



**Dublin San Ramon
Services District**

Water, wastewater, recycled water

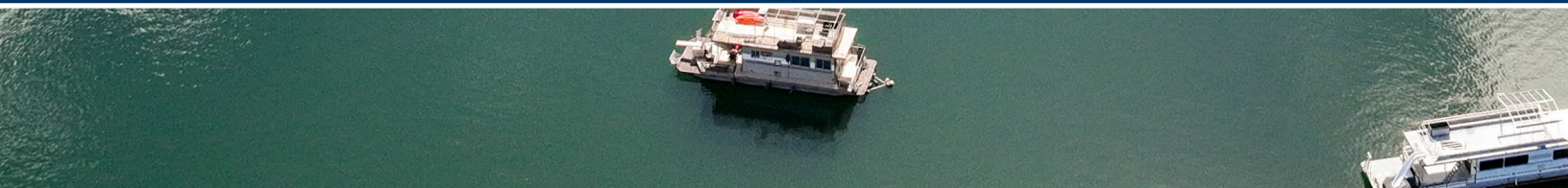


2024

Annual Water Quality Report



Dublin San Ramon Services District is please to report that in 2024 your drinking water met or exceeded all state and federal water quality standards.





A Message from the General Manager

Dublin San Ramon Services District (DSRSD) is pleased to present the 2024 Annual Water Quality Report to provide our customers with important information about their drinking (potable) water. DSRSD purchases all of its drinking water from Tri-Valley wholesaler Zone 7 Water Agency (Zone 7). The results of the water quality monitoring performed by Zone 7 and DSRSD confirm water delivered to customers met or exceeded all state and federal standards in 2024.

Strengthening the resiliency of our water system

At DSRSD, we are committed to providing safe, reliable water while building a resilient and sustainable water future for our customers. Recent California wildfires have highlighted the essential role of water agencies in responding to emergencies. DSRSD's drinking water system includes five turnouts to receive and control the flow of water from Zone 7 Water Agency, 343 miles of pipeline, 18 pump stations, 14 reservoirs, and over 4,000 fire hydrants. To strengthen our ability to respond to emergencies, DSRSD has increased preventative maintenance activities, replaced aging pipeline, purchased portable generators, exercised emergency interties with neighboring agencies, and conducted emergency exercises with staff and regional partners.

Protecting our drinking water from PFAS

Over the last few years, there has been increased attention on a group of thousands of man-made chemicals referred

to as per- and polyfluoroalkyl substances (PFAS), which can be detected in the air, land, and water. PFAS are sometimes referred to as “forever chemicals” because they do not break down easily and persist in the environment. There is growing evidence that long-term exposure to certain PFAS can lead to adverse health effects.

DSRSD is working closely with our water wholesaler, Zone 7 Water Agency, to monitor and address PFAS in our water supply. In March 2025, Zone 7 opened a second PFAS treatment facility at the Chain of Lakes Wellfield to remove PFAS from its groundwater supplies. These treatment facilities work together to protect the public and deliver drinking water that meets current and future regulatory standards for PFAS. DSRSD remains committed to working with state and local agencies to understand and address public health risks related to PFAS in the environment.

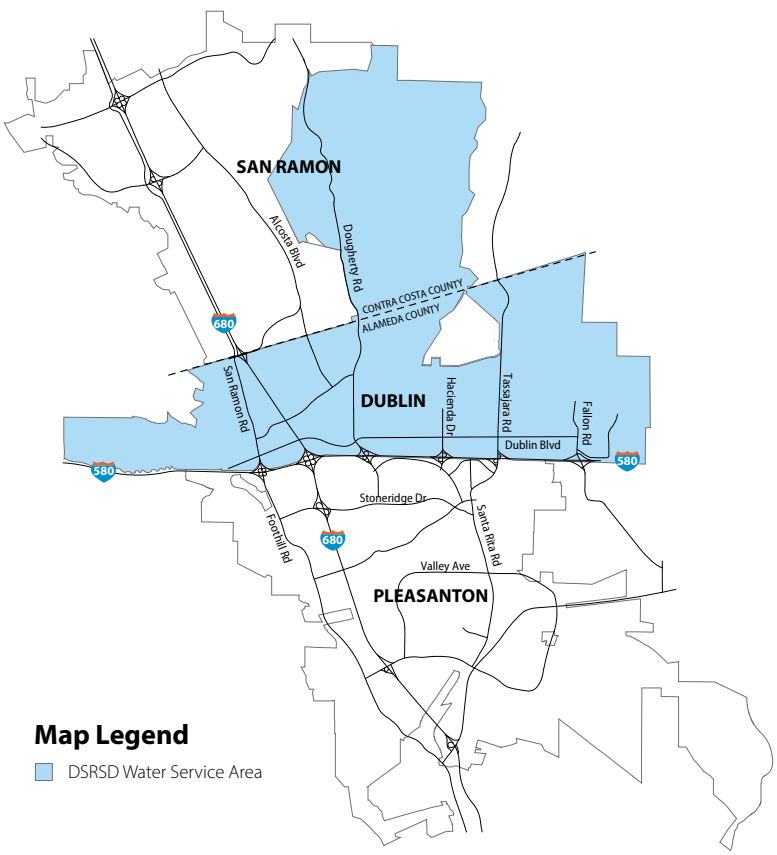
Conservation as a way of life

Water conservation remains essential for addressing long-term water reliability for our region. Even in wet years, saving water helps protect limited water resources. By making conservation a way of life, we can ensure a sustainable water supply for future generations.

