Annual Drinking Water Quality Report July 2024

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 español.

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

Where our water comes from...

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 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 to ensuring you have a reliable and high quality water service at a reasonable cost.

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.

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
- 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.
- Pesticides & herbicides-May come from a variety of sources such as agriculture, urban stormwater run-off, and residential uses.
- Organic chemical contaminants- Are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater run-off and septic systems
- Radioactive contaminants-Can be naturally-occurring or be the result of oil and gas production and mining activities.

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. Department Regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

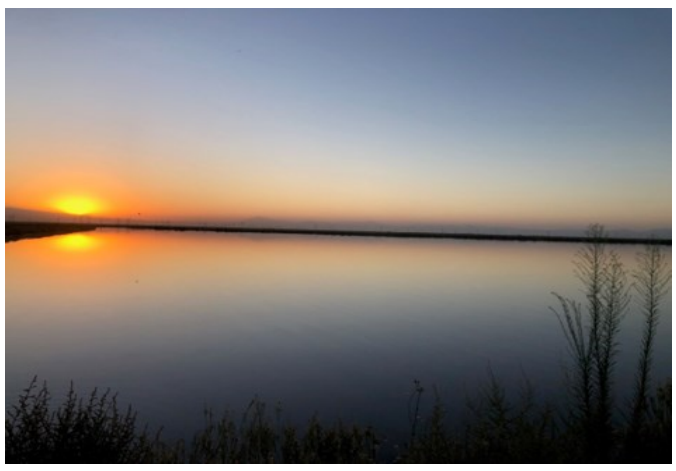
A message from the General Manager
Greg A Hammett

In July 2023, as part of the Governor's Making Conservation a Way of Life in California regulation, the State Water Resources Control Board released **draft *Urban Water Use Efficiency Standards, Objectives and Performance Measures*.** The State Board is scheduled to adopt the regulation in August 2024. The draft regulation requires water districts to develop Urban Water Use Objectives specific to their service area. The Objective includes budgets developed by the water suppliers for such things as efficient indoor and outdoor residential water use, efficient water use on commercial, industrial and institutional landscapes, to name a few. This will fundamentally change the way water districts track conservation efforts and likely result in additional costs to comply. The State has developed state-wide per capita water usage standards for the future. Compliance with these standards is proposed to start in 2027. Water suppliers are expected to be fully compliant with the standards by 2040. Compliance with these standards is going to be a challenge, District staff is working on plans to meet those challenges and is exploring any variances that apply, however, the effort will also require cooperation from customers to meet the conservation goals.

On a more positive note, in 2023, West Kern completed installation of Automatic Meter Reading (AMR) devices on all meter connections in the District's service area. In all about 7,000 AMR meters have been installed. AMR allows West Kern to collect usage information more accurately and efficiently. Additionally, AMR allows customers an opportunity to monitor their usage real-time, on a computer or smart device, by enrolling in an Eye on Water account. More information about Eye on Water can be found on the West Kern website.

This Annual Water Quality Report describes in detail the quality of your water during 2023. As in previous years, your water met all U.S. Environmental Protection Agency (USEPA) and State drinking water health standards. 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.

- Water between 6 pm and 9 am.
- Adjust watering frequency according to the weather & season.
- Inspect your landscape sprinkler system often. Avoid overwatering.
- Check & repair leaking pipes, hoses, sprinklers and toilets.
- Install water saving shower heads, toilets, & sprinkler controllers.
- Use a broom to clean driveways and sidewalks. sidewalks.



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. The public is encouraged to attend.

Drinking Water Source Assessment

An assessment of West Kern's drinking water sources was completed in May 2001, 2010, & 2012. 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.

