



2024 CONSUMER CONFIDENCE REPORT

WATER SYSTEM INFORMATION

Water System Name: KINNELOA IRRIGATION DISTRICT

Report Date: July 2024

Kinneloa Irrigation District (KID) is pleased to provide you with this Consumer Confidence Report (CCR), which contains information about the quality of drinking water that is delivered to you. This report meets the California requirements for reporting water quality information to customers of public water systems and addresses frequently asked questions.

Type of Water Source(s) in Use: Two vertical wells and one groundwater source tunnel.

Name and General Location of Source(s):

In 2024, the Kinneloa Irrigation District (KID) distributed approximately 537 acre-feet of water to its customers—equal to about 150 million gallons. For context, one acre-foot of water is enough to cover an acre of land one foot deep, or about 325,851 gallons. Your tap water came from two deep vertical wells and one gravity-fed groundwater tunnel in the mountainside. The wells draw from the Raymond Basin, reaching depths of 244 and 443 feet below the ground. The tunnel collects groundwater through natural flow, requiring no pumping. Water from these sources is delivered to reservoirs, where it is blended. Chlorine disinfectant is added at this stage to prevent bacterial growth both in the reservoirs and throughout the distribution system. KID also maintains emergency interconnections with the City of Pasadena, providing backup supply options when needed.

Drinking Water Source Assessment Information:

An assessment of Kinneloa Irrigation District's drinking water sources was completed in August 2002. The assessment concluded that KID's sources are considered most vulnerable to nitrate contamination. A copy of the full assessment is available for review at the District office, located at 1999 Kinclair Drive, Pasadena, CA. To request access, contact us at (626) 797- 6295.

Time and Place of Regularly Scheduled Board Meetings for Public Participation:

The Board meets on the fourth Tuesday of every month at the District office located at 1999 Kinclair Drive, Pasadena, CA. Members of the public are welcome to attend.

For More Information, Contact:

Kinneloa Irrigation District General Manager, Tom Majich, (626) 797- 6295

ABOUT THIS REPORT

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of **January 1 to December 31, 2024**, and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Favor de comunicarse con Kinneloa Irrigation District a 1999 Kinclair Drive, Pasadena, CA 91107 a (626) 797-6295 para más información.

DEFINITIONS

Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Maximum Contaminant Level Goal (MCLG)	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 (U.S. EPA).
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.
Maximum Residual Disinfectant Level (MRDL)	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 Disinfectant Level Goal (MRDLG)	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.
Notification Level (NL)	An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e., city council, county board of supervisors).
Public Health Goal (PHG)	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.
Regulatory Action Level (AL)	Concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.

SOURCES OF DRINKING WATER AND CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER

The sources of drinking water (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.

Contaminants that may be present in source water include:

- ☐ Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ☐ Inorganic contaminants, such as salts and metals, 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, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- ☐ Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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.

ABOUT YOUR DRINKING WATER QUALITY

DRINKING WATER CONTAMINANTS DETECTED

The **2024 Drinking Water Quality Data** lists all 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 Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked.

DISTRICT UPDATE ON FLUORIDE

KID's fluoride variance from the State Water Resources Control Board expired on December 13, 2023. KID is now required to meet the California fluoride maximum contaminant level (MCL) of 2 mg/L. In response, the District underwent necessary system changes to remain in compliance. All gravity-fed groundwater tunnels were removed from the distribution system and redirected to groundwater recharge (spreading) before the variance expired. In 2024, all remaining active water sources tested at or below 2 mg/L for fluoride.

