2023 Water Quality Report

The Lake Arrowhead Community Services District
Reporting year 2023

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para una versión en español por favor póngase en contacto con nuestra oficina en (909) 336-7100 o visitando al www.lakearrowheadcsd.com

DEER LODGE PARK

Message from the General Manager

Dear Residents,

At Lake Arrowhead Community Services District (LACSD), we are committed to delivering exceptional water and wastewater services. We embody our motto to "Provide, Protect, and Preserve" every day.

Throughout 2023, we rigorously tested our water to ensure its safety and reliability. We are proud to report that we consistently met and exceeded all state and federal standards while keeping costs as low as possible for our residents.

In response to new EPA regulations, we are proactively addressing PFAS contamination through a two-pronged approach: removing PFAS from the drinking water and assessing the watershed to determine the source well before the 2029 deadline. We continue to collect numerous samples from our water supply voluntarily and are working closely with an engineer with experience designing PFAS removal treatment systems for other agencies. We have completed a preliminary design for an advanced treatment system.

LACSD dependably manages multiple water sources, including Lake Arrowhead, groundwater, and supplemental water through a long-term agreement with Crestline-Lake Arrowhead Water Agency. To increase regional water availability and reduce reliance on Lake Arrowhead, we are actively developing more local groundwater supplies.

Our ongoing infrastructure investments, guided by our Capital Improvement Program (CIP), help us avoid costly repairs and ensure long-term system integrity. The District maintains an Urban Water Management Plan to carefully sustain resources now and into the future.

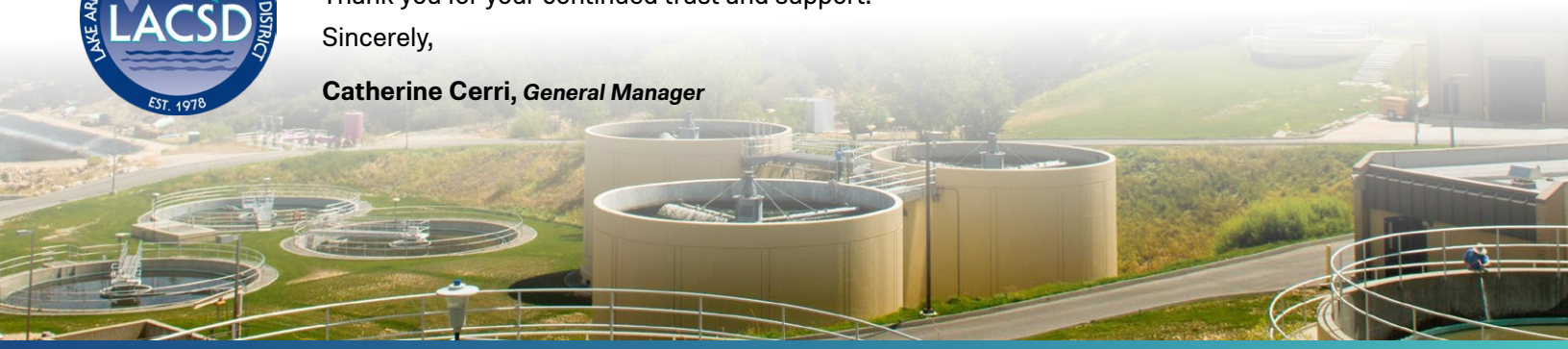
I am incredibly proud of our team's dedication and the progress we have made this year. We are honored to serve you and look forward to continuing to do so with the highest standards.

We invite you to learn more about our efforts by visiting our website at www.lakearrowheadcsd.com.

Thank you for your continued trust and support.

Sincerely,

Catherine Cerri, ***General Manager***



Community Participation Opportunities

We encourage you to participate in our public forums to voice concerns about your drinking water. Regularly scheduled meetings of the Board of Directors are held on the fourth Tuesday of every month (except for November and December) at 5:30 p.m. at the District Board Room (27307 State Hwy 189 Suite 104) in Blue Jay. Special meetings may be held, if necessary, throughout the year, with dates, times, and locations to be determined.

