

San Dieguito Water District



ANNUAL DRINKING WATER QUALITY REPORT

WATER QUALITY TEST RESULTS FROM 2023

Based on water quality monitoring data collected in 2023, San Dieguito Water District's tap water satisfies all Primary Drinking Water Standards.

Test results from 2023 are available online at: www.sdwd.org/2023waterqualityreport.pdf

SAN DIEGUITO WATER DISTRICT'S TAP WATER SUPPLY MEETS ALL DRINKING WATER STANDARDS IN 2023:

The San Dieguito Water District (SDWD) remains committed to providing you with a safe and reliable water supply. Based on water quality monitoring data collected in 2023, the District's tap water satisfies all Drinking Water Standards. To promote transparency, the United States Environmental Protection Agency (U.S. EPA) and the California Division of Drinking Water (DDW) mandate all water agencies to produce an annual report educating customers about their drinking water quality. SDWD presents this report which includes details about your water supply, what it contains, and how it met regulations throughout 2023.

Message from the General Manager:

As we reflect on the past year, it is evident that our region has experienced a significant shift in weather patterns. Following three consecutive years of drought, we entered 2023 with record-breaking rainfall, making it the wettest January and March in recent memory and marking the second wettest year in at least 25 years. This remarkable contrast resulted in the lowest amount of annual water consumption on record, highlighting both the adaptability of our community and the importance of water conservation. The District has taken tremendous steps to promote water efficiency, such as recycled water systems and customer-led initiatives to install efficient fixtures and landscapes.

In 2023, we continued our commitment to enhance the resilience of our water system through various projects and initiatives. This past winter, we completed the Valve Replacement Project, which replaced aging infrastructure but also improved operational efficiencies, minimizing disruptions to our customers during maintenance shutdowns in Old Encinitas. In addition, the District continued to partner in investing in capital improvements at RE Badger Filtration Plant, where all water supplied in the District is treated.

The District is in the midst of the Air Vacuum and Blow Off Replacement Capital Improvement Project. This project also replaces aging infrastructure and will increase operational efficiencies and limit potential emergency situations. Additionally, our ongoing condition assessment of the water system will provide valuable insight to guide future investment in system resiliency, ensuring the continued reliability of our water supply for generations to come.

Despite our proactive efforts, the challenges posed by inflationary pressures, much like the ones we know our customers face have increased the cost of construction related materials over the past two years. In addition, the District's access to local water at Lake Hodges, our most cost-effective source, has been reduced significantly due to aging infrastructure. Those restrictions have left us unable to capture the prolific precipitation we've seen over the past year and a half.

We extend our heartfelt gratitude to our customers for their continued support and understanding as we navigate these challenges together. We remain dedicated to serving our community's best interest and pledge to continue our effort to safeguard our water resources for future generations.

Sincerely,

Isam Hireish General Manager San Dieguito Water District

WATER SYSTEM INFORMATION:

Water System Name: San Dieguito Water District

Report Date: 2023

Type of Water Source(s) in Use: Surface Water

Name and General Location of Source(s):

- San Dieguito Reservoir Rancho Santa Fe
- Lake Hodges Escondido
- SDCWA Aqueduct Escondido

Drinking Water Source Assessment Information: Watershed Sanitary Survey, 2023

For More Information, Contact: Elijah Standing Warrior, Ewarrior@SFIDWater.org

Time and Place of Regularly Scheduled Board Meetings for Public Participation:

5:00pm Third Wednesday of Each Month, 505 S. Vulcan Avenue, Encinitas

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse San Dieguito Water District a 160 Calle Magdalena, Encinitas, CA, 92024 para asistirlo en español.



WATER SOURCES:

SDWD and Santa Fe Irrigation District (SFID) jointly own the Raymond Eugene Badger Filtration Plant (REB). This conventional drinking water treatment facility treats both imported and local supplies to drinking water quality standards.

Local Sources:

SDWD and SFID hold rights to inflow and storage at Hodges Reservoir. The reservoir is located within the San Dieguito watershed and impounds surface water from the Santa Maria and Santa Ysabel Creeks.

Imported Sources:

SDWD purchases both raw and treated imported water from the San Diego County Water Authority (SDCWA). SDCWA receives water from the Metropolitan Water District of Southern California (MWD), which blends imported supplies from the Colorado River and the State Water Project.

WATER QUALITY:

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. REB, along with SDCWA and MWD, go through exhaustive means of assessing, maintaining, and ensuring a safe water supply.