Jan R. Lee
General Manager

Our Water Service Area

A public agency founded in 1953, DSRSD distributes drinking water for approximately 100,000 people in Dublin and the Dougherty Valley portion of San Ramon.



Map Legend

■ DSRSD Water Service Area

Our Potable Water Sources

DSRSD purchases all of its potable water from Zone 7. This water comes from three sources: In 2024, about 90% was imported surface water from the California State Water Project and local rain runoff stored in Del Valle Reservoir, and about 10% was groundwater from local wells.

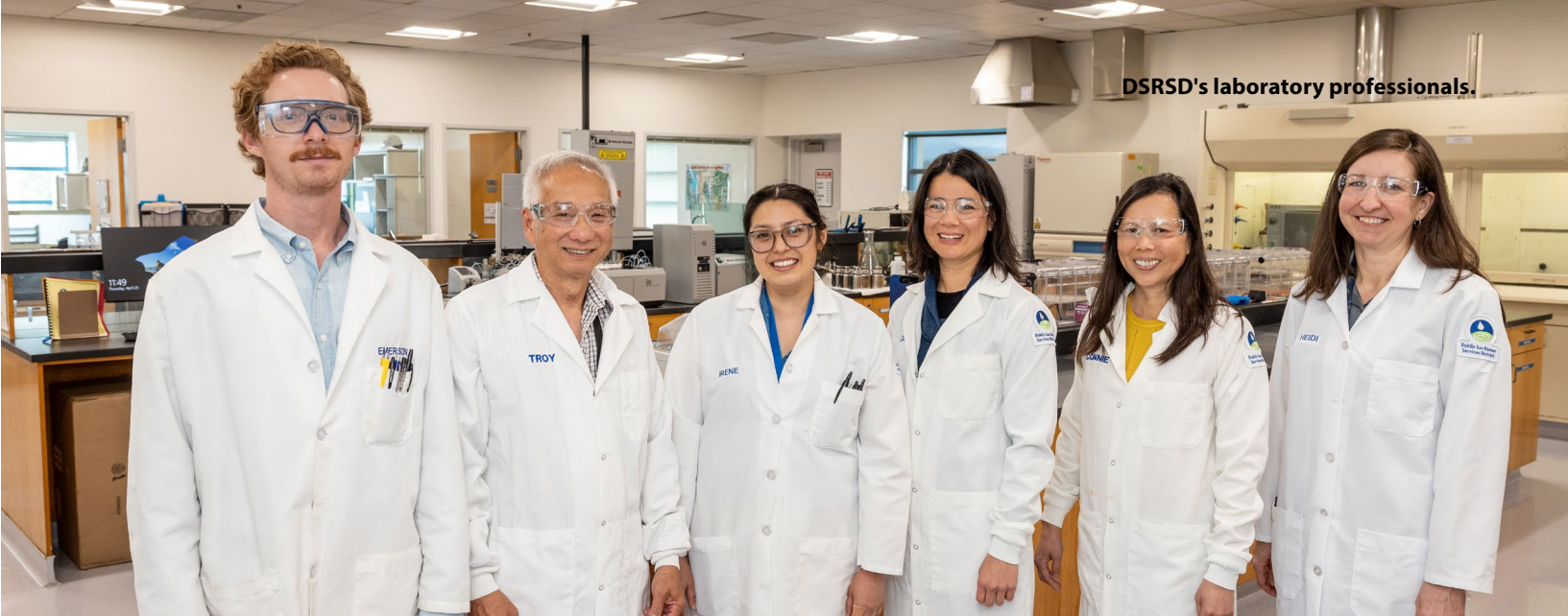
The surface water supply starts in the Sierra Nevada as rain and snow melt. Conveyed by the State Water Project from Lake Oroville on the Feather River in northern California, it travels through the Sacramento River, the Delta, and the South Bay Aqueduct to Zone 7's Del Valle and Patterson Pass treatment plants. When State Water Project allocations are restricted, more of our water comes from local sources. Learn more at trivalleywater.org/our-waters-journey.

Cover: Lime Saddle Marina on Lake Oroville in April 2024. Photo courtesy of the California Department of Water Resources.

