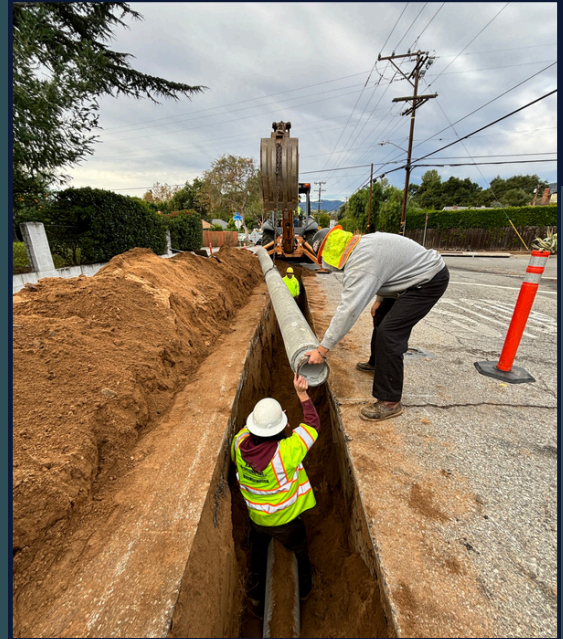


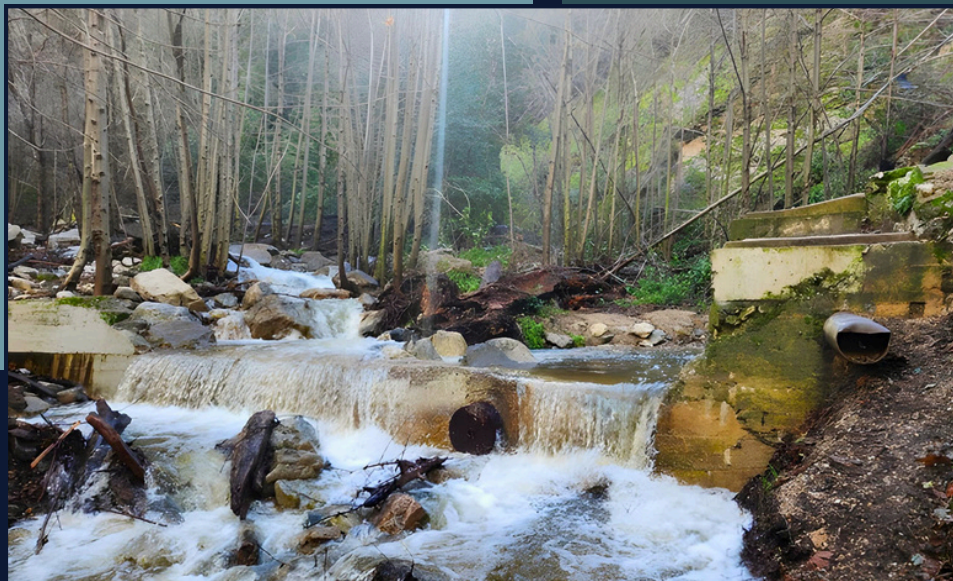
# Lincoln Avenue Water Company

---

2023



## ANNUAL REPORT OF OPERATIONS



## TABLE OF CONTENTS

|  |           |
|--|-----------|
| <i>Letter from General Manager.....</i>                            | <i>1</i>  |
| <i>West Palm Pipeline Project.....</i>                             | <i>2</i>  |
| <i>West Palm Pipeline Project.....</i>                             | <i>3</i>  |
| <i>Loma Alta Pipeline Project Phase I.....</i>                     | <i>4</i>  |
| <i>Loma Alta Pipeline Project Phase I.....</i>                     | <i>5</i>  |
| <i>Groundwater Treatment Plant Vessel Rehabilitation.....</i>      | <i>6</i>  |
| <i>Groundwater Treatment Plant Vessel Rehabilitation.....</i>      | <i>7</i>  |
| <i>Booster Pumps.....</i>  | <i>8</i>  |
| <i>Altadena Pollinator Palooza Extravaganza.....</i>               | <i>8</i>  |
| <i>2023 Water Production by Source.....</i>                        | <i>9</i>  |
| <i>Water Sales and Production for 2023.....</i>                    | <i>10</i> |
| <i>Energy Cost by Pumping Station and Wells (2019 – 2023).....</i> | <i>11</i> |
| <i>Annual Production (2014 – 2023).....</i>                        | <i>12</i> |
| <i>Annual Production by Source (2014 – 2023).....</i>              | <i>13</i> |
| <i>Total Annual Production (2014 – 2023).....</i>                  | <i>14</i> |
| <i>Annual Water Sales (2014 – 2023).....</i>                       | <i>14</i> |
| <i>Meters and Service Connections.....</i>                         | <i>15</i> |
| <i>Total Number of Meters by Size.....</i>                         | <i>15</i> |
| <i>Well Production Capacity.....</i>                               | <i>16</i> |
| <i>Distribution Lines .....</i>                                    | <i>16</i> |
| <i>Total Annual Canyon Water Basin Recharge.....</i>               | <i>17</i> |
| <i>Water Quality Compliance.....</i>                               | <i>17</i> |
| <i>Board of Directors.....</i>                                     | <i>18</i> |
| <i>Office Staff.....</i>   | <i>19</i> |
| <i>Field Staff.....</i>  | <i>20</i> |

