Annual Water Quality Report

Board of Public Utilities Meeting

June 20, 2024

Tony Llamas, Water Quality Manager

Santa Rosa WATER

OUR FUTURE IN EVERY DROP

Compliance with the Safe Drinking Water Act (SDWA)

Federal Rules – Public drinking water quality:

- Total Coliform Rule
- Disinfectants/Disinfection By-Products Rule
- Lead and Copper Rule
- Groundwater Rule

State Regulations - Cross Connection Control

Santa Rosa WATER

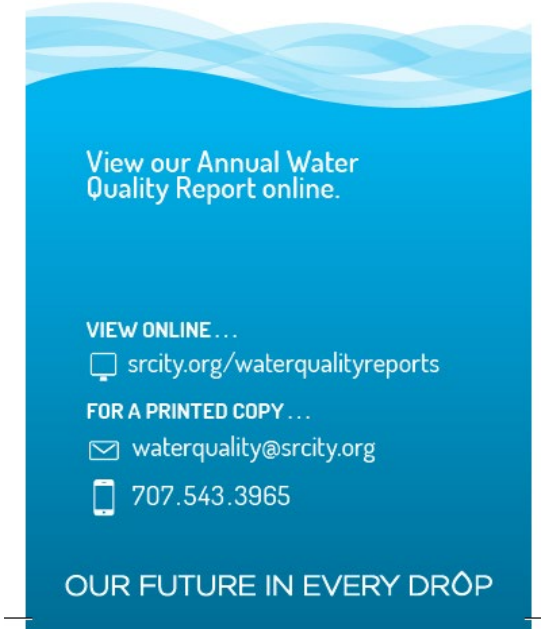
OUR FUTURE IN EVERY DROP

Annual Water Quality Report provides:

- Water system information
- Testing Information
- Definitions
- How to read Section
- Water Quality Results
- Water Saving Tips
- Required information on health and quality

Water Quality Report Distribution

- Press Democrat Ads
- Bill Insert
- Email and E-newsletter
- Social Media
- Mailings
- Printed copies



Santa Rosa WATER

OUR FUTURE IN EVERY DROP

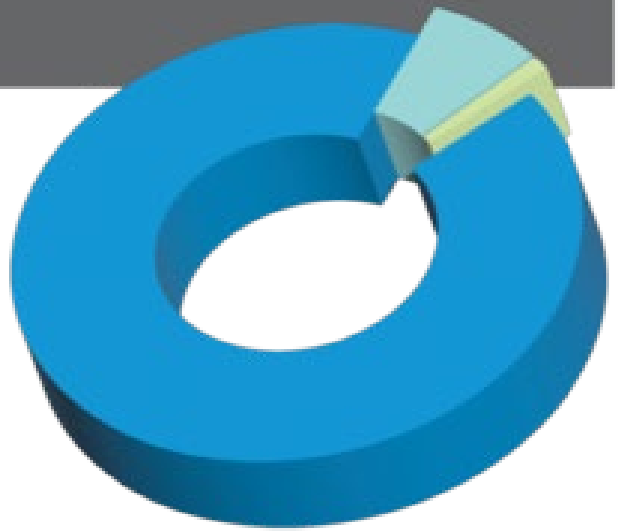
Water Supply Portfolio

Water supplied from Santa Rosa's Public Water system to homes and businesses is a combination of surface water from the Russian River and local groundwater.