If you have any suggestions, questions/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

Drinking Water Test Results for the year 2023

Tables 1, 2, 3, 4, & 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

TABLE 1. Compliance with Total Coliform MCL between January 1, 2023 and December 31, 2023

Microbial Contaminants	Sample Date	MCL	PHG (MCLG)	Highest # of Detections in a Month	Typical Source of Bacteria
Total Coliform Bacteria	2023	5% of monthly samples are positive	0	0	Naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present
Fecal Coliform and E.Coli	2023	0 positive	0	0	E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal fecal waste

TABLE 1A. Sampling Results showing the detection of Coliform Bacteria

Microbial Contaminants	Highest # of Detections	No of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. Coli	0	0	(a)	0	Human and Animal Fecal Waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli-positive or system fails to repeat samples following E. Coli positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.*

TABLE 2. Sampling Results showing the detection of Lead and Copper

Lead & Copper	No of Samples Collected	90th Percentile Level Detected	No Sites exceeding AL	AL	PHG	Typical Source of Contaminant
Copper (mg/L) 2021	30	0.100	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ug/L)- 2021	30	3	1	15	2	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits;

TABLE 3. Sampling Results showing Sodium and Hardness

Chemical or Constituent (units)	Sample Date	MCL	PHG (MCLG)	Range of Detections	WKWD Average	Typical Source of Contaminant
Sodium (mg/L)	2021-2022	None	None	37-99	65	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	2021-2022	None	None	49-160	115	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.

TABLE 4. Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent (units)	Sample Date	MCL	PHG (MCLG)	Range of Detections	WKWD Average	Typical Source of Contaminant
Aluminum (mg/L)	2021-2022	1	0.6	ND-0.06	ND	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic (ug/L)	2023	10	4	ND-4.70	1.31	Erosion of natural deposits
Barium (mg/L)	2021-2022	1	2	ND-0.051	ND	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2021-2022	2	1	ND-0.14	0.04	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (mg/L)	2023	10	10	ND-3.61	1.21	Runoff and leaching from fertilizer use
Gross Alpha (pCi/L)[1]	2019-2023	15	0	.44 - 25.8	8.7	Erosion of natural deposits
Uranium (pCi/L)	2019-2023	20	0.43	0 to 22.6	9.9	Erosion of natural deposits
TThms (Total Triahalomethanes (Ug/L)	2023	80	None	17-18	17.5	By-product of drinking water disinfection
Total Haloacetic Acids (HAAS) (ug/L)	2023	60	None	3.2	3.2	By-product of drinking water disinfection
Chlorine (mg/L)	2023	4	4	0.12-0.23	0.2	Drinking water disinfectant added for treatment

[1]While your drinking water meets the federal and state standards for Gross Alpha & Uranium, 2 wells exceeded the MCL. West Kern remains in compliance based on the source wells running annual average of 4 consecutive quarters.

TABLE 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (units)	Sample Date	MCL	Range of Detections	WKWD Average	Typical Source of Contaminant
Aluminum (ug/L)	2021-2022	200	ND-60	8.5	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (mg/L)	2021-2022	500	32-88	49.84	Erosion of natural deposits; seawater influence
Color	2021-2022	15	ND-5	5	Naturally occurring organic materials
Iron (ug/L)	2021-2022	300	ND-180	23.85	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2021-2022	1600	340-830	690	Substance that forms ions when in water; seawater influence
Sulfate (mg/L)	2021-2022	500	20-190	168	Runoff/leaching from natural deposits; industrial waste
Total dissolved solids (mg/L)	2023	1000	212-618	345	Runoff/leaching from natural deposits
Turbidity (NTU)	2021-2022	5	.10-2.8	0.46	Soil runoff

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.

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. U.S. EPA/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).

TERMS USED IN REPORT:

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 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 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.

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.

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

ND: Not Detectable at testing limit

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)

Additional General Information on Drinking Water

About Arsenic: While your drinking water meets the federal & state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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.

About Nitrate (as N): Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

About Gross Alpha: Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

About Uranium: 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.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. West Kern is responsible for providing 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/safewater/lead.

Unregulated contaminant monitoring helps EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated. West Kern completed sampling in 2023 for UCMR5 contaminants in our blended water source and all results showed no detection.