# LINCOLN AVENUE WATER COMPANY

March 29, 2024

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



Dear Board of Directors:

The past two rain seasons finally brought some relief to Southern California from recent drought conditions. Lincoln Avenue was able to use available surface water from the local mountains. We also saw improvement in local groundwater levels; however, it still hasn't been enough to make a significant and long-term impact to this important source.

Due to successful conservation efforts, in 2022 our customers reduced water consumption by 12%. In 2023, our customers continued their efforts and reduced overall consumption by an additional 12%. This reduction, along with the availability of surface water, helped defer the need to purchase expensive imported water.

In addition to managing our water resources, the current economic environment continues to pose many challenges which directly impact the company's operation. We are experiencing significant increases in fixed and variable costs, such as liability insurance, electricity, equipment maintenance and materials. Unfortunately, we don't anticipate a reduction in these expenses moving forward.

Providing dependable service 24/7 is what we do. And dependability comes down to our infrastructure, which we're continually maintaining and upgrading. In 2023, we invested \$1.3 million into our capital improvement program. Major projects in 2023 included:

- Palm Street Dual Pipeline Project, replacing a total of 2,200 feet of pipe
- Loma Alta Pipeline Project, Phase I, replacing 800 feet of pipe
- Groundwater Treatment System - Vessel Rehabilitation
- Booster Pump Motor Replacement

We also continued maintenance of our distribution system including replacement and upgrade of some fire hydrants, service lines, water meters, and other isolation valves.

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,

A handwritten signature in black ink, appearing to read "J Betancourt Torres".

Jennifer Betancourt Torres  
General Manager



# West Palm Avenue Pipeline Project



We started our 2023 Capital Improvement Plan with the West Palm Avenue Dual Pipeline Replacement Project from Olive Ave to Glenrose Ave.

This project involved the replacement of 1,100 linear feet of 6" pipe and 1,100 linear feet of 4" pipe. Both watermains were originally installed in 1940 and had begun to show sign of a potential failure.



**A TRACING WIRE IS ATTACHED TO THE C900 PIPE.**

**WATERMAINS ARE SELDOM A STRAIGHT LINE. IT'S COMMON TO INSTALL ANGLES AND BENDS ALONG THE WAY DUE TO OTHER UTILITIES OR STORM DRAINS.**





# West Palm Avenue Pipeline Project



**A SECTION OF PIPE IS PREPPED FOR INSTALLATION.**



**ONCE THE PIPE IS INSTALLED, THE TRENCH IS BACKFILLED AND COMPACTED.**



In addition to the 2,200 feet of pipeline, we also replaced 30 customer service lines and installed 2 fire hydrants.

This project is a continuation of our overall goal to improve water service throughout our distribution system.





# Phase One

## LOMA ALTA PIPELINE

In the fourth quarter of 2023, we began Phase I of the Loma Alta Pipeline Project. The construction are spanned from Fair Oaks Ave, east to Chaney Trail.

Loma Alta is not only a highly travelled area of Altadena, there are numerous utilities below ground, including existing Lincoln Avenue watermain, pump lines and valves that intersect with other parts of our distribution system. Therefore it was necessary to use extra precaution when excavating the street.



An area of the street is dug out to obtain a visual of the intersecting watermain.



After a section of pipe is put into place, the ditch is extended for the next section to be installed.

A service line repair is completed .





# Phase One

## LOMA ALTA PIPELINE



By the end of Phase I, saw cutting was complete and 800 of the total 1,600 feet of new 8" steel pipe had been installed.

Phase II will include the installation of the remaining 800 feet of pipe, in addition to 40 customer service lines and 2 fire hydrants.