93% Sonoma Water (Russian River)

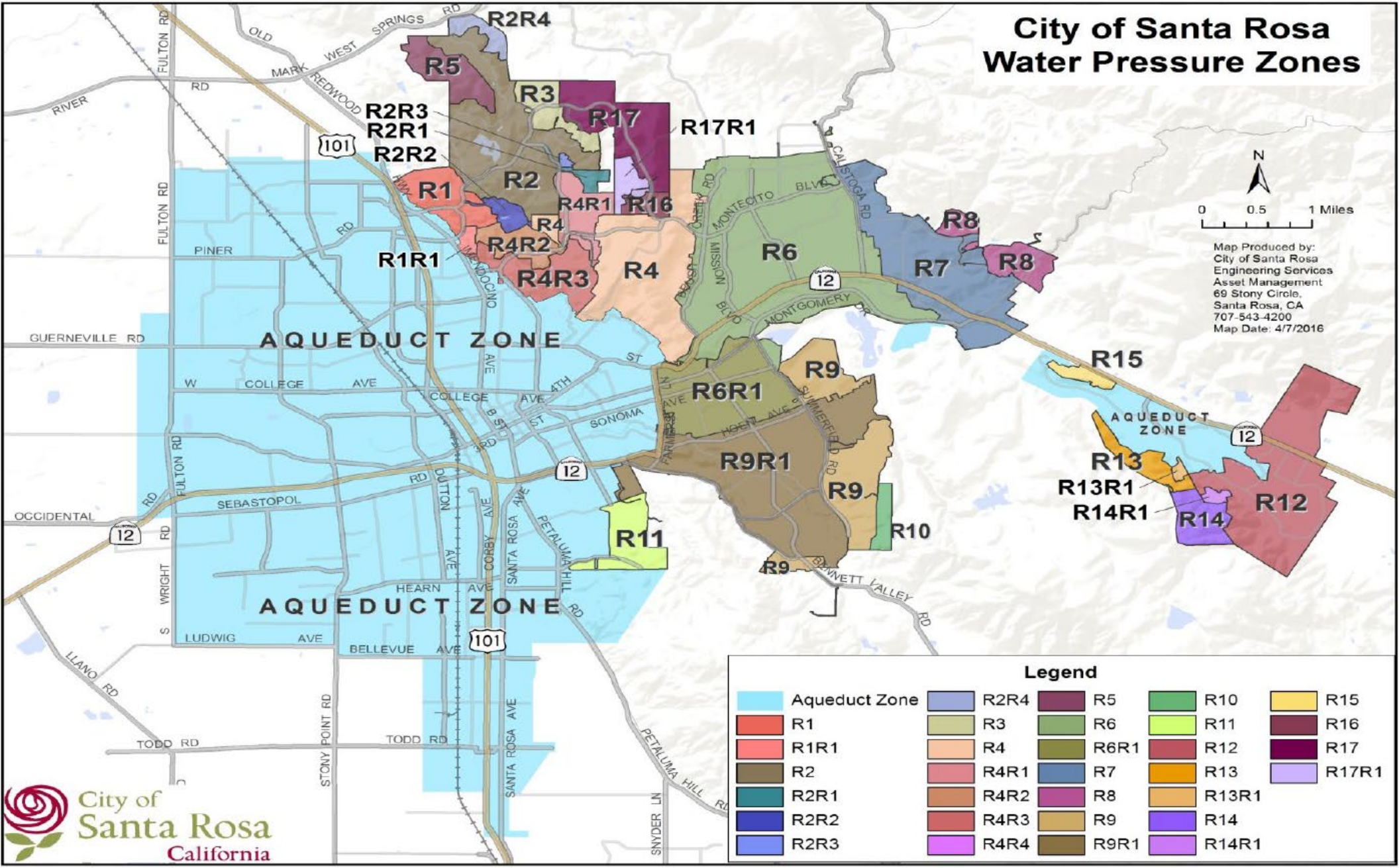
7% Groundwater

<1% Recycled



Santa Rosa WATER

OUR FUTURE IN EVERY DROP


City of Santa Rosa
Water Pressure Zones
R2R4
R5
R3
R17
R17R1
R2R3
R2R1
R2R2
R1
R2
R4R1
R16
R4
R4R2
R1R1
R4R3
R4
R6
R8
R7
R8
R15
R9
R6R1
AQUEDUCT ZONE
R9R1
R9
R13
R13R1
R14R1
R12
R14
R10
R11
R9
AQUEDUCT ZONE
N
0 0.5 1 Miles