Top: The South Bay Aqueduct near Livermore in June 2022. Photo courtesy of the California Department of Water Resources.

Key Terms Used in this Document

90th Percentile Level Detected	A statistical measure used to determine compliance with federal drinking water standards for lead and copper. It represents the concentration level below which 90% of the water samples collected during a montioring period fall.
Consumer Confidence Report Detection Level (State Water Board Established) (CCRDL)	The reporting level of a contaminant as defined by the U.S. Environmental Protection Agency (EPA) Unregulated Contaminant Monitoring Rule 5 (UCMR5) minimum reporting levels for 29 U.S. EPA 533 per- and polyfluoroalkyl substances (PFAS) constituents.
Detection Limit for Purposes of Reporting (DLR)	Established by the State Water Resources Control Board (State Water Board), Division of Drinking Water (DDW).
Hazard Index (Unitless) (HI)	A method to assess the cumulative risk posed by mixtures of chemicals.
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. EPA.
Method Reporting Level (MRL)	The lowest concentration of a substance that a laboratory can reliably quantify and report with confidence in routine analyses.
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.
Not Detected (ND)	Monitored for, but not detected, at or above DLR or MRL. ND or value in range column indicates more than one analysis was performed during the year.
Notification Level (NL)	A California drinking water notification level is a health-based advisory threshold established by the DDW for contaminants detected in drinking water. It serves as a guideline for water providers to notify local agencies and consumers when contaminant concentrations exceed these levels.
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 EPA.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Running Annual Average (RAA)	The test results based on an average of the previous four quarters.
Response Level (RL)	A California drinking water response level is a health-based advisory threshold established by the DDW to indicate when additional actions are recommended to reduce public exposure to a contaminant.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.



Water Quality Standards Regulate Contaminants

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 wastewater 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 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.

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

Additional information on water safety is available from the State Water Board, Division of Drinking Water (DDW) at www.waterboards.ca.gov/drinking_water/safedrinkingwaterplan.

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 1-800-426-4791.

Primary drinking water standards set maximum contaminant levels (MCL) and maximum residual disinfectant levels (MRDL) for substances that affect health, along with monitoring and reporting requirements for these substances and water treatment requirements. Secondary standards protect the odor, taste and appearance of drinking water. Secondary standards do not have public health goals (PHG) because they are not based on health concerns.

How We Monitor Water Quality

Monitoring for Contaminants

DSRSD employees collect representative samples from numerous locations throughout the water distribution system. DSRSD's distribution system is a network of pipelines, storage facilities, pumps, valves and hydrants that are designed to deliver safe, treated water from a source, such as Zone 7's water supply, to our customers.

These samples undergo analysis in DSRSD's laboratory, which is accredited by the State Water Board DDW Environmental Laboratory Accreditation Program (ELAP) or are analyzed by an outside laboratory that is accredited by ELAP.

Zone 7 monitors source water quality continuously online and through collecting samples for laboratory analysis. In all, DSRSD and Zone 7 test for more than 178 water quality parameters.



A DSRSD employee sets up an autosampler to test drinking water for lead and copper concentrations.

Treatment and Disinfection

Zone 7 disinfects and removes pollutants from surface water using a multi-barrier approach; groundwater is chloraminated (injected with chlorine and ammonia) to maintain a detectable chloramine concentration (also known as a disinfectant residual) in the distribution system.

After receiving treated water from Zone 7, DSRSD maintains a consistent residual level of disinfectant in its distribution system and flushes water through water pipelines to clear out sediment build-up, to prevent bacterial growth, and to protect water quality.



A DSRSD employee flushes water to clear sediment build-up and prevent bacteria growth.



Bethany Reservoir in March 2024. Photo courtesy of the California Department of Water Resources.

Source Water Assessment

Zone 7 draws from a diverse portfolio of drinking water sources, including local and imported surface water as well as groundwater from wells. The agency carefully monitors all these sources to ensure their continued quality and to protect the safety of our water supply.

A source water assessment is conducted on each groundwater well as required by the State Water Board. Sanitary surveys for surface water supplies are conducted every five years. The latest sanitary survey for the California Delta and the State Water Project was published in 2022. Access to the sanitary survey can be found at www.zone7water.com/post/source-water-assessment-reports.

Protecting our source water is an important part of providing safe drinking water to the public that meets the stringent Zone 7 water quality targets. By monitoring for potential contaminants, the agency can proactively address threats to water quality. For example, groundwater

sources can be vulnerable to releases from chemical/petroleum pipelines, leaking tanks, groundwater contamination plumes, septic tanks, and wastewater collection systems.