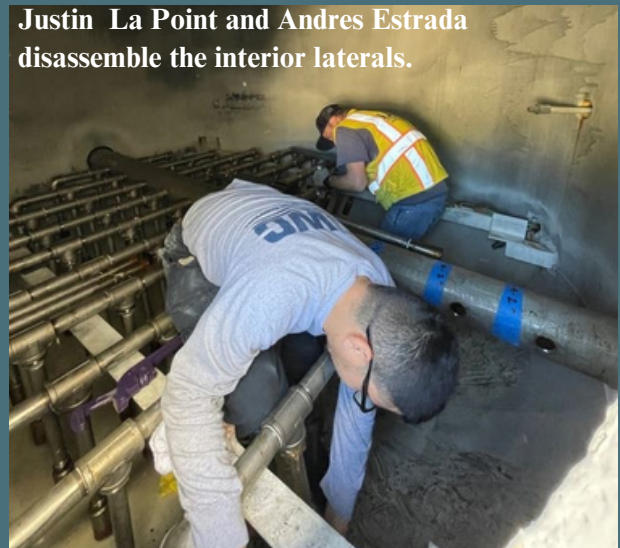


# GROUNDWATER TREATMENT PLANT VESSEL REHABILITATION



Lincoln Avenue has been treating groundwater for more than 30 years. Having expanded the capacity over the years, the current treatment system is comprised of 2 Ion Exchange vessels, 4 Granular Activated Carbon vessels and 4 bag filters.

**Justin La Point and Andres Estrada**  
disassemble the interior laterals.



This system undergoes regular inspections and repairs as necessary. At least every 10 years, major rehabilitation is needed to extend the lifespan and reliability.



The interior of a GAC vessel after the circular piping system is removed.



Bag filter housing.



The vessel interior is sandblasted.



# GROUNDWATER TREATMENT PLANT VESSEL REHABILITATION



Upon completion of the sandblasting and recoating of the vessel interiors, the exteriors were repainted with the valve tree and plumbing clearly identified.





# Booster Pump Motor Replacement

In 2023, the motor of Wapello Reservoir Booster No. 4 was replaced. Regular maintenance and replacement when needed ensures our facilities stay efficient and reliable.



## Altadena Pollinator Palooza Extravaganza



This event brought together multiple organizations to provide education and free seeds so that LA County residents can create their own pollinator-friendly gardens.

Lincoln Avenue staff was on-site to handout water conservation devices and information.