Map Produced by:
City of Santa Rosa
Engineering Services
Asset Management
69 Stony Circle,
Santa Rosa, CA
707-543-4200
Map Date: 4/7/2016
Legend
Aqueduct Zone
R1
R1R1
R2
R2R1
R2R2
R2R3
R2R4
R3
R4
R4R1
R4R2
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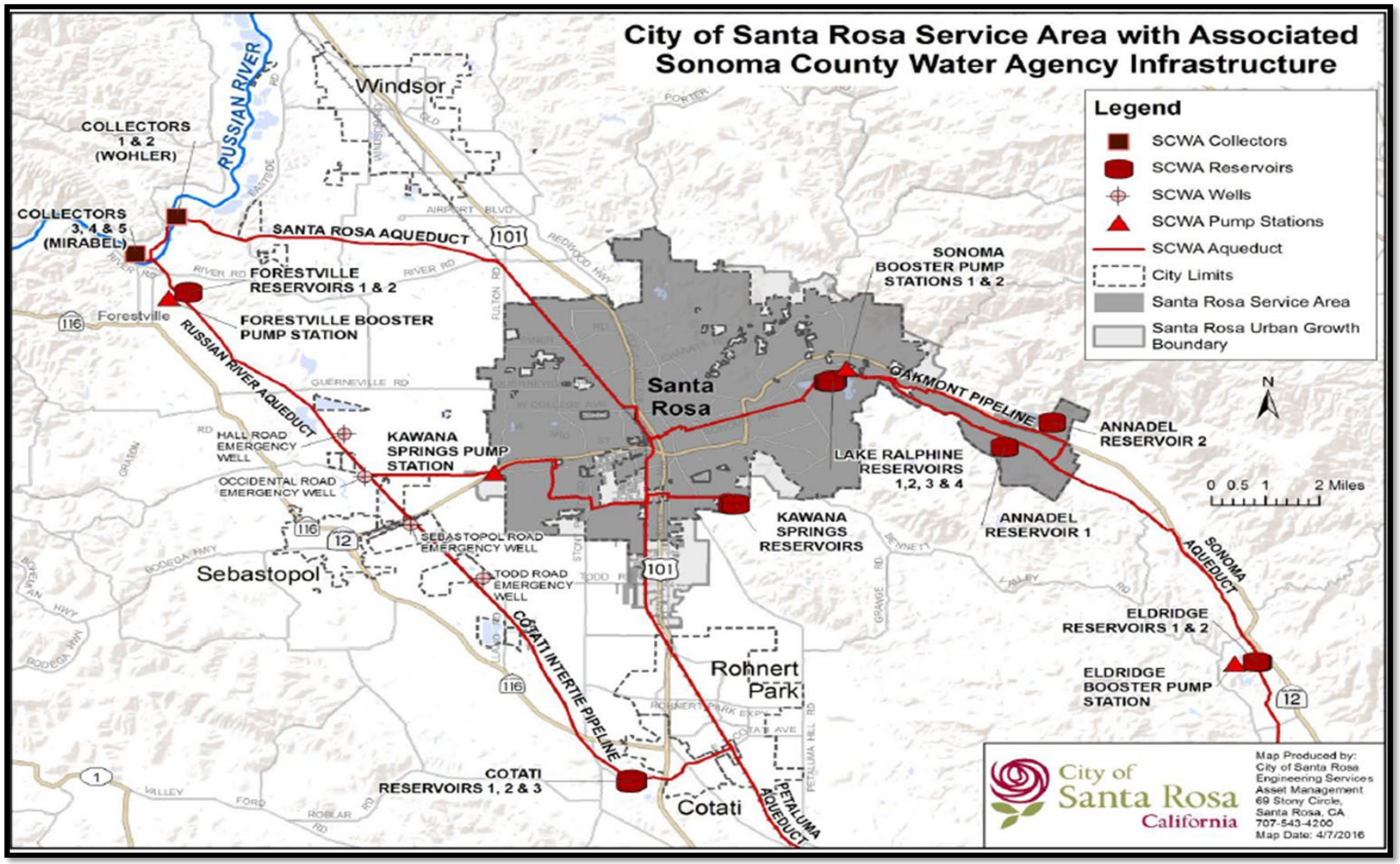
R10
R11
R12
R13
R13R1
R14
R14R1
R15
R16
R17
R17R1
City of
Santa Rosa
California

