

## Lincoln Avenue Water Company ANNUAL REPORT OF OPERATIONS



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## Líncoln Avenue Water Company

March 31, 2019

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



Dear Mr. Clairday:

On behalf of the Staff and Management of Lincoln Avenue Water Company I am pleased to present the 2018 Annual Report of Operations.

With another year of below average rainfall coupled with record breaking heat, we experienced an unexpected increase in water sales which allowed us to complete capital improvement projects without the use of reserve funds.

As customer water demands increased, we were able to minimize the purchase of expensive imported water with the operation of Well 6. Completing one full year in service during 2018, we have improved the management of our groundwater resource due to the wells production flexibility.

Insuring the reliability of the company's infrastructure continues to be one of our top priorities. Major projects in 2018 included:

- The replacement of 1300 feet of aged water main on Canon Blvd;
- The replacement of 730 feet of aged water main on Devonwood Rd;
- Replacement of pump control valves;
- Maintenance of system pressure regulators; and,
- Cleaning and inspection of all reservoirs.

After 39 years of dedicated service, 2018 brought the retirement of General Manager Robert J. Hayward. For almost four decades Mr. Hayward successfully guided Lincoln Avenue through significant financial and water quality evolution and his leadership has positioned the company to meet the challenges that lie ahead.

As we begin 2019 with above average rainfall for the first time in many years, the company continues to seek ways to respond to the State's water industry challenges.

The professional staff at Lincoln Avenue remains committed to providing the highest quality and most reliable water service to customers at the most economically feasible cost.

Sincerely, Lincoln Avenue Water Company

Jennifer Betancourt Torres General Manager

#### Canon Blvd

# Pipeline Project

Our first pipeline project of 2018 involved replacing 1,300 feet of aged pipe that had been in service for more than 60 years. The undersized water main was upgraded with a new 12-inch diameter steel pipe.



A 20-foot section of pipe is lowered into the trench.







Trenching activities are closely monitored.



Two sections of pipe are welded together.



When necessary and where it's possible, we utilize trenchless technology. A tunnel is excavated using special equipment. Then the pipe is inserted. This allows minimal disruption and repair to the surface.

### Canon Blvd Pipeline Project

This project also included the replacement of customer service lines, meters and the upgrade of 2 fire hydrants.

As always the crew remained vigilant while working in a narrow street that was the entrance and exit for a local elementary school. We worked with the neighborhood to avoid as much inconvenience as possible.



Measurements are taken to ensure the accurate length of pipe is installed.



A new fire hydrant is installed.

The new pipeline is connected to an adjacent water main.



After the pipeline is installed the trench is filled and compacted. Once final approval is received from L.A. County permanent paving can be completed.







#### DEVONWOOD PIPELINE

FOLLOWING THE CANON BLVD PROJECT WE IMMEDIATELY BEGAN PHASE I OF THE DEVONWOOD ROAD PIPELINE PROJECT. ALSO MORE THAN 60 YEARS OLD, THIS PHASE INVOLVED REPLACING 730 FEET OF THE AGED PIPE WITH NEW 8-INCH DIAMETER STEEL.



THE DIGGING BEGINS AT THE CORNER OF DEVONWOOD RD AND CANON BLVD.





CONSTRUCTION PROJECTS IN RESIDENTIAL AREAS ALWAYS COME WITH SOME CHALLENGES. MANY TIMES IT IS NECESSARY TO BLOCK DRIVEWAYS AND DISPLACE VEHICLES THAT WOULD NORMALLY PARK ON THE STREET. WE MAKE EVERY EFFORT TO COMMUNICATE CONSTRUCTION ACTIVITIES WITH RESIDENTS TO MINIMIZE DISRUPTION TO THEIR DAILY ROUTINE.



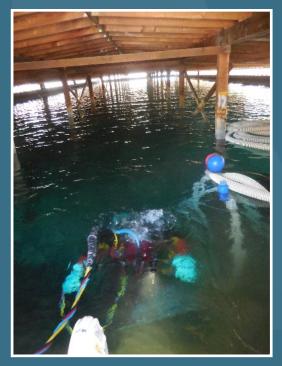
#### **Reservoir Cleaning and Inspection**

The importance of a consistent facilities maintenance program can never be overstated. In addition to daily inspections, the interior of all reservoirs are cleaned and inspected every 5 years. This allows us to monitor components below the water without taking these vital facilities out of service.



The diver is disinfected with liquid chlorine before entering the reservoir.

The diver makes his descent.



A surface view of the cleaning process.





