

Annual Report of Operations

2022



Lincoln Avenue Water Company

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Lincoln Avenue Water Company

March 31, 2023

John Clairday, President
Board of Directors
Lincoln Avenue Water Company
564 W Harriet Street
Altadena, CA 91001



Years of
Service
19

Dear Board of Directors:

On behalf of the Staff and Management of Lincoln Avenue Water Company (Lincoln Avenue), I am pleased to present the Annual Report of Operations.

As a company that has been in business for 126 years, Lincoln Avenue is no stranger to turbulent times. From the ongoing impact of the pandemic to high inflation rates and drought conditions, 2022 brought another opportunity to display our resiliency.

We entered 2022 with low precipitation and above average temperature. During the summer we experienced several recorded breaking heat waves. These factors furthered the extreme drought conditions throughout the state and made it necessary for some water agencies to enact unprecedented conservation measures.

While the impact to Lincoln Avenue customers was minimal, due to decreasing groundwater levels and the possibility of a reduction in our imported water supply, we called on all our customers to increase their conservation efforts. Our customers answered that call by lowering water usage by 12%.

As we addressed these matters, the company was able to complete critical Operation and Capital Improvement Projects. Major projects included Phase II of the Olive Avenue Pipeline Project. This phase included the replacement of the remaining 1,100 feet of water main, 61 service lines, 4 fire hydrant and final paving. In addition we replaced the pump at Well 6 to accommodate the changing groundwater levels. It was also necessary to upgrade component of our network infrastructure to enhance our cyber security. We concluded 2022 with more than \$1 million dollars invested into the company's capital improvement program.

So far this year, the above average precipitation has helped replenish the State Water Project supply. Unfortunately, we still have problems to solve. The Colorado River supply remains at an historic low. We have also yet to see a major improvement in our groundwater levels. While our overall water supply is in good condition, conservation continues to be an important part of our operation.

As we welcome the success of prior years, we remain focused on the community we serve and the needs of the company. The professional staff at Lincoln Avenue remain committed to providing the highest quality and most reliable water service to customers at the most fiscally responsible cost.

Sincerely,
Lincoln Avenue Water Company

A handwritten signature in black ink, appearing to read "Jennifer Betancourt Torres". The signature is fluid and cursive.

Jennifer Betancourt Torres
General Manager

Olive Avenue Dual Pipeline Project Phase II

Having ended the prior year with the upgrade of 1,500 feet of 6-inch watermain that was 76 years old with new 8-inch steel pipe and 500 feet of 10-inch main that was 84 years old with new 12-inch steel pipe. We entered 2022 focused on Phase II of the Olive Avenue Dual Pipeline Project.

Phase II included the installation of the remaining 1,100 feet of 12" steel pipe, 61 service lines, 4 fire hydrant and final paving.



Two sections of pipe are welded together



An adjacent pipeline is prepped to be tied into the new line.

As reported last year, we encountered numerous unforeseen obstacles that prolonged this project. Because the area was aged, as compaction activities would commence, the vibration resulted in leaking service lines. The work would stop to address the leaks before the replacement could resume.

Olive Avenue Dual Pipeline Project Phase II

Excavation isn't always easy.

During Phase I we encountered small boulders and an un-mapped & abandoned storm drain. Phase II was no different.

From old abandoned pipe, to gas lines and tree roots, Phase II came with it's own challenges



The pictures above give you a closer look at how meticulous the crew had to be to complete this project.

Olive Avenue Dual Pipeline Project Phase II

The final stage of each pipeline replacement project is the compaction and paving.

Compaction is an essential part of repairing the road. It ensures the pavement can handle traffic loads. It also results in a smooth surface and is less prone to cracking and potholes.



The paving crews use heavy machinery to roll over the ground to achieve proper compaction repeatedly. This process helps push out air pockets and creates a denser, more solid surface. If the ground is not compacted properly, it can result in an uneven paving job that is more likely to crack and crumble over time. Once the paving is complete, the road will be much smoother and more durable.



Well No. 6 Pump Replacement



The 350 HP motor is disconnected and prepared for removal.