Surface water can become contaminated as it travels through the Sacramento and San Joaquin watersheds and the Delta. After leaving the Delta, water is transported to Zone 7 via the South Bay Aqueduct. The aqueduct water quality can become polluted from local cattle grazing, wildfires, wildlife activities, and recreational activities in the watersheds of the Bethany and Del Valle reservoirs. In order to deliver high-quality water, Zone 7 proactively participates in activities to improve water supply reliability and the water quality of the South Bay Aqueduct.

Copies of any public outreach materials, source water assessment reports or sanitary surveys are available by calling Angela O'Brien, Zone 7 Water Quality Manager, at (925) 454-5748.

2024 Water Quality Test Results

The tables on pages 10 and 11 show the average level and range of each contaminant detected in the DSRSD water supply in 2024. All water supplied to customers during 2024 met the regulatory standards set by the state and federal governments. Additional unregulated parameters, such as sodium and water hardness, are included in the tables to assist customers in making health or economic decisions.

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 (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.



A DSRSD employee inspects a water meter and service line at a residential property.

Minimizing Exposure to Lead

Lead was not detected above the regulatory action level in the DSRSD water supply in the 2022 sampling event. 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. DSRSD 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 DSRSD Customer Service (925) 828-8524. 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>.

Every three years, DSRSD is required to test the indoor tap water from a sample of homes built before 1986, when plumbing fixtures were allowed to contain lead. DSRSD's next lead and copper sampling event will be in 2025; the last sampling event was conducted in 2022.

The U.S. EPA requires that 90 percent of the samples be below the regulatory action level of 15 parts per billion. DSRSD's 2022 sampling results were much better than this

standard. Out of the 48 homes included during the 2022 sampling event, no homes were at or above the regulatory action level. 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 www.epa.gov/lead.

Service Line Inventory

In 2024, DSRSD completed the initial lead service line inventory required by the U.S. EPA Lead and Copper Rule Revision. After completing a historical records review and field investigations, DSRSD determined there are no service lines made of lead or galvanized lines requiring replacement in its distribution system. The inventory also included an assessment of the service line sections maintained by the property owner.

Results from DSRSD's service line inventory can be viewed at www.dsrds.com/lead.

Testing for Lead in Schools

In 2017, the State Water Board DDW required water systems to test for lead in schools if school districts requested to be tested. The California legislature then passed Assembly Bill 746 requiring water systems to test for lead in drinking water at all public K-12 schools by July 1, 2019. The testing involves sampling water at taps throughout the school—drinking fountains and kitchen facilities. DSRSD provides water to 20 public and 5 private K-12 schools in its service area. By the end of 2018, DSRSD had tested all public schools and one private school (St. Raymond School was the only private school that requested lead testing). All tests were below the regulatory action level.

Lead sampling information and results can be found at www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplingschools.html.



A DSRSD employee opens a test cock on a backflow prevention device to verify that it is receiving water flow.

Cross-Connection Control Program

A cross-connection is any connection between drinking water and a potential source of contamination, which can allow pollutants to enter the water system. By requiring regular testing and backflow prevention devices to stop water flowing backward, DSRSD's Cross-Connection Control and Backflow Prevention Program helps protect our water distribution system from contaminated water, as required by Federal and State law. When DSRSD determines that a backflow condition exists on a customer's premises, the customer is notified and required to install an approved backflow prevention device. Residential, commercial, and industrial customers that demonstrate a high potential for backflow must install and maintain backflow prevention devices.

DSRSD is working with the State Water Board, DDW to keep our community's water safe to drink. To help protect the water system from contamination, DSRSD is developing a Cross-Connection Control Plan. This plan follows state guidelines outlined in the Cross-Connection Control Policy Handbook and ensures that our water meets regulatory standards for all customers.

January - December 2024 Water Quality Contaminants Detected in Treated Water Supply

Abbreviations

AL	Regulatory Action Level
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
MRL	Method Reporting Level
NA	Not Applicable
ND	Not Detected
PHG	Public Health Goal
RAA	Running Annual Average
TT	Treatment Technique

Units

µg/L	Micrograms per liter
mg/L	Milligrams per liter
µS/cm	Microsiemens per centimeter
pCi/L	Picocuries per liter
NTU	Nephelometric Turbidity Unit

How Much Is That?



mg/L = 1 cup of water in an Olympic-sized swimming pool



µg/L = 1 drop of water in an Olympic-sized swimming pool

* Gross alpha data is from 2024 except Hopyard Well 9 that was sampled in 2022.

