




Los Angeles
Department of
Water & Power

RESOLUTION NO. _____

BOARD LETTER APPROVAL



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Water System



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Date: December 10, 2015

SUBJECT: Proposed Water Rate Ordinance

The first attached Board Resolution requests City Council (Council) approval of a proposed Water Rate Ordinance (Ordinance), which adopts the proposed rates and rate structures outlined in this letter, as well as enhanced performance and accountability measures. See Appendix 1.

The second attached Board Resolution approves projected Water System expenditures for inclusion in various adjustment factors of the proposed Ordinance for the 12-month period commencing April 1, 2016. This would supersede the expenditures approved by the Board of Water and Power Commissioners (Board) on December 1, 2015. See Appendix 12.

The third attached Board Resolution adopts an official notice and directs that it be mailed to comply with Proposition 218's legal requirements. See Appendix 13.

SUMMARY

Los Angeles is at a crossroads with regard to its water future. The ability to weather what may be the "new normal" of prolonged drought requires changes for all. In addition, the rapidly aging infrastructure of the Los Angeles Department of Water and Power (Department or LADWP), much of which was installed during Los Angeles' boom years of the 1920-70's, now requires an accelerated replacement.

Water has become a precious resource in California, and the proposed Ordinance provides an appropriate allocation of costs, conservation and cost-based price signals, and the revenues necessary to address the related challenges.

This Summary serves to provide a high level review of the proposed rate action and is supplemented with additional detailed information and attachments.

The numbers referenced throughout this Board Letter reflect the most recent financial plan. These may differ slightly from previous public presentations as LADWP has made minor adjustments due to updated estimates, availability of Board approved budget numbers and the incorporation of feedback received from stakeholders. Additional information on these changes can be found in Chapter 6 of the Department's Report to the Ratepayer Advocate which is attached in Appendix 8.

Proposed Revenue Increases

LADWP's Water System has not had a base rate increase since the last water base rate action six years ago. LADWP has taken important steps to reduce the need for base rate increases, including major cost cutting initiatives, negotiating a new labor agreement, and securing lower cost financing. However, LADWP is at a point where rate increases are necessary.

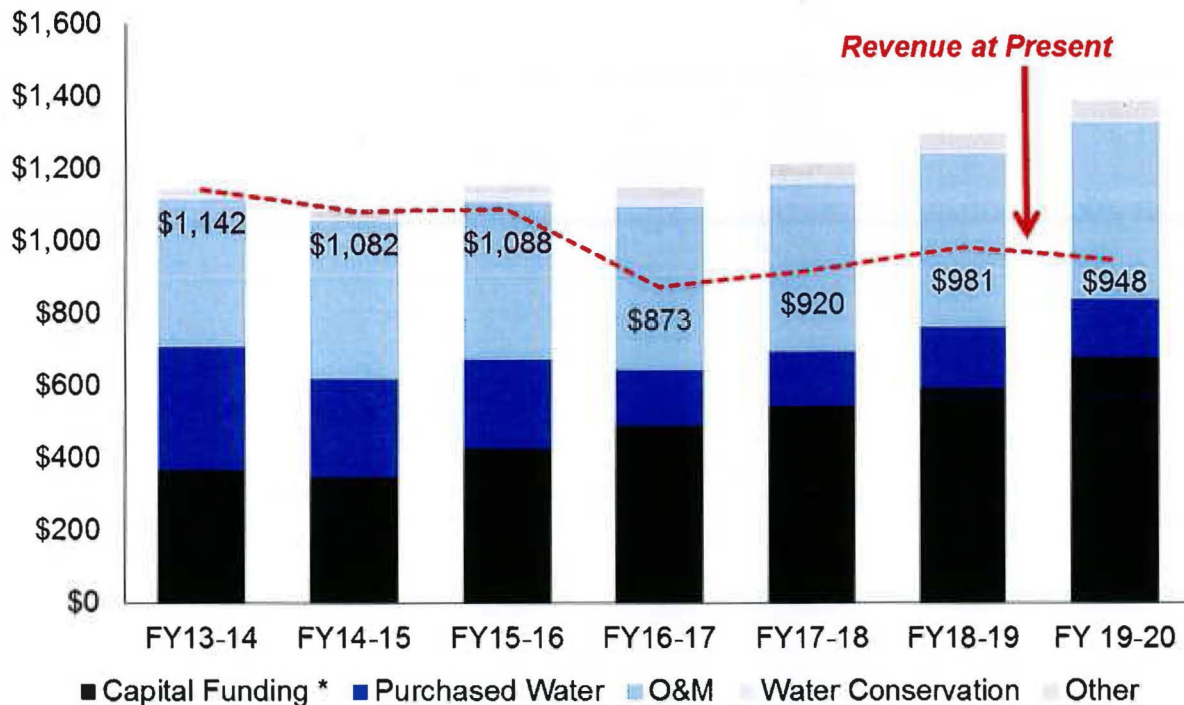
The proposed Ordinance includes conservation enhancing rates which will result in a 4.76 percent annual increase in the monthly bill of a "typical" Single-Dwelling Unit Residential Customer (12 HCF/month). This represents a system average annual rate increase of 5.26 percent, which will provide average annual revenue increases of \$66 million over the next 5 years for a total of approximately \$330 million.¹

The rates in the proposed Ordinance remain competitive with other California water utilities. The additional revenues will enable LADWP to cost effectively borrow approximately \$4.2 billion to help fund nearly \$7.9 billion of projects by leveraging today's historically low cost of capital and by maintaining LADWP's excellent AA water bond rating.

Without a rate action, LADWP will not accrue the necessary revenue to fund core planned LADWP programs. Figure 1 illustrates the potential revenue shortfall LADWP forecasts based on current planned expenditure levels and no rate increase over the proposed rate period.

¹ These amounts assume that there is a normal snowpack each year; actual rates may vary to reflect the impact of precipitation on water supply or for other reasons.

Figure 1: Revenue Shortfall (Given No Rate Increase, Including Purchased Water)



* All amounts based on income statement and capital funding include depreciation, net interest expense, and retained earnings.

Proposed Rate Restructuring

LADWP's existing rate ordinance is comprised of base rates and adjustment factors. Together, they create, except for Schedule E Service Availability Charges, a 100 percent volumetric rate (i.e. \$/HCF) that promotes conservation through allocation of water supply through tiers, such that cheaper water is provided for lower levels of consumption.

The resulting proposed Ordinance keeps the existing allocation structure with the following major improvements:

- **Water Infrastructure Adjustment (WIA)** – Created to provide “just in time” revenues dedicated solely to the replacement of aging infrastructure. This factor also increases transparency given that all qualifying infrastructure related costs and projects must be reported to the Board for review and approval annually.
- **From 2 Tiers to 4 Tiers** – A four tiered rate structure enhances water conservation price signals as the rate increases with each higher level tier of water (i.e. basic, efficient, high, and excessive). A multi-tier approach is the new normal for residential customers of California water utilities, with typical rate designs ranging from three to five tiers.

- Water Supply Cost Adjustment (WSCA) – This factor recovers the costs of all of LADWP's water supplies (i.e. groundwater, LA Aqueduct, Metropolitan Water District (MWD), and recycled water) and replaces the existing Water Procurement Adjustment (WPA) mechanism. The lowest cost water will be allocated to the lower consumption tiers described above. This cost-based approach complies with guidance relative to Proposition 218.
- Base Rate Decoupling – The Base Rate Revenue Target Adjustment (BRRTA) factor ensures that a minimum level of base rate revenues are recovered for general Water System (e.g. maintenance) and a portion of Joint System costs (e.g. Customer Service functions) as well as enables LADWP to promote water conservation. This provides additional revenues when water consumption is below forecast and returns money to LADWP's customers when water consumption is above forecast. This replaces the current Water Revenue Adjustment Factor (WRAF).

Other Rate Design Changes

Several changes to other adjustment factors are also proposed to establish more consistency and simplicity in the rate structure.

- The frequency of changes for the WQIA, Owens Valley Regulatory Adjustment (OVRA) and Low Income Subsidy Adjustment (LISA) factors will move from quarterly to semiannually to reduce the administrative cost and burden of factor changes, contact center training, and associated customer notifications.
- Since adjustment factors are tied to specific auditable costs with specific balancing accounts for each factor, caps are an administrative burden that impacts the alignment of costs and rates. As recommended by the RPA, all caps will be removed, except from the LISA factor.

Planned Investments

LADWP's plan intends to increase funding in the following categories:

Figure 2: Five-Year Spending Plan for Core Initiatives (O&M and Capital)

Historical Average Yearly Spend (\$M) ²	Core Initiative	Proposed Average Yearly Spend over Next Five Years (\$M)	Total Five-Year Spend (\$M)
\$306	Infrastructure Replacement	\$711	\$3,553
\$134	Supply Transition	\$382	\$1,912
\$299	Water Quality	\$272	\$1,362
\$103	Owens Valley Regulatory	\$209	\$1,045
\$842	Total	\$1,574	\$7,872

As can be seen from Figure 2 above, the major cost drivers and increases are in the categories of Infrastructure Replacement and Supply Transition. The Water Quality expenditures will be fairly level over the five years, as much of the work is currently underway.

The major elements of Supply Transition will assist in reducing Los Angeles' reliance on costly imported MWD water by 50 percent by 2025 as cited in the Mayor's Sustainable City Plan. These efforts include more: stormwater capture; recycled water; groundwater cleanup; and conservation.

The City of Los Angeles' water system was largely constructed between 1920 and 1970; therefore, much of the water infrastructure is approaching the end of its useful service life. The major elements of the Infrastructure Replacement work include: accelerated mainline replacements; rehabilitation of pipelines; seismic retrofits; and regulator station retrofits.

Customer Bill Impacts

Over five years, the "typical" Single-Dwelling Unit Residential Customer (12 HCF/month) monthly bill will see an average annual bill increase of \$3.02 or 4.76 percent.

However, since the citizens of Los Angeles have responded to the recent drought and the Mayor's call for conservation by further reducing consumption; the current average Single-Dwelling Unit Residential customer now only uses 10 HCF of water per month, which means that the actual bill impact will be lower than 4.76 percent. Typical customer bill impacts are summarized in Figure 3 below.

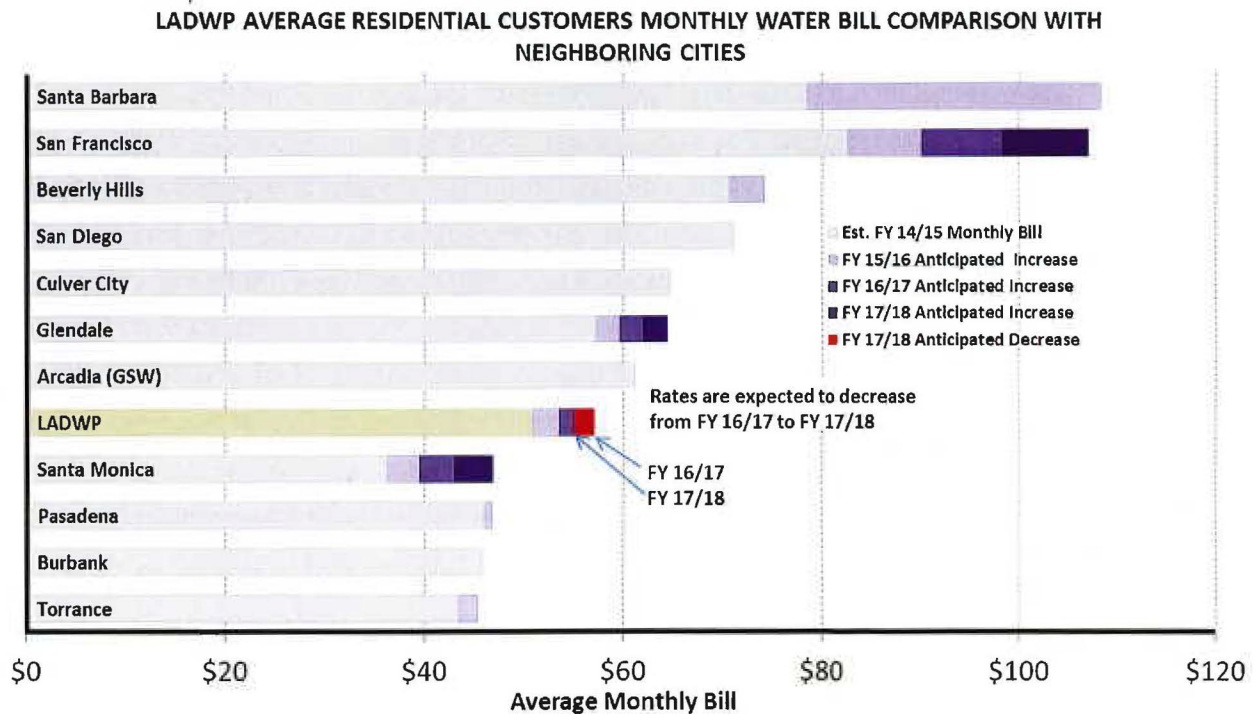
² Historical average based on FY 2012-13 and FY 2013-14.

