Dublin San Ramon Services District

Water, wastewater, recycled water

2017 ANNUAL WATER QUALITY REPORT

April 30, 2018

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告, 內有重要資料和訊息, 請找他人為你翻譯及解釋清楚.

A MESSAGE FROM THE GENERAL MANAGER

This annual report is a snapshot of the quality of your drinking water based on thousands of tests conducted during 2017. The report describes where your water comes from, what it contains, and how it compares to the state and federal drinking water standards. In 2017, your tap water met all U.S. EPA and State drinking water health standards.

Dublin San Ramon Services District (DSRSD) and Zone 7 Water Agency, the District's wholesale water supplier, protect public health and the environment by monitoring potable (drinking) water for more than 100 contaminants.

Sampling for Lead in the Water in our Schools

In January 2017, the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) amended the District's water supply permit, notifying schools that they could ask their public water system to sample their drinking water for lead and receive technical assistance if an elevated lead sample is found. In 2017, a total of eight San Ramon Valley Unified School District schools submitted requests to DSRSD to be sampled for lead. DSRSD collected up to five samples at each school where testing was completed.

In October 2017, Assembly Bill 746 became law and it requires community water systems to test lead levels in drinking water at all California public, K-12 school sites built before January 1, 2010. These tests must be completed by July 1, 2019.

We know you depend on us to provide a safe and reliable water supply, and we work hard every day to fulfill this responsibility to you, our community. I welcome your input; you can reach me at mcintyre@dsrsd.com or (925) 875-2200.

Daniel McIntyre
General Manager

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Sources of Our Potable Water

DSRSD purchases all of its potable (drinkable) water from Zone 7 Water Agency (Zone 7). This water comes from three sources: 80% is imported surface water from the California State Water Project, 10% is local rain runoff that is stored in Del Valle Reservoir, and 10% is groundwater from local wells.

Normally, mosts of our water supply starts in the Sierra Nevada as rain and snowmelt. 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 Water Agency's Del Valle and Patterson Pass treatment plants. When State Water Project allocations are restricted, more of our water comes from local sources.

Safety 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 human activities or the presence of animals.

To ensure tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) set 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. Additional information on bottled water is available on the State Water Resources Control Board, Division of Drinking Water: www.waterboards.ca.gov/publications_forms/publications/legislative/docs/2015/sdwp.pdf.

MANY PEOPLE WORK EVERY DAY TO PROTECT THE QUALITY OF OUR WATER

Contaminants that may be in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from upstream sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, that can occur naturally 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 storm water runoff, agricultural application, and septic systems;
- Radioactive contaminants that can occur naturally or result from oil and gas production and mining activities.

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. These samples undergo analysis in the District's laboratory, which is certified by the State Board Division of Drinking Water's Environmental Laboratory Accreditation Program. Zone 7 monitors water quality continuously online, as well as with instantaneous, or "grab," sampling. In all, DSRSD and Zone 7 test for more than 100 water quality parameters.

Treatment and Disinfection

Zone 7 disinfects and removes pollutants from surface water using a multi-barrier approach, and groundwater is chloraminated to maintain 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 pipelines to prevent bacterial growth.

Assessing the Quality of Source Water

Zone 7 drinking water sources include local and imported surface water as well as groundwater. Protecting our source water is an important part of providing safe drinking water to the public.

A source water assessment is conducted on each drinking water source as required by the California State Water Resources Control Board Division of Drinking Water (DDW). Groundwater sources in general can be vulnerable to releases from chemical/petroleum pipelines, leaking tanks, groundwater contamination plumes, septic tanks, and wastewater-collection systems. Surface water is most vulnerable to contaminants as it travels through the Sacramento and San Joaquin watersheds and Delta.

A comprehensive Watershed Sanitary Survey for the State Water Project (SWP) was completed in 1990 and updated about every five years. The 2016 SWP Sanitary Survey was completed in June 2017 which included two special topics on Grazing and Impacts of the 2012 to 2015 Drought.