PRIMARY DRINKING WATER STANDARDS, established by the State Water Board							
CONTAMINANTS, Units	MCL	PHG (MCLG), [MRDLG]	DSRSD DISTRIBUTION SYSTEM				MAJOR SOURCES IN DRINKING WATER
TOTAL TRIHALOMETHANES (TTHMs), µg/L	80	NA	HIGHEST LOCATIONAL RAA: 51	RANGE OF ALL SAMPLES: ND - 90			Byproduct of drinking water disinfection
HALOACETIC ACIDS (FIVE) (HAA ₅), µg/L	60	NA	HIGHEST LOCATIONAL RAA: 32	RANGE OF ALL SAMPLES: ND - 34.7			
BROMATE, µg/L	10	0.1	HIGHEST LOCATIONAL RAA: ND	RANGE OF ALL SAMPLES: ND			
CHLORAMINES AS CHLORINE, mg/L	MRDL = 4.0	[4]	SYSTEMWIDE RAA: 2.0	RANGE OF MONTHLY AVERAGE CHLORAMINES: 1.6 - 2.5			Drinking water disinfectant added for treatment
FLUORIDE, mg/L	2	1	SYSTEMWIDE AVERAGE: 0.8	RANGE OF ALL SAMPLES: 0.4 - 1.1			Water additive that promotes strong teeth; erosion of natural deposits; discharge from fertilizer & aluminum factories
			TREATED WATER SUPPLY				
			SURFACE WATER		GROUNDWATER		
TURBIDITY	TT = 1 NTU Maximum	NA	HIGHEST LEVEL FOUND: 0.1 NTU	NA			Soil runoff
	TT = 95% of samples ≤ 0.3 NTU	NA	% OF SAMPLES ≤ 0.3 NTU: 100%	NA			
TOTAL ORGANIC CARBON	TT = Quarterly RAA Removal Ratio ≥ 1.0	NA	LOWEST QUARTERLY RAA RATIO: 1.1	NA			Various natural & man-made sources
			AVERAGE	RANGE	AVERAGE	RANGE	
BARIUM, µg/L	1000	2000	ND	ND	152	ND - 288	Erosion of natural deposits; discharge of drilling wastes; & discharge from metal refineries
SELENIUM, µg/L	50	30	ND	ND	ND	ND - 6	Erosion of natural deposits; discharge from mines & industrial wastes
FLUORIDE, mg/L	2	1	ND	ND	ND	ND - 0.1	Erosion of natural deposits & discharge from fertilizer & aluminum factories
NITRATE AS NITROGEN, mg/L	10	10	ND	ND - 0.9	2.8	1.0 - 4.2	Erosion of natural deposits; runoff from fertilizer use; & leaching from septic tanks and sewage
CHROMIUM, HEXAVALENT, µg/L	10	0	0.1	NA	4.6	1.2 - 6.4	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, & textile manufacturing facilities
GROSS ALPHA PARTICLE ACTIVITY, pCi/L*	15	(0)	ND	NA	ND	ND - 5	Erosion of natural deposits
URANIUM, pCi/L	20	0.43	ND	NA	ND	ND - 4	
SECONDARY DRINKING WATER STANDARDS, established by State Water Board							
CONDUCTIVITY, µS/cm	1600	NA	397	235 - 647	826	375 - 1176	Substances that form ions when in water; seawater influence
CHLORIDE, mg/L	500	NA	42	8 - 131	84	36 - 116	Runoff/leaching from natural deposits; seawater influence
SULFATE, mg/L	500	NA	41	22 - 66	57	19 - 98	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS, mg/L	1000	NA	223	137 - 383	506	217 - 769	Runoff/leaching from natural deposits
TURBIDITY, NTU	5	NA	ND	ND - 0.16	0.06	0 - 0.48	Soil runoff
MANGANESE, µg/L	50	NA	ND	0 - 27	ND	ND	Runoff/leaching from natural deposits; industrial wastes
ADDITIONAL PARAMETERS - Included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.							
ALKALINITY AS CALCIUM CARBONATE, mg/L	NA	NA	91	51 - 144	266	119 - 424	Naturally-occurring minerals
BORON, µg/L	NA	NA	85	ND - 220	606	490 - 820	
TOTAL HARDNESS AS CALCIUM CARBONATE, mg/L	NA	NA	86	39 - 144	309	108 - 502	
POTASSIUM, mg/L	NA	NA	2.1	1.2 - 4.0	1.7	0.9 - 2.2	
SODIUM, mg/L	NA	NA	56	31 - 105	61	40 - 79	
pH	NA	NA	8.7	8.3 - 9.1	7.6	7.1 - 8.3	
SILICA, mg/L	NA	NA	9.8	6.2 -12	21	11 - 28	

A DSRSD employee takes a water sample from a reservoir. All drinking water reservoirs are sampled once a week to ensure water quality throughout the system.



Lead and Copper Rule

In October 2024, the U.S. EPA issued additional improvements to the Lead and Copper Rule to better safeguard children and communities from lead exposure. For more information, visit www.epa.gov/ground-water-and-drinking-water/lead-and-copper-rule-improvements. The table below provides a summary of the most recent tap sampling events that occurred in 2022.