Figure 3: Proposed Five-Year Water Rate Changes with Monthly Costs

	Low-Use Residential (8 HCF / month)	Typical Residential (12 HCF / month)	High-Use Residential (27 HCF / month)	Small Commercial (15 HCF / month)	Medium Commercial (80 HCF / month)	Large Commercial (500 HCF / month)
Current Monthly Bill	\$38.53	\$57.79	\$133.65	\$73.74	\$393.26	\$2,457.88
Five-Year Average Annual Rate Change	2.63%	4.76%	7.16%	3.79%	2.45%	2.33%
Five-Year Average Annual Monthly Bill Change	\$1.07	\$3.02	\$11.05	\$3.01	\$10.14	\$60.10
Average New Monthly Bill at the End of Five Years	\$43.87	\$72.90	\$188.89	\$88.81	\$443.96	\$2,758.37

The typical Single-Dwelling Unit Residential Customer's water bill will remain competitive with other California Utilities. Many other peer utilities have announced similar or larger rate increases as illustrated in Figure 4.

Figure 4: Average Residential Customers Monthly Water Bill Comparison



Cost of Service Study and Schedule F Customers

To ensure that the Water System's costs are being allocated appropriately to its various customer classes, LADWP completed a new marginal cost of service study. The results of the cost study indicate that LADWP's allocation of its costs was substantially in line with its marginal costs except for the Schedule F customers (which includes the City of Los Angeles Department of Recreation and Parks). The proposed Ordinance includes a phase-in of rate changes during the five-year rate period to bring Schedule F revenues up to the appropriate levels. LADWP has been working with these customers to identify water savings opportunities.

Actions to Reduce Size of Rate Increases

LADWP has undertaken several cost savings efforts that have helped to avoid base rate increases for the past six years as well as help to limit the size of future rate increases. These actions include, but are not limited to, the following:

- **Cost Reduction Plan** - LADWP, as a whole, has exceeded its three-year Cost Reduction Goal and saved over \$466.9 million from FY 2011-12 through FY 2013-14. Savings have been primarily accrued through: overtime reductions, vacancy and attrition based labor savings; non-labor operating savings; and capital cost savings.
- **New Labor Agreement** – Executed in 2013, this will save \$456 million through September 2017 and approximately \$5 billion over the next 30 years. The majority of these savings will be a result of salary savings. LADWP also identified a unique opportunity to place new hires in a new Tier 2 pension that provides for a reduced pension calculation. Approximately 58 percent of the workforce will be eligible to retire in ten years. Therefore, savings will be significant as more new hires take the place of retiring employees.
- **Benchmarking** – In February 2015, LADWP completed an initial high level benchmarking study. The study is the first of a three phase, comprehensive benchmarking analysis designed to evaluate LADWP's performance relative to peer utilities from throughout the United States. The initial study revealed favorable comparative performances in several areas of operational significance. These included Total Operations and Maintenance (O&M) costs metrics as well as reliability metrics measuring planned/unplanned water service disruptions. The initial benchmarking study findings were also used as a "road map" to identify areas for more in-depth analysis as part of the Phase II study which commenced in October 2015. In response to the aforementioned benchmark findings, tens of millions in sustained cost savings and revenue collections will be realized and used to mitigate the need for future rate increases for LADWP customers.
- **Securitization** – Financing qualifying water quality projects through a proposed Joint Powers Authority (JPA) is expected to reduce the Water System's cost of borrowing by around 25 basis points for qualifying projects beginning in FY 2016-17. This would result in a reduction of approximately \$188 million in costs that would not have

to be passed through to the customers over the next five years. LADWP is currently working out the final details.

- State Water Bond Funds - LADWP is currently in the process of applying for \$317 million in grants under Proposition 1 (State Water Bond) to support the San Fernando Groundwater Basin Remediation Project. The Project will remove contamination to restore and protect the full use of the groundwater basin consistent with water rights and historic groundwater use. Statewide, only \$800 million will be available through 2021 for this type of work. LADWP is working proactively with State Board staff to provide input on program guidelines to optimize State Water Bond funding for the City.
- State Zero Percent Loans - LADWP has benefited from the State of California's Safe Drinking Water State Revolving Fund (SDWSRF) to fund water quality projects. These funds are administered by the California Department of Public Health and require a competitive application process. It is estimated that a total of \$338.7 million (present value dollars) has been saved in avoided interest costs since program inception in 2002.

Office of Public Accountability / Ratepayer Advocate's Navigant Report

- Attached as Appendix 5 is the Office of Public Accountability's (OPA) Navigant report on the proposed Ordinance. The Executive Summary of that report notes the following: *"The Department is facing a number of critical and time-sensitive challenges that need to be addressed over the Study Period. These challenges include replacing and upgrading its aging infrastructure, reducing reliance on purchased water, increasing local water supplies, and maintaining regulatory compliance. Addressing these challenges while continuing to provide safe and reliable water to the ratepayers requires an increase of the Water System's revenue requirements."* Pg. 1
- *"Navigant assessed project plans for each key capital program and found that these plans align with local, state, and federal mandates and guidelines. Moreover, the proposed budgets for these programs appear to be reasonable given the significant amount of work that needs to be done to address the aforementioned challenges....The rate levels requested here represent a reasonable balance between minimizing the rate impact of such vast programs and continuing to keep up with the upgrading the water infrastructure."* Pg. 2
- *"In addition to funding needed capital programs, a rate increase is necessary to avoid the negative financial ramifications associated with a bond rating downgrade and increased interest costs."* Pg. 2
- *"Specifically, the Department's proposed revenue allocations for Schedules A, B, and C are in line with the COSS [Cost of Service Study] and the revenues for Schedule F are expected to be close to the COSS findings by FY 2019-20."* Pg. 3

- *“The Department, expanding on the recommendations of the OPA, the City Administrative Officer (“CAO”), and the Chief Legislative Analyst (“CLA”), directly addresses these [IEA] recommendations in the final proposed ordinance which will significantly increase transparency and accountability at the Department. In particular, the ordinance has defined a new, bi-annual reporting process that highlights the link between rates and progress on key capital programs and if necessary, adjusts rates based on the performance of these programs.” Pg. 2*
- ***“Based upon the findings noted above, Navigant found the proposed rate increase to be reasonable and well supported.” Pg. 3***

LADWP appreciates the findings of the OPA / Navigant Report (Report) as it articulates and acknowledges the challenges and opportunities that we face, and verified the corresponding revenue requirements, to meet the need to replace our aging infrastructure and meet our regulatory mandates. LADWP has worked alongside the OPA / Navigant and the City to address one of the Report's primary concerns regarding accountability, transparency, and performance and will continue to work through the specific recommendations in the Report to ensure that the full benefit of this review is captured.

Response to Council Recommendations

On September 19, 2012, the Council's Energy and Environment Committee adopted a report with ten recommendations associated with third-party review of LADWP's Incremental Electric Rate Ordinance. While these recommendations were directed at the LADWP Power System, several items have relevance to the Water System. Programs or other activities have been developed to address all of the recommendations. While some activities are ongoing, LADWP has made significant progress in each area. In some cases, the nature of the recommendations and the activities to address them are long-term, requiring continued efforts. Therefore, a summary of the activities and the present status for each applicable recommendation is included in Appendix 7 to the extent the specific item directly impacts the Water System's operations and revenue requirement.

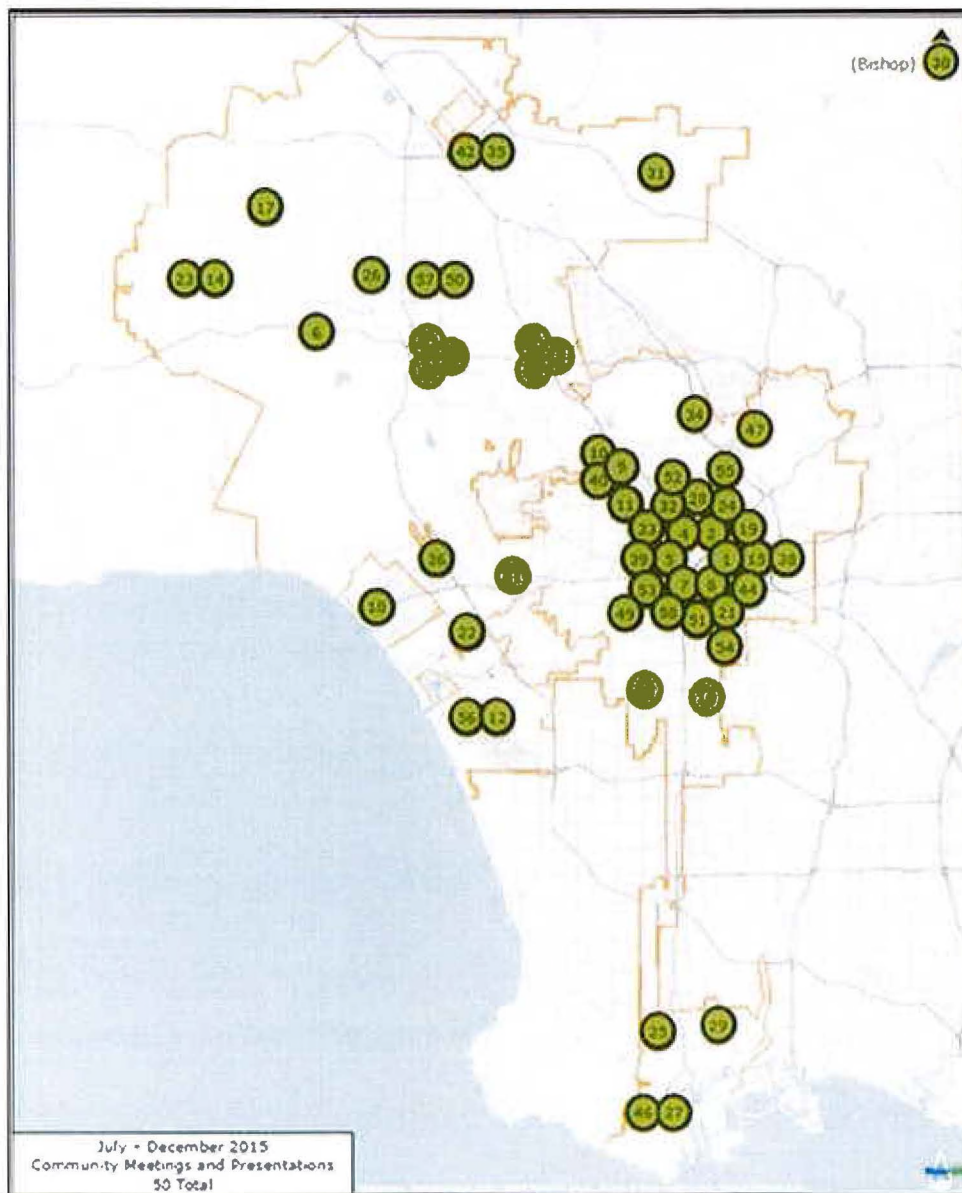
Public Outreach and Other Input

LADWP is one of the few Departments that serves all of the residents and businesses in Los Angeles on a daily basis. As a provider of vital services and one of the economic drivers in Los Angeles, LADWP fully understands the responsibility it has to all of its stakeholders.

Therefore, in addition to meeting regularly with the OPA, the City Administrative Officer, and the Chief Legislative Analyst, LADWP has also made significant efforts to engage the public as represented by the Neighborhood Councils, Chambers of Commerce, other business groups, environmental groups, academic institutions and other key stakeholders.

In order to make information easily accessible as well as solicit feedback, LADWP has reached out to its stakeholders through a variety of channels, including public meetings, webinars and videos. Over the last five months, over 55 public meetings were held at numerous locations throughout the City and in the Owens Valley as illustrated in Figure 5. Information related to the rate cases is also available to the public on the comprehensive website that LADWP set up specifically to support the public outreach process.³

Figure 5: Public Outreach Summary of Meetings



³ <http://www.myladwp.com/>

Water Adjustment Factor Expenditures

The attached Resolution, found in Appendix 12, approves expenditures for inclusion in the Water Supply Cost Adjustment (WSCA), Water Quality Improvement Adjustment (WQIA), Owens Valley Regulatory Adjustment (OVRA), and Water Infrastructure Adjustment (WIA) rate components based upon the proposed Ordinance commencing April 1, 2016. Detail regarding expenditures is included in Appendix 2. These expenditures are used to calculate factors that recover costs of providing water service to customers. The recovery of these factors funds the Local Water Supply plan of the Water System, improves water quality throughout the City of Los Angeles, allows replacement of aging infrastructure and provides security to the Water System. The WSCA, WQIA and OVRA factors will be adjusted every six months, and the WIA will be adjusted each year, based on changes in these costs, and all are subject to review by the Board and the Office of Public Accountability.