Source Water Assessment:

REB completes a Watershed Sanitary Survey every five years to assess sources of contamination. The last test study was completed in 2023 and is available for review at the treatment plant.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are 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.

Regulation of Drinking Water and Bottled Water Quality:

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

TERMS USED IN THIS REPORT:

Level 1 Assessment	A Level 1 assessment is 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.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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. Environmental Protection Agency (U.S. EPA).
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.
Primary Drinking Water Standards (PDWS)	MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
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 Environmental Protection Agency.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per billion or micrograms per liter (µg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picogram per liter (pg/L)
pCi/L	picocuries per liter (a measure of radiation)
(TT) Variances and Exemptions ND ppm ppb ppt ppq	Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions. Not detectable at testing limit. parts per million or milligrams per liter (mg/L) parts per billion or micrograms per liter (µg/L) parts per trillion or nanograms per liter (ng/L) parts per quadrillion or picogram per liter (pg/L)

About this Report:

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2023 and may include earlier monitoring data.

The tables below (1, 2, 3, 4, 5, 6, 7, and 10) list all the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest Number of Detections	Number of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(in a month) 1	0	π	0	Naturally present in the environment
Fecal Coliform or E. coli	(in the year) 1	0	0	0	Human and animal fecal waste

⁽a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	Number of Samples Collected	90th Percentile Level Detected	Number of Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	2023	42	1.4	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2023	42	0.59	1	1.3	0.3	not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2023	80	80-110	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2023	210	180-290	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ppm)	2023	0.026	ND - 0.026	1	0.6	Erosion of natural deposits; residual from some surface water treatment processes
Arsenic (ppb)	2023	2	ND - 2.0	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2023	0.08	0.067 - 0.082	1	2	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Cyanide (μg/L)	2023	ND	ND	150	150	Discharge from steel/metal, plastic and fertilizer factories
Fluoride (ppm)	2023	0.23	0.20 – 0.34	2	1	Erosion from natural deposits, water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (μg/L)	2023	ND	ND	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Mercury [Inorganic] (μg/L)	2023	ND	ND	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nitrate (mg/L)	2023	2023 0.11 ND - 0.11 10		10 (as N)	10 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite (mg/L)	2023	ND	ND	1 (as N)	1 (as N)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (μg/L)	2023	0.8	ND - 0.8	6	1	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used
PCBs [Polychlorinated Biphenyls] (ng/L)	2022	ND	ND	500	90	Runoff from landfills; discharge of waste chemicals
Total THMs (ppb)	2023	44 Highest LRAA	16 - 67	80	-	Byproduct of drinking water disinfection
Total HAA5 (ppb)	2023	20.5 Highest LRAA	5 - 24	60	-	Byproduct of drinking water disinfection
Turbidity (NTU)	2023	0.02	0.01 - 0.08	TT	-	Soil Runoff
Chloramines (ppm)	2023	2.64	2.54 - 2.84	4	4	Drinking water disinfectant added for treatment
Chlorite (ppm)	2023	0.47	0.36058	1	0.05	Byproduct of drinking water disinfection
Chlorine Dioxide (ppb)	2023	0	ND - 100	800	800	Drinking water disinfectant added for treatment
Control of DBP Precursors	2023	3.33	2.31 - 5.43	TT	-	Various natural and manmade sources
1,2,3-Trichloropropane [TCP] (μg/L)	2023	ND	ND	0.005	0.0007	Discharge from industrial and agricultural chemical factories; leaching from hazardous

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2023	2.4	ND - 2.6	200	NA	Erosion of natural deposits; residual from some surface water treatment processes
Copper (ppm)	2023	ND	ND	1	NA	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Turbidity (NTU)	2023	0.02	0.01 - 0.08	5	NA	Soil Runoff
Total Dissolved Solids (ppm)	2023			1000	NA	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	2023			1600	NA	Substances that from ions in water; seawater influence
Chloride (ppm)	2023	140	91 - 210	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	2023	175	110 - 220	500	NA	Runoff/leaching from natural deposits; industrial wastes
Color	2023	0	0	15	NA	Naturally-occurring organic materials

