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### Lincoln Avenue Water Company

March 30, 2015

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 2014 Annual Report of Operations.

Once again we opened the year focused on the replacement of aged pipeline.

We completed three major pipeline projects during the calendar year. It is our hope to repeat this accomplishment during the current year.

I am pleased to report that in 2014 we continued the multi-phase capital improvement program at our Ware Reservoir site. This most recent phase of work involved the construction of a 400 feet long, 14 feet high block wall designed to control erosion and enhance the security at this site. This is important because Ware Reservoir is the home of our second solar voltaic system installation. We began work on this 69kW system in 2014 with completion scheduled for this spring.

During 2014 we also completed the upgrade of our aged Supervisory Control and Data Acquisition System (SCADA). Following two years of planning we completed the design and installation of a new *state of the art* computerized SCADA system that will greatly improve our telemetering capability for years to come.

While we welcome the completion of capital projects we never lose focus on the maintenance and operation of a water system that has served the needs of our shareholders for the past 118 years.

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

Robert J. Hayward General Manager

#### Altadena Drive Pipeline Replacement Project

The 1,000 linear feet of aged 4-inch water main was originally installed in 1948. This aged and undersized pipe was replaced with new 8-inch steel pipe that will last for generations to come. This pipeline project extended on Altadena Drive West to Casitas Avenue.



The pavement is marked and cut for trenching.



System isolation valves are ready to be installed.



A valve is connected to the water main.

Trenching for the new pipeline.



The depth of the trench is measured & inspected.



#### Altadena Drive Pipeline Replacement Project

This project included the installation of 3 new fire hydrants on Altadena Drive.

Replacing aged pipeline allows us the opportunity to improve water availability and fire flow protection. This also improves overall water quality and service to our customers and shareholders.



Pipe sections welded together.



A new fire hydrant is installed.



The trench is backfilled.

The ground is prepped for compaction.



The ground is compacted using a compaction roller.



The ground is patched and prepared for the final paving.



#### Ridgeview Pipeline Project



WITH THE COMPLETION OF ALTADENA DRIVE WE PROCEEDED TO OUR NEXT PROJECT ON RIDGEVIEW DRIVE. THIS PROJECT INVOLVED THE REPLACEMENT OF OUR 600-FEET OF AGED 4-INCH WATER MAIN WITH NEW 8-INCH STEEL PIPE FROM ALTADENA DRIVE SOUTH TO EAST MARIPOSA STREET.



A section of pipe is guided into the ditch for installation.



An extended view of the 20-foot section of new steel pipeline.



The water isolation valve is installed on the new pipe.

UPGRADING AGED AND UNDERSIZED WATER MAIN IS ALWAYS TOP PRIORITY ON OUR CAPITAL IMPROVEMENT LIST.



New hydrant is installed.

Old 4" pipe being removed.

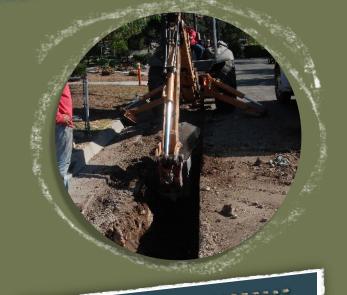


Temporary asphalt is used to cover the area until the project is completed and permanent paving can begin.



# CRESTFORD DRIVE PIPELINE PROJECT







We closed out the 2014 pipeline projects with the replacement of over 600-feet of sixty year old 4-inch pipeline on Crestford Drive. This pipe was also replaced with new 8-inch steel pipe.

Lincoln continues to focus on the goals of its Long Term Capital Improvement Program.



