost or available detection and treatment technologies.

**SDWS: Secondary Drinking Water Standards:** MCLs for contaminants that may adversely affect the taste, odor, or appearance of drinking water. These are aesthetic considerations that *don't impact health*.

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

### Data Table Units

**NTU** - Nephelometric Turbidity Unit

**mg/L** - milligrams per liter or parts per million (ppm)

**pCi/L** - picocuries per liter (measurement of radioactivity)

**ug/L** - micrograms per liter or parts per billion (ppb)

**µS/cm** - measure of electrical conductivity

**Lead & Copper** - Every 3 years, WKWD is required to sample for lead and copper at specific customer taps as part of the Lead & Copper Rule. Lead and copper are also tested on source water supplies. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. No traces of lead were detected in WKWD's water sources. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The District is responsible for delivering high quality water but cannot control the variety of materials used in customer plumbing systems. 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 the water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested by a private lab. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from USEPA Safe Drinking Water Hotline or at [www.epa.gov/lead](http://www.epa.gov/lead).

## Water Quality Table of Detected Contaminants

### Contaminants Regulated by Primary Drinking Water Standards

Contaminants (units)	Year Tested	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	WKWD Average	Typical Source of Substance
Aluminum (mg/L)	2016-2018	1	0.6	No	ND-.001	.007	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic <sup>1</sup> (ug/L)	2018	10	4	No	ND-2.91	1.25	Erosion of natural deposits
Antimony <sup>2</sup> (ug/L)	2016-2018	6	1	No	ND - 22	3.6	Discharge from petroleum refineries, fire retardants, ceramics solder
Barium (mg/L)	2016-2018	1	2	No	.02-.010	0.03	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Total Chromium (ug/L)	2016-2018	50	(100)	No	ND-4	0	Erosion of natural deposits
Fluoride (mg/L)	2016-2018	2	1	No	ND-0.27	0.08	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as Nitrogen (mg/L)	2018	10	45	No	0.26 – 5.5	1.93	Runoff and leaching fertilizer use
Gross Alpha (pCi/L)	2016-2018	15	0	No	0 to 15	5.61	Erosion of natural deposits
Uranium (pCi/L)	2016-2018	20	0.43	No	0 to 10	5.21	Erosion of natural deposits
Disinfection Byproduct under Stage 2 DBP Rule	Year Tested	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	WKWD Average	Typical Source of Substance
Total Haloacetic acids (ug/L)	2018	60	N/A	No	2.8-3.3	3.05	By-product of drinking water chlorination
Total Trihalomethanes (ug/L)	2018	80	N/A	No	16-19	17.5	By-product of drinking water chlorination
Disinfectant Residual (mg/L)	2018	4	4	No	0.16-0.23	0.18	By-product of drinking water chlorination
Microbiological Contaminants	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Highest Monthly	Typical Source of Substance
Total Coliform Bacteria	2018	positive samples	Less than 5% positive	(0)	No	0.00%	Naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present
Fecal Coliform and E. Coli	2018	positive samples	0 positive	(0)	No	0	E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal fecal waste

### Inorganic Contaminants with Action Levels

Contaminants (CCR Units)	Year Tested	AL	PHG (MCLG)	90 <sup>th</sup> Percentile	Exceeded Standard?	Range	No of Schools Requesting Lead Samples	Typical Source of Substance
Copper (mg/L)	2018	1.3	0.3	0.91	No	30 sites sampled; 0 sites over action level	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ug/L)	2018	15	0.2	1.1	No	30 sites sampled; 1 site over action level	13	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## Contaminants with Secondary Drinking Water Standards

Inorganic Chemicals (units)	Year Tested	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	WKWD Average	Typical Source of Substance
Aluminum (ug/L)	2016-2018	200	N/A	No	ND - 81	7	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (mg/L)	2016-2018	500	N/A	No	29 - 99	48.90	Erosion of natural deposits; seawater influence
Copper (mg/L)	2016-2018	1	N/A	No	ND-.013	.0015	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ug/L)	2016-2018	300	N/A	No	ND - 130	88.6	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2016-2018	1600	N/A	No	326 - 947	534	Substance that forms ions when in water; seawater influence
Sulfate (mg/L)	2016-2018	500	N/A	No	30 - 271	104.81	Runoff/leaching from natural deposits; industrial waste
Total dissolved solids (mg/L)	2018	1000	N/A	No	205 - 688	335	Runoff/leaching from natural deposits
Turbidity (NTU)	2016-2018	5	N/A	No	.1 - 3.22	0.46	Soil runoff
Zinc (mg/L)	2016-2018	5	N/A	No	ND - .049	0.006	Runoff/leaching from natural deposits; industrial wastes