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

TABLE 0 - DETECTION OF UNREGULATED CONTAMINANTS									
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level / Public Health Goal	Health Effects Language				
Chlorate (μg/L)	2023	365	320 - 410	800 (notification level)	Animal Studies demonstrated that chlorate exposure in rats caused adverse effects to the pituitary and thyroid glands				
Total HAA6Br (µg/L)	2020	18.7	ND - 40	NA	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.				
Total HAA9 (μg/L)	2020	27	0 - 64	NA	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.				
Hexavalent Chromium (μg/L)*	2022	0.063	0.063	0.02 (public health goal)	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer				
Perfluorohexanoic acid PFHXA (ng/L)	2023	3	ND - 3	3 (notification level)	Perfluorohexane sulfonic acid exposures resulted in decreased total thyroid hormone in male rats.				
Lithium (ppm)	2023	24	24	NA	Naturally-Occuring				

^{*} While Hexavalent Chromium is currently an Unregulated Contaminant, it is in the process of being re-evaluated by the EPA and may have an MCL set in the future.

	TABLE 7 - SAMPLING										
	Treatment Technique (a) (Type of approved filtration technology used)	Conventional Treatment									
	Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.30 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time.									
ſ	Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1	100%									
	Highest single turbidity measurement during the year	0.08									
L	Number of violations of any surface water treatment requirements	0									

 $^{^{\}mbox{\scriptsize (a)}}$ A required process intended to reduce the level of a contaminant in drinking water.

Important Information about your drinking water
Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

As required by the Environmental Protection Agency's Lead and Copper Rule (§141.153(d)(4)(xi)), the San Dieguito Water District has completed its Lead and Copper service line inventory in 2024 and has submitted it to the state for approval before the October 2024 Deadline. To date the District has not found any lead service lines. This inventory is available online at the SDWD Lead and Copper Inventory Dashboard: https://encinitas.maps.arcgis.com/apps/dashboards/2036ade4294844cb934ee07d7977f73d

To help with the continuing update and identification of your service line please fill out the update form here at SDWD Service line update: https://survey123.arcgis.com/share/3e186a7d45404cf4bf03d2eda03e1e9b

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

ADDITIONAL GENERAL INFORMATION ON DRINKING WATER:

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 health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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).

Nitrate-Specific Language: Nitrate in drinking water at levels above 10 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 10 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.

Arsenic-Specific Language: While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead-Specific Language: 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 and home plumbing. San Dieguito Water District is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. 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 (1-800-426-4791) or at https://www.epa.gov/lead. Customers are also encouraged to join San Dieguito Water District's Voluntary Water Quality Sampling List at https://lp.constantcontactpages.com/su/BL3uJwL.

RESOURCE PAGE

Newsletter

The SDWD Newsletter is a stream-lined and mobile friendly quarterly newsletter informing customers about the latest news regarding the district, water supply conditions, and water-saving incentives & rebates. https://lp.constantcontactpages.com/su/LAiPx4S

SoCal WaterSMART- Rebates & Incentives for Residential and Commercial Customers

SDWD offers rebates and incentives on water-saving measures and devices through our partners, the Metropolitan Water District of Southern California, and the San Diego County Water Authority. These include turf removal incentives as well as indoor and outdoor water savings devices.

Visit socalwatersmart.com for availability, instructions and to submit an application. https://socalwatersmart.com/en/residential/

On-Demand Resources

SDWD, along with our partners, offer on-demand educational resources.

- How to Check for a Leak and Turn Your Water Off
 https://vimeo.com/224892497?embedded=true&source=vimeo_logo&owner=1548008
- Complimentary virtual or in-person water-use surveys <u>https://www.waterefficiencysurvey.com/</u>
- Landscape Makeover Resources
 https://www.sdcwa.org/your-water/conservation/classes/
- WaterSmart Landscaping in San Diego County <u>http://watersmartsdlandscaping.org/</u>

VISIT

San Dieguito Water District		San Dieguito Water District	sdwd.org
After Hours Emergency Hotline	(760) 633-2922	City of Encinitas	encinitasca.gov
Customer Service	(760) 633-2658	San Diego County Water Authority	sdcwa.org
Conservation	(760) 633-2676	,	sucwa.org
Maintenance & Operations	(760) 633-2810	Metropolitan Water District	
Engineering	(760) 633-2709	of Southern California	mwdh2o.com
R.E. Badger Filtration Plant	()	California Division of Drinking Water	waterboards.ca.gov
Office	(858) 756-2424	U.S. EPA	water.epa.gov/drink
U.S. EPA			. 3
Safe Drinking Water Hotline	(800) 426-4791	American Water Works Association	awwa.org

www.sdwd.org