Questions About This Report

For more information about this report, or for any questions relating to your drinking water, please call Mica O'Connell, Water Treatment Supervisor, at (909) 336 7165 or Customer Service at (909) 336 7100. You may also visit our website at lakearrowheadcsd.com.

Maintenance Spotlight

Protecting Our Water Sources

Community Collaboration Successfully Keeps Our Lake Mussel-Free

Quagga/Zebra Mussels, pose a serious threat to our lake, fishery and water system. Thanks to our community, along with ALA's diligence and member support, the lake has remained Quagga/Zebra Mussel free. Be sure items used on Lake Arrowhead *(vessels, including but not limited to kayaks, canoes, pedal boats and paddle boards, inflatables, wet-suits, life jackets, rafts, squirt guns, waders etc.)* are only used on Lake Arrowhead and not on any other body of water. If you have questions, please call ALA's main office at (909) 337-2595.

Protect Your Water – Report Illegal Dumping

Think of Lake Arrowhead as a bowl, where most of the area drains to either Lake Arrowhead or Grass Valley Lake. Rainwater and snow melt may carry materials from your property to these lakes and can contaminate our drinking water. If you witness illegal dumping, please contact County of San Bernardino Code Enforcement at (909) 884-4056 and give us a call if you think the materials pose a threat to our watershed (909) 336-7100. If the material possesses an immediate threat to health or safety, please call 911.

Prevent Pipe Damage by Avoiding FOG Buildup

Fats Oils and Grease (FOG), along with "flushable wipes", are plaguing sewer systems. Sanitary sewer overflows, both public and private, can be costly and contaminate your drinking water supply.

Be sure to avoid putting wipes, diapers, personal hygiene products, FOG or food scraps down the drains. Instead, dispose of these items in the garbage. A wastebasket in areas of the home where these types of waste are generated is a suitable alternative.

Fix Leaks Fast and Save Water

In drought years, aquifer levels decline, which reduces well production. This, combined with the ongoing need to reduce reliance on imported State Water Project water, highlights our responsibility to conserve water throughout the year.

A considerable amount of water is wasted through broken or improperly designed irrigation, high flow shower heads, high flow or tampered with faucet aerators and leaks. Leaks in toilets often go unnoticed because the water goes down the drain, resulting in wasted water and increased water bills.

For more information, please visit our website to https://qrco.de/bf8MbT or scan the QR.

