# 2020 Water Quality Report



Este informe contiene informacion muy importante sobre su agua para beber. Favor de comunicarse West Kern Water District a 661-763-3151 para asistirlo en espanol.

(This report contains important information about your drinking water. Please contact West Kern Water District at 661-763-3151 for assistance in Spanish.)

This Annual Water Quality Report describes in detail the quality of your water during 2020. 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.

# **Public Participation**

West Kern Water District's Board of Directors meet on the fourth Tuesday of each month at 5:30 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.

# All About Water...

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 spreading ponds. Your water is extracted from the Tulare Lake aguifer 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 vou have a reliable and high quality water service at a reasonable cost.

## Contaminants that may be present in source water include

#### **Microbial contaminants**

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

#### Pesticides & 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

Are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic

## 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.

# In order to ensure 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/DFDC S/Pages/FDBPrograms/FoodSafetyProgram/Wat er.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



### 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 naturallyoccurring 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 detected any contaminants. For more information contact Wendy Adams-Rosenberger at 661-763-3151.

# 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

**Common questions about water** 

#### Why is my water milky white?

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Many times, this is caused by air dissolved in the water. Fill a glass and let it sit on your counter. See if the cloudiness disappears after a few minutes.

# Why is my water dirty from time to time and then clears up?

District maintenance activities or use of fire hydrants can disturb the pipe system. This is usually temporary. Don't run the clothes washer or dishwasher until it clears. You may need to run the bathtub faucet to clear out the problem. If it doesn't clear within a few minutes contact the District.

#### Why is my water red or brown?

Pipes in the street, home, or your hot water tank may be rusting. If the discolored water is coming only from the hot water tap, it is likely your water heater or home plumbing and you may need to consult a licensed plumber. If the problem flows from both hot and cold taps, contact the District so that we can help troubleshoot the problem.

#### Why does my water taste or smell strange?

There are many reasons for unusual taste and odor. The most common causes are:

- Chlorine added to the water to kill harmful organisms can also cause it to taste or smell differently. If there is a lot of chlorine, the water might have a "swimming pool" smell.
- A rotten-egg odor or sewage smell could contain hydrogen sulfide, a colorless gas that can naturally occur in groundwater.

Many of the substances that cause bad taste or odor in drinking water will not make you sick. However, if you detect an unusual odor or taste, contact the District.

#### **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 annually at two locations in the distribution system.

# Water Quality Table of Detected Contaminants Contaminants Regulated by Primary Drinking Water Standards

Contaminants (units)	Year Tested	MCL (SMCL)	PHG (MCLG)	Range	WKWD Averag	) Je		Typical Source	
Aluminum (mg/L)	2018-2019	1	0.6	ND010	.007		Erosion o surface w	f natural deposits; residual from some ater treatment processes	
Arsenic (ug/L)	2020	10	4	ND-6.37	0.85		Erosion o	f natural deposits	
Antimony (ug/L)	2018-2019	6	1	ND - 1.66	6 0.113		Discharge ceramics;	from petroleum refineries; fire retardants; solder; electronics	
Barium (mg/L)	2018-2019	1	2	.02013	0.02		Discharge refineries	s of oil drilling wastes and from metal ; erosion of natural deposits	
Total Chromium									
(ug/L)	2018-2019	50	(100)	ND-4	.30		Erosion o	f natural deposits	
Fluoride (mg/L)	2018-2019	2	1	ND-0.15	0.051		Erosion o promotes aluminum	f natural deposits; water additive that strong teeth; discharge from fertilizer and n factories	
Nitrate as Nitrogen	2020	10	45	0.09.4.10	1/2	1	Pupoff an	d loaching fortilizor uso	
	2020	10	43	0.09-4.10	1.45		Discharge	from petroleum, glass and metal refineries;	
Selenium (mg/L)	2018-2019	0.05		ND-0.007	7.0006	1	erosion of chemical	f natural deposits; discharge from mines and manufacturers; runoff from livestock lots.	
(pCi/L) <sup>1</sup>	2018-2020	15	0	0 to 44	14.04		Erosion o	f natural deposits	
Uranium $(pCi/L)^2$	2018-2020	20	0.43	0 to 33	11.80		Erosion o	f natural deposits	
Disinfection Byproduct under Stage 2 DBP Rule	Year Tested	MCL (SMCL)	PHG (MCLG)	Range	WKWD Averag	) Je		Typical Source	
Total Haloacetic acids (ug/L)	2020	60	N/A	2.4-4.1	3.25		By-produ	ct of drinking water chlorination	
Total Trihalomethanes (ug/L)	2020	80	N/A	13-27	20		By-produ	ct of drinking water chlorination	
Disinfectant Residual (mg/L)	2020	4	4	0 16-0 22	2 0.18		By-product of drinking water chlorination		
Nesidual (Ing/1) 2020 4 4 0.10-0.22 0.10 By-product of drinking water chlorination								et of armining water enformation	
Microbiological Contaminants	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Highest # ( Detections in Month	of n a		Typical Source	
Total Coliform Bacteria	2020	positive samples	5% of monthly samples are positive	(0)	0		Naturally an indic	y present in the environment and are used as ator that other, potentially harmful, bacteria may be present	
Fecal Coliform and E. Coli	2020	positive samples	0 positive	(0)	0		E. Coli are water ma fecal wast	bacteria whose presence indicates that the y be contaminated with human or animal se	
<sup>1</sup> While your drinking water meets the federal and state standards for Gross Alpha, 2 wells out of 13 exceeded the MCL. West Kern's blending operations utilize multiple wells which results in the Gross Alpha average being 14.04. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer. <sup>2</sup> While your drinking water meets the federal and state standards for Uranium, 2 wells out of 13 exceeded the MCL. The District's blending operations utilize multiple wells which results in the Uranium average being 11.80. Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.									
Inorganic Contaminants with Action Levels									
Contaminants (CCR Units)	Year Tested	AL	PHG (MCLG)	90 <sup>th</sup> Percentile	Range	No of Requ Lead S	<sup>:</sup> Schools uesting Samples	Typical Source	
Copper (mg/L)	2018	1.3	0.3	0.91	30 sites sampled; 0 sites over action level	١	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	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)	Range	WKWD Average	Typical Source
Aluminum (ug/L)	2018-2019	200	ND - 10	7	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (mg/L)	2018-2019	500	27 – 57	44.17	Erosion of natural deposits; seawater influence
Copper (mg/L)	2018-2019	1	ND013	.0013	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ug/L)	2018-2019	300	ND - 130	53.07	Leaching from natural deposits; industrial wastes
Silver (ug/L)	2018-2019	100	ND-3	.23	Industrial discharges
Specific Conductance (µS/cm)	2018-2019	1600	320 - 947	541	Substance that forms ions when in water; seawater influence
Sulfate (mg/L)	2018-2019	500	18 - 271	97.32	Runoff/leaching from natural deposits; industrial waste
Total dissolved solids (mg/L)	2020	1000	180-494	299	Runoff/leaching from natural deposits
Turbidity (NTU)	2018-2019	5	.11- 3.22	0.67	Soil runoff
Zinc (mg/L)	2018-2019	5	ND049	0.006	Runoff/leaching from natural deposits; industrial wastes