Conclusion

The proposed Ordinance includes rate increases and the revised rate structure that will enable LADWP to increase revenues to fund vital infrastructure projects, develop a more sustainable local supply in the face of drought and continue to meet mandates while allocating those costs appropriately and providing conservation price signals. It also includes enhanced requirements to report on LADWP's performance in a more structured manner.

LADWP is requesting that the proposed rate increase take effect beginning April 1, 2016. To gradually account for the delay in implementation from the start of the current fiscal year, any shortfall will be recovered through the new revenue decoupling mechanism in the BRRTA factor over a two-year period (January 1, 2017 – December 31, 2018).

In addition to the Summary, the Background and Detail Section included below expands on each of the aforementioned topics and provides additional details in the following manner:

- Proposed Revenue Increases;
- Proposed Rate Restructuring;
- Planned Investments;
- Customer Bill Impacts;
- Cost of Service Study and Schedule F;
- Major Water System Achievements;
- Office of Public Accountability / Ratepayer Advocate Report;
- Response to Council Motions;
- Public Outreach and Other Input; and
- Water Adjustment Factor Expenditures.

Attachments for Approval

The following resolutions are attached for Board approval:

- Board Resolution with proposed Water Rate Ordinance (Appendix 1);
- Board Resolution for Water Adjustment Factor Expenditures (Appendix 12); and
- Board Resolution to mail Proposition 218 notice (Appendix 13).

Informational Attachments

The following additional appendices are included to provide additional information to the Board as outlined in this Board Letter.

- Water Adjustment Factor Expenditures (Appendix 2);
- Final Proposed Rates (Appendix 3);
- Summary of Rates / Proposition 218 Notice (Appendix 4);
- Ratepayer Advocate Report on Proposed Rate Action (Appendix 5);
- Deleted (Appendix 6);
- Response to Council Recommendations (Appendix 7);
- Department's Report to the Ratepayer Advocate with Appendices (Appendix 8).
- Revised Financial Plan Case Number 94 (Appendix 9);
- Detailed Metric Reporting Process (Appendix 10); and
- Summary of Public Outreach (Appendix 11).

RECOMMENDATION

It is recommended that your Honorable Board adopt the attached Resolution authorizing execution of the proposed Ordinance and recommending the Los Angeles City Council's approval of that ordinance. It is also recommended that your Honorable Board adopt the attached Resolution approving projected Water System expenditures for inclusion in various adjustment factors of the proposed Ordinance for the 12-month period commencing April 1, 2016. Finally, it is recommended that your Honorable Board adopt the attached Resolution approving an official notice concerning the proposed Ordinance and directing that the notice be mailed to comply with Proposition 218's legal requirements.

BACKGROUND AND DETAIL

LADWP supplies water to nearly four million citizens of Los Angeles through the operation of over 7,200 miles of water transmission and distribution mains. Los Angeles is at a crossroads with regard to its water future. The ability to weather what may be the "new normal" of prolonged drought requires changes for all. In addition, the rapidly aging infrastructure of LADWP, much of which was installed during Los Angeles' boom years of the 1920-70's, now requires an accelerated replacement.

Since the last water base rate action in 2009, LADWP has taken important steps to reduce the need for base rate increases including major cost cutting initiatives, negotiating a new labor agreement, and securing lower cost financing. However, LADWP is at a point where rate increases are necessary to:

- Provide reliable and sustainable local water supply for the four million Los Angeles residents;
- Meet ongoing regulatory obligations;
- Continue improving customer service; and
- Maintain financial stability.

LADWP's proposed rate structure and rates will allow LADWP to meet the abovementioned objectives and obligations while also:

- Introducing a four-tier rate structure for Residential customers to enhance price signals that will continue to encourage conservation;
- Establishing a WSCA factor to incorporate all costs and sources of water supply;
- Implementing a WIA factor to provide revenue dedicated to improving system reliability;
- Revising the base rate decoupling mechanism to be symmetrical - recover base rate revenue shortfall or credit customers for base rate over-collection; and
- Maintaining competitive rates relative to peer utilities.

Proposed Revenue Increases

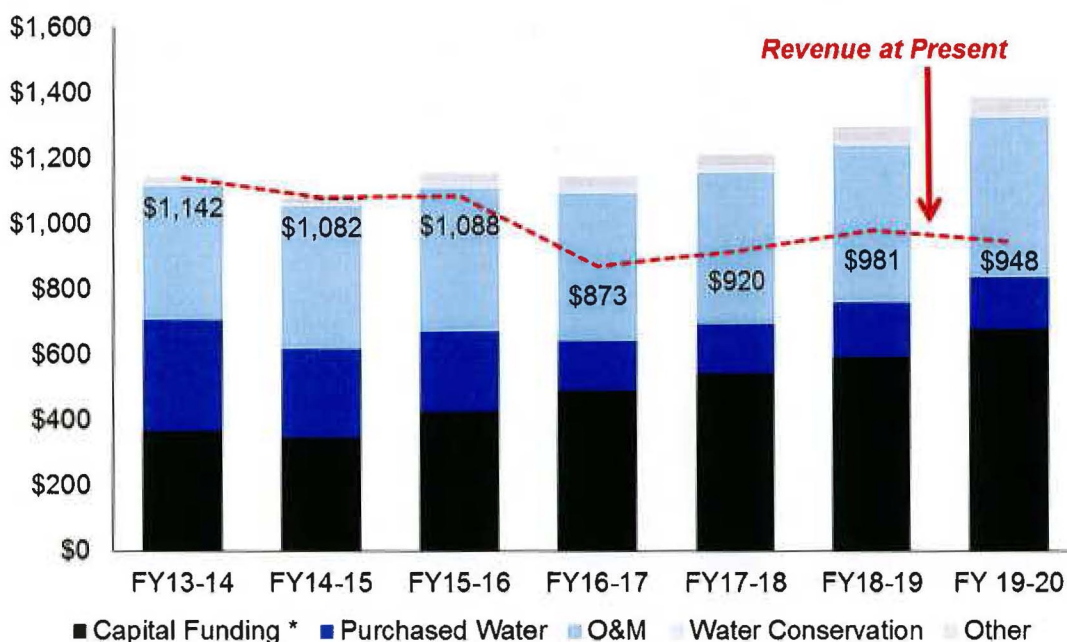
The major LADWP accomplishments to date have enabled reliable service while avoiding an increase to the Water System's base rates since 2009. However, LADWP has forecasted that, despite cost cutting efforts, the mix of investments needed over the next five years requires an increase to LADWP's revenue requirement.

The proposed Ordinance includes conservation enhancing rates which will result in a 4.76 percent annual increase in the monthly bill of a "typical" Single-Dwelling Unit Residential Customer (12 HCF/month). This represents a system average annual rate increase of 5.26 percent which will provide average annual revenue increases of

\$66 million over the next five years, for a total of approximately \$330 million.⁴ The additional revenues will enable LADWP to cost effectively borrow approximately \$4.2 billion to help fund nearly \$7.9 billion of projects by leveraging today's historically low cost of capital and by maintaining LADWP's excellent AA water bond rating.

Without a rate action, LADWP will not accrue the necessary revenue to fund core planned LADWP programs. Figure 6 illustrates the potential revenue shortfall LADWP forecasts based on current planned expenditure levels and no rate increase over the proposed rate period.

Figure 6: Revenue Shortfall (Given No Rate Increase, Including Purchased Water)



* All amounts based on income statement and capital funding include depreciation, net interest expense, and retained earnings.

If incremental revenue is not available, LADWP would be in jeopardy of not meeting its mandatory regulatory and legal obligations without a significant deterioration in financial stability. Therefore, without the proposed rate increases, LADWP would be required to make cuts in programs that are critical but not directly tied to regulatory mandates, such as increased pipeline replacement, building sustainable local water supply, and continued customer service improvements.

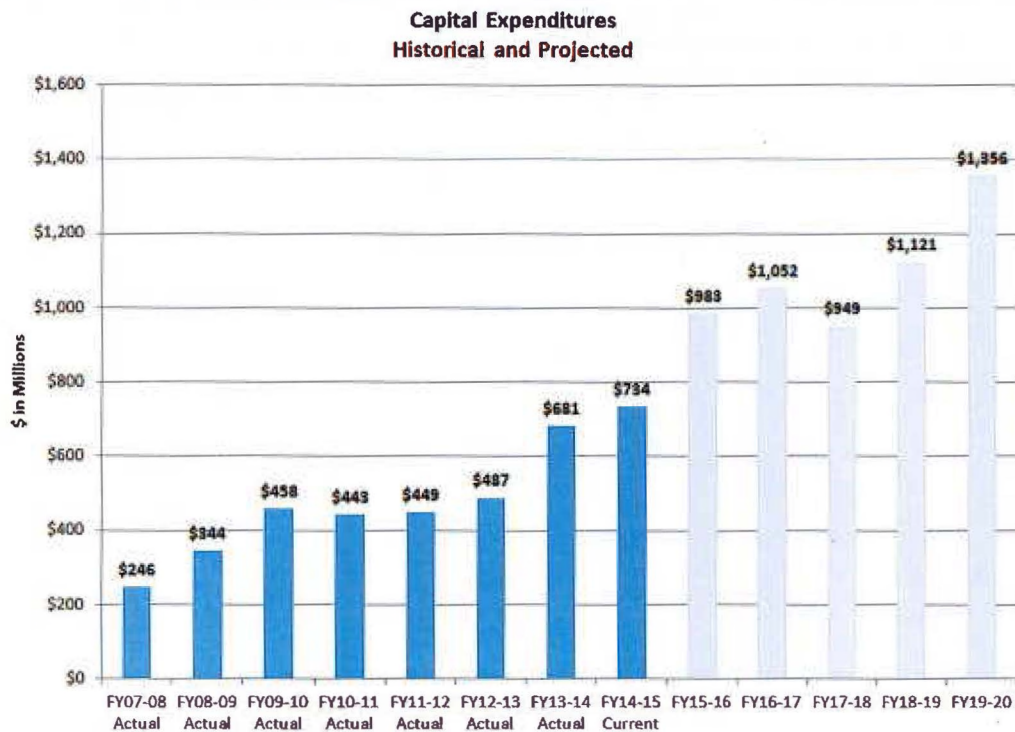
In addition, realization of the expected benefits of the new rate design, including, but not limited to the enhancement of price signals for conservation and alignment of rates with the cost of service study results, will be delayed. Furthermore, implementation of the new WSCA factor established to better align tiered rates and costs as guided by a recent judicial decision related to Proposition 218 would be postponed.

⁴ These amounts assume that there is a normal snowpack each year; actual rates may vary to reflect the impact of precipitation on water supply or for other reasons.

Ultimately, in case of further delays, LADWP would likely need to request a substantially larger rate increase in the future to cover both the cost of current programs described herein, and further improvements in infrastructure reliability and local water supply.

As shown in Figure 7, proposed capital spending will increase by an average of \$124 million annually over the next five years (FY 2015-16 through FY 2019-20).

Figure 7: Capital Expenditures Historical and Projected



To finance these expenditures, LADWP will increase borrowing. Debt service cost levels are projected to increase from \$263 million in FY 2015-16 to \$491 million by FY 2019-20 (an increase of nearly \$230 million in 5 years) as shown in Figure 8.

Figure 8: LADWP Projected Securitization and Non-Securitization Borrowing

	Historical			Projection					
	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	2015-2020
LADWP Borrowing (Non-Securitized)	\$352	\$509	\$399	\$749	\$334	\$359	\$569	\$703	\$2,715
Borrowing for Securitization	\$0	\$0	\$0	\$0	\$428	\$320	\$335	\$393	\$1,476
Borrowing (Total)	\$352	\$509	\$399	\$749	\$762	\$679	\$904	\$1,096	\$4,191
Debt Service	\$192	\$203	\$214	\$263	\$302	\$328	\$351	\$394	\$1,638
Debt Service for Securitization	\$0	\$0	\$0	\$0	\$28	\$49	\$71	\$97	\$245
Debt Service (Total)	\$192	\$203	\$214	\$263	\$330	\$377	\$422	\$491	\$1,884

Meeting Board approved financial metrics for capital structure/leverage and cash flow is crucial for LADWP to maintain its favorable bond rating. These metrics provide critical points of reference for assessing financial risk and help preserve favorable borrowing rates for capital investment. Given the level of expected borrowing to finance capital projects, minimizing interest rates is critical for maintaining reasonable customer rates.