SCAN ME

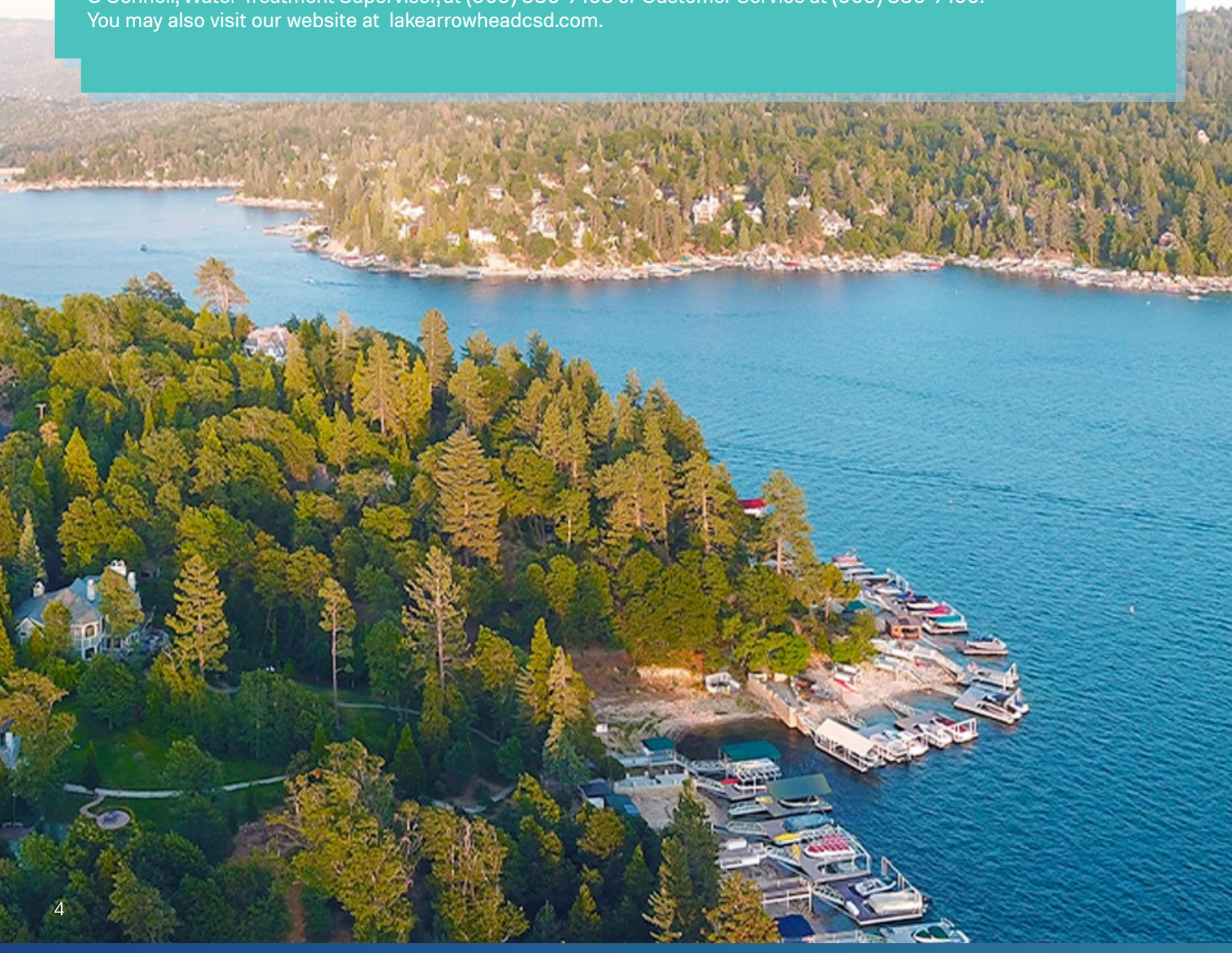
LACSD proudly presents the 2023 annual water quality report covering all testing performed between January 1 and December 31, 2023.

At LACSD, we are committed to ensuring a safe, dependable water supply for our community. We continually monitor the drinking water that we deliver, striving to meet or exceed all state and federal standards.

In addition to monitoring the water, we also maintain and work to improve our treatment plants, wells, pump stations, reservoirs, water mains, service lines and fire hydrants which make up our water system. Watch a short video about this system at **youtube.com/watch?v=hoqww9NIQHQ&t=6s.**

Our staff is available 24 hours a day, 7 days a week to handle emergencies and work tirelessly to overcome increasingly difficult challenges of source water protection, drought preparedness, water conservation and ever-changing regulations. Our team also strives to increase community education and awareness to better serve the needs of all our water users.

We are always available should you need any information about your water quality. Contact Mica O'Connell, Water Treatment Supervisor, at (909) 336-7165 or Customer Service at (909) 336-7100. You may also visit our website at lakearrowheadcsd.com.



About Your Drinking Water

Drinking water, including bottled water, typically contain small amounts of some contaminants. Most of these contaminants have allowable levels set by the State and Federal government. LACSD customers in Deer Lodge Park (DLP) receive water from groundwater wells where chlorine is added, along with purchased water from Crestline-Lake Arrowhead Water Agency (CLAWA). CLAWA treats the water from Silverwood Lake and delivers it to LACSD where it is blended with local groundwater.

A connection to the Lake Arrowhead Water System was installed in 2020 that allows the Woods system to supply DLP. This connection is for emergency use only and adds a significant amount of water supply for fire protection and other emergencies (fire, water main break, etc.) that the DLP system lacked previously.

The tables in this report on pages 10-11, marked as Arrowhead Woods, represent the water that would blend with DLP water in the event of an emergency.