An interior ladder in La Vina Reservoir is inspected.





#### The End of an Era

The Board and Management look over plans for the new Ware Reservoir at the construction site. (2005)



Following a long and distinguished career with Lincoln Avenue Water Company, In June 2018 Robert J. Hayward retired as General Manager.

Mr. Hayward began his career at Lincoln in 1979. He was hired as the Business Manager in charge of finance and administration. While serving in this position he returned to school to study water technology and was appointed General Manager in 1986.

For almost 4 decades Mr. Hayward advanced the Company's commitment to provide reliable, safe drinking water at a reasonable cost to the community of West Altadena with the following achievements:

- New Groundwater Extraction Well No. 6
- Well No.3 & Well No. 5 Rehabilitation
- Ion Exchange & Granular Activated Carbon Groundwater Treatment Facility
- Millard Canyon Surface Water Treatment Plant
- La Vina Reservoir New reservoir with storage capacity of one million gallons
- Ware Reservoir Rehabilitated to increase storage capacity by over 200%
- Rehabilitation of Main Office Complex as well as many other facilities
- 2 Solar Energy Generation Facilities
- State of the art Supervisory Control And Data Acquisition System (SCADA)
- The replacement of more than 50,000 feet of aged water main

John Clairday, Supervisor Michael Antonovich, Lawrence Duncan & Robert Hayward

Bob is considered a senior Water Resource Manager Specialist throughout the region. He has served on the Board of Directors of the Association of California Water Agencies, the oldest and largest state water association, as an executive member of the Raymond Basin Management Board as well as the California Association of Mutual Water Companies.

The Board of Directors and Staff memorialized this event with the adoption of a Resolution Expressing Gratitude to Mr. Hayward for 39 Years of Dedicated Service.



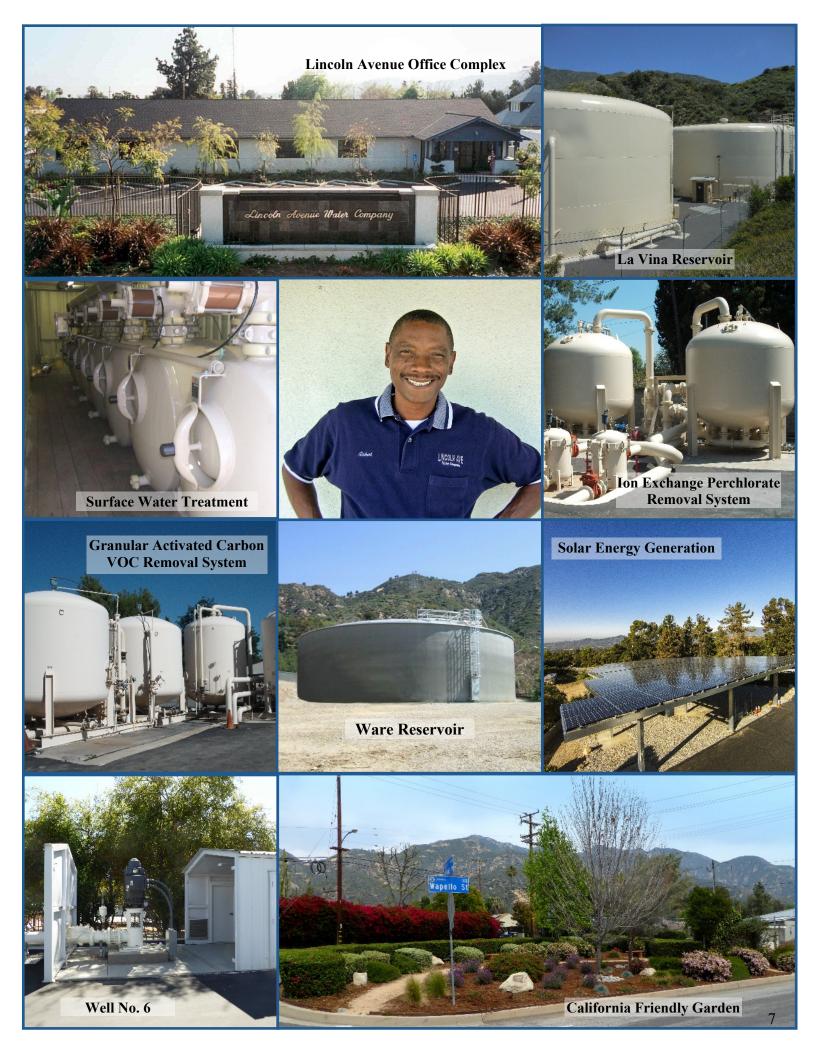


Fred Gregory, NASA Deputy Administrator & Bob Hayward discuss the opening of the Ion Exchange Groundwater Treatment Facility.