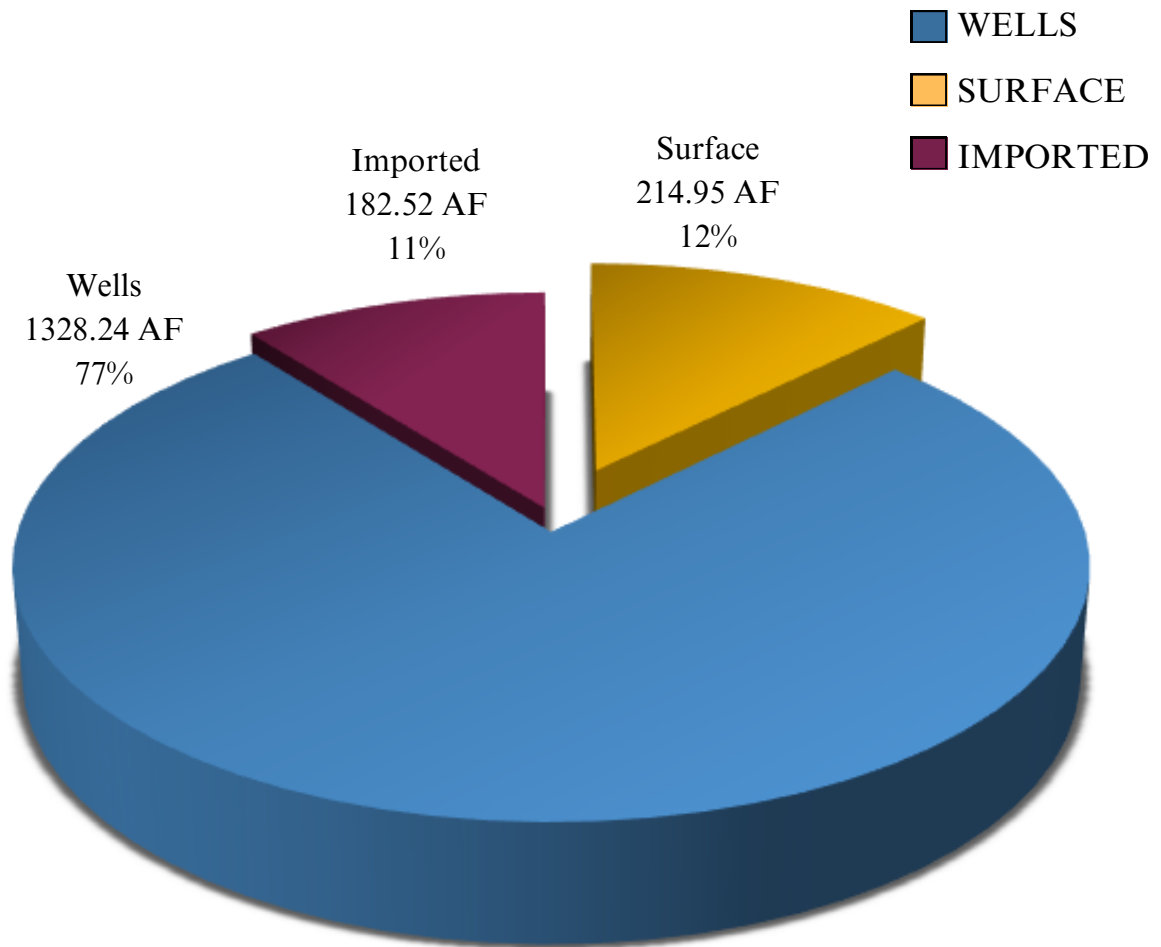


Jesus Bugarin provides water conservation materials to attendees.





## 2023 WATER PRODUCTION BY SOURCE



|                  |                  |
|------------------|------------------|
| Wells            | 1,328.24 AF      |
| Surface          | 214.95 AF        |
| Imported         | <u>182.52 AF</u> |
| Total Production | 1,725.71 AF      |

## WATER SALES AND PRODUCTION FOR 2023 IN ACRE FEET

| MONTH        | IMPORTED<br>WATER<br>PURCHASE | WELL<br>PRODUCTION | LOCAL<br>SURFACE<br>WATER | TOTAL<br>PRODUCTION | LEASE<br>WATER<br>DELIVERED | SALES           | RAIN<br>FALL<br>(INCHES) |
|--------------|-------------------------------|--------------------|---------------------------|---------------------|-----------------------------|-----------------|--------------------------|
| January      | 0.00                          | 83.54              | 12.70                     | 96.24               | 6.50                        | 107.31          | 7.69                     |
| February     | 1.88                          | 104.05             | 1.50                      | 107.43              | 5.10                        | 102.11          | 8.19                     |
| March        | 0.00                          | 85.12              | 0.00                      | 85.12               | 5.50                        | 80.92           | 11.81                    |
| April        | 0.00                          | 119.04             | 0.00                      | 119.04              | 8.00                        | 88.43           | 1.14                     |
| May          | 115.79                        | 13.96              | 19.86                     | 149.61              | 9.90                        | 134.64          | 2.24                     |
| June         | 0.00                          | 83.87              | 47.07                     | 130.94              | 10.10                       | 130.41          | 1.18                     |
| July         | 38.13                         | 155.37             | 29.54                     | 223.04              | 23.3                        | 151.05          | 0.00                     |
| August       | 10.97                         | 161.07             | 28.95                     | 200.99              | 10.10                       | 202.25          | 4.57                     |
| September    | 1.24                          | 150.94             | 17.76                     | 169.94              | 10.80                       | 168.13          | 0.42                     |
| October      | 10.19                         | 138.27             | 19.11                     | 167.57              | 12.5                        | 138.63          | 0.35                     |
| November     | 4.32                          | 128.19             | 18.34                     | 150.85              | 8.70                        | 157.76          | 0.94                     |
| December     | 0.00                          | 104.82             | 20.12                     | 124.94              | 0.00                        | 125.97          | 2.46                     |
| <b>TOTAL</b> | <b>182.52</b>                 | <b>1,328.24</b>    | <b>214.95</b>             | <b>1,725.71</b>     | <b>110.50</b>               | <b>1,587.60</b> | <b>40.99</b>             |

### PUMPED FROM WELLS

|              |                |
|--------------|----------------|
| WELL #3      | 0.58           |
| WELL #5      | 282.29         |
| WELL #6      | 1045.37        |
| <b>TOTAL</b> | <b>1328.24</b> |

|  |          |
|--|----------|
| Total Production                                     | 1725.71  |
| Lease Water Delivery                                 | -110.50  |
| Production for Lincoln                               | 1615.21  |
| Total Sales  | -1587.60 |
| Subtotal   | 27.61    |
| Treatment Plant Operation<br>& Water Quality Control | -5.00    |
| Non-Sales Production                                 | 22.61    |
|  | or 2%    |

**Non-Sales Production** is water used during routine water quality sampling, evaporation from reservoirs, irrigation at Company sites, water quality flushing, pipeline ditch compaction and dust control, fire fighting, fire training, leaks on mains, etc.

