FOR QUESTIONS ABOUT THIS REPORT:

Chris Kania
Water Treatment Plant Superintendent
(916) 617-4870

FOR ADDITIONAL COPIES OF THIS REPORT:

Public Works Department
(916) 617-4850

TO REPORT PROBLEMS AFTER HOURS:

Public Works Department
(916) 372-3375

FOR BILLING QUESTIONS:

Finance Department
(916) 617-4589

FOR WATER QUALITY COMPLAINTS:

George Kristoff Water Treatment Plant
(916) 617-4860

EPA Safe Drinking Water Hotline
(800) 426-4791

CITY OF WEST SACRAMENTO WEB SITE:

www.cityofwestsacramento.org

CITY COUNCIL MEETINGS:

Twice monthly - Wednesdays at 7 p.m. in the City Council Chambers, 1110 West Capitol Ave. For specific dates check the "City Calendar" on www.cityofwestsacramento.org or phone (916) 617-4500.

TO REPORT WATER WASTE:

(916) 617-4545



George Kristoff Water Treatment Plant

QUESTIONS AND COMMENTS

We hope you find this report to be useful and informative. If you have any questions or comments about this report or about your drinking water, please call Chris Kania, Water Treatment Plant Superintendent, (916) 617-4870. For Water Conservation: Ryan Burnett (916) 617-4545.

OUR COMMITMENT TO YOU

The City of West Sacramento has delivered over 138 billion gallons of high-quality treated water to our residents since the opening of the George Kristoff Water Treatment Plant in 1988. Today, as West Sacramento grows, our commitment to you continues. We are proud of the service we provide and promise to continue to deliver the highest quality drinking water to you and your family.

CITY OF WEST SACRAMENTO

ANNUAL WATER QUALITY REPORT

George Kristoff Water Treatment Plant
400 North Harbor Blvd.
West Sacramento, CA 95605
July 2024

2023

CONSUMER CONFIDENCE REPORT

WATER QUALITY



CITY OF WEST SACRAMENTO

INTRODUCTION

The City of West Sacramento is dedicated to supplying its customers with a safe and reliable supply of high-quality drinking water. We are pleased to present this annual water report, which conforms to a federal regulation that requires community water systems to provide customers with detailed information about their drinking water. It includes information about water supply sources, water treatment, water quality, and source water protection programs. We hope the information in this report increases your understanding of the water treatment process and your confidence in the quality of the water you drink.

WATERSUPPLY SOURCES

Landlords who receive this report should notify tenants residing in the city limits where they can view or obtain a copy of this report. This report is available on the City of West Sacramento's website.

http://cityofwestsacramento.org/city/depts/pw/public_works_operations/environmental_prog/waterquality.asp

Additional copies are available upon request; please contact the City of West Sacramento Public Works Department at (916) 617-4850.

Este informe contiene información importante sobre su agua potable. Tradúzcalo, o hable con alguien que pueda entenderlo.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

The City of West Sacramento's main water supply is the Sacramento River. Our intake structure is located at Bryte Bend, upstream of the confluence of the Sacramento and American rivers. To ensure an adequate water supply for West Sacramento's current and future needs, the City maintains 3 water supply contracts.

• SOURCEWATER PROTECTION

A community's drinking water supply is a valuable resource and needs protection. The quality and reliability of source water can have a significant impact on a community's economy and quality of life. Given the importance of the Sacramento River to West Sacramento's continuing growth and to the health and well-being of our residents, the City actively participates in several source water protection programs.

