ANNUAL WATER QUALITY REPORT

Reporting Year 2024

CITY OF DIXON CALIFORNIA

Presented By

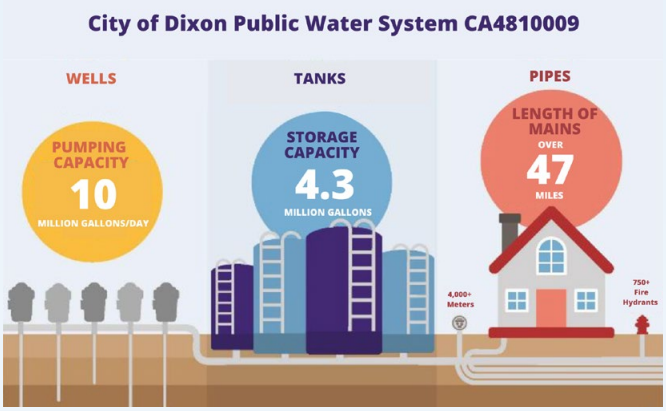
City of Dixon Public Water System

PWS ID#: CA4810009

What is a Consumer Confidence Report?

A Consumer Confidence Report, or Water Quality Report, is an annual report with a focus on the quality of water provided by your water purveyor. The City of Dixon's public water system is pleased to announce that the water we serve to our customers continues to meet all standards set by the U.S. Environmental Protection Agency (U.S. EPA) and State Water Resources Control Board, Division of Drinking Water (SWRCB). The City of Dixon monitors the drinking water from source to tap and uses a certified laboratory to analyze samples collected to ensure accurate results. The results and information provided in this report are specific to the City of Dixon's public water system from January 1 to December 31, 2024.

Your Water Source and Supply Facilities



The source of all drinking water in the City of Dixon is groundwater, pumped from hundreds of feet below the ground surface. The city's system operates and maintains four active production wells that pump water into the distribution system. The wells are located throughout the service area and have a total pumping capacity of approximately 7,000 gallons per minute (~10 million gallons per day). The water system uses booster pumps along with the source wells to pressurize the system between 52 and 62 pounds per square inch (psi).

The water distribution system includes over 47 miles of main line and four aboveground steel storage tanks. These tanks can hold a combined 4.3 million gallons of water, ensuring adequate water supply during peak demand and the high flow demands of firefighting. To avoid service interruption, each distribution facility is equipped with an emergency backup generator that provides power in the event of an outage.

Lead in Water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The City of Dixon is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact the City of Dixon Water Operations at (707) 678-7050 ext. 5501. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

In January 2017, the SWRCB issued a permit amendment establishing requirements for water purveyors to provide assistance and complete lead monitoring and sampling for all kindergarten to 12th-grade schools. The City of Dixon has worked collaboratively with the school district within the water system service area. The City of Dixon provided assistance and completed testing for the Dixon Unified School District at three local schools (Tremont Elementary, Gretchen Elementary, and Dixon High School) during the spring of 2019. For information related to the testing of lead in schools, visit waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.html.

Public Meetings

Do you have questions, comments, concerns, thoughts, or ideas related to your water system? We encourage customer participation! City council meetings are scheduled for the 1st and 3rd Tuesday of each month starting at 7 p.m. The council chambers are located at 600 East A Street.

Questions?

The City of Dixon is committed to providing superior customer service. For water service or billing questions, you can reach our dedicated and knowledgeable staff at (707) 678-7008. If you have questions related to water quality, please contact Water Operations Supervisor Josh Hudson at (707) 678-7050, ext. 5501. For after-hours calls and emergencies, a city operator is always available at (707) 676-3005.