Sonoma Water Transmission Lines

90 miles of pipelines from 12 to 54 inches



Field Sampling covers all areas of our water system

Santa Rosa WATER

OUR FUTURE IN EVERY DROP

Farmers Lane Water Treatment Plant

Santa Rosa WATER

OUR FUTURE IN EVERY DROP

Sonoma County Water Agency - Caissons 1 thru 6 - 2023 Water Quality Report

SYNTHETIC ORGANIC COMPOUNDS	Units	STATE	DLR	PHG	Caisson 1	Caisson 2	Caisson 3	Caisson 4	Caisson 5	Caisson 6
Section 64444 - Table A		MCL		{ MCLG }	23-Aug-23	23-Aug-23	22-Aug-23	22-Aug-23	22-Aug-23	23-Aug-23
Alachlor	mg/L	0.002	0.001	0.004	ND	ND	ND	ND	ND	ND
Atrazine	mg/L	0.001	0.0005	0.00015	ND	ND	ND	ND	ND	ND
Bentazon	mg/L	0.018	0.002	0.2	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	mg/L	0.0002	0.0001	0.000007	ND	ND	ND	ND	ND	ND
Carbofuran	mg/L	0.018	0.005	0.0007	ND	ND	ND	ND	ND	ND
Chlordane	mg/L	0.0001	0.0001	0.00003	ND	ND	ND	ND	ND	ND
2,4 - Dichlorophenoxyacetic acid (2,4-D)	mg/L	0.07	0.01	0.02	ND	ND	ND	ND	ND	ND
Dalapon	mg/L	0.2	0.01	0.79	ND	ND	ND	ND	ND	ND
Dibromochloropropane (1,2-Dibromo-3-chloropropane)	mg/L	0.0002	0.00001	0.000003	ND	ND	ND	ND	ND	ND
Di(2-ethylhexyl)adipate (Bis(2-ethylhexyl)adipate)	mg/L	0.4	0.005	0.2	ND	ND	ND	ND	ND	ND
Di(2-ethylhexyl)phthalate (DEHP) (Bis(2-ethylhexyl)phthalate)	mg/L	0.004	0.003	0.012	ND	ND	ND	ND	ND	ND
Dinoseb	mg/L	0.007	0.002	0.014	ND	ND	ND	ND	ND	ND
Diquat	mg/L	0.02	0.004	0.006	ND	ND	ND	ND	ND	ND
Endothall	mg/L	0.1	0.045	0.094	ND	ND	ND	ND	ND	ND
Endrin	mg/L	0.002	0.0001	0.0003	ND	ND	ND	ND	ND	ND
Ethylene Dibromide (EDB) (1,2-Dibromoethane)	mg/L	0.00005	0.00002	0.00001	ND	ND	ND	ND	ND	ND
Glyphosate	mg/L	0.7	0.025	0.9	ND	ND	ND	ND	ND	ND
Heptachlor	mg/L	0.00001	0.00001	0.000008	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	mg/L	0.00001	0.00001	0.000006	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	mg/L	0.001	0.0005	0.00003	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	mg/L	0.05	0.001	0.002	ND	ND	ND	ND	ND	ND
Lindane (HCH-Gamma)	mg/L	0.0002	0.0002	0.000032	ND	ND	ND	ND	ND	ND
Methoxychlor	mg/L	0.03	0.01	0.00009	ND	ND	ND	ND	ND	ND

PHG, DLR, and MCL are terms used in drinking water quality

PHG

- Public Health Goal is the level of a chemical contaminant in drinking water that doesn't pose a significant health risk. PHGs are not regulatory standards.