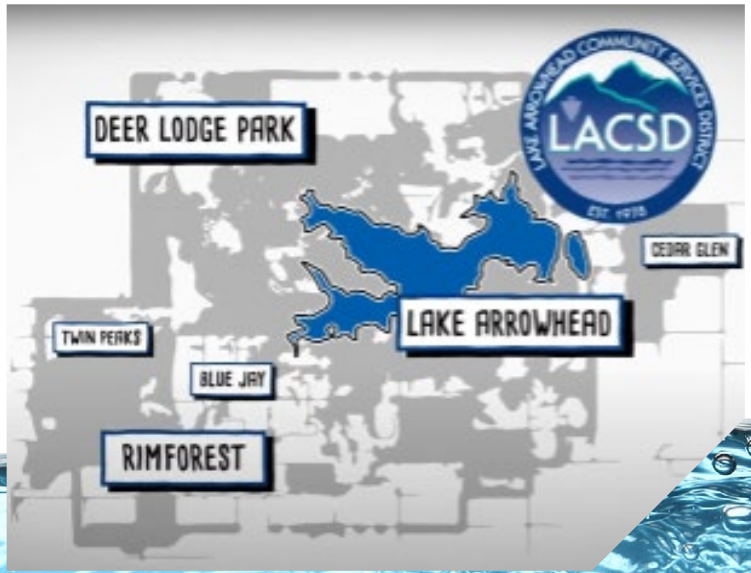
More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Information Hotline at 1-800-426-4791.

Source Water Assessment

Source Water Assessment Plan (SWAP) was completed in January 2003; you may request a copy at our District office.

The plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

The Vulnerability Summary concluded that the well site is at low risk for contamination and that the sources are considered most vulnerable to the following activities and are not associated with any detected contaminants: managed forests and wells and water supply.



Contaminants that May Be Present in Source Water

The sources of drinking water (both tap 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. It can also pick up substances resulting from the presence of animal or human activity. Water can acquire naturally occurring minerals and contaminants, such as:

Microbial Contaminants, like viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential use.

Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production or mining activities.

Inorganic Contaminants, such as salts and metals like arsenic, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic sewage discharges, oil and gas production, mining and farming.

Arsenic can pose a risk of cancer when ingested. LACSD's routine sampling has shown "not detected" levels.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and come from gasoline stations, urban storm water runoff and agricultural application.

Per- and Polyfluoroalkyl Substances (PFAS), a group of man-made chemicals prevalent in the environment that have been used in a variety of consumer products since the 1940s.

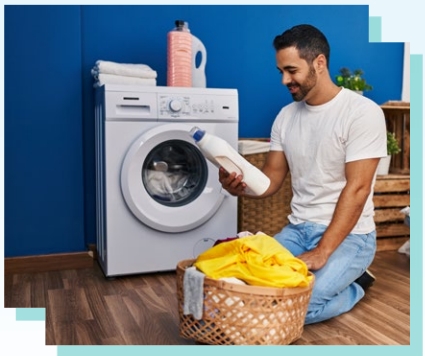
Per- and Polyfluoroalkyl Substances

PFAS exposure can come from a large list of household products, such as:

- Contact Lenses
- Dental Floss
- Shampoo
- Feminine Products
- Toilet Paper
- Nail Polish
- Eye Makeup
- Cell Phones
- Mattress Pads
- Wall Paint
- Laundry Detergent
- Dishwasher Detergent
- Water Proof and Stain Resistant Fabrics (Including Carpet and Couches)
- Pots and Pans
- Rain Water
- Drinking Water
- Microwave Popcorn Bags
- Pizza Boxes
- Fast Food Packaging
- Candy Wrappers

The list goes on, and the sad truth is that the use of, and the manufacturing of, these products is contaminating our environment, including our drinking water. In fact, PFAS chemicals have been detected in water throughout the nation. It is estimated that only 20% of average exposure comes from drinking water. Studies have shown that some of these chemicals pose a hazard to human health. On April 10, 2024, the U.S. EPA set new PFAS regulations identifying limits for several of these chemicals.

These regulations require treatment to remove PFAS to be implemented by 2029. LACSD is actively working to install treatment systems that will remove PFAS from our drinking water. Current targeted completion is long before the 2029 deadline.