LADWP's revenue requirement and proposed rates are developed to meet the following Board approved metrics: (i) maintain a minimum debt service coverage at 1.70 times, (ii) maintain a minimum operating cash target of 150 days of operating cash, and (iii) maintain a debt-to-capitalization ratio of less than 65 percent. These criteria are set by the Board based on advice from PRAG, LADWP's financial advisor, and input from rating agencies such as Moody's. Figure 9 provides the projected cash on hand, debt service coverage ratio, and capitalization ratio based on LADWP's financial plan.

Figure 9: Financial Metrics for the Proposed Five-Year Rate Plan

	Board Approved Target	Proposed Rate Period					
		FY 15-16	FY16- 17	FY17- 18	FY 18-19	FY 19-20	Five-Year Average
Operating Cash (in millions)	N/A	\$296	\$282	\$268	\$278	\$279	\$281
Debt Service Coverage	1.70	1.78	1.70	1.70	1.70	1.70	1.72
Capitalization Ratio (%)	65%	64%	64%	64%	64%	65%	64%

For additional details see the Financial Plan in Appendix 8.

Proposed Rate Restructuring

Water has become a precious resource in California, and the proposed Ordinance provides an appropriate allocation of costs, conservation and cost-based price signals, and the revenues necessary to address the related challenges.

The proposed rate structure will continue to be a combination of base rates and adjustment factors designed to align program costs and revenues. Rates will continue to be volumetric, except for Schedule E Service Availability Charges; however, several structural changes are proposed to increase the alignment of costs and revenues and encourage conservation. The proposed changes are designed to make the rate structure consistent across major customer classes while providing LADWP more certainty that revenue collected will cover costs.

In 2006, the California Supreme Court held that the requirements of Proposition 218, which introduced Articles XIII C and XIII D into the California Constitution, apply to domestic water service. Proposition 218's requirements include that rates shall provide no more revenue than necessary to cover LADWP's revenue requirement and proportionality. Several appellate courts have provided guidance as to the application of Proposition 218's requirements to water rates. Most recently, in *Capistrano Taxpayers Association v. City of San Juan Capistrano* (San Juan Capistrano Decision), the Fourth Appellate District of the California Court of Appeal suggested that usage of water supply costs was one appropriate approach for setting rate tiers that are consistent with Proposition 218's requirements. LADWP has considered these appellate decisions and the differential costs of providing water in establishing the proposed rates.

Tier Structure

In response to increased conservation efforts, many water utilities are increasing the number of tiers for residential customers to require high users to pay higher rates for excessive usage, while protecting low users from significant rate increases. A higher number of tiers is becoming common practice among California water utilities, as shown in Figure 10.

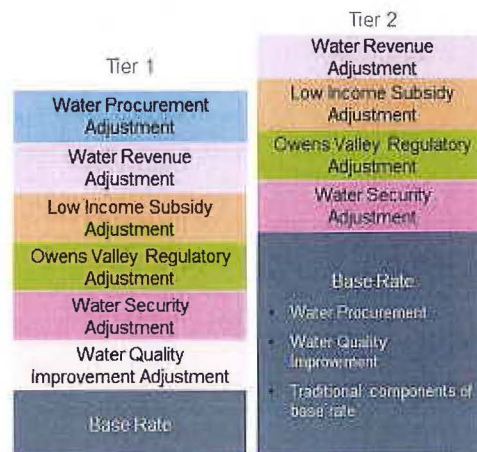
Figure 10: Examples of California Water Utility Residential Tier Structures

Water Agency	Number of Tiers	Water Agency	Number of Tiers
Long Beach	4	San Diego	4
Burbank	3	Simi Valley	3
Glendale	4	San Francisco	2
Pasadena	4	Irvine Ranch	4
East Bay Muni (Oakland)	3	Palmdale	6
San Jose	3	Western Municipal	5

LADWP now has the capability in its customer billing system to add additional tiers to the water rate design, which will provide new opportunities to design rates that achieve the conservation goals set by the Mayor.

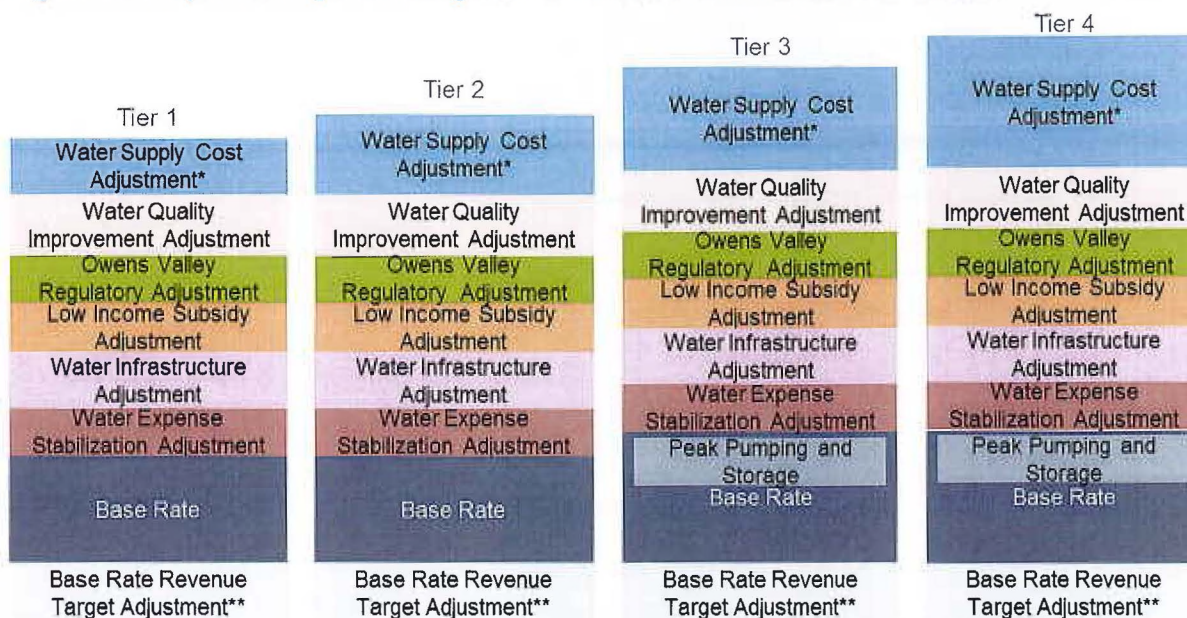
LADWP's proposed new Single-Dwelling Unit Residential rate design includes four tiers. Tiered rates are designed to increase the unit price as usage (and associated cost) increases. Combined with water budget allotments, tiered rates allow lower priced water to be provided for more essential needs and higher priced water to be provided for less essential needs. This design reflects the cost of service in which the cost to meet higher demands increases as demand increases. Figure 11 outlines the current overall rate structure for Single-Dwelling Unit Residential customers.

Figure 11: Current Single-Dwelling Unit Residential Customer Rate Structure



As shown in Figure 12, in the proposed four-tier rate structure for Single-Dwelling Unit Residential customers, each adjustment factor is applied separately to all tiers.

Figure 12: Proposed Single-Dwelling Unit Residential Customer Rate Structure



*Includes costs for all major supply sources including conservation and recycled water.

**Base Rate Revenue Target Adjustment could be positive (under-collection) or negative (over-collection).

Note: For simplification, the Water Security Adjustment (WSA) factor is largely consolidated with the Water Quality Improvement Adjustment (with a small amount shifted to base rates) to reflect the nature of programs included in the WSA.

Under the proposed rate design, tier rates are cost based, differentiated only by the costs of water supply and peak pumping and storage.

As part of its objectives to encourage conservation while simplifying the overall rate structure, LADWP is proposing to synchronize the rate structure for all tiers. While the Multi-Dwelling Unit Residential and Commercial, Industrial, Governmental and Temporary Construction (Commercial) rate structures will continue to be two-tiered, the rate elements in each tier for each major customer class will be the same as those shown in Figure 12, for the Single-Dwelling Unit Residential customer class.

LADWP already uses adjustment factors to associate elements of the rate structure to specific costs. However, currently the application of the WPA and WQIA factors is not consistent among the tiers. These factors are currently embedded in the tier 2 base rate for Single-Dwelling Unit Residential customers and the tier 2 high season base rate for Multi-Dwelling Unit Residential and Commercial customers, while these components are broken out as separate pass-through factors for tier 1 rates. When the expenses for purchased water and water quality programs were relatively small components of overall LADWP costs, embedding these costs in the tier 2 base rate was not a significant concern. However, since 1993, the WPA and WQIA have grown disproportionately compared to other components of LADWP's costs. The differential between tier 1 and 2 overall rates has decreased from 1.56 in FY 2008-09 to 1.20 in FY 2014-15. Therefore,

LADWP proposes to separate the WPA (to be replaced by the WSCA) and WQIA from the tier 2 base rates.

Specific Adjustment Factor Changes

Several changes and additions are proposed to the adjustment factors to increase the alignment of costs and revenues.

Water Infrastructure Adjustment (WIA)

Water utilities across the country are implementing specific rate elements to provide revenue to support the cost of replacing aging infrastructure. Similarly, LADWP's proposed WIA factor is a movement towards a more transparent funding mechanism for infrastructure reliability programs and will help ensure investments are made to improve the reliability of the water distribution system.

This factor recovers the capital costs associated specifically with these investments. The proposed WIA will align infrastructure costs and cost recovery in a transparent manner, ensure customers pay for only the expenditures actually incurred, provide LADWP the flexibility to shift investment among a portfolio of projects, and establish a specific balancing account to track costs associated with infrastructure projects, allowing easy reporting and auditing. This new factor is similar to Distribution System Investment Charges being implemented by other water utilities and regulators in many states. The WIA will be adjusted annually in July. LADWP will also be reporting to the Board on its performance in this area on a semi-annual basis.

Water Supply Cost Adjustment (WSCA)

In order to consider the differential costs associated with different sources of water supply, LADWP proposes to create the new WSCA factor to capture all costs of water supply and assign cost recovery to tiers and customer classes based on levels of usage.

The WSCA will replace the Water Procurement Adjustment. This new adjustment factor was created to correspond at a more granular level the rates for each tier in each customer class to water supply costs and available volume of water supply. It is designed based on the economic premise of cost causation that customers who cause costs must pay for these costs. As water usage increases, so does the cost of supply. Therefore, higher amounts of usage should result in higher customer rates through a higher WSCA.

Beginning with the least expensive water supply, each source of supply is assigned to each tier, based on the percentage of water demand of the tier. The cost per HCF of the various sources of supply is calculated based on LADWP's cost to provide the specific water supply, divided by the forecasted hydrologic supply (in HCF) of the specific source.

Decoupling - Base Rate Revenue Target Adjustment (BRRTA)

To ensure that the financial incentives for maximum water conservation are in place, LADWP proposes to implement a symmetrical decoupling mechanism for customer groups using the BRRTA factor. LADWP will set annual base rate revenue targets and track the over or under-recovery⁵ for customer groups. The BRRTA will be designed to collect additional revenue or credit over-collected revenue to customers based on the consumption of the specific customer groups. The BRRTA will be adjusted annually in January.

Decoupling is a standard utility solution to ensure the recovery of fixed costs while protecting customers from over-recovery of cost. Decoupling separates cost recovery from the usage underlying the calculated overall rate. If, after accounting for actual usage and revenue, designated costs are under-recovered, the decoupling mechanism adjusts rates to fully recover, but not over-recover, these costs. If usage is less than forecast, the decoupling mechanism adjusts rates to collect the shortfall; if usage exceeds forecasts, resulting in an over-recovery of fixed costs, customers receive a credit. With decoupling, the over or under-collection is resolved in the following accounting period, after actual revenue is known.

Water Security Adjustment (WSA)

In FY 2014-15, LADWP recovered \$60 million from the WSA. However, approximately 80 percent of these costs are associated with water quality programs. Therefore, LADWP proposes to eliminate the security factor and incorporate these water quality related costs into the existing WQIA factor with any remaining costs included in base rates. This change will help simplify the rate structure, while better matching cost recovery with rate factors.

Water Expense Stabilization Adjustment (WESA)

Preparing for unforeseen events such as earthquakes or major weather events is an important aspect of utility management. The purpose of the WESA is to maintain funds, representing approximately five percent of average annual capital expenditures, to help stabilize rates in the event of unforeseen events impacting water service delivery. The WESA will be designed to build up a balance of \$50 million by the end of FY 2016-17.