In an effort to maintain reliable and efficient access to our groundwater, in 2022 we replaced the pump in our Well No. 6. Fluctuating groundwater levels due to below average rainfall was impacting our production capabilities. The new pump helps us adapt to these environmental changes.



The careful process of extracting 800 feet of column pipe and the pump takes several hours to completed.



The bowls are lowered into the well. This section sits at approximately 600 feet below ground.



The motor is reinstalled and undergoing testing.



Jack Harms excavates an area of the road where a leak has been located with the assistance of Justin La Point.



Jeremy Rogers shuts down a leaking street valve.



Andy Estrada prepares a leaking pipe to be clamped.

Distribution System Operation and Maintenance

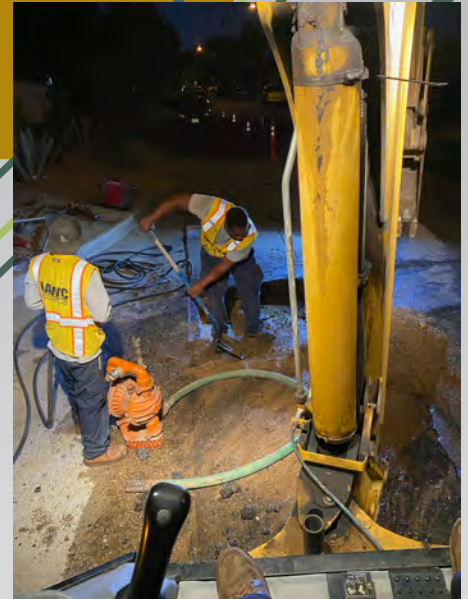
Operating a water system is a 24/7 job. Whether planned or unplanned, the maintenance and repair of water service lines, meters, valves and fire hydrants are only part of our Water System Operator's responsibilities.



Dave Castillo take a water measurement at one of our canyon weirs.



Andy Estrada tests the flow of a fire hydrant.



Justin La Point and Jeremy Rogers respond to an after hours leak.

VARIOUS 2022 ACTIVITIES

In addition to maintaining our drinking water facilities and distribution system, there are always other activities that occur throughout the year.



In the event of a medical emergency basic First Aid, CPR, and Automated External Defibrillator (AED) training increases the odds of a successful outcome. In addition to this training, having the necessary tools is equally important. In 2022 we installed an AED at our main office. It's our goal to install this device at several remote locations.



To deter loitering at Swigart Reservoir in the Meadows, a fence and additional signage was installed around a previously open area. To date, this effort has been successful.



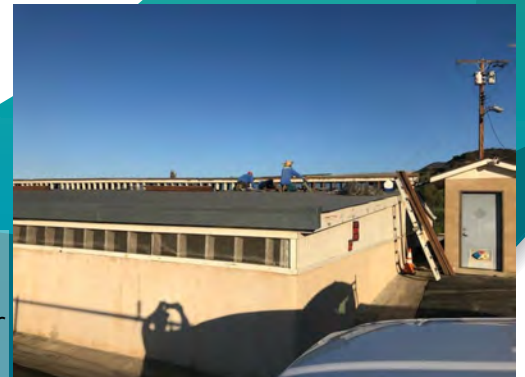
In August we were visited by Jill Anderson, the new Executive Vice President of Operations at Southern California Edison. She was joined by her SCE team to get a first hand look of our Well 6 efficiency test and also toured our treatment facility.