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



## ENERGY COST BY WELLS AND PUMP STATIONS 2019-2023

| WELLS<br>&<br>PUMPING STATIONS                             | 2023<br>ENERGY COST<br>COST/AF | 2022<br>ENERGY COST<br>COST/AF | 2021<br>ENERGY COST<br>COST/AF | 2020<br>ENERGY COST<br>COST/AF | 2019<br>ENERGY COST<br>COST/AF |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Well #3<br>(Pump to Main Plant)                            | 4,151.16<br>N/A                | 1,912.84<br>N/A                | 2,030.89<br>N/A                | 1,798.08<br>N/A                | 493.40<br>N/A                  |
| Well #5<br>(Pump to Main Plant)                            | 34,495.84<br>122.20            | 66,226.42<br>101.71            | 18,707.94<br>78.33             | 2,797.34<br>69.62              | 17,302.41<br>68.54             |
| Well #6<br>(Pump to Main Plant)                            | 143,098.64<br>140.28           | 90,519.75<br>129.87            | 164,123.84<br>121.62           | 188,913.89<br>93.14            | 110,599.19<br>77.24            |
| Main Plant<br>(Pump to Glenrose)                           | 144,041.51<br>96.93            | 139,909.72<br>74.16            | 156,380.73<br>71.76            | 146,873.32<br>67.21            | 99,378.19<br>55.27             |
| Glenrose Reservoir<br>(Pump to Wapello)                    | 54,694.54<br>81.87             | 56,615.12<br>60.64             | 58,298.39<br>59.41             | 46,251.85<br>48.75             | 34,375.46<br>36.23             |
| Wapello Reservoir<br>(Pump to Ware & La Vina<br>& Swigart) | 60,223.90<br>110.40            | 59,886.51<br>80.07             | 61,718.15<br>70.72             | 49,713.42<br>61.00             | 39,396.18<br>53.91             |
| Ware Reservoir<br>(Pump to Coulter)                        | 6,830.71*<br>63.59             | 5,560.77*<br>32.20             | 5,738.72*<br>27.45             | 2,901.89*<br>20.41             | 704.18*<br>6.10                |
| TOTAL ANNUAL<br>ENERGY COST                                | \$447,536.60<br>\$296.24       | \$420,631.13<br>\$228.67       | \$466,998.66<br>\$214.98       | \$439,249.79<br>\$206.30       | \$302,249.01<br>\$170.56       |

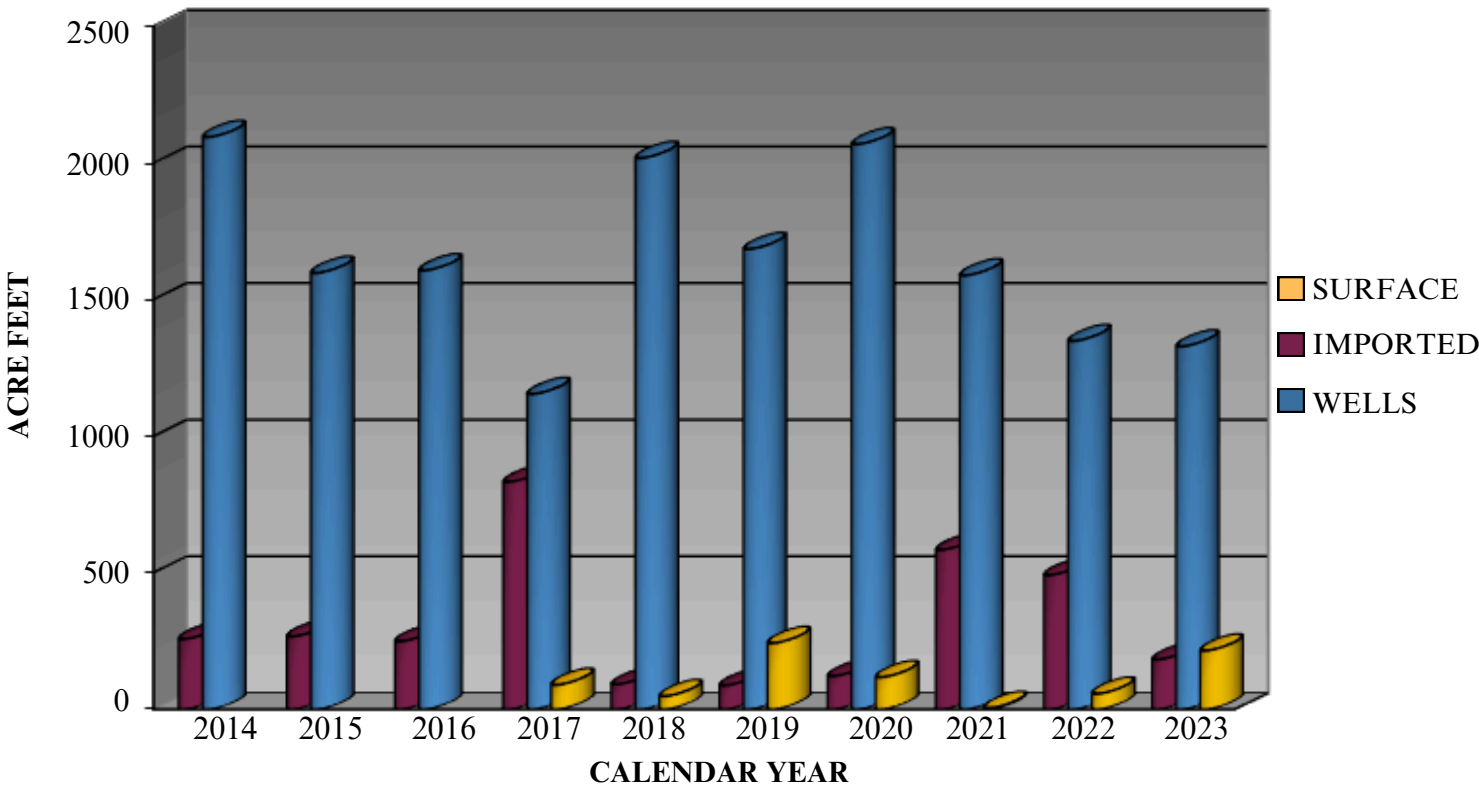
\*Total cost after applying Solar Energy Generation Credit.