The recommendations presented in the sanitary survey are potential actions for consideration by various agencies in the state of California. The Department of Water Resources (DWR) Municipal Water Quality Investigations (MWQI) Program and the Division of Operations and Maintenance (O&M) continue to conduct a comprehensive water quality monitoring program of the Delta and the SWP facilities. The long period of record at many locations allows the data to be analyzed for spatial trends, long-term trends, and seasonal trends.

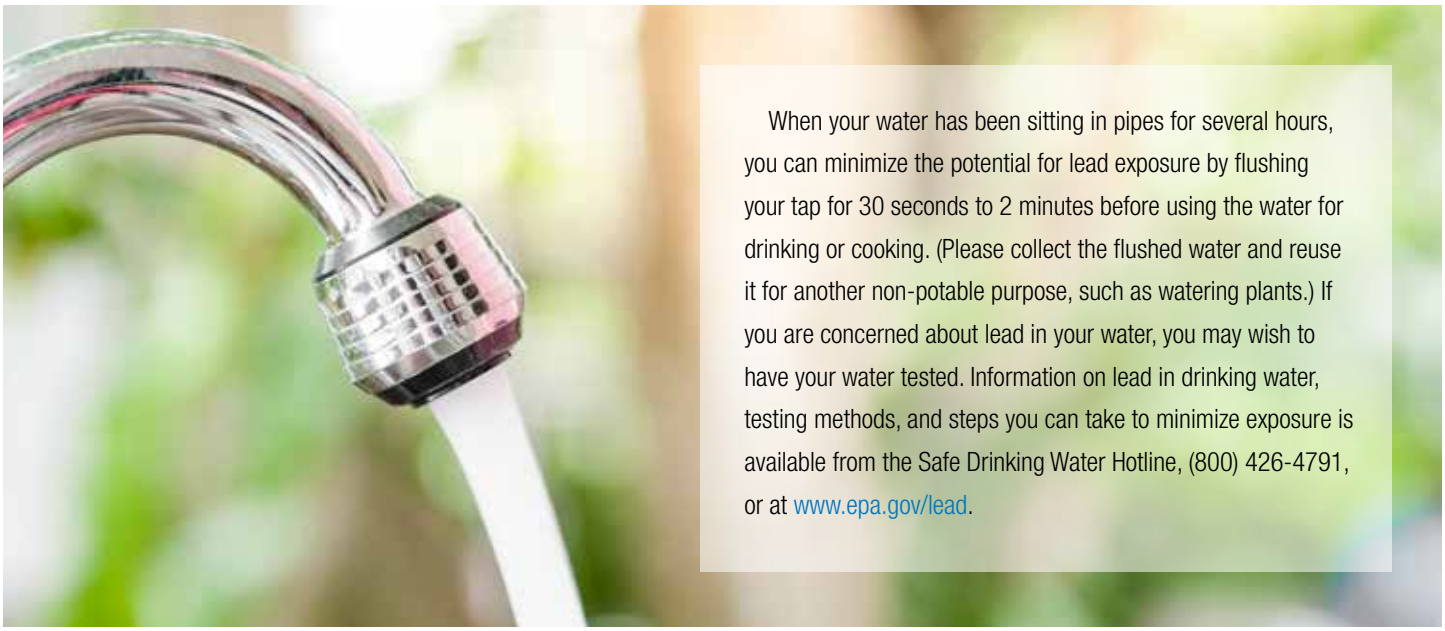
After leaving the Delta, water is transported to Zone 7 via the South Bay Aqueduct (SBA). SBA water quality may also be vulnerable to pollution from local cattle grazing, wildlife activities, and recreational activities in the watersheds of the Bethany and Del Valle reservoirs. Zone 7 is proactively participating in a number of activities to improve water supply reliability and water quality of the SBA.

Copies of any public outreach materials, source water assessment reports or sanitary surveys are available by calling Gurpal Deol at (925) 447-0533.

(Below) Water/Wastewater Systems Operator Ray Robles samples water for chlorine residual.

Oroville Repair Update
An overview of the Lake Oroville emergency spillway construction site shows progress of the new splashpad. It will armor the hillside between the emergency spillway and the secant pile wall to prevent erosion if the emergency spillway is ever used again. Photo taken April 9, 2018. Learn about our connection to Lake Oroville at www.dsrsd.com/oroville.