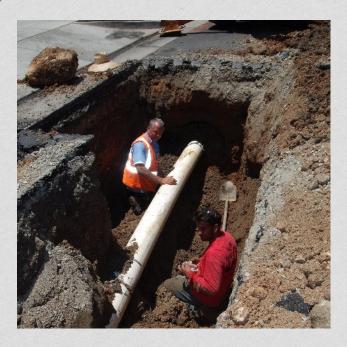


# GIDDINGS RANCH PIPELINE



When we received a call of a water geyser on Giddings Ranch Road we immediately dispatched an emergency response team to isolate the flow of water to this area. A repair team was quickly assembled and mobilized to the site to take on this emergency. Within a matter of hours the area was excavated and a 20 foot section of pipeline was removed and replaced with minimal loss of water and no damage to surrounding properties.

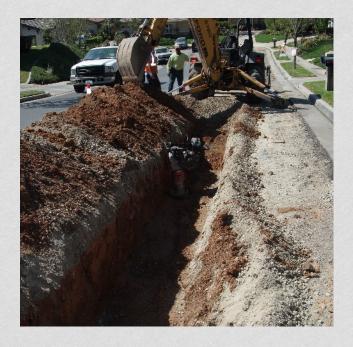


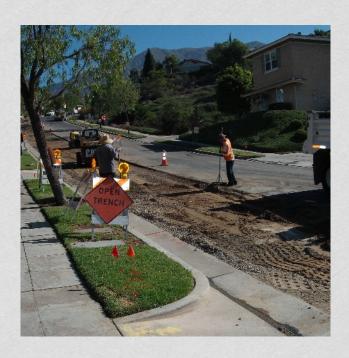














# GIDDINGS RANCH PIPELINE



The section of road affected by this rupture was immediately excavated, compacted and re-paved to prevent any further damage.



The Ware Reservoir site is one of many facilities with ongoing improvement projects.

In 2014 a 14-foot high 400-feet long block wall was constructed on the perimeter of the property. This new wall provides added security and help stabilize hillside erosion.

The construction of this new wall is part of a multi-phase master plan at this site.

The cost to lift water to the highest point of our distribution system (2200 feet above sea level) is a significant budget expense. Making sure that our booster stations are operating as efficiently as possible will have a positive impact on our power cost.



# Booster Pump Maintenance & Repair







A crane is used to lower the internal components of the booster pump while the technician guides it into place. The motor is then lowered and reassembled. Prior to placing the booster back into service it is tested for efficiency.



### **SCADA SYSTEM**

Supervisory Control and Data Acquisition (SCADA) is a computerized system that allows us to remotely monitor and control our wells, treatment plants, booster pumps, flow meters and reservoirs levels from a centralized location. This upgraded system collects data used for regulatory agency reporting as well as our own record keeping requirements. This new system is a vital component that will improve the efficiency in managing our remote operating sites.

The upgrades included the replacement of remote terminal units, the replacement of antennas along with new software and hardware. The new antennas will establish a triangulation system that will improve communication.

# Equipment Training







Training is essential when working in the field department.

In this training session the technicians reviewed the operation of a Mole. The Mole is an underground boring machine used to dig a horizontal tunnel under paved surfaces. The pipe is then pushed through the tunnel and the surface remains intact. This important tool allows us to minimize costly street repairs and traffic disruptions.



## Altadena Community Garden Annual Picnic & Resource Fair

Once again we had the pleasure of participating in the Altadena Community Garden Picnic. This annual event attracts participants and guests from Altadena and communities throughout the San Gabriel Valley.

Supporting our community while promoting water conservation is something we looks forward to.