# ANNUAL PRODUCTION IN ACRE FEET 2014-2023

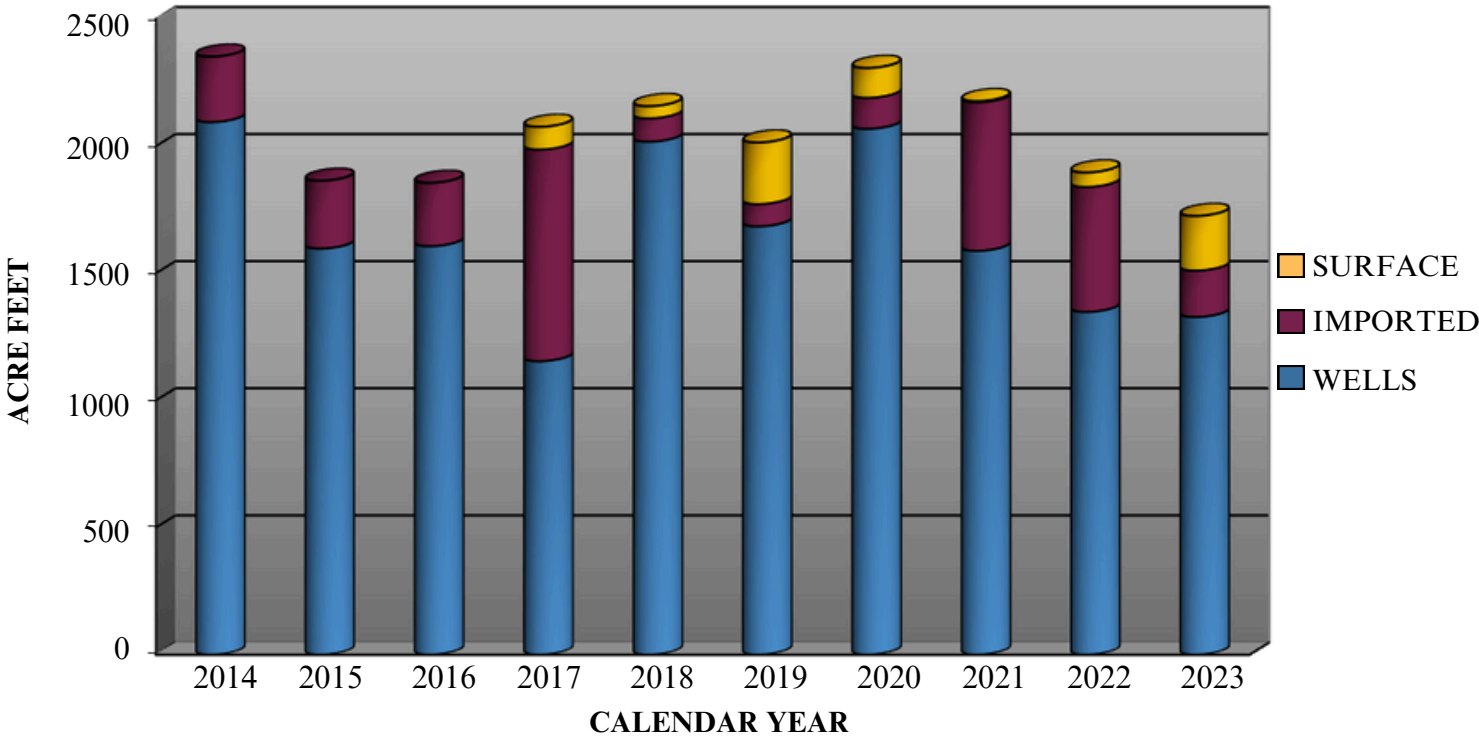
| CALENDAR YEAR | WELL #3 | WELL #5 | WELL #6 | SURFACE | IMPORTED | TOTAL PRODUCTION | LESS LEASE WATER DELIVERY | ACTUAL PRODUCTION (LINCOLN) | RAINFALL (INCHES) |
|---------------|---------|---------|---------|---------|----------|------------------|---------------------------|-----------------------------|-------------------|
| 2023          | 0.58    | 282.29  | 1045.37 | 214.95  | 182.52   | 1725.71          | 110.50                    | 1615.21                     | 40.99             |
| 2022          | 0       | 651.14  | 697.00  | 57.09   | 491.40   | 1896.63          | 0                         | 1896.63                     | 18.18             |
| 2021          | 0.14    | 238.84  | 1349.50 | 4.97    | 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             |