Roof Repairs

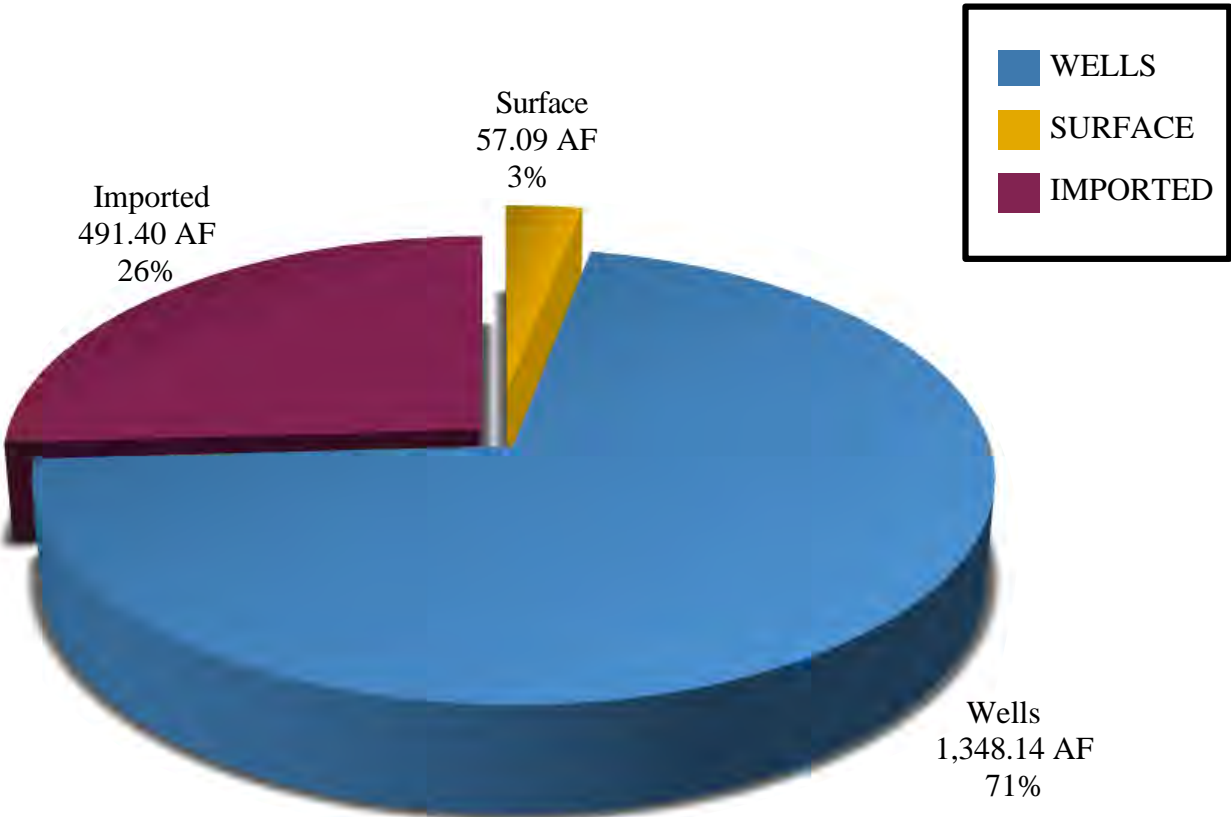


The electrical housing at our main facility is repaired.

The center air vent of the Swigart Reservoir roof is rebuilt.



2022 WATER PRODUCTION BY SOURCE



Wells	1,348.14 AF
Surface	57.09 AF
Imported	491.40 AF
Total Production	1,896.63 AF

**WATER SALES AND PRODUCTION FOR 2022
IN ACRE FEET**

MONTH	IMPORTED WATER PURCHASE	WELL PRODUCTION	LOCAL SURFACE WATER	TOTAL PRODUCTION	LEASE WATER DELIVERY	SALES	RAIN FALL (INCHES)
January	19.83	85.37	17.53	122.73	0	108.80	0.33
February	46.81	77.71	13.44	137.96	0	129.08	0.49
March	65.50	87.14	10.59	163.23	0	117.83	4.13
April	65.29	79.22	7.70	152.21	0	139.82	0.45
May	89.81	73.56	2.89	166.26	0	156.43	1.04
June	95.09	79.33	0	174.42	0	164.91	0.23
July	99.61	102.02	0	201.63	0	171.36	0
August	9.46	191.73	0	201.19	0	203.59	0
September	0	166.88	0	166.88	0	178.30	1.69
October	0	165.16	0	165.16	0	163.53	0.40
November	0	127.54	0	127.54	0	137.01	3.89
December	0	112.48	4.94	117.42	0	124.76	5.53
TOTAL	491.4	1348.14	57.09	1896.63	0	1795.43	18.18

PUMPED FROM WELLS

WELL #3	0.00
WELL #5	651.14
WELL #6	697.00
TOTAL	<u>1348.14</u>

Total Production	1896.63
Lease Water Delivery	<u>0</u>
Production for Lincoln	1896.63
Total Sales	<u>-1795.43</u>
Subtotal	101.20
Treatment Plant Operation & Water Quality Control	<u>-18.52</u>
Non-Sales Production	82.68 or 5%

Non-Sales Production is water used for routine water quality sampling, evaporation from reservoirs, irrigating at Company sites, water quality flushing, pipeline ditch compaction, fire fighting, fire training, leaks on mains, etc.

