

# 2024 WATER QUALITY REPORT

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse con la ciudad de Turlock a 209-668-5590 para asistirle en español.

This report provides important information about Turlock’s water supply, water quality and water conservation. Test results from Turlock’s 2024 Water Quality Monitoring Program are summarized on pages 4 - 6. It is important you read the messages regarding various water quality issues from the U.S. Environmental Protection Agency (USEPA) and from the City of Turlock’s Municipal Services Department.



This report is prepared in accordance with USEPA and State of California regulations under the Safe Drinking Water Act (SDWA) which require water utilities to provide detailed water quality information to their customers annually.

## Connect With Us:

**Office:**  
156 S. Broadway, Ste. 270  
Turlock, CA 95380

**Phone:**  
(209) 668-5590

**Email:**  
municipalservices@turlock.ca.us

**Website:**  
www.cityofturlock.org

**City Council Meetings:**  
156 S. Broadway  
Council Chambers  
2nd & 4th Tuesday at 6:00 pm

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  @TurlockMuni



## Watering Schedules

**March 1 - October 31**

Odd Addresses: **WEDNESDAYS & SUNDAYS**  
Even Addresses: **TUESDAYS & SATURDAYS**



**November 1 - February 28**

Even Addresses: **SATURDAYS**  
Odd Addresses: **SUNDAYS**

**No watering between 9:00 AM and 9:00 PM**

# YOUR WATER SYSTEM

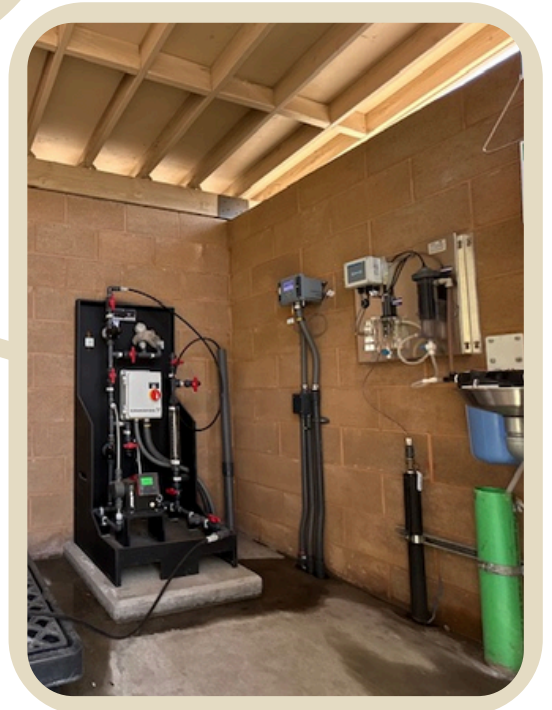


## YOUR WATER

To meet the needs of our residents, we use a combination of groundwater and water purchased from the Stanislaus Regional Water Authority (SRWA), which is obtained from the Tuolumne River. The Turlock system includes 18 active wells, 3 pump stations, and 4 storage tanks.

## CHLORINATION

Chlorination is the addition of chlorine to drinking water systems. It is the most common type of drinking water disinfection, killing bacteria, viruses, and other microorganisms that cause disease or immediate illness. Chlorine is effective and continues to keep water safe as it travels through pipes to consumers.



# HEALTH RELATED INFORMATION

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, that 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 by-products 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.

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

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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## NITRATES IN DRINKING WATER

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.

## ARSENIC IN DRINKING WATER

While your drinking water meets the federal and 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. 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.

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. 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).

## 1,2,3 TCP Evaluation Report

A 1, 2, 3 TCP evaluation of the City of Turlock's 18 active groundwater wells was completed in November 2024. 1, 2, 3 TCP is ubiquitous and tied to a non-point source, indicating likely historic widespread use of soil fumigants in the region. You may request a summary of the report be sent to you by contacting the Municipal Services Department at 209-668-5590.

# DEFINITIONS

*These terms are used throughout this report and in the following tables.*

**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 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.

**Maximum Residual**

**Disinfectant 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**

**Disinfectant Level Goal**

**(MRDLG):** 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.

**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.

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

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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

**Variances and Exemptions:** State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**90th Percentile:** The results of all samples taken during a monitoring period which are placed in ascending order from the sample with the lowest concentration to the sample with the highest concentration.

Each sample result is assigned a number starting with the number 1 for the lowest value. The number of samples taken during the monitoring period is then multiplied by 0.9. The contaminant concentration in the numbered sample yielded by this calculation is the 90th percentile.

**Total Hardness Conversion:**

ppm ÷ 17.1 = grains per gallon.  
60 to 180 ppm = soft to very hard water.