Additional PFAS information is available from the DDW at waterboards.ca.gov/pfas

Water Quality Regulations

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.

Water Quality Standards

Drinking water standards established by U.S. EPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The tables shown later in this report specify the following types of water quality standards:

- **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.
- **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.
- **Primary Drinking Water Standard (PDWS):** MCLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Secondary MCLs:** are set to protect the odor, taste and appearance of drinking water.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

Water Quality Goals

In addition to mandatory water quality standards, U.S. EPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- **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 U.S. EPA.
- **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.
- **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.

How Are Contaminants Monitored?

Water is sampled and tested throughout the year. Contaminants are measured in:

- **Parts per million (ppm):** or milligrams per liter (mg/L)
- **Parts per billion (ppb):** or micrograms per liter (µg/L)
- **Parts per trillion (ppt):** or micrograms per liter (ng/L)
- **TON:** Threshold Odor Number
- **90th Percentile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested
- **NA:** Not applicable
- **NL:** Notification Level – level at which governing body must be notified
- **ND (Not detected):** Indicates that the substance was not detected
- **µS/cm:** or microsiemens per centimeter is the amount of electrical conductivity of a solution

Sample Analysis Results: LACSD-DLP

The drinking water test results shown below were taken between January 1 and December 31, 2023. The tables only show substances that were detected in our water. A full list of sampling and results are available by request. Please remember that detecting a contaminant does not necessarily indicate that the water poses a health risk. The safe levels reflected below in the "MCL or MRDL" columns are established by the State and Federal government. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

PRIMARY (REGULATED) STANDARDS

CONSTITUENTS	YEAR	MCL OR MRDL	PHG (MCLG) [MRDLG]	LACSD		CLAWA			VIOLATION YES/NO	TYPICAL SOURCE(S) OF CONTAMINATION
				DETECTED AMOUNT	DETECTION RANGE	YEAR	DETECTED AMOUNT	DETECTION RANGE		
Chlorine as CL2 (ppm)	2023	4.0	[4.0 (as Cl2)]	1.16	0.32-2.05	2023	NA	NA	No	Disinfectant added during water treatment
Fluoride (ppm)	2023	2.0	1	0.12	0.12-0.12	2023	0.03	0-0.12	No	Naturally occurring, also used in water treatment **LACSD does NOT add Fluoride to your water**
Gross Alpha Particle Activity* (pCi/L)	2023	15	(0)	ND	ND	2023	NA	NA	No	Naturally occurring in many rocky regions
Haloacetic Acids* (ppb)	2023	60	NA	4.45	ND-5.9	2023	2.6	2-7.4	No	By-products of drinking water disinfection and organic material
Nitrate [as nitrogen] (ppm)	2023	10	10	1.4	1.4	2023	0.25	0-0.66	No	Septic systems, runoff from fertilizer and naturally occurring
TTHMs*[Total Trihalomethanes] (ppb)	2023	80	NA	22.4	ND-31.8	2023	24.1	18.5-84.3	No	By-products of drinking water disinfection and organic material
Turbidity** (NTU)	2023	TT	NA	0.09	0.04-0.40	2023	NA	NA	No	Runoff entering sources
Turbidity (Percent of monthly samples at or below the limit)	2023	TT = 95% of samples were ≤ 0.3 NTU	NA	NA	NA	2023	100	NA-0.61	No	Runoff entering sources

SECONDARY STANDARDS

CONSTITUENTS	YEAR	ACTION LEVEL	PHG (MCLG)	90TH PERCENTILE	SITES ABOVE AL/ TOTAL SITES	YEAR	90TH PERCENTILE	SITES ABOVE AL/ TOTAL SITES	ACTION LEVEL	TYPICAL SOURCE(S) OF CONTAMINATION
Copper (ppm)	2022	1.3	0.3	0.03	0/5	2023	0.041	0	No	Naturally occurring, leaching from plumbing
Lead (ppb)	2022	15	0.2	5	0/5	2023	1.9	0	No	Naturally occurring, leaching from plumbing and industrial discharges