The Company's well production consists of 567 acre feet annual decreed right plus spread credit from mountain run-off, and available leased groundwater rights.

ENERGY COST BY WELLS AND PUMPING STATIONS 2018 - 2022

WELLS & PUMPING STATIONS	2022 ANNUAL		2021 ANNUAL		2020 ANNUAL		2019 ANNUAL		2018 ANNUAL	
	ENERGY COST	COST/AF	ENERGY COST	COST/AF	ENERGY COST	COST/AF	ENERGY COST	COST/AF	ENERGY COST	COST/AF
Well #3 (Pump to Main Plant)	1,912.84		2,030.89		1,798.08		493.40		1,104.99	
	N/A		N/A		N/A		N/A		84.35	
Well #5 (Pump to Main Plant)	66,226.42		18,707.94		2,797.34		17,302.41		5,544.79	
	101.71		78.33		69.62		68.54		65.23	
Well #6 (Pump to Main Plant)	90,519.75		164,123.84		188,913.89		110,599.19		155,201.39	
	129.87		121.62		93.14		77.24		80.85	
Main Plant (Pump to Glenrose Resv.)	139,909.72		156,380.73		146,873.32		99,378.19		116,716.73	
	74.16		71.76		67.21		55.27		54.32	
Glenrose Reservoir (Pump to Wapello Resv.)	56,615.12		58,298.39		46,251.85		34,375.46		35,405.63	
	60.64		59.41		48.75		36.23		32.23	
Wapello Reservoir (Pump to Ware & La Vina & Swigart Resv.)	59,886.51		61,718.15		49,713.42		39,396.18		44,594.31	
	80.07		70.72		61.00		53.91		51.39	
Ware Reservoir (Pump to Coulter Resv.)	5,560.77*		5,738.72*		2,901.89*		704.18*		1,284.19*	
	32.20		27.45		20.41		6.10		6.28	
TOTAL ANNUAL ENERGY COST	\$420,631.13		\$466,998.66		\$439,249.79		\$302,249.01		\$359,852.03	