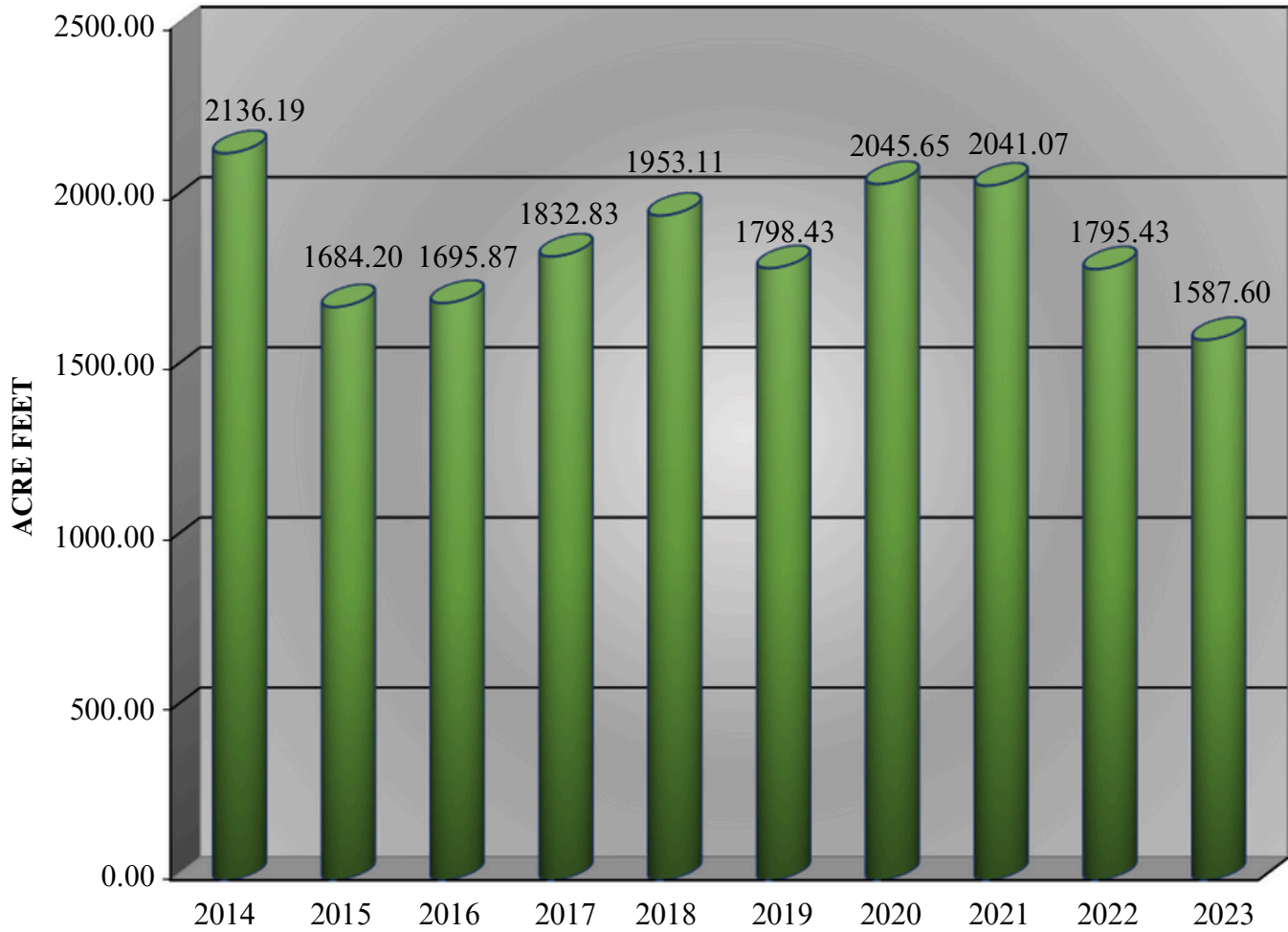
**ANNUAL PRODUCTION BY SOURCE - SURFACE, WELLS & IMPORTED**



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



**ANNUAL WATER SALES IN ACRE FEET**  
**2014 - 2023**





## METERS AND SERVICE CONNECTIONS

|   |           |
|---|-----------|
| New Service Connections installed in 2023                 | 16        |
| Meters replaced in 2023                                   | 275       |
| Distribution system service connections in 2023           | 4492      |
| 2023 average consumption per meter per day - Residential  | 284 gal.  |
| 2023 average consumption per meter per day - Commercial   | 1220 gal. |
| 2023 average consumption per capita per day - Residential | 81 gal.   |

## NUMBER OF METERS BY SIZE

|              |             |
|--------------|-------------|
| 5/8"         | 1454        |
| 3/4"         | 2541        |
| 1"           | 390         |
| 1 1/2"       | 28          |
| 2"           | 71          |
| 3"           | 6           |
| 4"           | 3           |
| <b>TOTAL</b> | <b>4493</b> |

## WELL PRODUCTION CAPACITY

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

## DISTRIBUTION SYSTEM IN LINEAR FEET

|                     |                        |
|---------------------|------------------------|
| Distribution System | 288,323                |
| Pump Lines          | 18,128                 |
| TOTAL               | 306,451<br>or 58 miles |



## ANNUAL CANYON WATER BASIN RECHARGE IN ACRE FEET

|                  |        |
|------------------|--------|
| Swigart          | 375.88 |
| El Prieto        | 40.65  |
| Millard/La Vina* | 330.27 |
| TOTAL            | 746.80 |

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 from 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 2023.