#### WATER SALES AND PRODUCTION FOR 2014 IN ACRE FEET

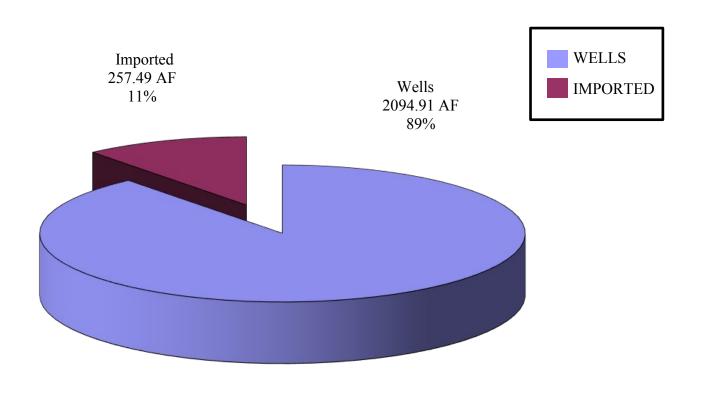
MONTH	IMPORTED WATER PURCHASE	WELL PRODUCTION	LOCAL SURFACE WATER	TOTAL PRODUCTION	LEASE WATER DELIVERY	SALES	RAIN FALL (INCHES)
January	0	188.01	0	188.01	0	152.08	0.21
February	0.21	149.08	0	149.29	0	151.33	2.71
March	0	140.15	0	140.15	0	116.89	3.15
April	8.15	176.98	0	185.13	0	149.05	0.96
May	24.61	212.46	0	237.07	0	188.14	0.01
June	47.84	201.74	0	249.58	0	212.34	0
July	49.43	205.19	0	254.62	0	221.90	0
August	40.17	194.47	0	234.64	0	214.67	0
September	47.4	180.92	0	228.32	0	220.91	0
October	39.01	173.05	0	212.06	0	211.32	0
November	0.67	162.72	0	163.39	0	168.82	1.54
December	0	110.14	0	110.14	0	128.76	6.30
TOTAL	257.49	2094.91	0	2352.40	0	2136.19	14.88

<b>PUMPED FRO</b>	OM WELLS	Total Production	2352.40
WELL #2	044.15	Total Sales	-2136.19
WELL #3	944.15	Subtotal	216.21
WELL #5	1150.76	<b>Treatment Plant Operation</b>	-75.07
TOTAL	2094.91	& Water Quality Control Non-Sales Production	141.14 or 6%

**Non-Sales Production** is water used for routine water quality sampling, evaporation from reservoirs, irrigating at Company sites, flushing of dead ends, 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.

#### 2014 WATER PRODUCTION BY SOURCE



Wells 2,094.91 AF Imported 257.49 AF Total Production 2,352.40 AF

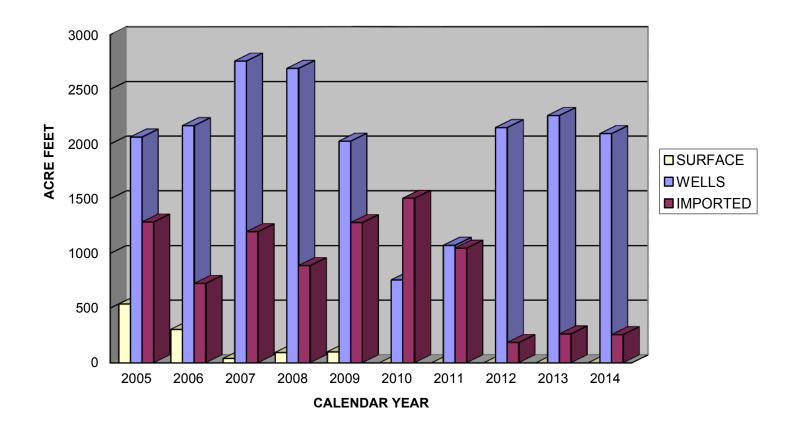
# ENERGY COST BY PUMPING STATION AND WELLS 2010 - 2014

