LAKESIDE WATER DISTRICT Pipeline

PIPELINE is a community newsletter published by the Lakeside Water District. JUNE 2019

LAKESIDE WATER DISTRICT'S PATH TO ASSET MANAGEMENT

Lakeside Water District was formed in August 1924. At that time, its mission was to provide water to the optimistic 90 customers living in the historical town center of Lakeside. By 1925, the Board had passed a $35,000 bond to fund its first infrastructure projects: a 200,000 gallon reservoir located on Castle Court Drive and 15,500 linear feet of water main through the downtown streets of Julian, Maine, Park(side), Laurel, Sycamore (Lakeshore) and River Street. The sources of supply were from the Lakeside Heights Flume and Pipeline Company, and a well located along the San Diego River where our offices are currently located on Vine Street.

When Lakeside Water District was founded, Riverview Mutual Water Company and Lakeside Farms Mutual Company had already been in existence for a number of years, providing water to the farms in their respective service areas. Water was plentiful in the river valley and large concrete pipes were installed throughout the area to provide the water needed to serve the area's farmers.

In the late 1800s and early 1900s, the Lakeside area was the hub of activity in East County. Home to the famous Lakeside Inn, the area was a thriving tourist destination. The District installed pipelines and added customers until the Great Depression of the 1930s. The optimism turned to a grim seriousness that proved to be a challenge for the area's water agencies. Keeping customers and maintaining revenue proved difficult to do. The District struggled, but as we moved into the 1940s and, with the war effort ramping up, San Diego and surrounding areas began growing again.

The City of San Diego completed El Capitan Reservoir in 1935 and, less than ten years later, a lengthy drought had dropped groundwater levels, which forced the District to look beyond local supplies to keep up with the growing demand.

In 1944 Lakeside Water District was one of nine original members to form the San Diego County Water Authority. This enabled county water agencies to divide up the area's secured water rights from the Colorado River and receive delivery through a newly built aqueduct with only three weeks local supply remaining.

A firm entitlement to imported water, allowed Lakeside's population to increase rapidly, requiring more pipelines, reservoirs, and pump stations to serve the growing service area. As the next four decades of growth continued, the water system evolved and expanded into the system we have today.

Currently, we have approximately 125 miles of pipeline, ranging in size from 4-24 inches, twelve water storage reservoirs with a capacity of 14 million gallons, twelve pump stations, and one active groundwater treatment plant. The current replacement value is estimated at approximately $160 million.

With this large infrastructure in place, the District developed a 100-year "Asset Management Plan" in 2014 to maintain the infrastructure for safe and reliable operation and to continue the high level of service our customers demand.

Lakeside Water District – A Plan to Serve

Lakeside Water District is a California Special District formed under California Irrigation District law to provide water service to the community of Lakeside. Special districts are created by the people of the community to meet specific service needs for their communities. Most perform a single function such as water or sewer service, fire protection, healthcare, or even cemetery management. As a California Independent Special District, we are a form of local government.

Special districts are not cities or counties, or state government. Special districts work hand-in-hand with cities and counties to provide communities with essential public service to keep pace with the demands of the community. As an Irrigation District, we operate under a specific section of the California Water Code.

The assets of the District are governed by an elected Board of Directors serving four-year terms. The Board has determined that asset management is a top priority and targets approximately $1,500,000 per year to stay on schedule rehabilitating or replacing those assets.

Annually, the district analyzes each asset class and prioritizes which project should be included in the District's 5 year capital improvement plan. This plan specifically identifies projects and proposed costs that may be included in the District's annual budget. Special Districts are funded either through local property tax revenues or fees charged to customers for their services, or a combination the two. Special districts that rely primarily on fees for service are considered enterprise agencies.

Some capital improvements can be done in conjunction with developer or County projects, but most are accomplished through a bidding process that combines District work and contractor work to complete a project. On most projects District crews will perform advance work to prepare the system for the planned project.