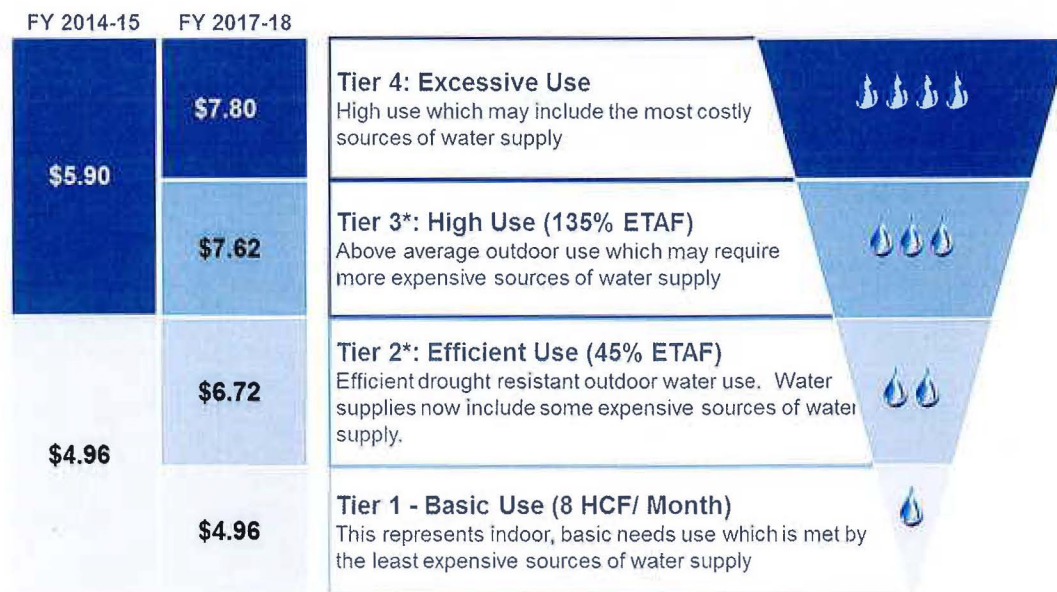
Tier Thresholds and Rates

The price difference across the tiers reflects the increasing cost of water supply at higher usage levels. LADWP's tier thresholds are guided by evapotranspiration adjustment factors (ETAFs), which determine the amount of water needed based on plants, turf, irrigation efficiency and climate. To address the current drought, LADWP has developed its tier 2 rate using an ETAF of 45 percent that reflects drought tolerant landscape. Tier 3 rates will be set using an ETAF of 135 percent to represent much less efficient irrigation and non-drought tolerant landscaping (which are generally grass

⁵ Previously, LADWP used a Water Revenue Adjustment (WRA) factor to collect only the under-recovery of base rate revenue.

lawns) in an effort to encourage customers to transition to a more efficient combination. Figure 13 illustrates the proposed ETAFs and corresponding tier rates. LADWP will observe how customer consumption patterns manifest under the proposed rates and will continue to review the ETAFs to ensure an ongoing conservation message.

Figure 13: Single-Dwelling Unit Residential Customer Proposed Tier Water ETAF



*Tier 2 and 3 allotments will also vary based on temperature zone and lot size.

Other Rate Design Changes

Several changes to other adjustment factors are also proposed to establish more consistency and simplicity in the rate structure.

- The frequency of changes for the WQIA, Owens Valley Regulatory Adjustment (OVRA) and Low Income Subsidy Adjustment (LISA) factors will move from quarterly to semiannually to reduce the administrative cost and burden of factor changes, contact center training, and associated customer notifications.
- Since adjustment factors are tied to specific auditable costs with specific balancing accounts for each factor, caps are an administrative burden that impacts the alignment of costs and rates. As recommended by the RPA, all caps will be removed, except from the LISA factor.

LADWP believes these changes collectively provide increased incentives for conservation in line with rate design guidance from the Blue Ribbon Commission (BRC), UCLA California Center of Sustainable Communities (UCLA Study) and industry standard practices.

Planned Investments

In developing the proposed rates, LADWP is committed to striking the right balance between continuing to meet regulatory requirements, providing reliable service, planning for a sustainable and secure water supply, and maintaining affordable rates. This section describes the nature, scope and importance of the key programs that contributed to the proposed costs, revenue requirements and rates. These programs include:

- Infrastructure Reliability
- Sustainable Local Water Supply
 - Customer Conservation
 - Recycled Water
 - Stormwater Capture
 - Groundwater Remediation and Clean-up
 - Bay Delta Conservation Plan
- Water Quality
- Purchased Water
- Owens Lake Dust Mitigation Program

Figure 14 illustrates the five-year spending plan for these core initiatives as compared to historical spending. Additional information on each core initiative is included below.

Figure 14: Five-Year Spending Plan for Core Initiatives (O&M and Capital)

Historical Average Yearly Spend (\$M)⁶	Core Initiative	Proposed Average Yearly Spend over Next Five Years (\$M)	Total Five-Year Spend (\$M)
\$306	Infrastructure Replacement	\$711	\$3,553
\$134	Supply Transition	\$382	\$1,912
\$299	Water Quality	\$272	\$1,362
\$103	Owens Valley Regulatory	\$209	\$1,045
\$842	Total	\$1,574	\$7,872

The major cost drivers and increases are in the categories of infrastructure replacement and supply transition. Water quality expenditures will be fairly level as much of the work is currently underway.

LADWP plans to spend a total of \$7,872 million on O&M and capital (excluding purchased water) over the next five years, as shown in Figure 15 and Figure 16.

⁶ Historical average based on FY 2012-13 and FY 2013-14.

Figure 15: Summary of Budgeted Capital Costs by Program

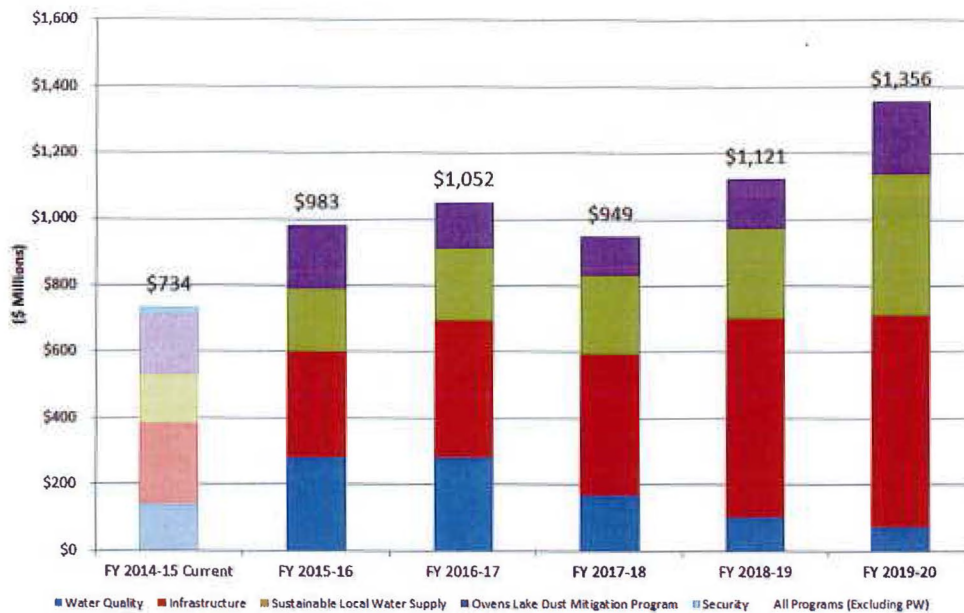
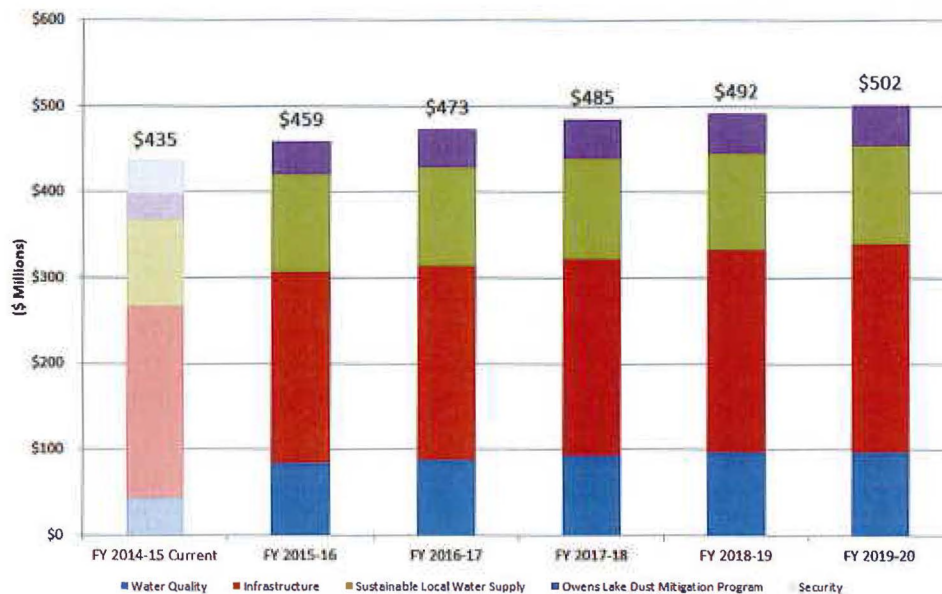


Figure 16: Summary of Budgeted O&M Costs by Program (Excluding Purchased Water)



Infrastructure Reliability

LADWP delivers water to its customers through a complex and expansive network. Much of LADWP's infrastructure is nearing the end of its useful life. Planned infrastructure investments over the next five years include, but are not limited to:

- Replace approximately one million feet of distribution mainline;
- Replace 25 large valves;

- Retrofit 20 pressure regulator and relief stations;
- Replace 125,000 small meters; and
- Conduct in-place refurbishments of the LAA system
 - Reline seven miles of cracked concrete;
 - Construct 10 cathodic protection stations;
 - Replace 15 miles of concrete lid;
 - Re-drill and replace 5-10 groundwater wells in Owens Valley; and
 - Replace and improve 10-15 old measuring stations.

These infrastructure investments are crucial if LADWP is to maintain high levels of reliability and water quality, minimize operational costs, and mitigate the high cost and inconvenience of service disruptions due to infrastructure failures. LADWP's experience shows that emergency repairs tend to cost over three times more than planned replacements; on average, pipeline breaks cost \$33,000 per incident, and often no mainline is actually replaced in emergency repair.

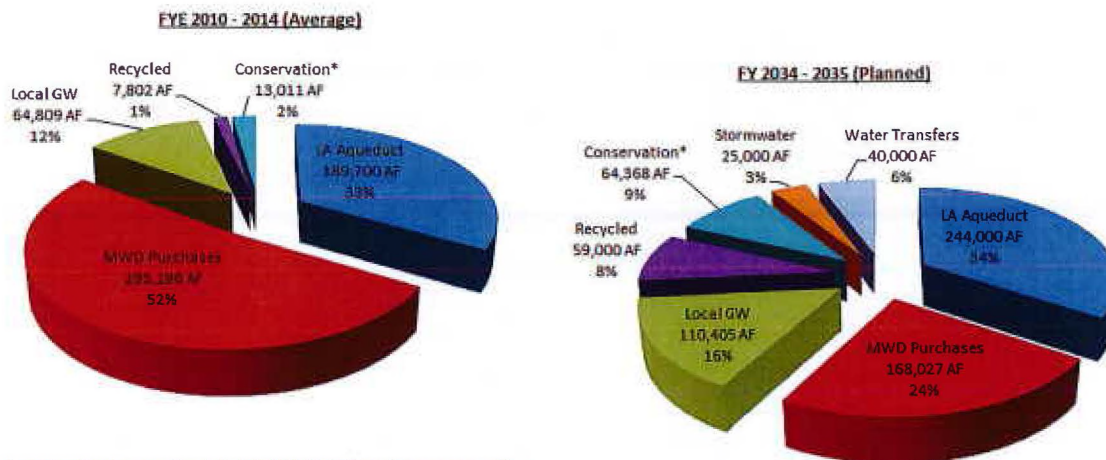
Sustainable Local Water Supply

Historically, LADWP has obtained the majority of its water supply from the Eastern Sierra Nevada Mountains (through the L.A. Aqueduct). This water source is entirely dependent on snowfall and highly volatile. In drought years, the shortfall in the water supply is supplemented through additional water purchases from the MWD. Both of these sources of supply, which come from hundreds of miles away, are becoming increasingly limited and expensive. In addition, the extent of their future viability is at risk due to legal and environmental mandates and threatened by climate change.