Photo courtesy of CA Dept of Water Resources



When your water has been sitting in pipes for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. (Please collect the flushed water and reuse it for another non-potable purpose, such as watering plants.) If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline, (800) 426-4791, or at www.epa.gov/lead.

2017 Water Quality Test Results

The tables on page 6-7 show the average level and range of each contaminant detected in the DSRSD water supply in 2017. All water supplied during 2017 met the regulatory standards set by the state and federal governments. Additional unregulated parameters, such as sodium levels and water hardness, are included in the tables to assist customers in making health or economic decisions.

Total Coliform Bacteria

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The U.S. EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Individuals with compromised immune systems (such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders), some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline: (800) 426-4791.

Minimizing Exposure to Lead

Lead was not detected above the regulatory action level in the DSRSD water supply. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines (pipelines that deliver water) and home plumbing. DSRSD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

Every three years, DSRSD is required to test the indoor tap water from a sample of homes built before 1986, when plumbing fixtures like faucets and pipe solder were allowed to contain lead. Due to the 3-year sampling cycle, our next lead and copper samples will be analyzed in 2019.

The EPA requires that 90 percent of the samples be below the regulatory action level of 15 parts per billion. The District's results were much better than this standard. When the last residential samples were taken, only two homes were at or above the regulatory action level. While we were not required to take any action, our staff advised the homeowners about the advantages of replacing old plumbing and fixtures with new lead-free materials.

CONTAMINANTS NOT DETECTED IN ZONE 7 WATER SUPPLY

None of these contaminants were detected at or above the Detection Limit for Purposes of Reporting (DLR) in the Zone 7 water supply during 2017 monitoring.

Primary Drinking Water Standards

ORGANIC CHEMICALS

Volatile Organic Chemicals (VOCs)

Benzene
Carbon Tetrachloride
1,2-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
Dichloromethane
1,2-Dichloropropane
1,3-Dichloropropene
Ethylbenzene
Methyl-tert-butyl ether (MTBE)
Monochlorobenzene
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Trichlorofluoromethane
1,1,2-Trichloro-1,2,2-Trifluoroethane
Vinyl Chloride
Xylenes

Synthetic Organic Chemicals (SOCs)

Alachlor
Atrazine
Bentazon
Benzo(a)pyrene
Carbofuran
Chlordane
2,4-D
Dalapon
Dibromochloropropane (DBCP)
Di(2-ethylhexyl)adipate
Di(2-ethylhexyl)phthalate
Dinoseb
Diquat

(SOCs continued)

Endothall
Endrin
Ethylene Dibromide (EDB)
Glyphosate
Heptachlor
Heptachlor Epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Lindane
Methoxychlor
Molinate
Oxamyl
Pentachlorophenol
Picloram
Polychlorinated Biphenyls
Simazine
Thiobencarb
Toxaphene
2,3,7,8-TCDD (Dioxin)
1,2,3-Trichloropropane (TCP)*
2,4,5-TP (Silvex)

INORGANIC CHEMICALS

Aluminum
Antimony
Arsenic
Asbestos**
Beryllium
Cadmium
Cyanide
Mercury
Nickel
Nitrite (as nitrogen)
Perchlorate
Thallium

RADIONUCLIDES

Radium-226, Radium-228
Beta/photon emitters
Tritium, Strontium-90

Secondary Drinking Water Standards

Aluminum
Copper
Foaming Agents (MBAS)
Iron
Manganese
Methyl-tert-butylether (MTBE)
Odor-Threshold
Silver
Thiobencarb
Zinc

* TCP MCL became effective on December 14, 2017.

** Latest monitoring for Asbestos was conducted in 2011.

2017 Water Quality Test Results

Terms Used

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

COL–Chain of Lakes

DLR–Detection Limit for Purposes of Reporting: Established by the State Water Resources Control Board, Division of Drinking Water.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

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 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. Environmental Protection Agency (EPA).

mg/L–Milligrams per liter, or parts per million (ppm)

µg/L–Micrograms per liter, or parts per billion (ppb)

µS/cm–Microsiemens per centimeter

MRL–Minimum Reporting Level

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: 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.