So as the District moves through the community with annual construction projects, please bear with us and rest assured that the overall goal is to stay in check with the District's 100-year Asset Management Plan, using steady and comprehensive analysis of the condition of District facilities to make sound operation and maintenance decisions.

LAKESIDE WATER DISTRICT CONSUMER CONFIDENCE REPORT

Test Results from Calendar Year 2018

(Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.)

PARAMETER	UNITS	STATE MCL [MRDL]	PHG (MCLG) [MRDLG]	STATE DLR	RANGE AVERAGE	LAKESIDE WELLS	HELIX PLANT	SKINNER PLANT	MAJOR SOURCES IN DRINKING WATER
Percent State					RANGE	NA	NR	0-84%	
Project Water	%	NA	NA	NA	AVERAGE	NA	20%	34%	Lakeside Water District's major water source is SDCWA-treated surface water via Helix Water District
PRIMARY STANDARDS: MANDATORY HEALTH-RELATED STANDARDS									
CLARITY									
Combined Filter	NTU	0.3			HIGHEST	0.19	ND-0.12	0.08	
Effluent Turbidity	%	95 (a)	NA	NA	% < 0.35	100%	100%	100%	Soil runoff
MICROBIOLOGICAL									
Total Coliform Bacteria (b)					RANGE	0	NR	NA	Naturally present in the environment
Distribution System-wide	%	5.0	(0)	NA	AVERAGE	0	NR	NA	
E. coli					RANGE	ND	NR	NA	Human and animal fecal waste
Distribution System-wide	(c)	(c)	(0)	NA	AVERAGE	ND	NR	NA	
INORGANIC CHEMICALS									
					RANGE	ND	63-440	ND-100	Residue from water treatment process; erosion of natural deposits
Aluminum (Al) (d)	ppb	1000	600	50	HIGHEST RAA	ND	225	51	
					RANGE	ND	ND-2.1	ND	Erosion of natural deposits, glass and electronics production wastes
Arsenic (As)	ppb	10	0.004	2	AVERGE	ND	ND	ND	
					RANGE	59-159	NR	ND	Oil and metal refineries discharge; erosion of natural deposits
Barium (Ba)	ppb	1000	2000	100	AVERAGE	115	NR	ND	
Flouride (e)	ppm	2.0	1	0.1	CONTROL RANGE	NA	NA	0.5-0.9	Water additive; Lakeside Water District has naturally occuring fluoride from erosion of natural deposits
Treatment-related					OPTIMAL LEVEL	NA	NA	0.7	
					RANGE	0.28-0.46	0.2-0.7	0.6-0.9	
					AVERAGE	0.36	0.6	0.7	
					RANGE	ND-2.05	ND-0..27	ND	Runoff and leaching from fertilizer usage; septic tanks and sewage; natural deposits erosion
Nitrate (as N)	ppm	10 (as N)	10 (as N)	0.4	AVERAGE	1.28	ND	ND	
RADIOLOGICALS (k)									
Gross Alpha					RANGE	1.8-12.1	5.3-8.0	ND-4	Erosion of natural deposits
Particle Activity	pCi/L	15	(0)	3	AVERAGE	7.9	6.5	ND	
Gross Beta					RANGE	ND	NR	ND-5	Decay of natural and man-made deposits
Particle Activity (f)	pCi/L	50	(0)	4	AVERAGE	ND	NR	ND	
					RANGE	3.1-9.2	1.4-5.4	ND-3	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	AVERAGE	6.47	3.3	ND	
DISINFECTION BY-PRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BY-PRODUCTS PRECURSORS (g)									