# Sampling Results for Sodium and Hardness

Contaminants (units)	Year Tested	MCL (SMCL)	PHG (MCLG)	Range	WKWD Average	Typical Source
Hardness (mg/L)	2018-2019	None	None	72 - 245	121	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Sodium (mg/L)	2018-2019	None	None	38 - 96	59	Refers to the salt present in the water and is generally naturally occurring.

# Other Detected Contaminants that May be of Interest

Contaminants (units)	Year Tested	Notification Level	Range	WKWD Average	Health Effects
Boron (mg/L)	2016	1	ND25	0.10	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Alkalinity (mg/L)	2018-2019	None	32 - 130	88.73	Lead & Copper
Calcium (mg/L)	2018-2019	None	26 - 64	41	Every 3 years, WKWD is required to samp and copper at specific customer taps as Lead & Copper Rule. Lead and copper tested on source water supplies. If presen
Magnesium (mg/L)	2018-2019	None	0.20 - 4	1.28	
рН (рН)	2018-2019	None	7.8 - 8.3	8	
Potassium (mg/L)	2018-2019	None	ND80	0.26	levels of lead can cause serious health p

## **Unregulated Contaminant** Monitoring Rule (UCMR)

The U.S. EPA requires utilities for to sample emerging contaminants as part of this rule. Every 5 years the US EPA prepares a list of unregulated contaminants for drinking water suppliers to analyze. UCMR results are then used to assist in the development of future drinking water The regulations. District completed UCMR3 testing in 2013 and UCMR4 testing in 2018

West Kern Water is required by State & Federal regulations to test your water for more contaminants than are shown in the tables above. These tables list only those contaminants that were detected.

### Turbidity

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.

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 US EPA Safe Drinking Water Hotline or at www.epa.gov/lead.

Dear West Kern Water Customers,

Again, California finds itself in the grips of another drought. According to Department of Water Resources records, the 2020-2021 water year is currently the third driest on record. While the Sierra Nevada snowpack peaked at about 50% of average, dry conditions resulted in below average run-off to reservoirs. As a result, the State Water Project allocation sits at a meager 5%. These dry conditions have prompted the Governor to proclaim a State of Emergency in 41 of 58 counties in California. We are once again navigating a difficult course.

Increased regulatory restriction on exports from the Sacramento/San Joaquin Delta are the primary reason West Kern's water demands typically exceed our available supplies. The current drought only amplifies these impacts. As always, the District places a high priority on wise water use in both wet and dry years. We are fortunate to have a significant inventory of banked water that allows us to ride out these dry hydrologic cycles and meet customer demand.