NTU–Nephelometric Turbidity Units: Determines size of suspended particles in a medium and visual range through the medium. Turbidity measures cloudiness and is a good indicator of the effectiveness of filtration systems.

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.

pCi/L–Picocuries per liter

RAA–Running Annual Average

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

Sources of Contaminants

The major sources of regulated contaminants are listed below and correspond to numbers in the columns labeled "Sources."

1 Erosion of natural deposits

2 Substances that form ions (subatomic particles with positive and negative charges) when in water

3 Runoff or leaching from fertilizers; leaching from septic tanks

4 Byproduct of drinking water disinfection

5 Drinking water disinfectant added for treatment

6 Runoff or leaching from natural deposits

7 Added to promote strong teeth

8 Naturally present in the environment

9 Internal corrosion of household water plumbing systems

10 Leaching from wood preservatives

11 Soil runoff

12 Discharge from petroleum, glass, and metal refineries; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

13 Discharges of oil drilling wastes and from metal refineries

14 Discharge from fertilizer and aluminum factories

15 Naturally occurring organic materials

16 Discharges from industrial manufacturers

17 Discharge from steel and pulp mills and chrome plating

18 Seawater influence

19 Industrial wastes

20 Various natural and man-made sources

21 Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities

22 "Hardness" is the sum of polyvalent cations (subatomic particles with positive charges) present in the water, generally magnesium and calcium. Cations usually occur naturally.

23 Human and animal fecal waste

Regulated Contaminants with PRIMARY and SECONDARY DRINKING WATER STANDARDS

Established by the State Water Resources Control Board (State Board), Division of Drinking Water (DDW)

DSRSD DISTRIBUTION SYSTEM						
Sources	**Contaminants (units)**	**MCL**	**DLR (MRL)**	**PHG, MCLG(MRDLG)**		
8	Total coliform bacteria	More than 5% of monthly samples are positive		(0)	**Highest percentage of monthly positive samples:** 3.1%	
23	Fecal coliform or *E. coli*	*		(0)	**Total number of positive samples in 2017:** 2**	
					Highest Locational Running Annual Average	**Range of all samples collected in 2017**
4	Total trihalomethanes (TTHMs), (µg/L)	80	1	NA	24	3.9 - 44
4	Haloacetic acids (five) (HAA), (µg/L)	60	1-2	NA	13	0.0 - 19
					Running Annual Average (RAA)	**Range of monthly average**
5	Chloramines as Chlorine (mg/L)	Maximum Residual Disinfectant Level (MRDL) = 4.0		[4]	1.5	1.2 - 2.1
1, 7, 14	Fluoride (mg/L)	4	0.1	1	0.9	0.6 - 1.1

* Under the California Total Coliform Rule, the MCL is exceeded if a routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli.* Under the federal Revised Total Coliform Rule, the MCL is exceeded if (a) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, (b) system fails to take repeat samples following *E. coli*-positive routine sample, or (c) system fails to analyze total coliform-positive repeat sample for *E. coli.*

** Out of more than 1,200 samples collected from the distribution system.

(Chart continued on next page)

Regulated Contaminants with PRIMARY and SECONDARY DRINKING WATER STANDARDS *(chart continued from previous page)*