DLR

- Detection Limit for Reporting is the minimum level at or above which a contaminant in drinking water must be reported to the State Water Board. DLRs represent the level at which laboratories are confident about the accuracy of the contaminant quantity being reported.

MCL

- Maximum Contaminant Level is the maximum allowable amount of a contaminant in drinking water that is delivered to the consumer. MCLs are adopted as regulations and are health protective drinking water standards that public water systems must meet

2023 Water Quality Sampling Results

TABLE OF DETECTED CHEMICALS OR CONSTITUENTS IN 2023

Substance (Parameter)	Public Health Goal (MCLG)	DLR	Maximum Contaminant	SONOMA WATER[1] Range Detected	SONOMA WATER[1] Reporting Value	SANTA ROSA[2] Range Detected	SANTA ROSA[2] Reporting Value	Major Source in Drinking Water
PRIMARY STANDARDS Detected Regulated Contaminants with Primary MCLs or MRDLs 2023								
INORGANIC CONTAMINANTS								
Fluoride (ppm)[3]	1	0.1	2.0	<0.1-0.10	<0.1	0.19-0.22	0.2	Erosion of natural deposits
Nitrate (as N ppm)	10	0.4	10	<0.4	<0.4	<0.2	<0.2	Runoff/leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
DISTRIBUTION SYSTEM DETECTIONS 2023								
MICROBIOLOGICAL CONTAMINANTS								
Total Coliform Bacteria from SR Distribution Sys	0		5% of monthly samples	NA	NA	0%	0%	Naturally present in the environment
Fecal Coliform and E. coli	0		0	NA	NA	0	0	Human and animal fecal waste
Total Trihalomethanes (ppb)	NS		80	4.8-22.0	13.5	24.7-46.7	32.7	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NS		60	ND-20.0	7.7	7.1-18.3	10.2	By-product of drinking water chlorination
Disinfectant-Free Chlorine (Cl_2) Residual (ppm)	MRDLG as Cl_2 4.0		MRDLG as Cl_2 4.0	NA	NA	0.21-1.67	1.1	Disinfectant to control microbes
pH (units) prior to pH adjustment	NS		NS	7.2-7.6	7.3	7.2-8.6	8.0	Sodium Hydroxide addition
LEAD/COPPER RULE 2022 DATA	Monitored at customer's tap.		# of sites exceeding action level=0	# of samples collected=50	# of schools sampled=0			
Copper (ppm)	0.3	0.05	1.3 (AL)	<0.05	<0.05	0.02-0.22	0.086*	Internal corrosion of household plumbing; erosion of natural deposits
Lead (ppb)	0.2	5	15 (AL)	<5.0	<5.0	ND-11.6	1.63*	
LEAD SAMPLING IN SCHOOLS 2019 DATA	# of sites exceeding action level=0		# of samples collected=333	# of schools sampled=31				