## BOARD OF DIRECTORS FOR THE YEAR 2023



**JOHN CLAIRDAY**

**PRESIDENT**

John Clairday currently serves as president of Lincoln's Board of Directors. A graduate of the University of Southern California and Loyola Law School, Mr. Clairday retired from the Metropolitan Water District of Southern California where he served as Chief Deputy General Counsel within the legal department, and later, manager of the District's Real Estate Group. In addition to serving as president of Lincoln Avenue's Board, Mr. Clairday has been an active supporter of the San Gabriel Valley Habitat for Humanity, serving on its Board of Directors, and participating in several local and national build projects.



**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 55-year Altadena resident. Mr. Duncan is entering his 23rd year as a member of the Lincoln Avenue 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 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 19 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.



LINCOLN AVENUE  
**OFFICE STAFF**  
WATER COMPANY



**Taijha Capellan**  
Office Supervisor  
and Bookkeeper

**Years of Service**  
**2**



**Wendy Childs**  
Customer Service Representative  
and Water Stock Clerk

**Years of Service**  
**16**



**Jesus Bugarin**  
Customer Service Representative  
and Administrative Assistant

**Years of Service**  
**13**



**Adrian Felix**  
Water Quality Coordinator  
and Administrative Assistant

**Years of Service**  
**1**

LINCOLN AVENUE  
**FIELD STAFF**  
WATER COMPANY



**Name - Title - Years of Service**

**Back Row:**

**Jeremy Rogers - Water System Operator - 6 years**

**John Earnest - Water System Operator - 4 years**

**Michael Cotter - Field Supervisor - 20 years**

**Andres Estrada - Water System Operator - 2 years**

**Front Row:**

**Justin LaPoint - Water System Operator - 2 years**

**Dave Castillo - Water System Foreman - 9 years**

**Jack Harms - Senior Operator / Facilities Manager - 23 years**