CONTAMINANT	NO. OF SAMPLES COLLECTED	90 TH PERCENTILE LEVEL DETECTED	NUMBER OF SITES EXCEEDING AL	AL	PHG	SOURCES
LEAD, µg/L	48	5.1	None	15	0.2	Erosion of natural deposits; internal corrosion of household water plumbing systems; discharges from industrial manufacturers
COPPER, mg/L	48	0.59	None	1.3	0.3	Erosion of natural deposits; internal corrosion of household water plumbing systems; leaching from wood preservatives

Unregulated Contaminant Monitoring Rule 4 (UCMR4)

The U.S. EPA's fourth Unregulated Contaminant Monitoring Rule (UCMR4) required monitoring of 30 contaminants between 2018 and 2020. Unregulated contaminant monitoring helps U.S. EPA and State Water Board to determine where certain contaminants occur and whether the contaminants need to be regulated. The detected contaminants are from 2019.

UNREGULATED CONTAMINANTS (UNITS)	MCL	MRL	AVERAGE	RANGE	SOURCES
HALOACETIC ACIDS (FIVE) (HAA ₅) µg/L	No Standard	NA	3.2	<0.2 - 13	Byproduct of drinking water disinfection
HALOACETIC ACIDS (SIX) (HAA ₆) BROMINATED µg/L	No Standard	NA	5.6	<0.2 - 25	Byproduct of drinking water disinfection
HALOACETIC ACIDS (NINE) (HAA ₉) µg/L	No Standard	NA	7.6	<0.2 - 31	Byproduct of drinking water disinfection
MANGANESE µg/L	No Standard	0.40	0.45	NA	Runoff/leaching from natural deposits; industrial wastes

Unregulated Contaminant Monitoring Rule 5 (UCMR5)

UCMR5 which requires monitoring of 29 per- and polyfluoroalkyl substances (PFAS) and lithium was finalized in December 2021 with quarterly sample collection scheduled in 2023-2024. Contaminants were not detected in the samples for the sampling conducted in 2023-2024.



Reservoir 3B in western Dublin. Reservoirs help maintain consistent water supply and pressure throughout the service area.

Protecting Our Water Supply from PFAS

With concern growing about the presence of PFAS in some water supplies, Zone 7 continues to actively monitor for PFAS in its water supplies and has been proactively addressing PFAS.



PFAS SOURCES

- SHAMPOO
- FIREFIGHTING FOAMS
- PHOTOGRAPHY
- FAST FOOD PACKAGING
- STAIN RESISTANT PRODUCT
- NON-STICK COOKWARE
- PAINTS
- PESTICIDES

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a large group of manmade substances that have been extensively used since the 1940s in common consumer products designed to be waterproof, stain-resistant, or nonstick. In addition, they have been used in fire-retarding foam and various industrial processes. PFAS are contaminants of emerging concern in drinking water due to a host of health impacts and the tendency of PFAS to accumulate in groundwater. There is growing evidence that long-term exposure above specific levels to certain PFAS can lead to adverse health effects such as developmental effects to fetuses during pregnancy or breastfed infants; cancer; or liver, immunity, thyroid, and other effects.

PFAS Regulatory Update

The science on PFAS and impacts to the environment and public health have prompted recent regulatory actions.

Federal EPA Efforts

In April 2024, the U.S. EPA adopted the first national primary drinking water regulation, which established MCLs for six (6) PFAS compounds. The regulation requires that water agencies complete initial monitoring for six PFAS compounds by 2027. If PFAS levels are found to exceed certain levels, agencies have until 2029 to implement solutions to reduce PFAS. After 2029, water agencies that have PFAS in drinking water which violated one or more of the PFAS

MCLs must take action to reduce levels of these PFAS in their drinking water and must provide notification to the public of the violation. See the table on page 16 for U.S. EPA enforceable levels.

California DDW Efforts

The State Water Board DDW is in the process of establishing regulatory standards for PFAS chemicals in drinking water. While regulatory standards are being set, California has implemented drinking water advisory levels for four (4) PFAS compounds. See the table on page 16 for DDW current health-based advisory levels.

Zone 7 Water Agency celebrates the opening of the Chain of Lakes PFAS treatment facility in May 2025.



Actions Taken in Response to PFAS Detections

Studies & Monitoring

Zone 7 completed a PFAS Potential Source Investigation and other PFAS-related studies that are available on Zone 7's website at www.zone7water.com/pfas. In addition to these studies, Zone 7 is actively monitoring for PFAS across its groundwater basin and surface water supplies.

DSRSD completed testing for PFAS compounds during the U.S. EPA's UCMR5 in 2023 - 2024. All results are on page 13.

Treatment

In 2023, Zone 7 opened its first PFAS treatment facility using ion exchange at its Stoneridge Well property in Pleasanton. In March 2025, Zone 7 completed a second PFAS treatment

facility at its Chain of Lakes location. Currently, Zone 7 is working on a conceptual design for a third PFAS treatment facility at its Mocho Wellfield location.