WATER SUPPLY SOURCES																			
Sources	Contaminants (units)	PRIMARY DRINKING WATER STANDARDS			Del Valle Water Treatment Plant		Patterson Pass Water Treatment Plant		Mocho Groundwater DeMin Plant		Mocho Well Field		Stoneridge Well		Hopyard Well Field		Chain of Lakes (COL) Well Field	
		MCL	DLR (MRL)	PHG, (MCLG), [MRDLG]	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range
11	Turbidity (NTU)	TT = 1 NTU Maximum		NA	Highest Level Found = 0.13 NTU		Highest Level Found = 0.14 NTU		NA		NA		NA		NA		NA	
		TT = 95% of samples ≤ 0.3 NTU		NA	% of samples ≤ 0.3 NTU = 100		% of samples ≤ 0.3 NTU = 100		NA		NA		NA		NA		NA	
20	Total Organic Carbon	TT = Quarterly RAA Removal Ratio ≥ 1.0		NA	Lowest Quarterly RAA Ratio = 1.9		Lowest Quarterly RAA Ratio = 1.7		NA		NA		NA		NA		NA	
	Inorganic Chemicals				Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range
1, 13	Barium (µg/L)	1000	100	2000	ND	ND	ND	ND	ND	ND	123	ND - 180	295	270 -320	130	ND	274	240 -300
1, 17	Chromium Total (µg/L)	50	10	(100)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND - 14
1, 21	Chromium 6 (Cr6) (µg/L)	10***	1	0.02	ND†	NA†	ND†	NA†	NA	NA	6†	5 - 8†	9	NA	6†	5 - 7†	9‡	ND - 13‡
1, 12	Selenium (µg/L)	50	5	30	ND	ND	ND	ND	ND	ND	ND	ND - 9	ND	ND	ND	ND - 5	ND	ND
1, 7, 14	Fluoride (mg/L)	2	0.1	1	ND	ND - 0.1	ND	ND	ND	ND	ND	ND - 0.1	ND	ND	0.1	0.1	ND	ND - 0.1
1, 3	Nitrate (as N) (mg/L)	10	0.4	10	ND	ND - 0.9	ND	ND - 1.0	2.0	1.6 -2.6	3.2	1.9 - 4.9	3.7	3.7 - 3.8	3.0	2.9 - 3.0	4.0	3.6 - 4.5
	Radionuclides				Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range	Avg.	Range
1	Gross Alpha particle activity (pCi/L)	15	3	(0)	3	NA	ND	NA	ND	NA	3	ND-6	ND	NA	ND	NA	ND	ND - 5
1	Uranium (pCi/L)	20	1	0.43	ND	ND	ND	ND	ND	ND	3	2 - 3	1	NA	4	NA	ND	ND - 1
	REGULATED CONTAMINANTS	**SECONDARY DRINKING WATER STANDARDS**																
15	Color (Units)	15	0	—	1.5	0 - 2.5	0.5	0 - 2.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2, 18	Conductivity (µS/cm)	1600		—	307	200- 436	276	190 - 442	476	394 - 600	1291	1097 - 1557	839	790 - 922	957	940 - 988	747	690 - 825
6, 18	Chloride (mg/L)	500		—	46	29 - 70	48	27 - 82	37	1 - 69	162.1	147 - 183	85	76 - 93	87	86 - 88	6.5	49 - 87
6, 19	Sulfate (mg/L)	500	0.5	—	16	9.6 - 33	16	8.6 - 31	38	25 - 46	99	61 - 137	50	47 - 53	79	77 - 80	43	40 - 50
6	Total Dissolved Solids (mg/L)	1000		—	170	102 - 225	159	99 - 230	274	224 - 334	779	622 - 930	514	483 - 545	552	532 - 572	430	381 - 493
11	Turbidity (NTU)	5	(0.05)	—	ND	ND	ND	ND	ND	ND	0.1	ND - 0.6	ND	ND	ND	ND	ND	ND - 0.1
	ADDITIONAL PARAMETERS — Included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.																	
22	Alkalinity as calcium carbonate (mg/L)	—		—	65	35 - 97	50	33 - 64	110	53 - 156	358	303 - 442	268	248 - 287	341	336 - 345	247	228 - 270
8	Boron (µg/L)	—	100	—	42	0 - 140	34	ND - 130	1317	1240 - 1450	1124	860 - 1530	455	450 - 460	540	530 - 550	329	240 - 390
22	Total Hardness as calcium carbonate (mg/L)	—		—	71	32 - 115	55	30 - 78	141	104 - 185	481	387 - 613	349	327 - 371	401	393 - 408	325	304 - 366
8	Potassium (mg/L)	—		—	2	1 - 3	2	1 - 4	1	ND - 2	3	2 - 5	3	2 - 3	2	2	2	2 - 3
22	Sodium (mg/L)	—		—	33	23 - 47	35	22 - 56	46	38 - 58	96	62 - 120	56	52 - 60	68	67 - 69	35	27 - 46
	pH (Units)	—		—	8.7	7.9 - 9.1	8.8	8.3 - 9.3	8.3	7.7 - 8.6	7.4	7.1 - 7.6	7.5	7.5 - 7.5	7.3	7.3 - 7.3	7.5	7.2 - 7.7
8	Silica (mg/L)	—		—	10	6 - 12	10	7 - 12	9	7 - 12	26	22 - 30	27	26 - 29	25	25 - 26	26	22 - 30

*** MCL was withdrawn on September 11, 2017.

† Treatment Plants, Mocho and Hopyard Well Fields: latest data for Cr6 is from 2011.