Total Trihalomethanes (TTHM) (g) (l)					RANGE	19-45	NR	15-35	By-product of drinking water chlorination
Distribution System-wide	ppb	80	NA	1	HIGHEST LRAA	29	NR	24	
Haloacetic Acids (five) (HAA5) (g) (l)					RANGE	ND-9.9	NR	12.18	By-product of drinking water chlorination
Distribution System-wide	ppb	60	NA	1	HIGHEST LRAA	4	NR	8.6	
Total Chlorine Residual					RANGE	NA	NR	NA	Drinking water disinfectant treatment
(Chloramine)	ppm	[4.0]	[4.0]	NA	RAA	2.0	NR	NA	
DBP Precursors Control					RANGE	NA	NR	2.0-2.7	Various natural and manmade sources
(TOC)	ppm	TT	NA	0.30	AVERAGE	NA	NR	2.4	
SECONDARY STANDARDS: AESTHETIC STANDARDS									
					RANGE	243-315	67-83	90-93	Runoff/leaching from natural deposits; seawater influence
Chloride	ppm	500	NA	NA	AVERAGE	278	77	92	
					RANGE	1-9	ND-2	ND-1	Naturally occuring organic materials
Color	Units	15	NA	NA	AVERAGE	3.6	ND	ND	
					RANGE	ND	ND	3	Naturally occuring organic materials
Odor Threshold (h)	TON	3	NA	1	AVERAGE	ND	ND	3	
					RANGE	1340-1660	580-908	841-851	Substances that form ions in water; seawater influence
Specific Conductance	µS/cm	1600	NA	NA	AVERAGE	1513	769	846	
					RANGE	200-216	83-190	168-175	Runoff/leaching from natural deposits; industrial waste
Sulfate (SO_4)	ppm	500	NA	0.5	AVERAGE	210	141	172	
Total Dissolved Solids					RANGE	862-1050	560	510-526	Runoff/leaching from natural deposits; industrial wastes
(TDS)	ppm	1000	NA	NA	AVERAGE	969	560	518	
					RANGE	0.1-0.9	NR	ND	Soil runoff
Turbidity (a)	NTU	5	NA	NA	AVERAGE	0.37	NR	ND	
OTHER PARAMETERS									
CHEMICAL									
					RANGE	197-242	96-127	104-109	
Alkalinity ($CaCO_3$)	ppm	NA	NA	NA	AVERAGE	225	114	106	
					RANGE	69-82	NR	120	Runoff/leaching from natural deposits; industrial wastes
Boron (B)	ppb	NA	NL = 1000	100	AVERAGE	75	NR	120	
					RANGE	88-129	34-66	54-58	
Calcium (Ca)	ppm	NA	NA	NA	AVERAGE	110	51	56	
					RANGE	ND	ND-26	43	Byproduct of drinking water chlorination; industrial processes
Chlorate	ppb	NA	NL = 800	20	AVERAGE	ND	ND	43	
					RANGE	ND	ND-.04	ND	Industrial waste discharge; could be naturally present as well
Chromium VI (i)	ppb	NA	NA	1	AVERAGE	NR	ND	ND	
Corrosivity (j)					RANGE	NR	NR	12.3-12.4	Elemental balance in water; affected by temperature, other factors
(Aggressiveness Index)	AI	NA	NA	NA	AVERAGE	NR	NR	12.4	
					RANGE	400-546	135-290	218-238	Runoff/leaching from natural deposits; municipal and industrial waste discharges
Hardness, Total	ppm	NA	NA	NA	AVERAGE	476	213	228	
					RANGE	42-56	17-23	21-22	
Magnesium (Mg)	ppm	NA	NA	NA	AVERAGE	50	21	22	
	pH				RANGE	7.02-7.13	8.0-8.3	8.1-8.2	
pH	Units	NA	NA	NA	AVERAGE	7.08	8.1	8.2	
					RANGE	4.5	3.9-4.6	4.0-4.5	
Potassium	ppm	NA	NA	NA	AVERAGE	4	4.3	4.2	