2023 Water Quality Sampling Results

Substance (Parameter)	Public Health Goal (MCLG)	DLR	Maximum Contaminant	SONOMA WATER[1] Range Detected	SONOMA WATER[1] Reporting Value	SANTA ROSA[2] Range Detected	SANTA ROSA[2] Reporting Value	Major Source in Drinking Water
REGULATED CONTAMINANTS WITH SECONDARY MCLs	There are no adverse health effects from exceeding the secondary (aesthetic) standards.							
Threshold Odor Number (TON) at 60°C	NS	1	3	<1.0	<1.0	<1.0	<1.0	Naturally occurring organic materials
Chloride (ppm)	NS		500	5.7-6.9	6.3	15.6-22.0	18.8	Run-off/leaching from natural deposits
Sulfate (ppm)	NS	0.5	500	14-18	15.5	<0.5	<0.5	Run-off/leaching from natural deposits
Specific Conductance (umhas/cm)	NS		1600	240-270	253	450-490	470	Substances that form ions when in water
Total Dissolved Solids (ppm)	NS		1000	110-160	138	340-360	350	Run-off/leaching from natural deposits
Color (units)	NS		15	4.0-10.0	6.2	<5.0	<5.0	Naturally occurring organic materials
Manganese (ppb)	NS	20	50	<20	<20	0.92-6.93	3.0	Run-off/leaching from natural deposits
ADDITIONAL CONSTITUENTS								
Sodium (ppm)	NS		NS	8.7-9.5	9.2	47-50.2	48.6	Sodium refers to the salt present in water. It is naturally occurring.
Total Hardness $CaCO_3$ (ppm)	NS		NS	114-135	124	137-142	139.5	Erosion of natural deposits
Total Alkalinity $CaCO_3$ (ppm)	NS		NS	91-130	115	230-240	235	Erosion of natural deposits
Calcium (ppm)	NS		NS	23-26	24	26.7-27.9	27.3	Erosion of natural deposits
Total Radon 222 (pCi/L)[4]	NS	100	NS	70.3-123	90	445-455	450	Found in the soil throughout the U.S.
Temperature °C	NS		NS	NA	NA	10.9-27.9	18.0	Water temp. in Distribution System
UNREGULATED SUBSTANCES	Unregulated substance monitoring helps EPA and the Division of Drinking Water determine where contaminants occur and if regulation is required.							
Brominated Haloacetic Acids[5]	NS		NS			ND-2.85	1.2	By-product of drinking water chlorination
Haloacetic Acids (ppb)[6]	NS		NS			ND-3.6	1.6	By-product of drinking water chlorination
Bromide (ppb)[7]	NS		NS			ND	ND	Naturally occurring element found in surface and groundwater

Santa Rosa's drinking water meets or exceeds all state and federal drinking water health standards. Your water is tested weekly and the water system is carefully managed to be dependable and safe.

* 90th percentile detected

WATER QUALITY
UPDATE

U.S. EPA's NEW Monitoring Requirements for PFAS in Drinking Water

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of manmade chemicals that have been used extensively in numerous consumer products, such as, cookware, stain resistant carpets, fast food packaging, fire-fighting foams and other materials designed to be waterproof, stain-resistant, or non-stick.

How does PFAS get into drinking water?

Chemical manufacturers are the original source of PFAS chemicals. If PFAS-containing products are improperly disposed of they can contaminate water sources by seeping into groundwater, lakes and rivers that are used for drinking water supplies or for private drinking water wells.

What are the U.S. EPA's new drinking water standards for PFAS?

On April 10, 2024, the U.S. EPA set new national drinking water standards for PFAS. Under this rule, drinking water systems, including Santa Rosa Water, must complete initial monitoring requirements for PFAS within three years. Starting in 2027, water systems must include the initial and long-term quarterly PFAS testing in their Annual Water Quality Report. If there is a detection of 4 parts per trillion (PPT) or greater, treatment will be required. The U.S. EPA is estimating that between 6 and 10% of public water systems nationwide will be impacted by the new rule.

What is Santa Rosa Water doing to monitor PFAS in my drinking water?

Per U.S. EPA requirements, Santa Rosa Water sampled the city's water distribution system and groundwater wells for PFAS in 2013, 2014, and 2015 and no PFAS was detected.

Additional testing was conducted in May 2024 and will occur again in November 2024. Santa Rosa Water will complete initial monitoring required under the U.S. EPA's April 10, 2024 regulation and report those results in our 2024 Water Quality Report. Depending on those results, Santa Rosa will begin testing twice per year or once every three years.

Additionally, Sonoma Water, who provides most of our drinking water, has monitored PFAS compounds for the past 5 years and will begin quarterly monitoring in April 2024. Sonoma Water has not found concentrations in the water delivered above the current state response and notification levels nor have they found concentrations above the maximum contaminant levels set by the EPA on April 10, 2024.

For more information on PFAS, visit: **epa.gov/pfas**

Questions?

Website: srcity.org/WaterQuality

Santa Rosa WATER

OUR FUTURE IN EVERY DROP