2024 Drinking Water Quality Data

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTION	MCL VIOLATION	RECENT TEST YEAR	TYPICAL SOURCE OF CONTAMINANT
PRIMARY DRINKING WATER STANDARDS - Health - Related Standards							
RADIOLOGICALS							
Gross Alpha Particle Activity (pCi/L)	15	0	ND	7.51	No	2024	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	ND	15	No	2024	Erosion of natural deposits
SYNTHETIC ORGANIC CHEMICALS							
1,2,3 Trichloropropane [TCP] (ng/L)	5	0.7	ND	ND	No	2024	Industrial & Agricultural chemical discharge
INORGANIC CHEMICALS							
Arsenic (ppb)	10	0.004	4.37	ND - 8.00	No	2022	Erosion of natural deposits
Fluoride (ppm) <i>Naturally Occurring</i>	2*	1	1.42	0.98 - 1.90	No	2024	Erosion of natural deposits
Hexavalent Chromium (µg/L)	10	0.02	1.26	0.16 - 2.70	No	2022	Runoff/leaching from natural deposits
Nitrate (ppm)	10	10	3.88	1.6 - 5.7	No	2024	Leaching from fertilizer use
Perchlorate (µg/L)	6	1	1.7	ND - 1.7	No	2024	Industrial environmental contamination

*See more information on Fluoride on Page 3

SECONDARY DRINKING WATER STANDARDS - Aesthetic Standards, Not Health-Related							
Aluminum (ppb)	200	NA	ND	ND	No	2022	Erosion of natural deposits
Chloride (ppm)	500	NA	19.43	7.5 - 38	No	2022	Runoff/leaching from natural deposits
Iron (ppb)	300	NA	ND	ND	No	2022	Leaching from natural deposits
Odor - Threshold (units)	3	NA	1	1	No	2022	Naturally-occurring organic materials
Specific Conductance (µmhos/cm)	1600	NA	360	360	No	2022	Substances that form ions in water
Sulfate (ppm)	500	NA	38	17 - 77	No	2022	Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	1000	NA	250	190 - 380	No	2022	Runoff/leaching from natural deposits
Turbidity (NTU)	5	NA	0.22	ND - 0.55	No	2022	Soil runoff

UNREGULATED CHEMICALS OF INTEREST							
Hardness as CaCO ₃ (ppm)	NR	NA	181.48	80.90 - 296.00	NA	2022	Runoff/leaching from natural deposits
Sodium (ppm)	NR	NA	23.20	11.00 - 55.00	NA	2022	Runoff/leaching from natural deposits

CHEMICAL	ACTION LEVEL (AL)	PHG	90TH PERCENTILE	SITE EXCEEDING AL/NUMBER OF SITES	AL VIOLATION	NO. OF SCHOOLS REQUESTING LEAD SAMPLING	TYPICAL SOURCE OF CONTAMINANT
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LEAD AND COPPER CONCENTRATIONS AT RESIDENTIAL TAPS							
Copper (ppm)	1.3	0.3	0.12	0/10	No	NA	Corrosion of household plumbing
Lead (ppb)	15	0.2	5.7	0/10	No	0	Corrosion of household plumbing

The most recent set of samples (10 residences) was collected in July 2022. Copper was detected in 5 samples. None exceeded the regulatory action level (AL). Lead was detected in 2 samples. None exceeded the regulatory AL. AL is the concentration of lead or copper which if exceeded in more than 10 percent of the samples tested, triggers treatment or other requirements that a water system must follow. In 2022, no schools submitted a request to be sampled for lead

MRDLG = maximum residual disinfectant level goal; MRDL = maximum residual disinfectant level; MCL = maximum contaminant level; MCLG = maximum contaminant level goal; N/A = not applicable; ND = not detected; NR = not regulated; PHG = public health goal; NL = Notification Level; ppb = parts per billion or micrograms per liter; ppm = parts per million or milligrams per liter; SMCL = secondary MCL; µmho/cm = micromhos per centimeter; < = average is less than the reporting limit; pCi/l = picocuries per liter ±UCMR require reporting for five years. Detections for UCMR (Unregulated Contaminant Monitoring Rule) contaminants are removed from the report once they have reached the fifth year