	2014 ANNUAL	2013 ANNUAL	2012 ANNUAL	2011 ANNUAL	2010 ANNUAL
PUMPING STATIONS	ENERGY COST	ENERGY COST	ENERGY COST	ENERGY COST	ENERGY COST
WELLS	COST/AF	COST/AF	COST/AF	COST/AF	COST/AF
Well#3	\$65,176.53	\$54,368.65	\$34,069.28	\$30,563.48	\$36,402.62
(Pump to Main Plant)	\$69.03	\$54.92	\$49.28	\$51.01	\$48.05
Well #5	78,535.78	67,918.96	61,223.37	33,115.82	2667.87
(Pump to Main Plant)	68.25	53.42	41.95	69.74	0
Main Plant	138,605.32	130,538.65	94,853.41	81,883.47	85013.01
(Pump to Glenrose Resv.)	57.45	52.49	43.78	38.22	37.62
Glenrose Reservoir	47,151.47	53,564.53	42,982.41	41,362.66	45390.84
(Pump to Wapello Resv.)	39.72	39.63	39.87	41.32	44.89
Wapello Reservoir	51,110.93	53,439.08	44,314.94	44,994.53	50063.00
(Pump to Ware & La Vina & Swigart Resv.)	48.77	44.98	50.95	51.33	56.94
Ware Reservoir	21,049.34	22,370.95	20,205.52	19,959.09	21545.74
(Pump to Coulter Resv.)	88.52	66.03	63.48	63.87	69.40
	(New TOU Kate)				
TOTAL ANNUAL ENERGY COST	\$401,629.37	\$382,200.82	\$297,648.93	\$251,879.05	\$241,083.08

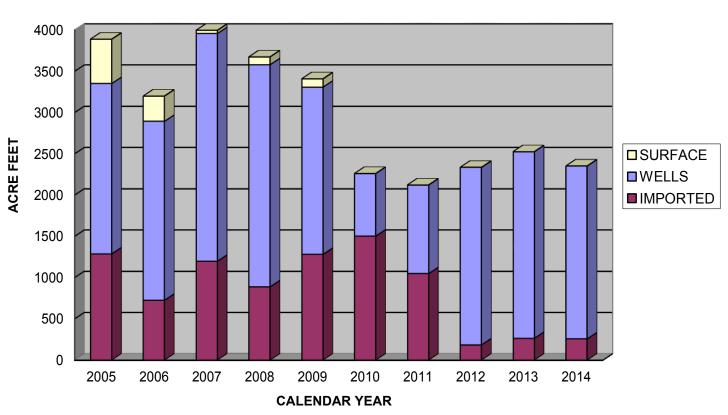
# ANNUAL PRODUCTION IN ACRE FEET 2005 - 2014

WELL #3	SURFACE IMPORTED PROD	TOTAL	LESS LEASE WATER	ACTUAL PRODUCTION	RAINFALL (INCHES)
			DELIVERY	(LINCOLN)	
1150.76	0 257.49	2352.40	0	2352.40	
1271.38	0 264.35	2525.61	96.39	2429.22	
1459.58	0 185.33	2336.19	0	2336.19	
474.85	0 1048.62	2122.64	0	2122.64	
0.03	0 1504.14	2261.85	108.70	2153.15	
756.55	100.55 1281.62	3408.68	915.40	2493.28	
1311.92	94.56 888.76	3674.99	944.90	2730.09	
1360.11	39.16 1198.16	3996.16	968.50	3027.66	
984.60	305.70 725.70	3199.90	269.60	2930.30	
691.40	536.60 1287.60	3888.20	1141.30	2746.90	