Substances That Could Be in 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, 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA and SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Hexavalent Chromium

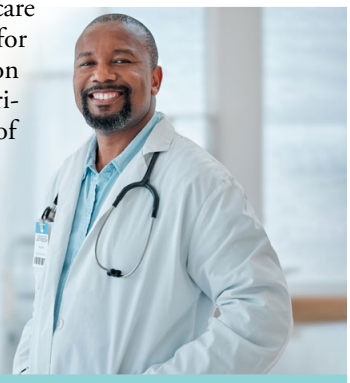
On April 17th, 2024 the SWRCB State Water Resources Control Board, in resolution No.2024-0015, adopted a regulation for a hexavalent chromium maximum contaminant level (MCL) of 10 parts per billion (ppb). The MCL went into effect on October 1st, 2024. Chromium (hexavalent) was detected at levels that exceed the chromium (hexavalent) MCL. While a water system of our size is not considered in violation of the chromium (hexavalent) MCL until after October 1st, 2027, we are working to address this exceedance and comply with the MCL. Specifically, we are conducting a pilot study with a State approved treatment technology so we can design and price appropriate treatment for your drinking water wells.

Source Water Assessments

Drinking water source assessments for the City's wells were all completed by 2007. The wells are considered most vulnerable to sewer collection systems, auto repair shops, chemical and petroleum pipelines, ag wells, and gas stations. You may request a summary of the assessment by calling 707-678-7050 ext.5501.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 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, (800-426-4791), or epa.gov/safewater.



Distribution Disinfection and Water Quality

Small amounts of sodium hypochlorite (chlorine) are added at each active source to disinfect the water supply in the distribution system. The addition of chlorine reduces the possibility of microbiological contamination in your water supply. During 2024 weekly bacteriological samples were collected at representative points within the distribution system (see Regulated Substances table). Bacteriological samples were also collected whenever a new main line was placed into service or pressure was reduced to below 5 psi for a system repair.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2024	10	0.004	1	ND–3	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2024	1	2	0.15	0.13–0.18	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2024	[4.0 (as Cl2)]	[4 (as Cl2)]	0.85	0.71–0.96	No	Drinking water disinfectant added for treatment
Chromium, Total (ppb)	2024	50	(100)	23.67	20–27	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
***E. coli* (State Revised Total Coliform Rule)** (positive samples)	2024	0	(0)	0	NA	No	Human and animal fecal waste
Gross Alpha Particle Activity (pCi/L)	2020	15	(0)	1.74	0.77–2.54	No	Erosion of natural deposits
HAA5 [sum of 5 haloacetic acids] (ppb)	2024	60	NA	9.95	9.7–10.2	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2024	10	20	19	15–22	No	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
Nitrate [as nitrogen] (ppm)	2024	10	10	3.52	2.0–4.3	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2024	50	30	3.67	ND–11	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	1.95	1.7–2.2	No	By-product of drinking water disinfection
Uranium (pCi/L)	2020	20	0.43	1.99	1.16–3.97	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	0.3	0.14	ND–0.27	0/31	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2024	15	0	ND	ND–11	0/31	No	Corrosion of household plumbing systems, erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2024	500	NS	13	11–17	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µmho/cm)	2024	1,600	NS	547	530–560	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2024	500	NS	28.3	27-30	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2024	1,000	NS	327	300–330	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2024	5	NS	0.13	0.10–0.15	No	Soil runoff

UNREGULATED SUBSTANCES [1]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity (ppm)	2024	217	210–220	NA
Boron (ppb)	2024	433	400–460	NA
Calcium (ppm)	2024	24.67	21–28	NA
Hardness, Total [as CaCO3] (ppm)	2024	163	130–190	NA
Lithium (ppb)	2023	34	28–40.5	NA
Magnesium (ppm)	2024	24.3	18–30	NA
pH (units)	2024	8.02	7.95–8.09	NA
Potassium (ppm)	2024	2.27	2.1–2.6	NA
Sodium (ppm)	2024	56	42–67	NA
Vanadium (ppb)	2024	6.23	3.8–8.6	NA

[1] Unregulated contaminant monitoring helps U.S. EPA and SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

Lead in Home Plumbing - Service Line Inventory

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The City of Dixon completed its LSL inventory in early 2024, with no lead service lines reported. For more information or to request a copy of the LSL inventory, please contact the Water Operations Division at 707-678-7050 ext.5501.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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 (SMCLs) 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 U.S. EPA.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health, along with their monitoring and reporting requirements 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 the California EPA.

ppb (µg/L) (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (mg/L) (parts per million): One part substance per million parts water (or milligrams per liter).

µmho/cm (micromhos per centimeter): A unit expressing the amount of electrical conductivity of a solution.

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.