- **The Rice Pesticide Workgroup,** in partnership with the City of Sacramento, the County of Sacramento and the East Bay Municipal Utility District keeps us up to date on this important water quality issue. Our program of frequent monitoring at our raw water intake during rice season has been expanded to include new rice pesticides. In addition, we continually voice our concerns about the impact of rice growing activities on source water quality in meetings with the California State Department of Pesticide Regulation, the Regional Water Quality Control Board (RWQCB), the California Rice Commission, and Agriculture Commissioners of the major rice growing counties. We have also presented our concerns directly to the RWQCB and to rice growers.
- **The Keep the Waters Clean Campaign**, in partnership with the City of Sacramento, the County of Sacramento and the East Bay Municipal Utility District protects water quality by encouraging boaters and other recreational users of the Sacramento River to use pump outs and public restrooms rather than the river to dispose of wastes
- **The Sanitary Survey of the Sacramento River Watershed**, an ongoing project in partnership with the City of Sacramento, Sacramento County Water Agency, Placer County Water Agency, City of West Sacramento, East Bay Municipal Utility District, City of Roseville and Woodland-Davis Clean Water Agency keeps us up to date on developments in the Sacramento Valley watershed. The Sanitary Survey of 2020 is available for review at the Public Works Department. 1110 West Capitol Avenue in West Sacramento.
- **The Drinking Water Source Assessment Program (DWSAP)** allows us to identify sources of contamination and respond to possible contamination near our water treatment plant and throughout the watershed. Our Source Water Assessment was completed in November 2014. The DWSAP survey identified agricultural drainages to which West Sacramento's surface water source is most vulnerable. A copy of the survey is available for your review at the Public Works Department, 1110 West Capitol Avenue in West Sacramento.
- **The Regional Water Authority Water Efficiency Program** partners with water agencies throughout the greater Sacramento region to help meet regulation and promote water efficiency. The program provides region-wide messaging and educational opportunities for residents through the "Be Water Smart" outreach program. In additional to outreach, the program hosts program meetings so that agencies can share best practices and create unified responses to conservation issues that affect the entire region. This program also assists in funding opportunities for individual agencies.

• WATER TREATMENT: SURFACE WATER

Water drawn from the Sacramento River is treated at the City's George Kristoff Water Treatment Plant (GKWTP), which is operated 24 hours a day by State-Certified Water Treatment Plant Operators. 3.52 billion gallons of Sacramento River water was treated in 2023.

The City of West Sacramento maintains the high quality of our treatment process through the following:

- Monitoring current research on water treatment, and continuing education and training at our treatment plant assures you of a motivated, professional staff focused on producing the best quality water possible.
- A vigorous preventative maintenance program helps us to operate equipment at maximum efficiency.
- Membership in local, regional and national water industry organizations allows us to draw on expertise and experience outside of our own city.

For further information about the water treatment process, please contact the George Kristoff WTP at (916) 617-4860.

• WATER CONSERVATION

The City promotes water conservation year-round with messaging events, rebates, and water waste enforcement following West Sacramento Municipal Code prohibitions. Messaging efforts include social media posts, bill inserts and direct mailers. Events include seasonal events, like Earth Day, as well as region-wide partnerships. Here are some examples of what you can do to save water:

- Follow the permanent watering schedule. For odd addresses, water on Tuesdays, Thursdays and Saturdays. For even addresses, water on Wednesdays, Fridays and Sundays. No watering on Mondays, and no watering between 10:00am and 7:00pm. Exemptions for establishing a new landscape, watering container plants and drip irrigation.
- Apply for a free residential Water Wise House Call. Receive a no-cost survey of your outdoor irrigation system; this includes a leak check, system issue check and assistance with your sprinkler schedule.
- Purchase and install a smart irrigation controller. These devices use weather data to automatically adjust your irrigation schedule for you. See our website for current rebates.
- Check your toilet for a leak. Put a little food coloring in the tank of your toilet. If that color appears in the bowl, you have a leak. This is the most common leak around the house and can waste a lot of water.