CONSTITUENTS	YEAR	SMCL	DETECTED AMOUNT	DETECTION RANGE	YEAR	DETECTED AMOUNT	DETECTION RANGE	VIOLATION YES/NO	TYPICAL SOURCE(S) OF CONTAMINATION
Chloride (ppm)	2023	500	18	18-18	2023	46.56	27-77	No	Naturally occurring
Color (Units)	2023	15	1.2	1-3	2023	NA	NA	No	Naturally occurring organic materials
Odor Threshold (TON)	2023	3	1	1-1	2023	1	1-1	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2023	1,600	448	352-547	2023	NA	NA	No	Substances that affect the water's capacity to conduct electricity
Sulfate (ppm)	2023	500	5	5-5	2023	44.69	28-69	No	Runoff entering sources, industrial waste
Total Dissolved Solids (ppm)	2023	1,000	260	260-260	2023	237.5	150-340	No	Naturally occurring, an overall indicator of the amount of minerals in water.
Turbidity (NTU)**	2023	5	0.163	0.04-1.00	2023	NA	NA	No	Runoff entering sources

**Total trihalomethanes and haloacetic acids are reported as the highest locational running annual average (LRAA).*

*** Turbidity (NTU) is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system and general system health.*

**** Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board determine where certain contaminants occur and whether the contaminants need to be regulated.*

Sample Analysis Results: LACSD-DLP

UNREGULATED SUBSTANCES ****	CONSTITUENTS	YEAR	LACSD		CLAWA			TYPICAL SOURCE(S) OF CONTAMINATION
			DETECTED AMOUNT	DETECTION RANGE	YEAR	DETECTED AMOUNT	DETECTION RANGE	
	Boron (ppb)	2023	ND	ND	2023	110	0-190	Erosion of Natural Deposits
	Calcium (ppm)	2023	50	50-50	2023	NA	NA	Erosion of Natural Deposits
	Magnesium (ppm)	2023	11	11-11	2023	NA	NA	Erosion of Natural Deposits
	pH (Units)	2023	7.31	7.04-8.55	2023	8.04	7.7-8.4	Erosion of Natural Deposits
	Potassium (ppm)	2023	3	3 -3	2023	NA	NA	Industrial Waste Discharge
	Sodium (ppm)	2023	23	23-23	2023	50.38	34-78	Industrial Waste Discharge
	Total Hardness (ppm)	2023	170	170-170	2023	75.31	54-90	Industrial Waste Discharge
	Vanadium (ppb)	2023	3	3-3	2023	3.72	0-8.5	Industrial Waste Discharge

Home Use Water Treatment Systems

Point of use and whole house treatment systems are great ways to add another layer of protection to your drinking water. Many of these devices (including the simple pitcher type) do an excellent job of improving taste and are able to remove small amounts of contaminants from your water supply. If you use these devices, it is very important that you follow the manufacturer's recommended maintenance and filter replacement guidelines. To select the correct filter, look for a filter performance data sheet; it will list removal rates of specific contaminants. Most manufacturers have a customer support line to help with questions. Additional information about home water treatment systems is available from the Water Quality Association at 630-505-0160 or by visiting **wqa.org/find-products#**. If you are looking for a filter system that is effective at reducing all contaminates including PFAS, look for a system with the code **NSF/ANSI 53** for general filtration or **NSF/ANSI 58** for reverse osmosis systems.

Additional General Information on Drinking Water

Certain 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 and some elderly and infants may be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Information Hotline at 1-800-426-4791.

Lead In Residential Plumbing

LACSD has upgraded our corrosion control treatment to reduce lead exposure to customers. This treatment is an effort to protect those who unknowingly have lead components within their household plumbing. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing, and is not at the fault of LACSD, as we cannot control which materials are used in home plumbing. LACSD is still doing our part to help customers identify potential risks. We are currently conducting a service line inventory of the customer side to identify potential lead sources. We expect this inventory to be completed near the end of 2024. Customers will be notified if potential lead sources are found. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. *After your water has been unused 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 do so, you may wish to collect the flushed water and reuse it for another beneficial 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 are available from the Safe Drinking Water Hotline at (800) 426-4791 or at epa.gov/safewater/lead**

Sample Analysis Results: Arrowhead Woods

STANDBY WATER SUPPLY – The following table reflects the water quality from the Lake Arrowhead Woods Water System from 2023 and does not represent your normal water quality in DLP. This water will be introduced into DLP automatically in the event of an emergency, triggered by a significant pressure drop.