In order to mitigate the costs of expensive and at-risk purchased water and protect the interests of future generations, LADWP has long pursued a multi-pronged program to ensure a sustainable local water supply through increased conservation, groundwater production and use of recycled water. Figure 17 depicts the expected breakdown of water supply from the various sources in FY 2034-35 compared to the most recent five years, given planned levels of investment as of 2010.⁷ LADWP expects to reduce imported water from 85 percent to 58 percent of total supply over this period. The proposed rates are designed to help support this transition.

⁷ Breakdown of water supply in FY 2034-35 is from 2010 Urban Water Management Plan. The projected breakdown will be adjusted for new developments, such as Mayor's Executive Directive No. 5, in the 2015 Urban Water Management Plan (currently under development).

Figure 17: Planned Shift in Water Supplies



* Charts do not reflect approximately 100,000 AFY of existing conservation

Water Quality

Water quality investments remain a top priority for the Water System. LADWP is undertaking a number of projects in order to remain in compliance with State and Federal water quality regulations, specifically the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D-DBPR). Specifically, these projects include: covering or removing from service all open treated-water distribution reservoirs; making investments in state-of-the-art disinfection facilities to minimize the formation of disinfection byproducts; and other infrastructure upgrades.

To help mitigate the impact of water quality programs on base rates, on February 8, 2012, the Council approved a \$0.35 per hundred cubic feet (HCF) increase in a cap affecting the WQIA factor. While the implementation of the increased WQIA factor allowed LADWP to fund the required water quality projects through the issuance of revenue bonds, the current WQIA factor covers only a portion of the total water quality compliance expenses. Upon approval of this cap in 2012, it was recognized that these revenues allowed LADWP to access the bond market in the short run, but, going forward, a more permanent rate plan would be necessary. As noted earlier, the RPA has proposed removal of the WQIA cap to help ensure all costs for water quality programs are reflected in the appropriate rate factor in a transparent manner. LADWP plans to use securitization to fund additional water quality projects where possible to minimize the borrowing cost.

Purchased Water

As shown above, in an average precipitation year, over one-half of customers' water demands are currently met through purchases from the MWD. The price of purchased water (PW) from MWD has risen in the past and is expected to maintain this upward trend. This increase is being driven by MWD's infrastructure investments and rising O&M costs. In addition, MWD will be responsible for 25 percent of costs associated with

the Bay Delta Conservation Plan (BDCP). This plan, which is currently in the planning phases, is intended to alleviate the stress on the Bay Delta habitats and will cost a total of approximately \$25 billion statewide. The implementation of the BDCP will only further increase purchased water costs in the future. LADWP will include PW costs in the WSCA factor set up to include all water supply costs in a single rate factor.

Owens Lake Dust Mitigation

In December 2014, LADWP signed an historic agreement with the Great Basin Unified Air Pollution Control District (Agreement). The Agreement stems from the recognition that the enormous Owens Lake Dust Mitigation Program that LADWP has implemented on more than 45 square miles of the lakebed over the past 15 years at a cost of over \$1.6 billion has eliminated more than 90 percent of the excess blowing dust. The agreement affords LADWP:

- Increased use of waterless dust control measures;
- Certainty as to the full extent of Water System liability; and
- Anticipated savings of 3 billion gallons of water per year.

With this agreement, the Water System will complete the two phases - Phases 9 and 10 - of the Owens Lake Dust Mitigation Project, be subject to dust control orders on 4.8 sq. mi. of additional lakebed, and make improvements to the existing system to conserve water. The Agreement also provides Los Angeles with the certainty of knowing the full extent of its liability for dust mitigation at Owens Lake.

Compliance with the Agreement is expected to cost approximately \$1 billion over the next five years. In the long run, the proposed project is expected to be revenue neutral by saving LADWP (and customers) money as less water is diverted from the L.A. Aqueduct for dust control (and less MWD purchased water is required). Most of the Owens Lake Dust Mitigation Program costs will be financed through traditional debt and, when possible, securitization. Securitization based financing helps to reduce the impact on the system average retail rate increase for customers. The costs of the Owens Valley Dust Mitigation Program will continue to be included in the OVRA factor.

Customer Bill Impacts

The rates in the proposed Ordinance remain highly competitive with other California water utilities, despite additional LADWP spending. Over the five years, the “typical” Single-Dwelling Unit Residential Customer (12 HCF/month) monthly bill will see an average annual bill increase of \$3.02 or 4.76 percent.

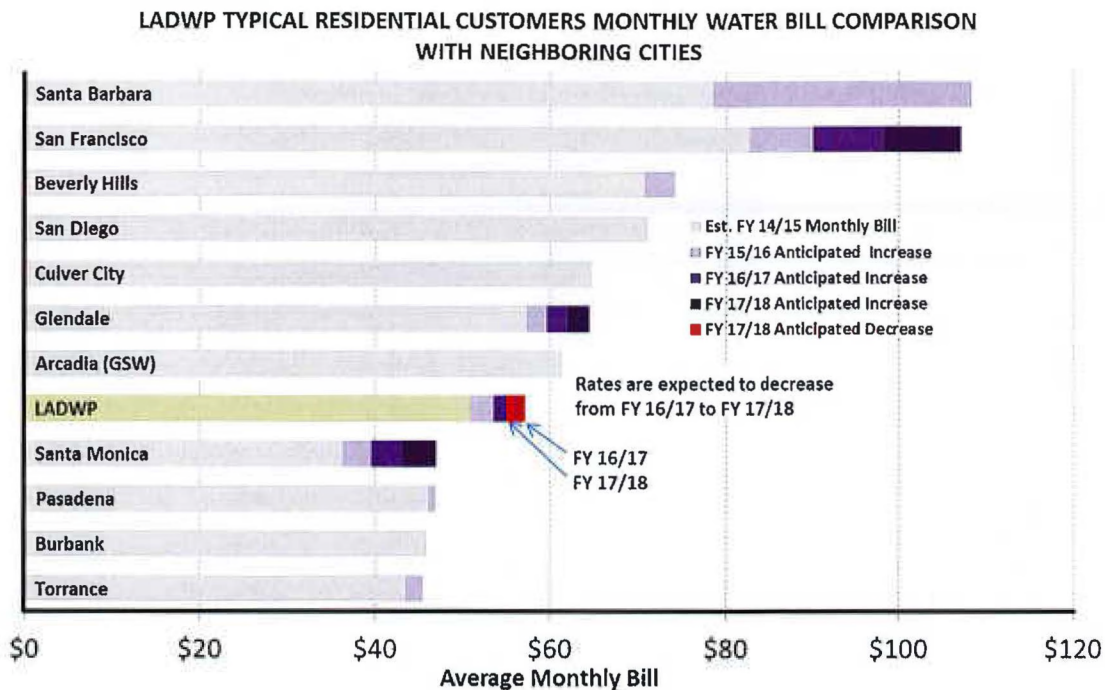
However, since the citizens of Los Angeles have responded to the recent drought and the Mayor’s call for conservation by further reducing consumption; the current average Single-Dwelling Unit Residential customer now only uses 10 HCF of water per month, which means that the actual bill impact will be lower than 4.76 percent. Detailed typical customer bill impacts for the five-year rate period are summarized in Figure 18 below:

Figure 18: Proposed Five-Year Water Rate Changes with Monthly Costs

	Low-Use Residential (8 HCF / month)	Typical Residential (12 HCF / month)	High-Use Residential (27 HCF / month)	Small Commercial (15 HCF / month)	Medium Commercial (80 HCF / month)	Large Commercial (500 HCF / month)
Current Monthly Bill	\$38.53	\$57.79	\$133.65	\$73.74	\$393.26	\$2,457.88
Five-Year Average Annual Rate Change	2.63%	4.76%	7.16%	3.79%	2.45%	2.33%
Five-Year Average Annual Monthly Bill Change	\$1.07	\$3.02	\$11.05	\$3.01	\$10.14	\$60.10
Average New Monthly Bill at the End of Five Years	\$43.87	\$72.90	\$188.89	\$88.81	\$443.96	\$2,758.37

The typical Single-Dwelling Unit Residential Customer's water bill will remain competitive with other California Utilities. Many other peer utilities have announced similar or larger rate increases as illustrated in Figure 19.

Figure 19: Typical⁸ Single-Dwelling Unit Residential Customers Monthly Water Bill Comparison



Cost of Service Study and Schedule F

On October 2, 2012, the Council approved LADWP's Incremental Electric Rate Ordinance No. 182273 to provide incremental rate increases for FY 2012-13 and FY 2013-14. In its action to approve LADWP's power rates, the Council recommended that LADWP "conduct a new formal cost of service study in order to prepare for future power rate restructuring." Though this recommendation was in response to a Power System rate ordinance, LADWP has also completed a new cost of service study for the Water System.

The marginal cost approach is an accepted methodology for utility cost of service studies in the United States and globally. A cost of service study which follows a marginal cost approach facilitates attaining the following objectives:

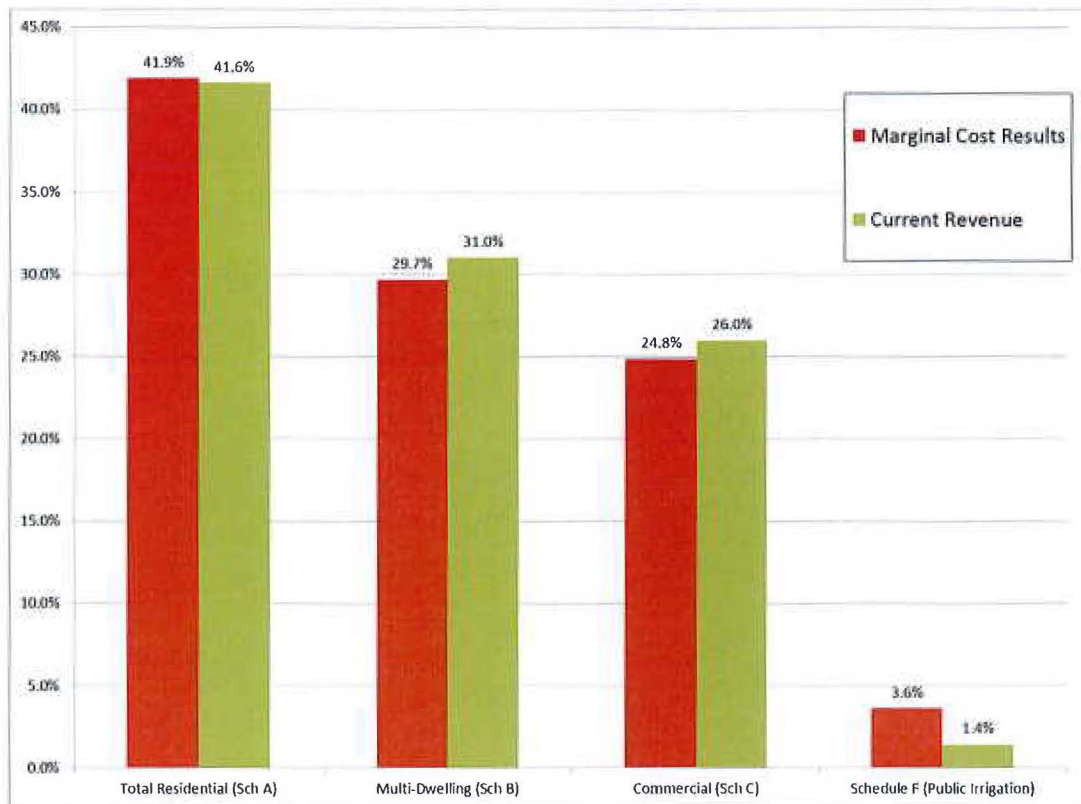
- Ensure rates for each major class of customers recover the costs associated with providing service to that class of customers;
- Allow the development of rates that produce revenue to recover the costs of LADWP's programs;
- Encourage efficient system expansion and the efficient use of utility facilities, and discourage wasteful use;
- Provide appropriate (and efficient) price and resource allocation signals (in tandem with the related cost based rate design); and

⁸ The analysis is based on LADWP's proposed rates and rate changes approved or announced for peer utilities through FY 2016-17. Bill comparisons for utilities with water budgets were based on medium temperature zone, low season, lot size < 7,500 sqft, three people per household, January month, 1,500 sq ft irrigated land and lowest pumping zone charge where applicable. These estimates do not reflect changes announced after January 2015.

- Provide legally defensible foundation for cost based rates.

Figure 20 provides the comparisons among the marginal cost revenue requirement and current revenue percentages (based on the FY 2012-13 test year⁹) for each major customer class.