For more information, visit: *www.cityofwestsacramento.org/water*

WATER QUALITY ANALYSIS RESULTS

DISINFECTION BYPRODUCTS

TTHM 2023					HAA5 2023				
Location	1 QTR	2 QTR	3 QTR	4 QTR	Location	1 QTR	2 QTR	3 QTR	4 QTR
Site 1	34.0	48.0	32.0	28.0	Site 1	28.0	23.0	26.0	38.0
Site 1 LRAA	33.0	41.0	40.0	38.0	Site 1 LRAA	21.3	22.3	24.0	28.8
Site 2	47.0	52.0	68.0	45.0	Site 2	35.0	28.0	25.0	45.0
Site 2 LRAA	51.5	49.3	54.0	53.0	Site 2 LRAA	24.8	26.3	26.5	33.3
Site 3	57.0	52.0	65.0	50.0	Site 3	23.8	28.0	21.0	50.0
Site 3 LRAA	50.5	48.5	54.5	56.0	Site 3 LRAA	23.8	25.8	25.8	34.0
Site 4	64.0	66.0	77.0	65.0	Site 4	44.0	39.0	28.0	65.0
Site 4 LRAA	66.8	63.8	68.0	68.0	Site 4 LRAA	31.3	33.3	32.5	44.0
Site 5	45.0	57.0	62.0	44.0	Site 5	33.0	25.0	24.0	44.0
Site 5 LRAA	47.3	46.5	52.0	52.0	Site 5 LRAA	22.5	23.8	24.5	31.5
Site 6	44.0	57.0	88.0	49.0	Site 6	33.0	28.0	39.0	49.0
Site 6 LRAA	47.3	46.3	57.8	59.5	Site 6 LRAA	22.8	24.5	29.0	37.3
Site 7	54.0	55.0	84.0	45.0	Site 7	38.0	29.0	45.0	45.0
Site 7 LRAA	50.0	49.0	59.5	59.5	Site 7 LRAA	24.5	26.8	32.5	39.3
Site 8	46.0	60.0	68.0	45.0	Site 8	35.0	28.0	25.0	45.0
Site 8 LRAA	50.8	50.8	55.5	55.1	Site 8 LRAA	25.0	26.3	26.8	33.3

TURBIDITY

Contaminant	MCL	PHG	Level Found	Sample Data	Violation	Source
Turbidity	TT = 1 NTU	N/A	0.071 NTU	12/8/20	No	Soil runoff
	TT = 95% of samples ≤0.3 NTU		100%			

Constituent	Type MCL	Violation	Max Level Det Result	Units	DLR mg/L	EPA MCL	CA PHG	Source
Aluminum	Secondary	No	Not Detected	mg/L	0.050	0.2	600	Erosion of natural deposits; residue from some surface water treatment processes
Barium	Primary	No	Not Detected	mg/L	0.050	1000	200	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Manganese	Unregulated	No	Not Detected	mg/L	0.010	N/A	N/A	Naturally occurring in the environment
Fluoride	Primary	No	0.77	mg/L	0.100	2.0	1.0	Erosion of natural deposits
Arsenic	Primary	No	Not Detected	ppb	2.0 ppb	6.0 ppb	1.0 ppb	Erosion of natural deposits, runoff from orchards; glass and electronics wastes
Thallium	Primary	No	Not Detected	ppb	1.0 ppb	2.0	0.1	Leaching from ore-processing sites: discharge from electronics, glass and drug factories
Chloride	Secondary	No	6.7	mg/L	1.0	500	N/A	runoff/leaching from natural deposits; seawater influence
Odor	Secondary	No	1.8	TON	N/A	3.0	N/A	Naturally occurring organic materials
Conductivity	Secondary	No	150	umhos/cm	1.0 umhos/cm	1600	N/A	substances that form ions when in water; seawater influence
Sulfate as SO4	Secondary	No	6.2	mg/L	0.5	500.0	N/A	runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	Secondary	No	100	mg/L	5.0	1000	N/A	runoff/leaching from natural deposits
Silver	Secondary	No	Not Detected	ppb	10.0	0.1	N/A	Industrial discharge
Calcium	Secondary	No	11.0	mg/L	0.10	N/A	N/A	runoff/leaching from natural deposits
Magnesium	Secondary	No	5.0	mg/L	0.10	N/A	N/A	runoff/leaching from natural deposits