	CONSTITUENTS	YEAR	MCL OR MRDL	PHG (MCLG) [MRDLG]	LACSD		CLAWA			VIOLATION YES/NO	TYPICAL SOURCE(S) OF CONTAMINATION
					DETECTED AMOUNT	DETECTION RANGE	YEAR	DETECTED AMOUNT	DETECTION RANGE		
PRIMARY (REGULATED) STANDARDS	Chlorine as CL2 (ppm)	2023	4.0	[4.0 (as Cl2)]	1.51	1.04-1.98	2023	NA	NA	No	Disinfectant added during water treatment
	Control of DBP precursors [TOC] (Units)	2023	TT	TT	2.3	1.5 -2.8	2023	NA	NA	No	Decaying natural organic material along with synthetic sources, detergents, pesticides, fertilizers, and other chemicals
	Fluoride (ppm)	2023	2.0	1	0	0-0	2023	0.03	0-0.12	No	Naturally occurring, also used in water treatment **LACSD does NOT add Fluoride to your water**
	Gross Alpha Particle Activity* (pCi/L)	2023	15	(0)	0.985	0-6.8	2023	NA	NA	No	Naturally occurring in many rocky regions
	Haloacetic Acids**(ppb)	2023	60	NA	29.8	7.6-33.5	2023	2.6	2-7.4	No	By-products of drinking water disinfection and organic material
	Nitrate [as nitrogen] (ppm)	2023	10	10	ND	ND	2023	0.25	0-0.66	No	Septic systems, runoff from fertilizer and naturally occurring
	TTHMs** [Total Trihalomethanes] (ppb)	2023	80	NA	59.7	17.7-65.8	2023	24.1	18.5-84.3	No	By-products of drinking water disinfection and organic material
	Turbidity*** (NTU)	2023	TT	NA	0.101	0.05-0.5	2023	NA	NA	No	Runoff entering sources
	Turbidity (Percent of monthly samples at or below the limit)	2023	TT = 95% of samples were ≤ 0.3 NTU	NA	100	NA	2023	100	NA-0.61	No	Runoff entering sources
	CONSTITUENTS	**YEAR**	**ACTION LEVEL**	**PHG (MCLG)**	**90TH PERCENTILE**	**SITES ABOVE AL/ TOTAL SITES**	**YEAR**	**90TH PERCENTILE**	**SITES ABOVE AL/ TOTAL SITES**	**ACTION LEVEL**	**TYPICAL SOURCE(S) OF CONTAMINATION**
	Copper (ppm)	2023	1.3	0.3	0.260	0/20	2023	0.041	0	No	Naturally occurring, leaching from plumbing
	Lead (ppb)	2023	15	0.2	ND	0/20	2023	1.9	0	No	Naturally occurring, leaching from plumbing and industrial discharges
	CONSTITUENTS	**YEAR**	**SMCL**		**DETECTED AMOUNT**	**DETECTION RANGE**	**YEAR**	**DETECTED AMOUNT**	**DETECTION RANGE**	**VIOLATION YES/NO**	**TYPICAL SOURCE(S) OF CONTAMINATION**
SECONDARY STANDARDS	Aluminum (ppb)	2023	200		ND	ND-ND	2023	NA	NA	No	Naturally occurring and from water treatment additives
	Chloride (ppm)	2023	500		28.65	17-31	2023	46.56	27-77	No	Naturally occurring
	Color (Units)	2023	15		1.43	1-7	2023	NA	NA	No	Naturally occurring organic materials
	Iron (ppb)	2023	300		12.61	0-170	2023	NA	NA	No	Leaching from natural deposits and industrial waste
	Manganese (ppb)	2023	50		1.30	0-30	2023	NA	NA	No	Leaching from natural deposits
	Odor Threshold (TON)	2023	3		1	1-1	2023	1	1-1	No	Naturally occurring organic materials
	Specific Conductance (µS/cm)	2023	1,600		302	199-827	2023	NA	NA	No	Substances that affect the waters capacity to conduct electricity
	Sulfate (ppm)	2023	500		5.12	4-8.2	2023	44.69	28-69	No	Runoff entering sources, industrial waste
	Total Dissolved Solids (ppm)	2023	1,000		141.5	110-160	2023	237.5	150-340	No	Naturally occurring, an overall indicator of the amount of minerals in water.
	Turbidity*** (NTU)	2023	5		0.174	0.01-0.76	2023	0.14	0-0.43	No	Runoff entering sources