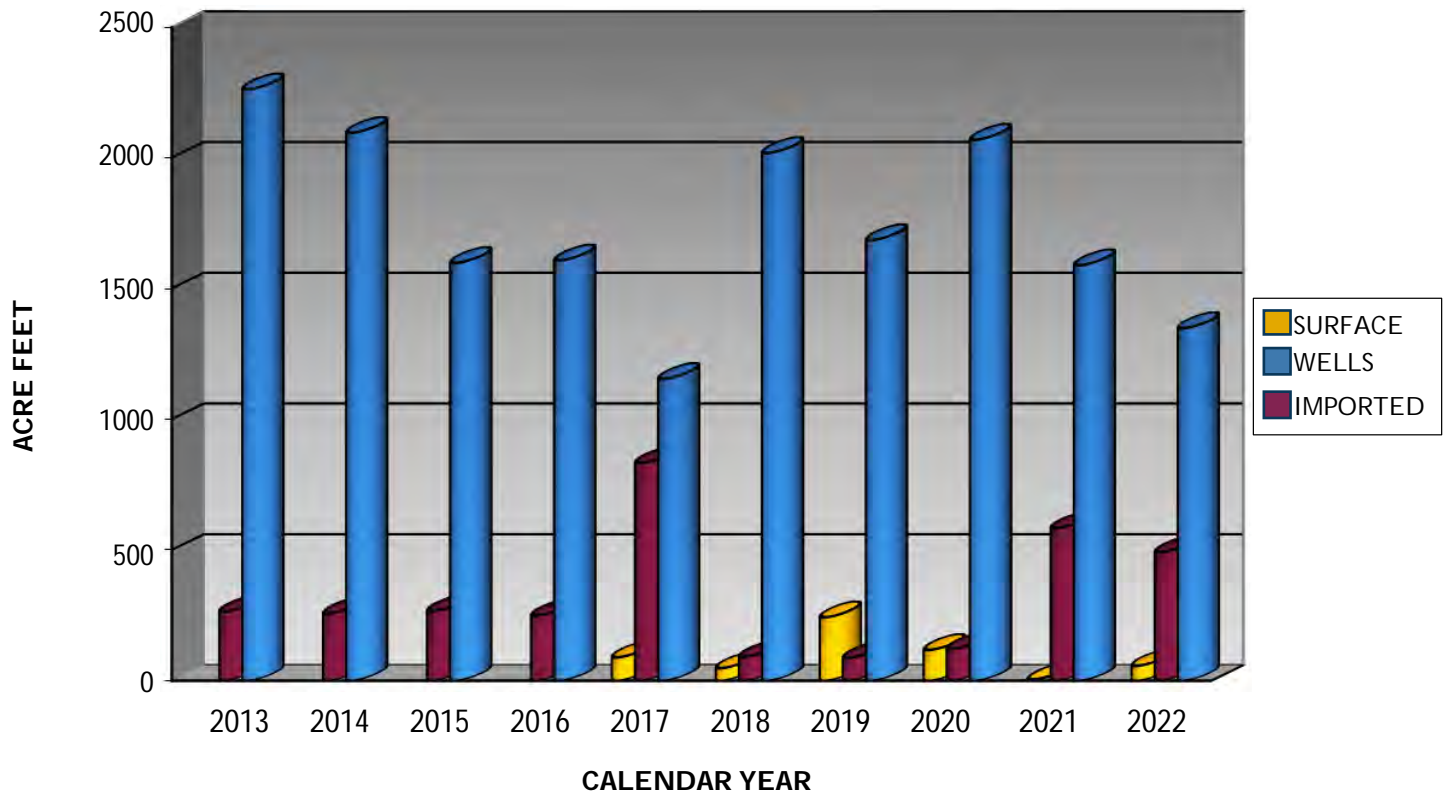
*Total cost after applying Solar Energy Generation Credit.