**ND:** Non-Detected

**MFL:** million fibers per liter

**mrem/year:** millirems per year (a measure of radiation absorbed by the body)

**N/A:** not applicable

**NTU:** Nephelometric Turbidity Units

**pCi/L:** picocuries per liter (a measure of radioactivity)

**ppb:** parts per billion, or micrograms per liter (µg/L)

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

**ppq:** parts per quadrillion, or pictograms per liter (pg/L)

**ppt:** parts per trillion, or nanograms per liter (ng/L)

**µs/cm:** micro siemens per cm (measure electrical conductivity of water)

**Comparative  
Figures for  
Interpreting  
Measurements**

mg/L - milligrams per liter	ppm - parts per million	1 second in 11.5 days
µg/L - micrograms per liter	ppb - parts per billion	1 second in nearly 32 years
ng/L - nanograms per liter	ppt - parts per trillion	1 second in nearly 32,000 years

# DETECTED CHEMICALS OR CONSTITUENTS IN 2024

The following tables list all the drinking water contaminants the City detected during the 2024 calendar year. The presence of these contaminants in the water does not indicate the water poses a health risk. Unless otherwise noted, the data presented in these tables are from testing done between January 1 and December 31, 2024. The USEPA and State of California requires the City 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 more than one year old.

## How to Read Tables in This Report:

SUBSTANCE	PHG (MCLG)	MCL	AVERAGE LEVEL DETECTED	RANGE DETECTED	TYPICAL SOURCE(S) IN DRINKING WATER
Sampled contaminate	Below this level, a constituent has no known or expected health risk.	Highest amount of a contaminate the USEPA allows in drinking water. If exceeded, treatment or other requirements must take place.	The average amount of a constituent detected in the drinking water	The amount from the lowest to highest of a detected constituent in the drinking water.	Turlock's drinking water comes entirely from groundwater. This describes the most likely way a constituent enters the drinking water

## INORGANIC CONTAMINANTS

Regulated contaminants with primary MCLs or MCLG

Constituent	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA <sup>1</sup>		Typical Source(s) in Drinking Water	Violation
					Average	Range	Result/Average	Range		
Arsenic <sup>2</sup>	2022-2024	ppb	0.004	10	8.3	4.1 - 11	ND	N/A	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	No
Chromium (hexavalent) <sup>3</sup>	2024	ppb	0.02	10	4.9	3.5 - 6.8	0.03	ND - 0.05	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities.	No
Fluoride	2022-2024	ppm	1	2	0.1	ND - 0.4	ND	N/A	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	No
Nitrate <sup>4</sup>	2024	ppm	10	10	6.0	1.6 - 9.9	0.49	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	No

1 A part of Turlock's water supply was purchased from Stanislaus Regional Water Authority (SRWA) between 1/1/24 - 12/31/24.

2 The average arsenic level in our groundwater was 8.3 ppb, with a maximum level of 11 ppb. We are closely monitoring the 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.

3 The average chromium (hexavalent) level in our groundwater was 4.9 ppb, with a maximum level of 6.8 ppb. Some people who drink water containing hexavalent chromium in excess of the MCL (10 ppb) over many years may have an increased risk of getting cancer.

4 The average nitrate level in our groundwater was 6.0 ppm, with a maximum level of 9.9 ppm. We are closely monitoring the nitrate levels. Nitrate in drinking water at levels above 10 ppm 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 ppm 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 seek advice from your health care provider.

## VOLATILE ORGANIC CONTAMINANTS

Constituent	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA		Typical Source(s) in Drinking Water	Violation
					Average	Range	Result	Range		
Tetrachloroethylene (PCE) <sup>5</sup>	2024	ppb	0.06	5	3	2.7 - 3.4	ND	N/A	Discharge from factories, dry cleaners, and auto shops (metal degreaser)	No

5 Some people who use water containing tetrachloroethylene (PCE) in excess of the MCL over many years may experience liver or nervous system problems.

## MICROBIOLOGICAL CONTAMINANTS

Constituent	Year Tested	Unit	PHG (MCLG)	MCL	Distribution System-Wide		Typical Source(s) in Drinking Water	Violation
					Average	Range		
Total Coliform Bacteria	2024	Positive	0	5% of monthly samples <sup>6</sup>	0%	0%	Naturally present in the environment	No

6 Exceeds if routine and repeat samples are total coliform-positive and either is E. coli-positive, system fails to take repeat samples following E. coli-positive routine sample, or system fails to analyze total coliform-positive repeat sample for E. coli.