Steve Slaten, NASA Groundwater Remediation Manager & Robert Hayward



Andrew Turner, Bob Hayward, Diego Fernandez, Lawrence Duncan, Robert Gomperz & John Clairday tour the Well 6 construction site.



#### **Community Engagement**

As part of the community we serve, we welcome participation in events that bring us closer to the residents of Altadena. In 2018 this included an event held at the Altadena Community Garden sponsored by members of the Altadena Town Council. It was a great opportunity to interact with our neighbors and provide important water information.







In August, we opened the doors to our Ion Exchange and Granular Activated Carbon Groundwater Treatment Facility to approximately 30 members of the community along with Mr. Christian Daly, Assistant Field Deputy for Los Angeles County Supervisor Kathryn Barger. Lincoln Avenue Board members and staff provided a tour of the facility which included an explanation of the treatment process as well as a brief history of our partnership with NASA and the groundwater remediation efforts. With staff on hand, attendees received individual attention and participated in group discussions.





### Asia Smith's 30th Anniversary



In October Lincoln Avenue's Board and Staff recognized Asia Smith for this milestone achievement.

As a Field Department Supervisor and senior member of our staff, Asia is relied on for his vast knowledge of the water distribution system as well as training and mentoring new field employees.

The dedication and hard work he has exhibited throughout his career and continues to this day has furthered the Company's commitment to the community of Altadena to supply safe and reliable drinking water service.





Lincoln Avenue President, John Clairday (Left) and Director, Lawrence Duncan (right) thank Asia for his service.

### Just Another Day in the Field

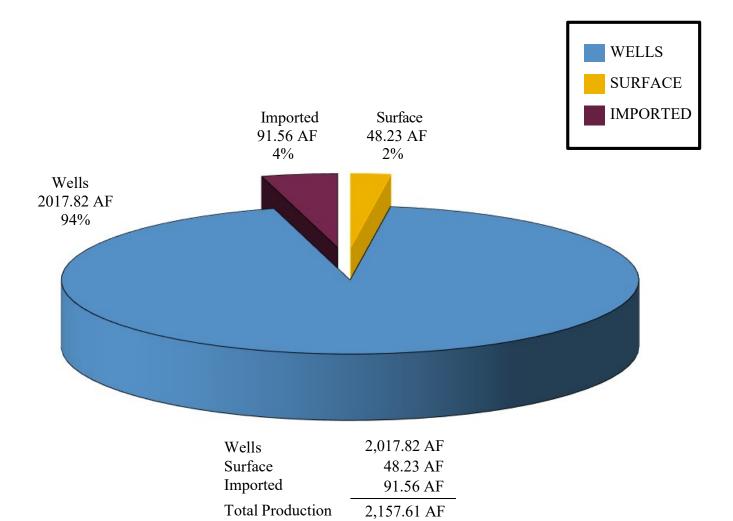
The duties of our Water System Operators vary from day to day but the importance remains the same.

These highly trained and skilled employees go above and beyond to keep our water system running smoothly.

When operators are not assisting customers they are completing tasks such as sampling, monitoring wells and treatment facilities, changing meters, replacing service lines, facility repairs,..etc.

Our operators also participate in regular safety and equipment training. It is imperative that all employees are aware of current practices and regulations to follow them accordingly.

#### 2018 WATER PRODUCTION BY SOURCE



#### WATER SALES AND PRODUCTION FOR 2018 IN ACRE FEET

MONTH	IMPORTED WATER PURCHASE	WELL PRODUCTION	LOCAL SURFACE WATER	TOTAL PRODUCTION	SALES	RAIN FALL (INCHES)
January	0	146.67	3.08	149.75	156.13	3.06
February	0	149.47	2.83	152.30	131.72	0.31
March	0	92.50	26.17	118.67	113.49	7.24
April	0	171.04	12.65	183.69	117.48	0.01
May	0	166.51	0	166.51	173.01	2.12
June	0	190.62	0	190.62	152.33	0
July	23.03	218.34	0	241.37	194.40	0
August	43.14	200.85	0	243.99	236.90	0
September	23.94	194.48	0	218.42	212.32	0
October	1.45	186.96	0	188.41	167.42	0
November	0	172.89	0	172.89	173.38	0.27
December	0.00	127.49	3.50	130.99	124.53	2.98
TOTAL	91.56	2017.82	48.23	2157.61	1953.11	15.99