Operations

Zone 7 continues to be proactive in operating its water supply systems to ensure the supply from PFAS-affected groundwater wells remain below California response levels and federal MCLs. These proactive measures include PFAS treatment at the Chain of Lakes and Stoneridge Wells, blending well water, treatment through the Mocho Groundwater Demineralization Facility, and increased use of surface water.

How can you learn more about PFAS in your drinking water?

To learn more about PFAS in your water supply you can visit Zone 7's PFAS page at www.zone7water.com/pfas.



Zone 7's new Chain of Lakes PFAS Treatment Facility.

Abbreviations

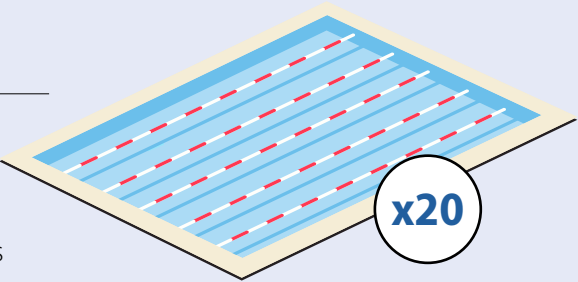
CCRDL	Consumer Confidence Report Detection Level (State Water Board established)
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
HI	Hazard Index (unitless) $HI\ MCL = \left(\frac{[HFPO - DA_{ppt}]}{[10\ ppt]} \right) + \left(\frac{[PFBS_{ppt}]}{[2000\ ppt]} \right) + \left(\frac{[PFNA_{ppt}]}{[10\ ppt]} \right) + \left(\frac{[PFHxS_{ppt}]}{[10\ ppt]} \right) = 1$
NA	Not Applicable
ND	Monitored for but not detected at or above CCRDL
NL	Notification Level
RL	Response Level

Units

ng/L Nanograms per liter

How Much is That?

ng/L = 1 drop of water in 20 Olympic-sized swimming pools



U.S. EPA MCL Enforceable Levels & State Water Board DDW Advisory Levels

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) (ng/L), U.S. EPA MCL Enforceable Levels & State Water Board DDW Advisory Levels			
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)	U.S. EPA MCL (ENFORCEABLE LEVELS) ¹	STATE WATER BOARD DDW (ADVISORY LEVELS) ²	
		NOTIFICATION LEVEL	RESPONSE LEVEL
Perfluorooctanoic acid (PFOA)	4 ng/L	5.1 ng/L	10 ng/L
Perfluorooctanesulfonic acid (PFOS)	4 ng/L	6.5 ng/L	40 ng/L
Perfluorohexanesulfonic acid (PFHxS)	10 ng/L	3 ng/L	20 ng/L
Perfluorobutanesulfonic acid (PFBS) ³	-	500 ng/L	5000 ng/L
Perfluorononanoic acid (PFNA)	10 ng/L	No levels established	
Hexafluoropropylene oxide dimer acid (HFPO-DA, Gen X Chemicals)	10 ng/L	No levels established	
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA and PFBS	1 (unitless) Hazard Index	No levels established	

¹ Although the federal limits have been finalized, water agencies will have until 2029 to comply with the enforceable levels.
² When a contaminant is found at concentrations greater than its advisory level, certain notification requirements and recommendations apply.
³ PFBS is included in the HI calculation and does not have a separate MCL.

Contaminants Detected in Treated Water Supply
January - December 2024 Water Quality Data

PER- and POLYFLUOROALKYL SUBSTANCES (PFAS) GUIDANCE LEVELS, established by the State Water Board						SURFACE WATER		GROUNDWATER		SOURCES
PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)	MCL	MCLG	NL	RL	CCRDL	AVERAGE	RANGE	AVERAGE	RANGE	
Perfluorooctane Sulfonic Acid (PFOS), ng/L	4.0	0	6.5	40	4	ND	ND	ND	ND - 4.5	Various man-made sources
Perfluorohexane Sulfonic Acid (PFHxS), ng/L	10	10	3	20	3	ND	ND	ND	ND - 4	

Questions and Answers about Our Water

Why does the taste of our tap water sometimes change?

Many factors can affect the taste of water. DSRSD’s water is a blend of surface water and groundwater. The blend changes throughout the year and these variations can change taste and odor. Chlorine used to disinfect the water supply occasionally produces a chemical smell. Rapid algae growth in the Delta can cause an earthy or musty taste or smell. (These algae “blooms” can occur at any time but are most common from late spring through early fall). None of the changes in taste or odor cause health concerns about water consumption.

Rotting food in the garbage disposal or bacteria in the P-trap under the drain can also cause a foul smell. To get rid of the odor, fill the sink with hot water, add an ounce of household bleach, and allow the water to drain slowly. If you have a water filter on your faucet or refrigerator, be sure to change it as often as recommended. Otherwise, it becomes a breeding ground for bacteria that not only taste or smell foul but can make you sick.