## SECONDARY DRINKING WATER CONTAMINANTS

*Aesthetic standards established by the State Water Resources Control Board's Division of Drinking Water*

Constituents	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA		Typical Source(s) in Drinking Water	Violation
					Average	Range	Result/Average	Range		
Chloride	2022-2024	mg/L	N/A	500	25	3.7 - 70	3.5	N/A	Runoff/leaching from natural deposits; seawater influence	No
Specific Conductance	2022-2024	µS/cm	N/A	1,600	386	274 - 570	142	127 - 159	Substances that form ions when in water; seawater influence	No
Total Dissolved Solids	2022-2024	mg/L	N/A	1,000	249	202 - 334	110	N/A	Runoff/leaching from natural deposits	No
Turbidity	2022-2024	NTU	N/A	5	0.7	0.1 - 4	0.2	N/A	Soil runoff	No

## RADIOACTIVE CONTAMINANTS

Constituents	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA		Typical Source(s) in Drinking Water	Violation
					Average	Range	Result	Range		
Gross alpha particle activity <sup>7</sup>	2019-2024	pCi/L	0	15	2.02	ND - 8.96	ND	N/A	Erosion of natural deposits	No
Uranium <sup>8</sup>	2019-2024	pCi/L	0.43	20	4.02	ND - 8.10	ND	N/A	Erosion of natural deposits	No

7 Compliance is based on a running annual average (RAA), which was 2.02 pCi/L and below the MCL. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing α emitters in excess of the MCL over many years may have an increased risk of getting cancer.

8 Compliance is based on a running annual average (RAA), which was 4.02 pCi/L and below the MCL. 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.

## Water Main Flushing

Over time, natural sediments, such as rust and sand particles can accumulate in the water pipes located under the streets of Turlock. While these sediments are safe to drink, they may affect water taste, color and smell.



Water main flushing is the process of cleaning the interior of the water pipes and removing any accumulated sediments by sending a rapid flow of water through the pipes.

No impacts on water services are expected during this process and water will remain safe to drink. If you notice any water quality issues at your home or business, run your outside hose for a few minutes to clear the water line from your meter.



# SYNTHETIC ORGANIC CONTAMINANTS

Constituent	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA		Typical Source(s) in Drinking Water	Violation
					Average	Range	Result	Range		
1, 2, 3 Trichloropropane (1,2,3 TCP) <sup>9</sup>	2024	µg/L	0.0007	0.005	0.003	ND - 0.02	ND	N/A	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.	Yes

<sup>9</sup> Compliance is based on a running annual average (RAA), which was 0.003 ug/L, with a maximum of 0.02 ug/L. The MCL for 1,2,3 TCP is 0.005 ug/L. Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

## DISINFECTION BYPRODUCTS & DISINFECTANT RESIDUAL

Disinfection Byproducts	Year Tested	Unit	PHG (MCLG)	MCL	Distribution System-Wide		Typical Source(s) in Drinking Water	Violation
					Average	Range		
Total haloacetic acids (THAA)	2024	ppb	N/A	60	3.5	ND - 9.8	Byproduct of drinking water disinfection	No
Total trihalomethane (TTHM)	2024	ppb	N/A	80	7.9	ND - 26	Byproduct of drinking water disinfection	No

Disinfectant Residual	Year Tested	Unit	MRDLG	MRDL	Distribution System-Wide		Typical Source(s) in Drinking Water	Violation
					Average	Range		
Chlorine residual	2024	ppm	4	4	0.84	0.16 - 0.93	Drinking water disinfectant added for treatment	No

## UNREGULATED CONTAMINANTS

*No proposed health standards for these contaminants.*

Constituents	Year Tested	Unit	PHG (MCLG)	MCL	Groundwater		SRWA		Violation
					Average	Range	Result/Average	Range	
Alkalinity (total)	2022-2024	ppm	N/A	N/A	111	92.5 - 180	54.5	49 - 60	N/A
Calcium	2022-2024	ppm	N/A	N/A	27	18 - 45	48	41 - 55	N/A
Hardness (total)	2022-2024	ppm	N/A	N/A	87	26 - 154	59	N/A	N/A
Magnesium	2022-2024	ppm	N/A	N/A	6	ND - 10	2	N/A	N/A
pH	2022-2024	STD U	N/A	N/A	7.7	7.1 - 8.2	8.7	8.5 - 8.9	N/A
Sodium	2022-2024	ppm	N/A	N/A	29	19 - 41	6.6	N/A	N/A

### Water Conservation Tips

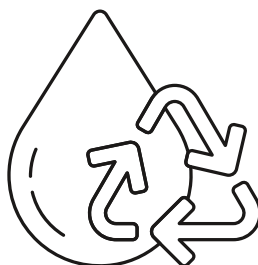
- Check toilets for leaks: Place a few drops of food coloring in your toilet tank.
- Stop using toilets as an ashtray or wastebasket: Every flush uses 5-7 gallons of water.
- Take shorter showers: Typical showers use 5-10 gallons of water per minute.
- Turn off the water while brushing teeth and/or shaving
- Use dishwasher for full loads only
- Check pipes and faucets for leaks.
- Put a layer of mulch around trees and plants.