Total Production	2157.61
Total Sales	<u>-1953.11</u>
Subtotal	204.50
Treatment Plant Operation	-49.26
& Water Quality Control	
Non-Sales Production	155.24
	or 7%
	Total Sales Subtotal Treatment Plant Operation & Water Quality Control

**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.

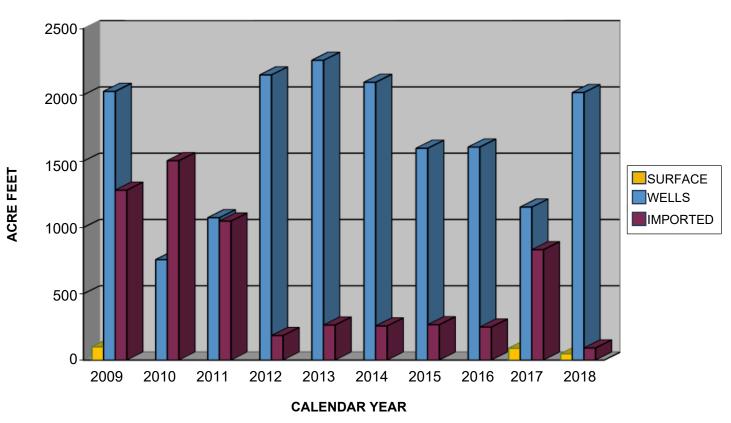
	ENERGY	COST BY WELLS AND PUMPING STATIONS 2014 - 2018	ND PUMPING STAT 018	SNOL	
WELLS	2018 ANNUAL	2017 ANNUAL	2016 ANNUAL	2015 ANNUAL	2014 ANNUAL
& PUMPING STATIONS	ENERGY CUSI COST/AF	ENERGY CUSI COST/AF	ENERGY CUSI COST/AF	ENERGY COST COST/AF	ENERGI CUSI COST/AF
Well #3 (Pump to Main Plant)	1,104.99 84.35	22,453.11 75.47	43,575.63 72.90	\$46,657.37 \$77.89	\$65,176.53 \$69.03
Well #5 (Pump to Main Plant)	5,544.79 65.23	11,690.17 66.73	65,635.50 65.05	70,407.46 70.52	78,535.78 68.25
Well #6 (Pump to Main Plant)	155,201.39 80.85	68,304.34 100.21			
Main Plant (Pump to Glenrose Resv.)	116,716.73 54.32	95,843.33 46.33	111,084.41 58.05	108,920.30 55.52	138,605.32 57.45
Glenrose Reservoir (Pump to Wapello Resv.)	35,405.63 32.23	39,256.78 38.47	38,950.26 38.88	37,992.59 40.20	47,151.47 39.72
Wapello Reservoir (Pump to Ware & La Vina & Swigart Resv.)	44,594.31 51.39	43,256.69 53.81	40,686.37 54.70	40,013.54 53.71	51,110.93 48.77
Ware Reservoir (Pump to Coulter Resv.)	1284.19* 6.28	4,153.23 23.98	11,356.20 54.46	11,2 <i>67.75</i> 53.58	21,049.34 88.52 Maw TOLL Patel
TOTAL ANNUAL ENERGY COST	\$359,852.03	\$284,962.65	\$311,288.37	\$315,259.01	\$401,629.37

\*Total cost prior to applying Solar Energy Generation Credit \$12,483.54.