In light of these conditions, the West Kern Water District is encouraging customers to follow these voluntary water conservation measures:

- 1. Equip hoses with shut-off nozzle.
- 2. Avoid hosing down driveways, street/parking lot, sidewalks, or buildings unless necessary for health or safety.
- 3. Avoid excessive watering that runs off onto sidewalks, streets or gutters.
- 4. Avoid irrigating residential and commercial landscape between the hours of 10 a.m. and 6 p.m. Adjust watering times to avoid runoff.
- 5. Wash motor vehicles, trailers, boats and other types of equipment using a bucket and/or a handheld hose with a shut-off nozzle, high pressure/low volume wash system, or at a commercial site that recirculates water on-site. Avoid washing vehicles during hot conditions when additional water is required due to evaporation.
- 6. Restaurants should serve water only upon request.
- 7. Hotels, motels, and other commercial lodging establishments should offer customers the option of not laundering towels and linens daily.
- 8. Pools, spas, and ornamental fountains/ponds should be recirculating and leak proof. Drain and refill only as necessary for health, maintenance or structural reasons.
- 9. Repair all leaks within twenty-four (24) hours of notification by the District unless other arrangements are made with the General Manager.

On behalf of our customers, District staff continues to analyze the effects of the current drought on our water supply and particularly as it relates to groundwater level impacts in the Kern Subbasin.

The drought reminds us that conservation and efficient water use are vital elements of sustainable water management. Please join with us to conserve this precious commodity for future Westside residents. We thank you in advance for your cooperation.

Respectfully,

Greg A. Hammett General Manager Estimados clientes de West Kern Water:

Nuevamente, California se encuentra en las garras de otra sequía. Según los registros del Departamento de Recursos Hídricos, el año hidrológico 2020-2021 es actualmente el tercero más seco registrado. Si bien la capa de nieve de Sierra Nevada alcanzó su punto máximo en aproximadamente el 50% del promedio, las condiciones secas dieron como resultado una corriente de agua por debajo del promedio a los depositos de agua. Como resultado, la asignación del Proyecto Estatal de Agua asciende a un escaso 5%. Estas condiciones secas han llevado al gobernador a proclamar un estado de emergencia en 41 de los 58 condados de California. Una vez más estamos navegando por un rumbo difícil.

El aumento de las restricciones regulatorias sobre las exportaciones desde Sacramento/San Joaquin Delta es la razón principal por la que las demandas de agua de West Kern generalmente exceden nuestros suministros disponibles. La sequía actual solo amplifica estos impactos. Como siempre, el Distrito otorga una alta prioridad al uso racional del agua tanto en años húmedos como secos. Tenemos la suerte de tener un inventario importante de agua acumulada que nos permite superar estos ciclos hidrológicos secos y satisfacer la demanda de los clientes.

Debido a estas condiciones, West Kern Water District anima a los clientes a seguir estas medidas voluntarias de conservación de agua:

1. Equipe las mangueras con boquilla de cierre.

2. Evite lavar con manguera los caminos de entrada, calles/estacionamientos, aceras o edificios, a menos que sea necesario por razones de salud o seguridad.

3. Evite el riego excesivo que se corra por las aceras, calles o cunetas.

4. Evite regar el paisaje residencial y comercial entre las 10 a.m. y las 6 p.m. Ajuste los tiempos de riego para evitar la escorrentía.

5. Lave los vehículos de motor, remolques, botes y otros tipos de equipo usando un balde y/o una manguera de mano con una boquilla de cierre, un sistema de lavado de alta presión/bajo volumen, o en un sitio comercial que recircula agua en- sitio. Evite lavar vehículos en condiciones de calor cuando se requiera agua adicional debido a la evaporación.

6. Los restaurantes deben servir agua solo a pedido.

7. Los hoteles, moteles y otros establecimientos comerciales de alojamiento deben ofrecer a los clientes la opción de no lavar las toallas y la ropa de cama todos los días.

8. Las piscinas, spas y fuentes/estanques ornamentales deben ser recirculantes y a prueba de fugas. Drene y vuelva a llenar solo cuando sea necesario por razones de salud, mantenimiento o estructurales.

9. Repare todas las fugas dentro de las veinticuatro (24) horas posteriores a la notificación del Distrito, a menos que se hagan otros arreglos con el Gerente General.

En nombre de nuestros clientes, el personal del Distrito continúa analizando los efectos de la sequía actual en nuestro suministro de agua y particularmente en lo que se refiere a los impactos del nivel del agua subterránea en la subcuenca de Kern.

La sequía nos recuerda que la conservación y el uso eficiente del agua son elementos vitales para la gestión sostenible del agua. Únase a nosotros para conservar este preciado bien para su futura residencia en el lado oeste. Le agradecemos de antemano su cooperación.

Respetuosamente,

Greg A. Hammett General Manager



PO Box 1105 Taft, CA 93268



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

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

Residential/Commercial customers in Maricopa, Tupman, Valley Acres, Dustin Acres, Derby Acres, & McKittrick, along with all Industrial customers, can sign up for Eye on Water to view daily water usage and set a leak alert.

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.