DISINFECTION BYPRODUCTS

Contaminant	TTHM (PPB)	HAA5(PPB)
Type MCL	Primary	Primary
MCL	80	60
Average	55.1	29.5
Range	26.0 - 79.0	12.0 - 34.0
Sample Date	2023	2023
Violation	No	No
Source	Byproduct of drinking water disinfection	Byproduct of drinking water disin-fection

2023 WEST SACRAMENTO WATER HARDNESS

Grains per gallon	Milligrams per liter (mg/L) parts per million (PPM)	Classification
3.0	47	Slightly
^ WATER HARDNESS SCALE ^		
Less than 1.0	Less than 17.1	Soft
1.0 - 3.5	17.1 - 60	Slightly
3.5 - 7.0	60 - 120	Moderately Hard
7.0 - 10.5	120 - 180	Hard
Over 10.5	over 180	Very Hard

HARDNESS

There is no MCL for hardness. We are frequently asked for the hardness of West Sacramento water in grains per gallon. One grain/gallon is equal to 17.1 mg/L of hardness

The City of West Sacramento routinely monitors your drinking water according to federal and state laws. The following table shows selected results of our monitoring tests for the period of January 1st to December 31st, 2019. To help you better understand the terms and abbreviations used in the report, we've provided the following definitions:

HAA5 - Haloacetic acids
DDW - Division of Drinking Water
Detection Limit for Purposes of Reporting (DLR) - the concentration of a contaminant in drinking water at or above which is reported to the California Department of Public Health
Parts Per Million (PPM) Or Milligrams Per Liter (mg/L) - a measurement of chemical concentration.
Parts Per Billion (ppb) Or Micrograms Per Liter (mg/L) - a measurement of chemical concentration.
Regulatory Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirement that a water system must follow.
LRAA - Locational running annual average
Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected risk to health.
Maximum Contaminant Level (MCL) - the maximum level of a contaminant that is allowed in drinking water. It is set as close to the maximum contaminant level goal as feasible, using the best available treatment technology.
Maximum Residual Disinfectant Level (MRDL) - the highest level of 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
N/A - not applicable.
Nephelometric Turbidity Unit (NTU) - a measurement of the clarity of water. Turbidity in excess of 5 ntu is noticeable to the average person.
Primary Drinking Water Standard (PDWS) - MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment techniques
Public Health Goal (PHG) – the level of a contaminant in drinking water below which there is no known or expected risk to health. California Environmental Protection Agency sets public health goals.
Secondary Drinking Water Standard – MCL's for contaminants that may influence consumer acceptable of water but are not otherwise harmful. These standards relate to taste, odor, color, mineral content and clarity.
SWRCB – State Water Resources Control Board
TON – Threshold Odor Number – Greatest dilution of a sample with odor-free water that still yields a just-detectable odor
TTHM – Total trihalomethanes
Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water
Running Annual Average (RAA) – a cumulative running average

WHAT YOU SHOULD KNOW ABOUT..

	Action Level	PHG (MCGL)	Amount Detected (90th Percentile)	Sites Above AL/Total Sites	Year Sampled	Violation	Typical Source of Constituent
Copper (ppb)	1300	300	ND NON-Detected	0/30	2022	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.							
Lead (ppb)	15	0.2	ND NON-Detected	0/30	2022	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