ANNUAL PRODUCTION IN ACRE FEET 2009 - 2018

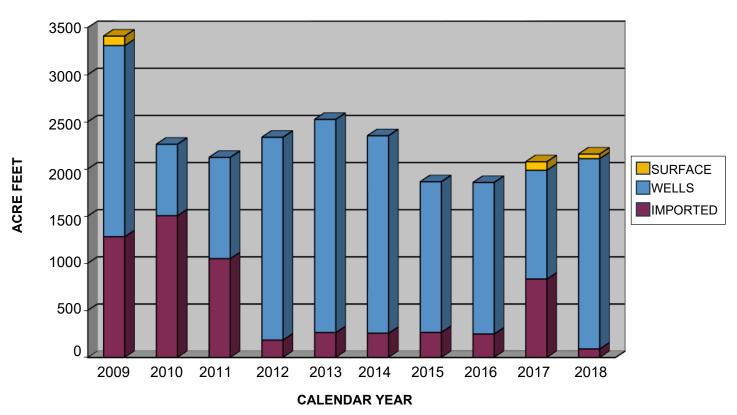
RAINFALL (INCHES)	15.99	19.47	18.60	10.22	14.88	10.13	18.20	17.65	37.00	16.17
ACTUAL PRODUCTION (LINCOLN)	2157.61	2076.21	1855.98	1864.14	2352.40	2429.22	2336.19	2122.64	2153.15	2493.28
LESS LEASE WATER DELIVERY	0	0	0	0	0	96.39	0	0	108.70	915.40
TOTAL PRODUCTION	2157.61	2076.21	1855.98	1864.14	2352.40	2525.61	2336.19	2122.64	2261.85	3408.68
RFACE IMPORTED	91.55	832.43	249.26	266.71	257.49	264.35	185.33	1048.62	1504.14	1281.62
SURFACE	48.23	89.49	0	0	0	0	0	0	0	100.55
WELL #6	1919.72	681.60								
WELL #5	85.00	175.19	1008.99	998.41	1150.76	1271.38	1459.58	474.85	0.03	756.55
WELL #3	13.10	297.50	597.73	599.02	944.15	989.88	691.28	599.17	757.68	1269.96
CALENDAR YEAR	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009

Note: Well 6 began operation in August 2017



#### **ANNUAL PRODUCTION BY SOURCE - SURFACE, WELLS & IMPORTED**

**TOTAL ANNUAL PRODUCTION - SURFACE, WELLS & IMPORTED** 



#### 2500.00 2247.51 2084.29 2115.43 2136.19 1957.08 1921.51 1953.11 2000.00 1832.83 1684.20 1695.87 ACRE FEET 1500.00 1000.0 500.00 0.00 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

### ANNUAL WATER SALES IN ACRE FEET 2009 - 2018

CALENDAR YEAR

#### **METERS AND SERVICE CONNECTIONS**

New service connections installed in 2018	0
Meters replaced in 2018	332
Distribution system service connections in 2018	4474
2018 average consumption per meter per day - Residential	365 gal.
2018 average consumption per meter per day - Commercial	1503 gal.
2018 average consumption per capita per day - Residential	100 gal.

#### NUMBER OF METERS BY SIZE

TOTAL	4474
4"	3
3"	6
2"	70
11/2"	28
1"	363
3/4"	1224
5/8"	2780

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

#### CANYON WATER BASIN RECHARGE

Swigart	34.67
El Prieto	9.56
Millard/La Vina	94.06
TOTAL	138.29

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.

#### 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 2018.

#### BOARD OF DIRECTORS FOR THE YEAR 2018









#### **JOHN CLAIRDAY**

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 recently 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

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 four 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

Lawrence W. Duncan is a retired textile industry supervisor and a 51-year Altadena resident. Mr. Duncan is entering his 18th year as a member of the Lincoln Board and also serves as the Company's Community Liaison Officer.

#### ANN R. DOUGHERTY

Ann R. Dougherty is a retired Management Consultant. She worked as an Executive Director for various non-profit organizations for 27 years. She currently serves on the Advisory Board for the San Gabriel Valley Habitat for Humanity where she has been involved for 21 years. She is a 47-year resident of Altadena.

#### **DIEGO FERNANDEZ**

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 13 years and was appointed to the Board in 2014.

#### **TREASURER**

**1ST VICE PRESIDENT** 

**ASSISTANT SECRETARY** 

20

## Office Staff

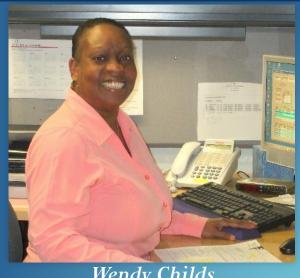


oversees Bookkeeping/Accounting and all administrative compliance.



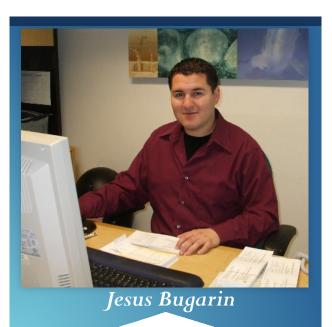
Benjamin Bowen

Water Quality Coordinator and Administrative Assistant oversees all areas of water quality compliance.



Wendy Childs

Customer Service Representative, Water Stock Clerk and Water Conservation Coordinator



Customer Service Representative and Administrative Assistant

## Field Staff



Left to right:

Michael Cotter, Field Supervisor Asia Smith, Field Supervisor Bartolo Gonzalez, Field Representative Dave Castillo, Field Representative Nicholas Carino, Field Representative Jack Harms, Field Representative Jeremy Rogers, Field Representative