Why does our water taste different than EBMUD’s?

East Bay Municipal Utility District (EBMUD) is the water agency to the north of DSRSD that serves other portions of San Ramon. EBMUD receives most of its water from the Mokelumne River watershed and channels it into an aqueduct east of the Delta. The water never passes through the Delta and that’s why it tastes different than DSRSD’s water, which is a blend of surface water that has flowed through the Delta and groundwater extracted from local wells.

Zone 7’s Patterson Pass Water Treatment Plant uses ozone as its main disinfectant for water from the State Water Project.

What is being done to improve water taste and address algae?

During warm months when algae blooms are more likely in the Delta, the California Department of Water Resources applies copper sulfate, and Zone 7 utilizes ozone to destroy some of the taste-and-odor-causing compounds released by algae. Ozonation improves overall water quality by destroying organic matter, reducing the formation of chlorine by-products, and treating other contaminants of emerging concern. Learn more at www.zone7water.com/post/earthymusty-taste-and-odor-water.

Does our tap water contain fluoride?

Yes. Fluoride occurs naturally and is added to promote strong teeth. Voters in DSRSD’s service area approved fluoridation in 1974, and treatment began in 1977. DSRSD complies with the optimal level of 0.7 milligrams of fluoride per liter of water (mg/L) and control range of 0.6 to 1.2 mg/L, as required by federal and state regulations. Information about fluoridation, oral health, and current issues is available from www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html.



The Mocho Groundwater Demineralization Plant uses reverse-osmosis (RO) membrane technology to treat up to 7.7 million gallons of groundwater a day.

How hard is our water?

Naturally occurring calcium and magnesium cause water to be “hard.” We measure hardness by the amount of calcium carbonate in the water, expressed either as milligrams per liter (mg/L) or grains per gallon (gpg). Our water in 2024 was soft to very hard, in the range of 52 to 384 mg/L or 3.0 to 22.5 gpg. Because our water is a variable blend of surface and groundwater, hardness changes throughout the year and by location in DSRSD. Visit www.zone7water.com/post/questions-about-hard-water to learn more.

What do you advise about water softeners?

DSRSD discourages customers from installing salt-regenerated water softeners because they add excess amounts of salt to our wastewater, which in turn increases the salinity of recycled water used for irrigation. The salt in recycled water seeps back into our groundwater basin where it degrades the quality of our drinking water supply. Zone 7 operates a demineralization plant to remove salt from groundwater, but this is an expensive process. The more softened water that is used in DSRSD, the higher the costs for all customers.

If having soft water is important to you, please consider using an exchange tank service. An exchange tank service company will install portable water softening tanks at your home and replace them on a regular schedule. The company disposes of the brine in the tanks under controlled conditions, so it never enters DSRSD’s wastewater, recycled water, or the groundwater basin. Learn more at www.dsrSD.com/your-account/water-quality/water-softeners.

What is being done to improve water hardness?

Zone 7 has a demineralization plant to slow down the buildup of salts and minerals in our groundwater basin and reduce the hardness of groundwater pumped from the Mocho Well Field in western Pleasanton. Learn more at www.zone7water.com/post/mocho-groundwater-demineralization-plant.



An employee collects a drinking water sample for testing. Your water is tested for more than 178 water quality parameters.



Dublin San Ramon Services District

Water, wastewater, recycled water

We encourage public interest and participation in Dublin San Ramon Services District (DSRSD) decisions affecting water service and other District business. Board meetings occur on the first and third Tuesday of every month at 6 p.m. at our district office: DSRSD Boardroom, 7051 Dublin Blvd. Dublin, CA.

The public is welcome. For agendas, minutes, and video recordings of past meetings, visit the DSRSD website at www.dsrdsd.com.

This report contains important information about your drinking water. Please contact Dublin San Ramon Services District (DSRSD) at 7051 Dublin Boulevard, Dublin CA 94568 or (925) 828-0515 for assistance.

Este informe contiene información importante sobre su agua potable. Póngase en contacto con Dublin San Ramon Services District (DSRSD) acudiendo a 7051 Dublin Boulevard, Dublin CA 94568 o llamando al (925) 828-0515 para recibir ayuda en español.

本报告包含您的饮用水相关的重要信息。如需中文帮助, 请联系都柏林圣拉蒙服务区 (Dublin San Ramon Services District, DSRSD), 地址: 7051 Dublin Boulevard, Dublin CA 94568 或电话: (925) 828-0515。

इस रपॉर्ट में आपके पीने के जल से सम्बंधित महत्वपूर्ण जानकारी है। हदी में सहायता के लिए, Dublin San Ramon Services District (DSRSD) को 7051 Dublin Boulevard, Dublin CA 94568 अथवा (925) 828-0515 पर संपर्क करें।

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