Sodium (Na)	ppm	NA	NA	NA	Range	127-163	54-82	85-92	
					Average	148	72	88	
Vanadium (V)	ppb	NA	NL = 50	3	Range	5-10	ND-2.7	ND	
					Average	7	ND	ND	Various natural and manmade sources
N-Nitrosodimethylamine (NDMA) Distribution System-wide	ppb	NA	3	2	Range	NA	NR	4.1	
					Average	NA	NR	4.1	Naturally occuring; industrial waste discharge
									Byproduct of drinking water chlorination; industrial processes

Levels testing for lead and copper is required every three years. | Latest test: **June 2016**. Number of Sample Sites: **30**. 90th Percentile Levels: Lead (ppb) = **ND**; COPPER (ppm) = **0.22**
Number of sites above action level of 15 ppb Lead, 1.3 ppm Copper = **0** | Number of schools served by Lakeside Water District that requested Lead samplng during the calendar year = **10**

ABBREVIATIONS AND FOOTNOTES

ABBREVIATIONS

AI ..... Aggressiveness Index
AL..... Action Level
CFU..... Colony-Forming Units
DBP ..... Disinfection By-Products
DLR ..... Detection Limits for Reporting
MCL..... Maximum Contaminant Level
MCLG..... Maximum Contaminant Level Goal
MRDL ..... Maximum Residual Disinfectant Level
MRDLG ..... Maximum Residual Disinfectant Level Goal
N ..... Nitrogen
NA..... Not Applicable
ND..... Not Detected
NL ..... Notification Level
NR..... Not Reportable
NTU ..... Nephelometric Turbidity Units
P or ND ..... Positive or Not Detected
pCi/L ..... picoCuries per Liter
PHG..... Public Health Goal
ppb ..... parts per million or micrograms liter (µg/L)
ppm ..... parts per million or milligrams per lieter (mg/L)
ppq ..... parts per quadrillion or picograms per liter (pg/L)
ppt ..... parts per trillion or nanograms per liter (ng/L)
RAA..... Running Annual Average
RTCR..... Revised Total Coliform Rule
SI..... Saturation Index (Langelier)
TOC..... Total Organic Carbon
TON ..... Threshold Odor Number
TT..... Treatment Technique
µS/cm ..... micromho per centimeter (µmho/cm)

FOOTNOTES

(a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary Standards were based on the treatment plant effluent.
(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive.
(c) *E. coli* MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains E. coli, constitutes an acute MCL violation. The MCL was not violated.
(d) Aluminum has both primary and secondary standards.
(e) MWD, Helix and Lakeside were in compliance with all provisions of the State's Fluoridation System Requirements.
(f) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
(g) MWD, Helix, and Lakeside were in compliance with all provisions of the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. Compliance was based on the RAA.
(h) Metropolitan utilizes a flavor-profile analysis method that can detect odor occurrences more accurately.
(i) Chromium VI reporting level is 0.03 ppb.
(j) AI <10.0) = highly aggressive and very corrosive water; AI >12.0 = non-aggressive water; AI 10.0 - 11.9 = moderately aggressive water.
(k) Radiological sampling is required only every third year.
(l) Helix THM and HAA5 available upon request from Helix Water District.

DEFINITIONS

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Maximum Contaminate 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 set to protect the odor, taste, and appearance of drinking water.•
Maximum Contaminate Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLs are set by California Environmental Protection Agency (CalEPA).
Public Health Goal (PHG): The level of a contaminant in drinking water below which there are no known or expected health risks. PHGs are set by the CalEPA.
Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting, and water treatment requirements.
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.
Regulatory Action Level: The concentration of a contminant which, if exceeded, triggers treatment or other recourse that a water system must follow.

WATER QUALITY NOTICE Failure to Monitor Violation: *This notification is required by the California Code of Regulations, Title 22 Section 64534(g).* We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During calendar year 2018, we did not monitor for Disinfection By-Products as required by the Stage 2 Disinfectants and Disinfection Byproducts Rule (DBPR) during February 2018, and therefore, cannot be sure of the quality of your drinking water during that time. After noticing the error on April 10, 2018 we notified the State Water Resources Control Board immediately, and upon their direction sampled on April 12, 2018. The DBPR mandates testing for a group of chemicals associated with chlorine disinfection of the District's water supply four times per year in the months of February, May, August and November. The chemical groups tested for are total trihalomethanes and haloacetic acids. All sample results were under the Maximum Contaminant Level and there was never any public health risk, as the District has tested four times per year for over 30 years without ever exceeding the maximum contaminant level, which is calculated using a four quarter "running annual average".