**These results are from samples taken at the IX Treatment Plant Final at the Lake Arrowhead Country Club. This water is pumped to Bernina Treatment Plant, where it is blended with lake and CLAWA water. **Total trihalomethanes and haloacetic acids are reported as the highest locational running annual average (LRAA). ***Turbidity (NTU) is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system and general system health. ****Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board determine where certain contaminants occur and whether the contaminants need to be regulated.*

Sample Analysis Results: Arrowhead Woods

UNREGULATED SUBSTANCES ****

CONSTITUENTS	YEAR	MCL OR MRDL	LACSD		CLAWA			TYPICAL SOURCE(S) OF CONTAMINATION
			DETECTED AMOUNT	DETECTION RANGE	YEAR	DETECTED AMOUNT	DETECTION RANGE	
Bicarbonate (ppm)	2023	NA	84.33	74-100	2023	NA	NA	Erosion of Natural Deposits
Boron (ppb)	2023	NA	ND	ND	2023	110	0-190	Erosion of Natural Deposits
Calcium (ppm)	2023	NA	29.21	21-31	2023	NA	NA	Erosion of Natural Deposits
Magnesium (ppm)	2023	NA	3.77	3.5-4.1	2023	NA	NA	Erosion of Natural Deposits
PFBS Perfluoro Butane Sulfonic Acid (ppt)	2023	NL = 500	0.36	ND-2.9	2023	NA	NA	Industrial Waste Discharge
PFHpA Perfluoro Heptanoic Acid (ppt)	2023	NOT REGULATED	4.03	ND-5.7	2023	NA	NA	Industrial Waste Discharge
PFHxS Perfluoro Hexane Sulfonic Acid (ppt)	2023	NL = 3	0.41	ND-3.3	2023	NA	NA	Industrial Waste Discharge
PFHxA Perfluorohexanoic Acid (ppt)	2023	NOT REGULATED	4.03	ND-5.7	2023	NA	NA	Industrial Waste Discharge
PFOS Perfluoro Octane Sulfonic Acid (ppt)	2023	NL = 6.5	4.47	ND-7.2	2023	NA	NA	Industrial Waste Discharge
PFOA Perfluoro Octanoic Acid (ppt)	2023	NL = 5.1	9.73	3-14	2023	NA	NA	Industrial Waste Discharge
pH (Units)	2023	NA	7.40	6.7-8	2023	8.04	7.7-8.4	Erosion of Natural Deposits
Potassium (ppm)	2023	NA	2.2	2-2.4	2023	NA	NA	Erosion of Natural Deposits
Sodium (ppm)	2023	NA	22	16-25	2023	50.38	34-78	Erosion of Natural Deposits
Total Hardness (ppm)	2023	NA	69.61	31-87	2023	75.31	54-90	Erosion of Natural Deposits
Vanadium (ppb)	2023	NA	ND	ND	2023	3.72	0-8.5	

PO Box 700,
Lake Arrowhead, CA 92352

— Lake Arrowhead Community Services District —

2023 WATER QUALITY REPORT

Reporting year 2023 for Deer Lodge Park - Public Water System #3600087

Para una versión de este informe en español por favor póngase en contacto con nuestra oficina en (909) 336-7100 o visitando al www.lakearrowheadcsd.com