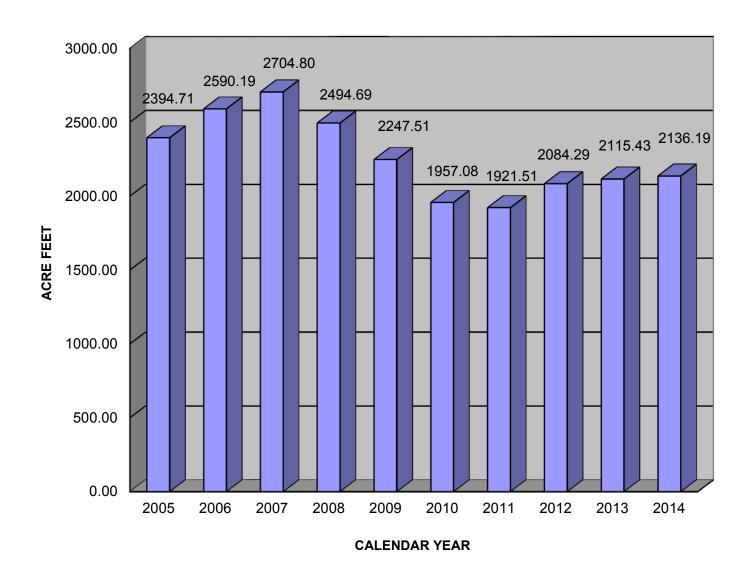
#### ANNUAL PRODUCTION BY SOURCE - SURFACE, WELLS & IMPORTED



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



#### ANNUAL WATER SALES IN ACRE FEET 2005 - 2014



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

New service connections installed in 2014	3
Meters replaced in 2014	393
Distribution system service connections in 2014	4470
2014 average consumption per meter per day - Residential	374 gal.
2014 average consumption per meter per day - Commercial	1628 gal.
2014 average consumption per capita per day - Residential	107 gal.

#### NUMBER OF METERS BY SIZE

TOTAL	4470
4"	3
3"	5
2"	70
1½"	28
1"	352
3/4"	820
5/8"	3192

#### WELL PRODUCTION CAPACITY

Well #3 (drilled 1924) 900 GPM

Well #5 (drilled 1971) 1100 GPM

#### **DISTRIBUTION LINES IN LINEAR FEET**

Distribution System 288,323

**Pumping Lines** 18,128

> 306,451 or 58 miles TOTAL

#### ANNUAL CANYON WATER BASIN RECHARGE IN ACRE FEET

#### **CANYON WATER BASIN RECHARGE**

Millard\* Station Fire Disruption

Swigart 0

El Prieto\* Station Fire Disruption

Millard/La Vina 108.79

TOTAL 108.79

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.

\*As a result of the devastation caused by the 2009 Station Fire, Lincoln Avenue stream gauging facilities in Millard and El Prieto Canyons are currently off-line.

#### **WATER QUALITY**

California Department of Public Health (CDPH) 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 CDPH water quality standards at all times during 2014.

#### BOARD OF DIRECTORS FOR THE YEAR 2014



#### JOHN C. CLAIRDAY

#### **PRESIDENT**

John C. Clairday, a graduate of the University of Southern California and Loyola Law School, has served on Lincoln Avenue's Board since 1993. A former public high school teacher, Mr. Clairday presently works for the Metropolitan Water District of Southern California. Prior to becoming Manager of Metropolitan's Real Property Group, Mr. Clairday was a Chief Deputy within the Office of the General Counsel.



#### **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 three 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 served a portion of 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 47-year Altadena resident. Mr. Duncan is entering his 14th year as a member of the Lincoln Board and also serves as the Company's Community Liaison Officer.



#### ANN R. DOUGHERTY

#### **ASSISTANT SECRETARY**

Ann R. Dougherty is a retired Management Consultant. She worked as an Executive Director for various non-profit organizations for 26 years. She currently serves on the Board of Directors for the San Gabriel Valley Habitat for Humanity where she has been involved for 17 years. She is a 43-year resident of Altadena.



#### **DIEGO FERNANDEZ**

#### **DIRECTOR**

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, Dona Rosa Bakery & Taqueria along with Rose City Catering. Mr. Fernandez brings a broad array of business and management skills to Lincoln Avenue. Mr. Fernandez has lived in Altadena for the past 9 years and was appointed to the Board in 2014.

# Office Staff



Maria Roxanna Autran
Office Supervisor oversees Bookkeeping/
Accounting and all administrative compliance.



Wendy Childs Customer Service Representative, Water Stock Clerk and Water Conservation Coordinator.



Jennifer Betancourt Water Quality Coordinator and Assistant Office Supervisor, oversees all areas of water quality compliance.



Jesus Bugarin Customer Service Representative and Administrative Assistant.

# Field Staff



Left to right:

Jose Gonzalez, Field Representative Michael Crowe, Field Representative Randall Chew, Field Representative David Castillo, Field Representative

Michael Cotter, Foreman

Jack Harms, Field Representative

Asia Smith, Foreman