Figure 20: Comparison of Marginal Cost Revenue Requirement and Current Revenue (FY 2012-13) Ratios



Results of the LADWP marginal cost of service study indicate that allocating the revenue requirement based on marginal costs results in little difference from the current revenue percentages for Single-Dwelling Unit Residential (Schedule A), Multi-Dwelling Unit Residential (Schedule B) and Commercial, Industrial, Governmental and Temporary Construction (Schedule C) customer classes. Only Schedule F revenue has a significant variance - 3.6 percent compared to the current revenue level of 1.4 percent - which will be addressed through gradual rate changes during the five-year rate period.

Major Water System Achievements

Since the last base rate action in FY 2009-10, the LADWP Water System has made significant achievements in infrastructure investment, regulatory compliance, environmental stewardship, and operational cost reduction. These accomplishments are significant and include, but are not limited to, items under the following categories:

⁹ FY 2012-13 was the most currently available and audited accounting period when the cost of service study was conducted.

- Actions to reduce size of rate increases:
 - Cost reduction plan;
 - New labor agreement;
 - Benchmarking;
 - Financial planning considerations;
 - Securitization;
 - State water bond funds (Proposition 1);
 - State zero percent loans;
- Other major achievements:
 - Conservation;
 - Cost of service study; and
 - Major water system investments.

Actions to Reduce Size of Rate Increases

LADWP has implemented several major cost reduction efforts to operate more efficiently and reduce the level of customer rate increases, which has allowed LADWP to avoid an increase to the Water System's base rates over the last six years. In addition, as noted below, LADWP has begun corporate performance benchmarking initiatives to identify further opportunities to reduce operating costs.

Cost Reduction Plan

In 2011, LADWP examined its portfolio of recurring and non-recurring projects to identify areas to reduce costs in the short term. This plan included savings in areas such as labor, operations and capital expenditures. The major components identified for LADWP's original cost reduction plan were as follows:

- Overtime reductions, vacancy and attrition-based labor cost savings;
- Non-labor operations savings; and
- Capital cost savings.

The plan was developed to ensure customer rates remained reasonable while moving forward with implementation of LADWP's major Water and Power System initiatives. Over the three-year period ending in June 2014, LADWP has saved an estimated \$467 million across the entire LADWP, exceeding the original \$459 million target by \$8 million.¹⁰ Figure 21 illustrates the distribution of savings across the major areas in the cost reduction plan.

¹⁰ Cost reduction efforts have been developed and tracked on a Department wide basis, so the amounts shown represent total LADWP savings.

Figure 21: Cost Reduction Plan Current Results (Water and Power Systems)

Source	February 2011-June 2014 Savings (\$M)
Labor	\$230
Non-Labor	\$143
Capital	\$94
Total	\$467

Though the cost reduction plan was designed as a three-year program, various initiatives have sustainable effects that LADWP expects will continue producing savings in the future.

New Labor Agreement

In September 2013, LADWP implemented a revised labor contract, or Memorandum of Understanding (MOU), forecasted to save \$456 million from October 2013 to September 2017, as summarized in Figure 22.

Figure 22: Key Components of the MOU

Key Components	Four-Year Savings Estimate (\$M)
Defer Cost of Living Adjustment from 10/1/13 to 10/1/16	\$385.0
Entry Level Salary Reduction for 34 Common Classes	\$15.0
Sick Time Medical Certification Requirement	\$12.0
Contracting Out Overtime Restriction - Reduction from 10% to 5%	\$3.0
Retirement Plan Tier 2 For All New Hires	\$41.0
Total Estimated Savings Over Four Years	\$456.0

It is estimated the contract will result in a \$5 billion savings over 30 years with an estimated \$4.22 billion coming from salary savings.

LADWP identified a unique opportunity to place new hires in a new Tier 2 pension that provides for a reduced pension calculation. Given its current workplace demographic, over the next four years, this approach is estimated to save LADWP \$41 million. Approximately 40 percent of the workforce will be eligible to retire in the next five years. Therefore, savings will be significant as more and more new hires take the place of retiring employees.

Benchmarking

In February 2015, LADWP completed an initial high level benchmarking study in response to a Los Angeles City Council request made in September of 2012 as well as the Mayor's letter sent in December of 2013 directing LADWP to engage a qualified outside consulting firm to conduct a benchmarking study. The study is the first of a three phase, comprehensive benchmarking analysis designed to evaluate LADWP's performance relative to peer utilities from throughout the United States. The initial study, which ranked utilities from the first quartile being the "best" to the fourth quartile representing the "worst" performer, revealed favorable comparative performances in several areas of operational significance. These included Total Operations and Maintenance (O&M) costs metrics as well as reliability metrics measuring electric power outages and planned/unplanned water service disruptions. Total O&M cost was an especially significant benchmark for LADWP, given that over 70 percent of this metric is comprised of labor costs. Total O&M costs are expected to continue improving in the future as lower pension benefits implemented under the recently approved MOU should also help reduce LADWP's overall administrative and general functional costs as new Tier 2 employees replace the existing workforce, roughly 40 percent of whom are currently eligible to retire within the next five years.

The initial benchmarking study findings were also used as a "road map" to identify areas for more in-depth analysis as part of the Phase II study, which commenced in October 2015. The new study will delve more deeply into areas identified as having the highest potential for improvement with an initial focus on Customer Service Operations, including but not limited to Uncollectible Accounts and Energy Losses, both of which ranked in the 4th quartile.

In response to the aforementioned benchmark findings, tens of millions in sustained cost savings and revenue collections will be realized and used to mitigate the need for future rate increases for LADWP customers.

Financial Planning Considerations

Financial leverage allows the costs of financed projects to be spread over the useful life of the projects, enables the recovery of costs from those customers that benefit from the projects, and mitigates the rate impacts that would result if this work was directly funded in full from customer rates. Given the substantial increase in capital spending levels that is anticipated, LADWP has taken financial measures to minimize short-term rate increases, such as securitization (see below), refinancing, regulatory asset treatment, and securing of State zero percent loans and grants (see below).

Securitization

The Water System plans to finance qualifying water quality projects through a JPA, which is expected to reduce the Water System's cost of borrowing by around 25 basis points for qualifying projects beginning in FY 2016-17, with an anticipated reduction of \$188 million in the cumulative revenue requirement over the next five years.

State Water Bond Funds

The Proposition 1 Groundwater Sustainability Program provides \$900 million for a groundwater sustainability funding program, including \$800 million for projects that prevent and clean up contamination of groundwater that serves as a source of drinking water. The State Water Resources Control Board (State Water Board) – Division of Finance is administering the \$800 million in grants, and announced the opening of pre-applications in early August 2015. The San Fernando Groundwater Basin (SFB) Remediation Project (Project) is expected to be eligible to compete for this funding for up to fifty percent of the total estimated project cost of about \$636 million.

The Project will remediate the SFB by removing contamination to restore and protect the full use of the groundwater basin consistent with water rights and historic groundwater use. The Project includes investigation work performed as part of the Groundwater System Improvement Study, installation of additional monitoring wells, and the development, planning, design, and construction of centralized and localized treatment for removing contamination from three of the City of Los Angeles' major wellfields in the SFB: the Rinaldi-Toluca, North Hollywood West, and Tujunga Wellfields.

The Water System submitted the funding pre-application for \$317 million to the State Water Board on September 11, 2015. The State Water Board has evaluated the pre-application and has met with LADWP twice to discuss the project's details and provide an overview of the program's draft guidelines. LADWP is working closely with State Water Board staff to provide input as they develop the funding program guidelines. The final guidelines will be released March 2016, and the first round of funding will be available Fall 2016 or early 2017.

State Zero Percent Loans

LADWP has benefited from the State of California's Safe Drinking Water State Revolving Fund (SDWSRF) to fund water quality projects. These funds are administered by the California Department of Public Health and require a competitive application process. Figure 23 shows the total amount received by LADWP since January 2002 (the year the fund was initiated) through October 2014. It is estimated that a total of \$338.7 million (present value dollars) has been saved in avoided interest costs. Because this fund is revolving, LADWP expects to continue to take advantage of these loans as they become available.

Figure 23: Water Quality Project Zero Interest Loans Since Program Inception in 2002

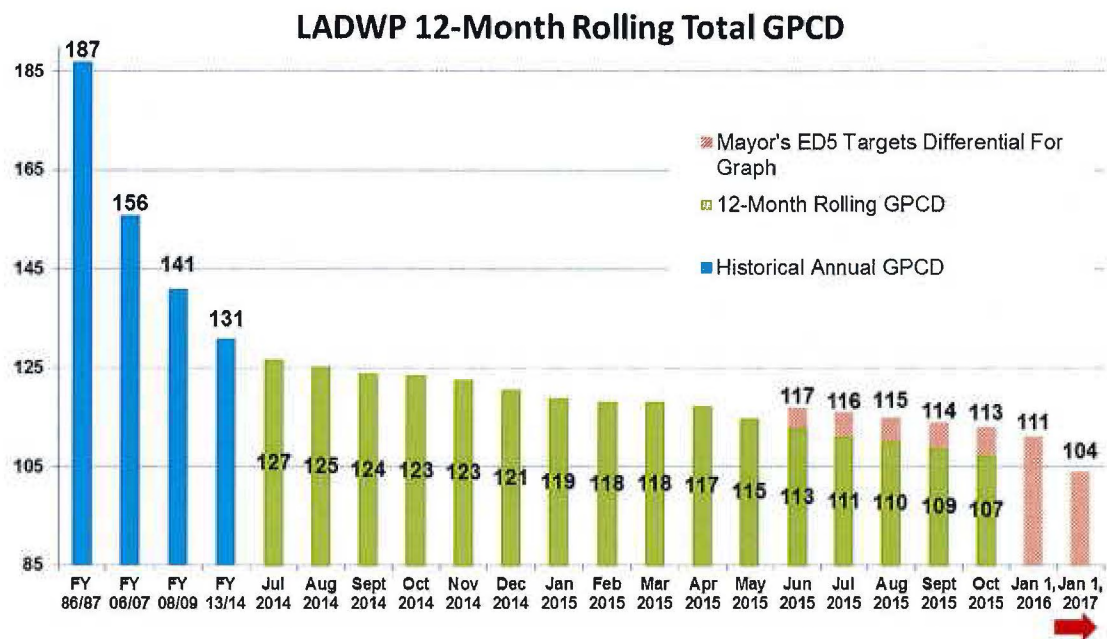
Funding Type	Total Awarded to Date (\$M)
Low-interest loans	\$272.9
Zero-interest loans (Construction)	\$514.7
Zero-interest loans (Planning)	\$1.5
Total	\$789.1

Other Major Achievements

Conservation

LADWP takes great pride in the fact that, despite a growing population in Los Angeles, water conservation efforts have kept water usage relatively stable. As seen in Figure 24, extensive conservation programs supported by a volumetric-based rate structure have contributed to a reduction of approximately 24 percent in water usage from June 2009 through October 2015.

Figure 24: LADWP's Twelve Month Rolling Total Gallons per Capita Daily (GPCD)



Within the proposed rate period, conservation will be even more important given the continued drought. In addition, conservation is highly cost effective compared to imported water. The average cost of the water conservation rebate programs ranges from \$450 to \$500 per acre-foot (AF), while MWD purchased water costs range from \$890 to \$1,032 per AF.

Cost of Service Study

As recommended by the City Council in response to the last Power System rate ordinance, LADWP conducted a new formal cost of service study to inform the rate restructuring recommendations.

Major Water System Investments

LADWP has made major investments in water quality, groundwater remediation, local supply, infrastructure reliability and Owens Lake regulatory compliance. In particular, the Water System has met and is on track to meet deadlines to comply with State and

Federal drinking water standards, specifically the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D-DBPR) recently promulgated by the United States Environmental Protection Agency (EPA).

LADWP has also reached an historic agreement with the Great Basin Unified Air Pollution Control District, which recognizes that LADWP has invested over \$1.6 billion to eliminate more than 90 percent of the excess blowing dust over the past year, and implements the final two phases of the dust mitigation efforts.

Office of Public Accountability / Ratepayer Advocate Report

During the development of the proposed rates, LADWP has been working closely with Office of Public Accountability (OPA). Bi-weekly meetings have been held since July 2013. In these meetings, many major aspects of LADWP's financial plans and actions that require Board approval have been reviewed. Specific topics discussed pertaining to the Water System include, but are not limited to:

- Major initiatives and capital projects;
- Monthly cash/variance reports;
- Financial plans that may potentially be used in the rate action;
- Quarterly Board packages for major program expenditures;
- Marginal cost study results;
- Water rate design options; and
- Various sensitivity cases to stress test the revenue requirement (LADWP has worked with the RPA to develop long-term fiscal outlooks and stress test the proposed plan against dozens of different scenarios).