**ANNUAL PRODUCTION IN ACRE FEET
2013- 2022**

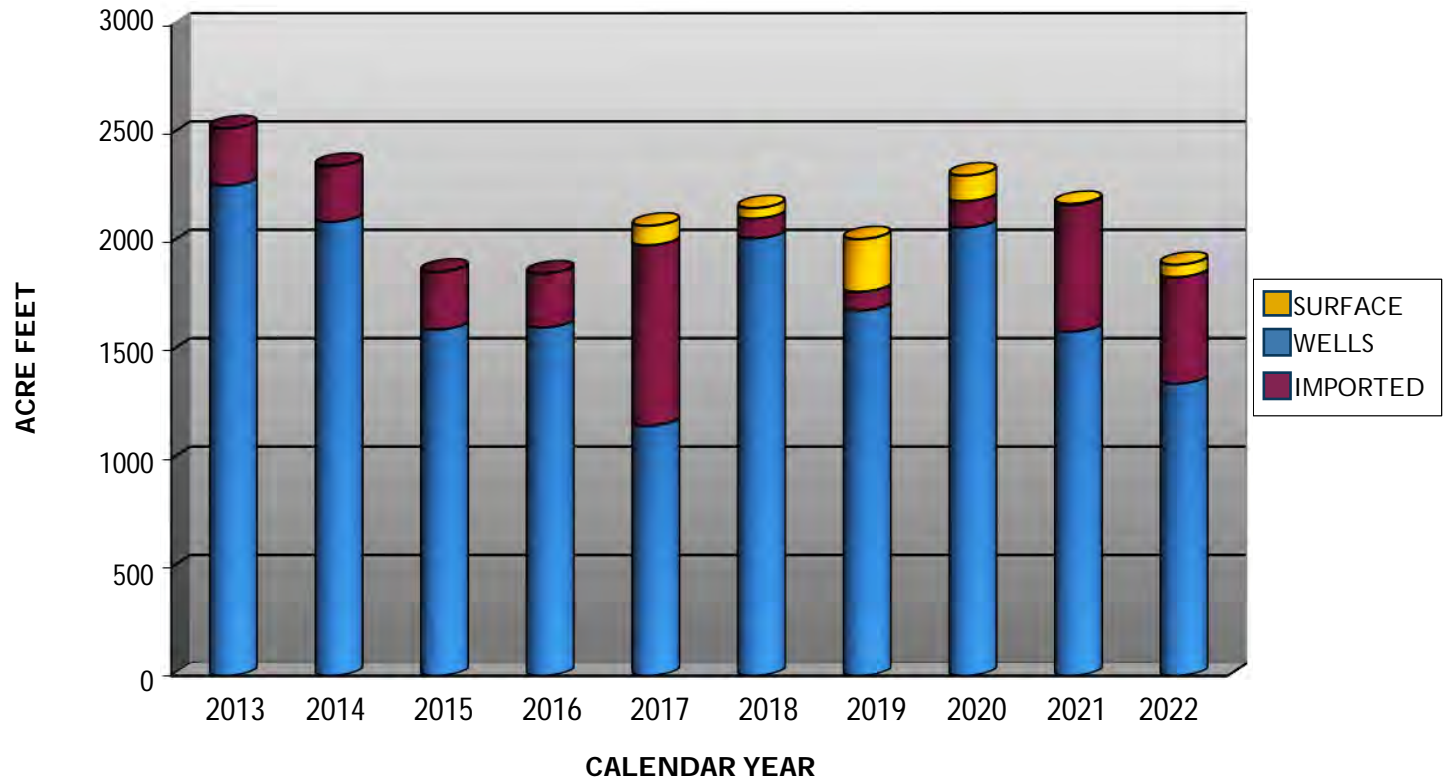
CALENDAR YEAR	WELL #3	WELL #5	WELL #6	SURFACE	IMPORTED	TOTAL PRODUCTION	LESS LEASE WATER DELIVERY	ACTUAL PRODUCTION (LINCOLN)	RAINFALL (INCHES)
2022	0	651.14	697.00	57.09	491.40	1896.63	0	1896.63	18.18
2021	0.14	238.84	1349.50	1349.5	583.87	2177.14	0	2177.14	23.82
2020	0.04	40.18	2028.31	117.66	121.73	2307.92	119.76	2188.16	15.00
2019	0.27	252.43	1431.90	242.43	87.51	2014.54	0	2014.54	36.16
2018	13.10	85.00	1919.72	48.23	91.55	2157.61	0	2157.61	15.99
2017	297.50	175.19	681.60	89.49	832.43	2076.21	0	2076.21	19.47
2016	597.73	1008.99		0	249.26	1855.98	0	1855.98	18.60
2015	599.02	998.41		0	266.71	1864.14	0	1864.14	10.22
2014	944.15	1150.76		0	257.49	2352.40	0	2352.40	14.88
2013	989.88	1271.38		0	264.35	2525.61	96.39	2429.22	10.13