### DID YOU KNOW?

- As much as 50% of water used outdoors is lost due to wind, evaporation, an runoff caused by inefficient irrigation systems.
- Turning off the tap while brushing your teeth can save 8 gallons of water per day
- Household leaks can waste about 900 billion gallons of water annually nationwide

### Turlock Municipal Code Violations

- Watering on wrong day and/or hours.
- Watering landscaped areas such that excess water leaves the property/area being watered.
- Watering landscaped areas while raining and/or within 48 hours following measurable rainfall.
- Washing vehicles, boats, or equipment during restricted days/hours and/or using a hose without a positive shut-off valve.
- Hosing down driveways, sidewalks, building exteriors, streets, and/or parking lots.
- Broken sprinklers, plumbing fixtures or leaky faucets



# LEAD AND COPPER SAMPLING

In 2024, the drinking water in 122 homes within Turlock were tested for lead and copper concentrations. Two of the homes showed a detectable concentration of lead in the tap water. Twelve of the homes had detectable amounts of copper present, all at levels well below the Regulatory Action Level (AL). The results were as follows:

Compound Limit (90th percentile)

Lead	MCL	Copper	MCL
ND	15 ppb	ND	1.3 ppm

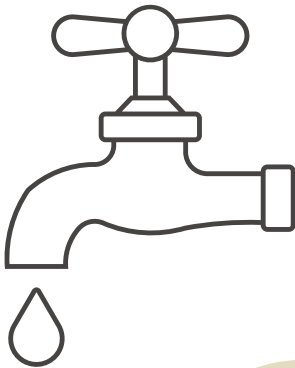
The City of Turlock tested for lead and copper twice, once in February and another in August of 2024. Both test results were reported to the State Water Resources Control Board (SWRCB) before August 30, 2024. The 90th percentile for lead and copper were in compliance with the regulatory standards.

## 2024 Results:

Substance	Unit	PHG (MCLG)	AL	Level Detected	Sites Above AL/	Typical Source(s) in Drinking Water	Violation
Lead	ppb	0.2	15	ND	0/122	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	No
Copper	ppm	0.3	1.3	ND	0/122	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	No

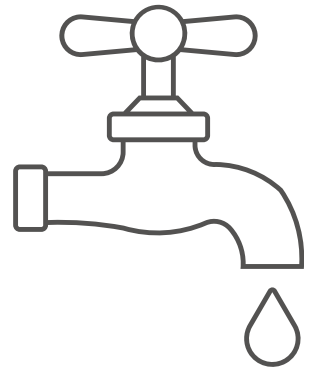
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Turlock is responsible for providing high quality drinking 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>



## Cross-Connection Control

Backflow can occur when certain pressure conditions exist either in our distribution system or within the customer's plumbing, so customers are the first line of defense. A minor home improvement project-without the proper protections-can create a potentially hazardous situation, so careful adherence to plumbing codes and standards will ensure the community's water supply remains safe. Please be sure to utilize the advice or services of a qualified plumbing professional.



Many water-use activities involve substances that, if allowed to enter the distribution system, would be aesthetically displeasing or could even present health concerns. Some common cross-connections are:

- Garden hoses connected to a hose bib without a simple hose-type vacuum breaker
- improperly installed toilet tank fill valves that do not have the required air gap between the valve or refill tube
- Landscape irrigation systems that do not have the proper backflow prevention assembly installed on the supply line

Customers must ensure that all plumbing is in conformance with local plumbing codes. Additionally, state law requires certain types of facilities to install and maintain backflow prevention assemblies at the water meter. The backflow coordinator will determine whether you need to install a backflow prevention assembly based on water uses at your location.

**Farsi, Persian**

این گزارش حاوی اطلاعات مهمی در مورد آب آشامیدنی شماست. برای دریافت اطلاعات بیشتر با ما تماس بگیرید  
209-668-5590

**Portuguese**

**Este relatório contém informação importante sobre sua água potável. Por favor entre em contato com City of Turlock a 209-668-5590 para auxílio em português.**

**Punjabi**

ਐਂਸ ਰਿਪੋਟ ਵਿਚ ਤੁਵਾਡੇ ਪੀਣੇ ਦੇ ਵਾਰੇ ਮਹੱਤਵਪੂਰਨ ਸੂਚਨਾ ਹੈ | ਪੰਜਾਬੀ ਵਿਚ ਮਦਦ ਲਈ, City of Turlock ਨੂੰ 156 S Broadway Turlock CA 95380 ਜਾਂ 209-668-5590 ਤੇ ਸੰਪਰਕ ਕਰੋ |

**Spanish**

**Este informe contiene información muy importante sobre su agua potable. Favor de comunicarse con la ciudad de Turlock al 209-668-5590 para asistirle en español.**