2024 Drinking Water Quality Data

CHEMICAL	MCL (MRDL/MRDLG)	AVERAGE	RANGE OF DETECTION	MCL VIOLATION	RECENT TEST YEAR	TYPICAL SOURCE OF CONTAMINANT
DISTRIBUTION SYSTEM WATER QUALITY						
Chlorine Residual (ppm)	4	1.31	0.71 - 1.8	No	2024	Drinking water disinfectant
Haloacetic Acids (5) (HAA5) (ppb)	60	1.9	ND - 1.9	No	2024	Byproduct of chlorine disinfection
Fluoride (ppm)	2*	1.2	0.9 - 2.0	No	2024	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs) (ppb)	80	7.79	0.57 - 15.00	No	2024	Byproduct of chlorine disinfection
Turbidity (ntu)	5**	0.28	ND - 0.64	No	2024	Soil runoff
Odor (ton)	3**	2	1 - 2	No	2024	Byproduct of drinking water disinfection

*Six distribution system locations are tested for fluoride quarterly at the request of the State Board. ** Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

CHEMICAL	MCL	PHG (MCLG)	HIGHEST NO. OF DETECTIONS	NO. OF MONTHS IN VIOLATION	MCL VIOLATION	RECENT TEST YEAR	TYPICAL SOURCE OF CONTAMINANT
REVISED TOTAL COLFIORM RULE - Detection of Coliform Bacteria							
MICROBIOLOGICAL							
<i>E.Coli</i> (state RTCR)	(a)	0	0	0	No	2024	Human and animal fecal waste

Health Effects Language: E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, some of the elderly, and people with severely-compromised immune systems.

Any violation of an AL, MCL, MRDL, or TT is asterisked. (a) routine and repeat samples are total coliform-positive and either is E. coli-positive.

CHEMICAL	MCL	PHG (MCLG)	HIGHEST NO. OF DETECTIONS	NO. OF MONTHS IN VIOLATION	MCL VIOLATION	SAMPLE DATES	TYPICAL SOURCE OF CONTAMINANT
GROUND WATER RULE - Fecal Indicator-Positive Groundwater Source							
MICROBIOLOGICAL							
Fecal Indicator <i>E. Coli</i> (GWR)	0	(0)	0	0	No	2024	Human and animal fecal waste
Enterococci	TT	NA	0	0	TT	2024	Human and animal fecal waste
Coliphage	TT	NA	0	0	TT	2024	Human and animal fecal waste

Health Effects Language: Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

LEAD & COPPER RULE - LEAD SERVICE LINE INVENTORY

RULE, REVISIONS, AND IMPROVEMENTS

The purpose of the federal Lead and Copper Rule (LCR), Revisions (LCRR), and Improvements (LCRI) is to protect public health by reducing lead and copper levels in drinking water. Lead and copper can enter drinking water through disturbance or corrosion of lead and copper plumbing materials. Public water systems are required to monitor and take various actions to minimize lead and copper levels at consumers' taps.

The Kinneloa Irrigation District completed its initial Lead Service Line Inventory on October 16, 2024, in compliance with the U.S. EPA's Lead and Copper Rule Revisions (LCRR). Based on a thorough review of historical records and field investigations, the District has determined that there are no lead or galvanized service lines requiring replacement within its distribution system. This determination includes both District-owned and customer-owned service lines. To access the District's written statement on the Lead Service Line Inventory, visit this link: <https://tinyurl.com/KIDLSLI25>

REGULATION OF DRINKING WATER AND BOTTLED WATER QUALITY

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in 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 GENERAL INFORMATION ON DRINKING WATER

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 U.S. EPA's Safe Drinking Water Hotline (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. 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).

Lead: 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. Kinneloa Irrigation 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline (1-800-426-4791).

Nitrate: Testing conducted in 2024 found detectable levels of nitrate in KID's groundwater sources; however, the concentrations were well below the regulatory action threshold.

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 specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

Arsenic: While your drinking water meets the federal and state standards for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

***Cryptosporidium*:** Groundwater is protected from many infectious organisms, such as the parasite cryptosporidium, by the natural filtration action of water percolating through soils. There is no indication that *Cryptosporidium* has breached this natural soil filter and entered the KID water supply.

Chromium (hexavalent): Testing conducted in 2022 found detectable levels of hexavalent chromium in KID's groundwater sources; however, the concentrations were well below the regulatory action threshold.