Note: Well 6 began operation in August 2017

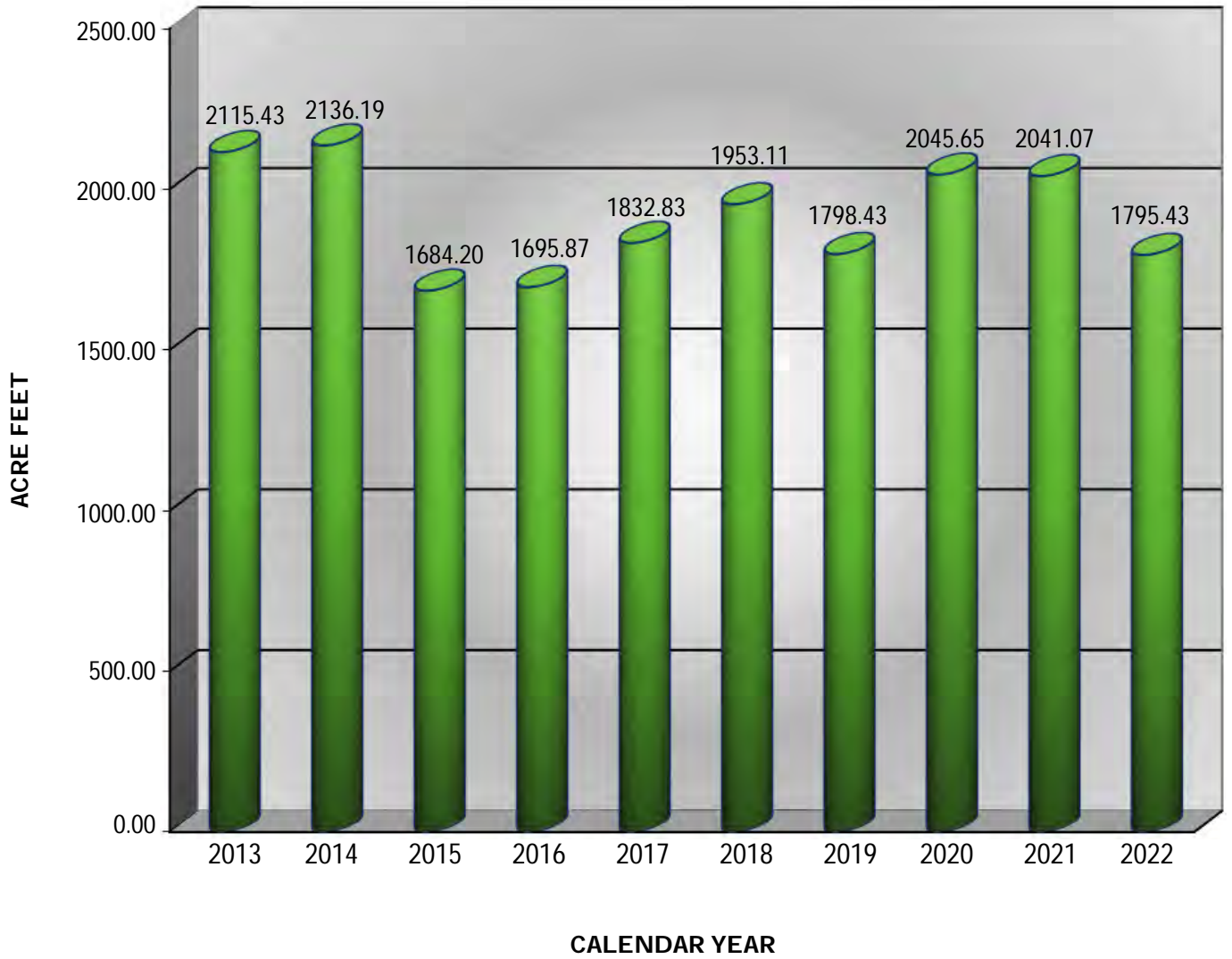
ANNUAL PRODUCTION BY SOURCE - SURFACE, WELLS & IMPORTED



TOTAL ANNUAL PRODUCTION - SURFACE, WELLS & IMPORTED



ANNUAL WATER SALES IN ACRE FEET 2013 - 2022



METERS AND SERVICE CONNECTIONS

New service connections installed in 2022	0
Meters replaced in 2022	541
Distribution system service connections in 2022	4477
2022 average consumption per meter per day - Residential	322 gal.
2022 average consumption per meter per day - Commercial	1380 gal.
2022 average consumption per capita per day - Residential	92 gal.

NUMBER OF METERS BY SIZE

5/8"	1638
3/4"	2360
1"	371
1½"	28
2"	71
3"	6
4"	3
TOTAL	4477

WELL PRODUCTION CAPACITY

Well #3 (drilled 1924)	900 GPM
Well #5 (drilled 1971)	1100 GPM
Well #6 (drilled 2016)	2000 GPM

DISTRIBUTION LINES IN LINEAR FEET

Distribution System	288,323
Pumping Lines	18,128
TOTAL	306,451 or 58 miles

ANNUAL CANYON WATER BASIN RECHARGE IN ACRE FEET

CANYON WATER BASIN RECHARGE

Swigart	161.19
El Prieto	9.27
Millard/La Vina*	145.56
TOTAL	316.02

All canyon water that flows to the spreading basin is metered with an allowable extraction the following year based on Raymond Basin Management Board percolation calculations.