## Other Detected Constituents that May be of Interest to Consumers

Constituents (units)	Year Tested	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Range	WKWD Average	Typical Source of Substance
Hardness (mg/L)	2016-2018	None	None	N/A	38 - 245	102	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Sodium (mg/L)	2016-2018	None	None	N/A	45 - 96	66	Refers to the salt present in the water and is generally naturally occurring.
Alkalinity (mg/L)	2016-2018	None	None	N/A	40 - 107	75.47	<b>West Kern Water tests your water for more contaminants than are shown in the table as required by state and federal regulations. This table lists only those contaminants that were detected.</b>
Boron (mg/L)	2016-2018	None	None	N/A	ND - .25	0.10	
Calcium (mg/L)	2016-2018	None	None	N/A	22 - 115	52.26	
Magnesium (mg/L)	2016-2018	None	None	N/A	ND - .35	0.23	
pH (pH)	2016-2018	None	None	N/A	7.8 - 8.4	8.1	
Potassium (mg/L)	2016-2018	None	None	N/A	ND - .80	0.51	

<sup>1</sup>While your drinking water meets the federal and state standards for arsenic, it does contain low levels of arsenic. The arsenic standards balance the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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.

<sup>2</sup>While your drinking water meets the federal and state standard for antimony, it does contain low levels. During the sample period two wells out of 13 exceeded the MCL. West Kern's blending operations utilize multiple wells which results in antimony average being 0. To address the issue 4 consecutive quarters of testing for these wells began in Jun 2017. Some people who drink water containing antimony in excess of the MCL over many years may experience increases in blood cholesterol and decreases in blood sugar.

## Disinfection By-Products

West Kern Water uses chlorine to disinfect its groundwater sources. Disinfection By-Products (DBPs), which include Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5), are generated by the interaction between naturally occurring organic matter and disinfectants such as chlorine. TTHMs and HAA5 are measured at multiple locations throughout the distribution system. Each location is averaged once per quarter and reported as a running average by location.

## 1,2,3-trichloropropane (TCP)

TCP was used in pesticides about 40 years ago and is considered by CA as a human carcinogen. Effective December 14, 2017 the CA State Water Resources Control Board established the MCL of 5 ppt. West Kern completed required quarterly testing on all source wells in 2018 with results showing non-detect levels.



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## Notice of Change to District Rules and Regulations

Dear Water Customer:

At the May 28, 2019, regular Board meeting, the Board of Directors approved changes to the District Rules and Regulation related to the removal of obstructions that prevent access to District facilities to perform routine maintenance, repairs and the reading of meters. Under the revised rule, customers will be given a 24 hour notice to remove any obstruction that prevents access to District facilities. If the obstruction is not removed within 24 hours, the District will remove the obstruction at the customer's expense.

Unfortunately, the placement of obstructions on or around District facilities has become a growing problem and interferes with the day to day operation of the District. It's in everyone's best interest that access to District facilities be readily available.

If you have any questions, please do not hesitate to contact the District office.

Respectfully:

A blue ink signature of Greg A. Hammett, consisting of a stylized 'G' and 'H'.

Greg A. Hammett, PG  
General Manager

## *Prohibited Practices*



- **Cars may only be washed with hoses that have an automatic shutoff nozzle.**
- **Water cannot be used to clean sidewalks or driveways unless there is a health & safety issue.**
- **Outdoor landscapes may not be watered in any way that causes runoff.**
- **Outdoor landscapes may not be watered at all for 2 days after any measurable rainfall.**

**West Kern Water District encourages customers to maintain a water efficient lifestyle**

Contact the District for information on residential audits, rebates, kits and other tools to help you save water.

If you have any suggestions, questions, or concerns, or require further information regarding this report please contact Wendy Adams-Rosenberger at 661-763-3151 or through the District's webpage at [www.wkwd.org](http://www.wkwd.org).