- **FLUORIDE**

The City's water plant adds fluoride to the naturally occurring level in order to promote dental health to consumers. The fluoride levels in the treated water for 2023 were maintained within an average monthly range of 0.69 to 0.78 mg/L. The maximum level of Fluoride measured in West Sacramento during 2023 was 0.73 mg/L. A Public Health Goal (PHG) of 1 ppm is developed for fluoride in drinking water. This level is intended to be an approximate year-round average. The U.S. Environmental Protection Agency's (U.S. EPA's) Maximum Contaminant Level (MCL) for fluoride is 2.0 mg/L. U.S. EPA's MCL was set to protect against crippling skeletal fluorosis, to protect against dental fluorosis (in mild cases, fluorosis is a slight discoloration of teeth, in more severe cases it can lead to pitting and breaking of the teeth). Moderate to severe dental fluorosis is rare when the drinking water fluoride level is in the range of 1 mg/L, but begins to become significant at concentrations close to 2 mg/L. The California MCL for fluoride is 2.0 mg/L. The PHG is based on a no-observed-adverse effect-level (NOAEL) of 1 mg/L for dental fluorosis in children. A relative source contribution of 100% (1) was applied yielding a calculated PHG of 1 mg/L. This level is judged to be the optimum level for reducing the prevalence of dental fluorosis while providing protection against dental caries. In reviewing the available data on health effects of fluoride, studies have been found which provide some indication that there may be a causative relationship between lifetime consumption of fluoridated drinking water and increased incidence of hip fracture in the elderly. However, this health endpoint is not sufficiently established at present to provide the basis for calculating a PHG. Therefore, OEHHA calculates a PHG of 1 mg/L (1 ppm) for fluoride in drinking water.

- **SODIUM**

We are frequently asked about the sodium content of the West Sacramento water. Sodium is a naturally occurring chemical element and is present in our source water. The maximum level of sodium measured in West Sacramento water during 2023 was 12.0 mg/L. At this level an individual will ingest 13.0 mg of sodium for every liter of water consumed. There is no MCL for sodium in drinking water. Sodium in the diet is also measured in milligrams (mg). There is no recommended dietary allowance for sodium. However, the National Academy of Sciences states that a person should consume at least 500 mg a day and healthy adults should stay within the range of 1,100 to 3,300 mg a day. Individuals concerned with the effect of West Sacramento treated water in their daily intake of sodium should consult a healthcare professional. Additional information about potential health effects of drinking water can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

- **TURBIDITY**

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The EPA's Interim Enhanced Surface Water Treatment Rule requires that the Combined Filter Effluent (CFE) turbidity be less than 0.3 NTU in at least 95% of the measurements taken each month, and that the maximum CFE turbidity not exceed 1 NTU. In 2023, the city achieved 100%, the highest CFE turbidity was 0.08 NTU. (3/27/2023)

- **TOTAL COLIFORMS AND E COLI**

There are a variety of bacteria, parasites, and viruses which can potentially cause health problems if humans ingest them in drinking water. Testing water for each of these potential pathogens (disease causing agents) would be difficult and expensive. Instead, water quality and public health workers measure coliform levels. The presence of any coliforms in drinking water suggests that there may be a pathway for pathogens and/or fecal contamination to enter the drinking water distribution system (pipes, storage facilities, etc.). For drinking water, total coliforms are used to determine the adequacy of water treatment and the integrity of the distribution system. The absence of total coliforms in the distribution system minimizes the likelihood that fecal pathogens are present. Thus, total coliforms are used to determine the vulnerability of a system to fecal contamination. The MCL for total coliforms is no more than 5% of the samples collected in any month positive for total coliforms. In 2023 the City collected 780 samples for total coliforms and E coli and did not exceed the 5% rule for any month sampled.

- **NITRATE**

Nitrate in drinking water at levels above 45 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 45 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. The George Kristoff Water Treatment Plant drinking water results for nitrate was non-detectable (ND).

- **IMPORTANT INFORMATION FOR IMMUNO-COMPROMISED PERSONS**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer and 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 healthcare providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the USEPA Safe Drinking Water Hotline, (800) 426-4791.

- **DRINKING WATER CONTAMINANTS**

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 the water poses a health risk. More information about contaminants and potential heath effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap water and bottle 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 materials and can pick up substances resulting from the presence of animals or from human activity.

Contaminants in source water may include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operation, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm water 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 storm water 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 storm water 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 (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

WATER QUALITY

All public water supplies must meet stringent Federal and State standards. Treated water that is delivered to you and your family, not only meets but surpasses State and Federal standards for quality and safety. We know this because we continually test our water using modern equipment and procedures in our own laboratory and State approved commercial laboratories. This regular program of water analysis, including sampling at over thirty water sample stations throughout the city, assures safe drinking water for you and your family.