BILL PAYMENT OPTIONS You will need your account number as it appears on your bill.
Online: ***www.lakesidewater.org*** Credit cards or e-checks. Automatic draft payments are free of charge.
By Phone: (619) 443-3805, option 3
In Person: Monday–Friday, 8am to 5pm or, after hours, deposited in the **black drop box** in front of the office.

CONSUMER CONFIDENCE REPORT: Educational Information

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.

Lakeside Water District's groundwater source is the Santee-El Monte Basin, a groundwater source for many in our community. The basin provides good water quality that has small amounts of iron and manganese which we remove with a specially designed treatment plant located at our Administration and Operations facility at 10375 Vine Street, Lakeside. A source water assessment detailing potential sources of contamination completed in January 2010 is available for review upon request at the District office. The remainder of Lakeside Water District's water is imported from the Metropolitan Water District of Southern California and the San Diego County Water Authority. This water is treated at Metropolitan's Skinner Treatment Plant near Temecula and Helix Water District's Levy Treatment Plant. This water is a blend of water from the Colorado River System and the California State Water Project.

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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. ***Note:*** 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. Lakeside 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 regarding lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Drinking Hotline or at *http://www.epa.gov/safe water/lead*]
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activates.

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

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 posses a health risk. More information about contaminants and potential health effects can be obtained by calling the 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. 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 (1-800-426-4791).

If you have any questions about the CCR or water quality in general, please call Lakeside Water District at 619-443-3805.

LAKESIDE WATER DISTRICT

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CALIFORNIA LEGISLATIVE UPDATE

One of the most significant issues facing the California State Legislature this year is the issue of safe drinking water. In 2012, Governor Brown signed Assembly Bill 685 making it a law that every California citizen has the right "to safe, clean, affordable, and accessible water adequate for human consumption, cooking and sanitary purposes". This has opened up a legislative floodgate of laws that support this statute. There are approximately 9,000 water systems regulated in California. Of those, 329 systems regulated by the State Water Resources Control Board have been identified as serving contaminated water. The reasons vary, from unsound infrastructure to lack of financial, managerial or technical resources. The majority of these systems are small, rural systems that service less than 10,000 people.

The goal is to improve failing water systems and eliminate noncompliance to drinking water standards in disadvantaged communities throughout the state. Toward that end, the legislature has proposed a water tax on urban water user's to help fund solutions; it has been attached to a budget trailer bill titled "Environmental Justice – Safe and Affordable Drinking Water and Exide Cleanup".

The Association of California Water Agencies (ACWA), of which Lakeside Water District is a member, opposes the tax and has proposed a funding mechanism through SB669 (Caballero) that institutes a perpetual trust fund to cover the estimated cost of $150 million per year to assist disadvantaged communities.

Lakeside Water District, along with many other agencies, support SB669 (Caballero) and other funding methods to solve this problem. We welcome any support from District customers to avoid a "water tax" and encourage those who are interested to express their concerns to State Assemblyman, Randy Voepel, State Senator, Brian Jones, and to Governor Newsome.

ALMOND ROAD PIPELINE REPLACEMENT PROJECT

In 2018, Lakeside Water District completed the replacement of 4,500 lineal feet of 8" asbestos cement and steel pipeline. The project located through Almond Road and Walnut Road in the southern portion of the District was completed in a little over four months by local pipeline contractor Cass/Arrieta Construction of El Cajon. The total cost of the project was $1,007,000. Our engineer was Dexter Wilson Engineering of Carlsbad, and inspection was done by District Operations staff.

This summer, Lakeside Water District will start another pipeline replacement project along Valle Vista Road from Johnson Lake Road to High Ridge Road, Serena Road and Vista Camino. This project will replace 5,100 lineal feet of 65-year-old asbestos cement pipe that is showing signs of age.

Construction will be divided into three phases to reduce the inconvenience to the property owners. Ample notice will be given before any outages or disruptions. The District contact for the project will be Quinn Johnze.