‡ Although the MCL for Cr6 was withdrawn, a monthly sample is collected whenever COL Well 5 is blended into the supply. Blending station data from 2017: Average 9 µg/L; Range 8-9 µg/L (PHG 0.02 µg/L)

LEAD AND COPPER RULE						
	Contaminant	No. of Samples Collected	90th Percentile Level Detected	Number of Sites Exceeding AL	Action Level (AL)	PHG
1, 9, 16	Lead (mg/L)	30	0.003	2	0.015	0.0002
1, 9, 10	Copper (mg/L)	30	0.37	None	1.3	0.3

This rule is applicable to DSRSD's direct customers only. Per DDW approval, compliance monitoring is conducted once every three years. Data from June- July 2016 monitoring is summarized on the left.

Help Us Protect Source Water Quality

Protecting drinking water sources is everyone's responsibility. You can help in several ways:

1. Reduce or eliminate fertilizers and pesticides; they are a primary source of pollution in creeks and the San Francisco Bay.

   Visit www.Baywise.org for environmentally friendly alternatives.
2. Pick up after your pets.
3. Dispose of medication, chemicals, and used motor oil properly. Find disposal and recycling options at www.dsrsd.com/WhatNotToFlush.

QUESTIONS AND ANSWERS ABOUT OUR WATER

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 is generally moderately hard to hard, in the range of 48-233 mg/L (3-14 gpg). Because our water is a variable blend of surface and groundwater, hardness changes throughout the year and by location in the District.

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.

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 these changes in taste or odor affects the safety of the water.

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) gets 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 Mocho Well Demineralization Plant in Pleasanton.

Photo courtesy of CA Dept of Water Resources

Sacramento-San Joaquin River Delta.

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

During warm months when algae blooms are more likely in the Delta, the Department of Water Resources (DWR) applies copper sulfate, and Zone 7 adds powdered activated carbon to the water to remove some of the taste-and-odor-causing compounds released by algae.

DWR monitors for toxic compounds released by algae, including cyanotoxins produced by some blue-green algae, throughout the State Water Project. In addition, Zone 7 implemented its own algal toxins monitoring in 2016. Blue-green algae is appearing more frequently in water bodies such as the Delta and Lake Del Valle, which supply water to Zone 7.

A study of Zone 7's source water identified ozone as the only effective treatment of such cyanotoxins. Zone 7 is currently designing improvements that will add ozone treatment to surface water provided to DSRSD and other Tri-Valley water retailers. In addition to removing algal toxins, ozonation will reduce disinfection by-products and improve the taste and odor of our water more effectively than current treatments. Groundbreaking for the Del Valle Water Treatment Plant Ozonation Project begins May 2018. Ozonation is scheduled to begin at the Del Valle treatment plant by 2019 and at the Patterson Pass plant by 2021.

Zone 7's Del Valle Treatment Plant.

Does our tap water contain fluoride?

Yes. Fluoride occurs naturally and is added to promote strong teeth. Voters in the District's service area approved fluoridation in 1974 and treatment began in 1977. The District 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.shtml.

What do you advise about water softeners?

The District 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 the District, the higher the costs for all customers.

If having soft water is important to you, please consider using a water softening service. The 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 the District's wastewater, recycled water, or groundwater basin.

Contact Us

We encourage public interest and participation in District decisions affecting water service and other District business. Board meetings occur on the first and third Tuesday of every month at the District Office, 7051 Dublin Blvd., Dublin, at 6 p.m. The public is welcome. For agendas, minutes, and video recordings of past meetings, visit the District website.

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Service Area

A public agency founded in 1953, DSRSD distributes water, recycles water, and collects, treats, and disposes of wastewater for 178,000 people in Dublin, southern San Ramon, Dougherty Valley, and Pleasanton.