*Maximum allowable spread credit for Millard/La Vina is 0.65 CFS.

WATER QUALITY



California State Water Resources Control Board, Division of Drinking Water (DDW) requires Lincoln Avenue Water Company to take distribution system water quality samples which include bacteriological, total trihalomethanes, volatile organic compounds, general physical, general mineral and inorganics, along with other scheduled analyses. Lincoln's system was in compliance with DDW water quality standards at all times during 2022.

BOARD OF DIRECTORS FOR THE YEAR 2022



JOHN CLAIRDAY

PRESIDENT

John Clairday, a graduate of the University of Southern California and Loyola Law School, has served on Lincoln Avenue's Board since 1993. Mr. Clairday retired, after 27 years, from the Metropolitan Water District of Southern California, where he served as Chief Deputy General Counsel within the legal department, and as manager of the District's Real Estate Group. In addition to serving as President of Lincoln Avenue's Board, Mr. Clairday is a member of the San Gabriel Valley Habitat for Humanity Board of Directors.



ROBERT J. GOMPERZ

VICE PRESIDENT

Robert J. Gomperz has been a Board member since 1990. He is retired from the Metropolitan Water District of Southern California where he coordinated various communications programs to the public about Metropolitan's programs and policies. Mr. Gomperz has been a public relations professional for more than five decades. He has a degree in Management from the University of Redlands. Prior to joining Metropolitan, he was Pasadena City College's Public Information Director for 12 years. Mr. Gomperz also represented West Altadena for 10 years as a Foothill Municipal Water District director and as a Southern California region director on the Association of California Water Agencies Board.



LAWRENCE W. DUNCAN

1ST VICE PRESIDENT

Lawrence W. Duncan is a retired textile industry supervisor and a 54-year Altadena resident. Mr. Duncan is entering his 22nd year as a member of the Lincoln Board and also serves as the Company's Community Liaison Officer. He is a longtime active member of the Southern California Water Utilities Association. In 2019 the Association honored Mr. Duncan with the prestigious Doctor of Water Award.



DIEGO FERNANDEZ

TREASURER

Diego Fernandez is an Operating Partner with the El Cholo Restaurant Management Group LLC. He started work with El Cholo at the age of 18 and in 1994 he was promoted to the position of General Manager. In 2000 he became an Operating Partner. As a partner, Diego has been involved with the opening of El Cholo-Pasadena, Rose City Catering and Hart Pony Baseball & Softball. Mr. Fernandez brings a broad array of business and management skills to Lincoln Avenue. Mr. Fernandez has lived in Altadena for the past 18 years and was appointed to the Board in 2014.



VICKIE THOMPSON

ASSISTANT SECRETARY

Vickie Thompson graduated from Humboldt State College and went to work at the City of Hope - Beckman Research Institute in Duarte. She retired after working there for 40 years. She started work as a Research Associate, became the Manager of the Research Storeroom, and retired as the Manager of Purchasing. She has lived in Altadena since 1995 and enjoys walking with her husband in the neighborhood and near-by foothills. She was appointed to the Board in November 2020.

Office Staff

*Taijha
Capellan*

Years of
Service
1



Office Supervisor and Bookkeeper

*Adrian
Felix*

Years of
Service
<1



Water Quality Coordinator
and Administrative Assistant

*Wendy
Childs*

Years of
Service
15



Customer Service Representative,
Water Stock Clerk and
Water Conservation Coordinator

*Jesus
Bugarin*

Years of
Service
12



Customer Service Representative
and Administrative Assistant

Field Staff



Name - Title - Years of Service

Back Row:

Jeremy Rogers - Water System Operator - 5 years

John Earnest - Water System Operator - 3 year

Michael Cotter - Field Supervisor - 19 years

Andres Estrada - Water System Operator - 1 year

Front Row:

Justin LaPoint - Water System Operator - 1 year

Dave Castillo - Water System Foreman - 8 years

Jack Harms - Senior Operator / Facilities Manager - 22 years