In July 2015, LADWP provided a report to the OPA that summarized critical information, including financial plans and budget details supporting the current Water System rate proposal and rate design changes. A copy of this report is provided in Appendix 9. Subsequently, the OPA completed a comprehensive analysis of the proposed Water System rate action, which included a substantial amount of data requests and other follow up from LADWP. At the request of the OPA, LADWP responded to 150 responses to requests for information in FY 2015-16 and provided an analysis of 40 additional financial sensitivity cases for water.

After performing a detailed review of the initial proposed rate plan, recently the OPA produced a report analyzing the proposed rates and provided recommendations that LADWP has incorporated into its revised financial plan¹¹ and proposed rates. Two major items included in the OPA's report are an interim review after FY 2017-18 and a set of metrics to monitor LADWP's progress on key programs impacting specific rate elements.

¹¹ The revised proposed financial plan is also referred to as Financial Plan Case No. 94.

Interim Review (Check-In)

LADWP's five-year rate plan is designed to provide funds to finance the key programs outlined in this Board Letter in an economical manner, provide rate certainty to customers and instill financial discipline for LADWP. However, to provide further oversight of LADWP's rates during the five-year period, during FY 2018-19, the OPA will review the progress of key LADWP rate driver programs and overall revenue requirement. This process is designed to confirm that the proposed rates continue to be set appropriately and will be completed no later than June 30, 2019. This review shall include: a revised five-year financial and performance outlook; consideration of revised base rate revenue targets; and the status of Departmental responses to any Mayoral and City Council reports requested and recommendations made as part of this rate action.

Metric Reporting Process

Another key recommendation from the OPA was for LADWP to include in the proposed Ordinance an initial set of specific key performance metrics, targets, and estimated potential variance ranges from the targets related to key components of the rates. The OPA also requested that LADWP's performance against these metrics be reported to the Board and OPA on a regular basis. Therefore, LADWP included in the proposed Ordinance metrics, which accomplish the goals of the OPA. Specific targets and variance ranges will be proposed to the Board in January 2016 after further consultation with the OPA. The performance metrics will also inform the Board, Ratepayer Advocate and City Council about the work being performed. The establishment of the metrics process supports removal of caps on rate adjustment factors.¹²

LADWP will report results to the OPA one month prior to seeking Board approval for changes to adjustment factors, and to the Board and E&E committee on a semiannual basis. If performance is outside a pre-determined estimated potential variance range, LADWP will provide a variance explanation to the OPA and the Board for review. At the Board's discretion, subsequent adjustment factors or base rates can be set based on LADWP's actual performance.

Figure 25 represents the specific Water System reporting metrics and their corresponding rate components. LADWP is still in the process of finalizing metric targets and estimated potential variance ranges, which, as noted above, will be presented in a separate Board package in January 2016.

¹² Based on recommendation from the OPA the caps will be removed on all adjustment factors except the LISA.

Figure 25: OPA Proposed Water System Rate Component Metrics

Factor	Metric	Definition
Water Supply Cost Adjustment Factor	Water supply costs budget vs. actual (\$M)	Board Approved Annual Budget vs. Actual expenditures
	Annual quantity of purchased water in acre-feet (AF) against plan	AF of water purchased against plan
	Annual quantity of recycled water delivered against plan (AF)	AF of recycled water delivered against plan
	Stormwater system capacity milestones (AF) against plan	AF of stormwater system capacity as of a milestone date against plan
	Annual groundwater production in Central Basin (AF) and San Fernando Basin (AF) against plan	AF of Groundwater in Central Basin against plan and AF of Groundwater in San Fernando Basin against plan
	Budget vs. actual (\$M) for Aqueduct refurbishment	Board Approved Annual Budget vs. Actual expenditures
	Level of water conservation against target (GPCD)	Gallons per capita per day (GPCD) of water conserved against target
Water Infrastructure Adjustment Factor	Budget vs. actual (\$M) for fixed assets replacement	Board Approved Annual Budget vs. Actual expenditures
	Budget vs. actual (\$M) for Pump Stations	Board Approved Annual Budget vs. Actual expenditures
	Budget vs. actual (\$M) for Regulator Relief Station Retrofits	Board Approved Annual Budget vs. Actual expenditures
	Assets replaced against plan	Miles of mainline, miles of trunkline, and number of meters replaced against plan
Water Quality Improvement Adjustment Factor	Total Water Quality Budget vs. actual (\$M)	Board Approved Annual Budget vs. Actual expenditures
Water Expense Stabilization Adjustment Factor	Water Expense Stabilization Adjustment (WESA) account balance against target	Amount (\$M) in the WESA account vs. plan
Owens Valley Regulatory Adjustment Factor	Budget vs. actual for Owens Lake O&M (\$M)	Board Approved Annual Budget vs. Actual expenditures
	Annual quantity of water conserved from Owens Lake (AF) against plan	AF of water conserved against plan

Several metrics for support services that apply to both the Water and Power Systems are also included in the reporting process as shown in Figure 26.

Figure 26: OPA Proposed Rate Component Metric Reporting

Factor	Metric	Definition
None	Human Resources Budget vs. actual (\$M)	Board Approved Annual Budget vs. Actual expenditures
	Human Resources Total Full Time Equivalent (FTEs) against plan	Total number of full time equivalent positions occupied vs. annual Authorized Personnel Resolution
	Financial and Human Resources Replacement Project total spending against plan	Board Approved Annual Budget vs. Actual expenditures
	Financial and Human Resources Replacement Project progress against schedule	Project milestones met in accordance with project schedule
	Number of new distribution infrastructure crews as compared to plan	Number of new crews dedicated to distribution infrastructure as compared to plan

The metrics, targets and estimated potential variance ranges will provide the OPA, Board and City Council additional oversight for LADWP's progress. This process is designed to ensure that actual performance closely matches the budgeted expenditures and related operational targets underlying key rate drivers and rate components. In addition, this process provides LADWP with some flexibility to ensure spending levels remain sufficient to meet LADWP's changing financial, operational or regulatory needs. Appendix 10 provides further detail on this reporting process.

Response to Council Recommendations

On September 19, 2012, the Council's Energy and Environment Committee adopted a report with ten recommendations associated with third-party review of LADWP's Incremental Electric Rate Ordinance. Many of these recommendations stemmed from the recommendations found in Appendix E of the "LADWP - Power System Financial Review and Rate Restructuring Analysis" report issued to the City Council on August 23, 2012 (RPA Power Report) in accordance with Council action of April 8, 2011.

While these recommendations were directed at the LADWP Power System, several items have relevance to the Water System. Programs or other activities have been developed to address all of the recommendations. While some activities are ongoing, LADWP has made significant progress in each area. In some cases, the nature of the recommendations and the activities to address them are long-term requiring continued efforts.

LADWP has been working collaboratively with the Ratepayer Advocate (RPA), Chief Legislative Analyst (CLA) and Chief Administrative Officer (CAO) to address these recommendations. Programs or other activities have been developed to address all of the recommendations. While some activities are ongoing, LADWP has made significant progress in each area. However, in some cases, the nature of some of the recommendations and the activities to address them are long-term. The current status for each item is shown in Appendix 7.

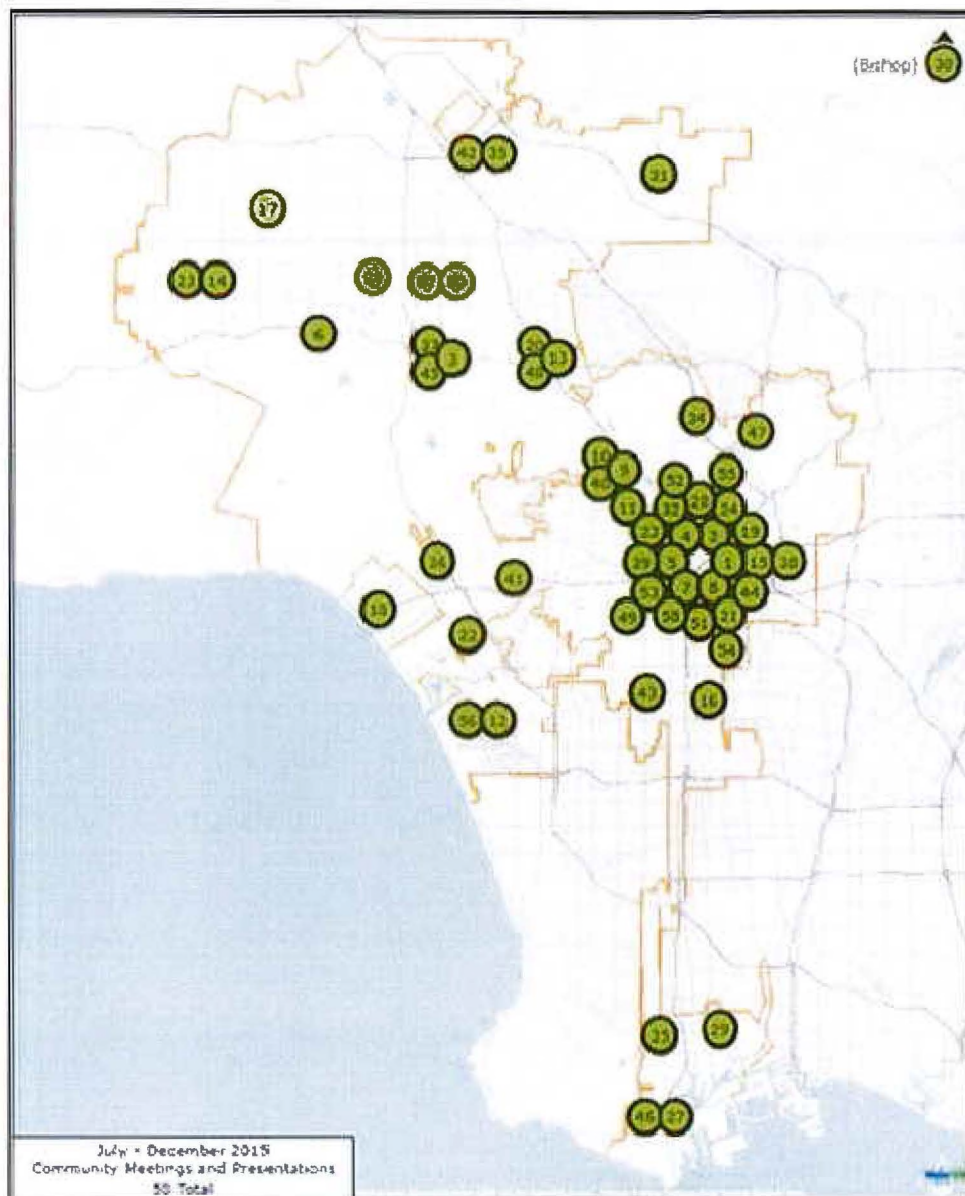
Public Outreach and Other Input

LADWP is one of the few Departments that serve all of the residents and businesses in Los Angeles on a daily basis. As a provider of vital services and one of the economic drivers in Los Angeles, LADWP fully understands the responsibility it has to all of its stakeholders.

Therefore, in addition to meeting regularly with the OPA, the City Administrative Officer, and the Chief Legislative Analyst, the Department has also made significant efforts to engage the public as represented by the Neighborhood Councils, Chambers of Commerce, other business groups, environmental groups, academic institutions and other key stakeholders.

In order to make information easily accessible as well as solicit feedback, LADWP the Department has reached out to its stakeholders through a variety of channels, including public meetings, webinars and videos. LADWP has held over 55 meetings with Neighborhood Councils, the business community, the environmental community, and other constituent groups to demonstrate the necessity for the restructuring and rate increases and obtain valuable feedback which assisted in the preparation of the proposed rates that are presented to the Board. More specifically, LADWP provided eighteen Community Collaboration Sessions across the City of Los Angeles at the following locations: Downtown L.A., Crenshaw, Westchester, Canoga Park, South L.A., Wilmington, Owens Valley, Sunland/Tujunga, Griffith Park, Pacoima, West L.A., Glassell Park, North Hollywood, Van Nuys, Pico Union, and East Hollywood. LADWP also provided six Neighborhood Council Workshops at various locations. The locations of these various meetings are illustrated in Figure 27. Further details are outlined in Appendix 11.

Figure 27: Public Outreach Summary of Meetings



Information related to the rate cases is also available to the public on the comprehensive website that LADWP set up specifically to support the public outreach process.¹³

If the board adopts the resolution attached as Appendix 1, the 218 notice attached as Appendix 4 will be mailed to comply with Proposition 218's legal requirement.

Water Adjustment Factor Expenditures

The attached Resolution, found in Appendix 12, approves expenditures for inclusion in the Water Supply Cost Adjustment, Water Quality Improvement Adjustment and Water

¹³ <http://www.myladwp.com/>

Infrastructure Adjustment rate components based upon the proposed Ordinance commencing April 1, 2016. Detail regarding expenditures is included in Appendix 2. These expenditures are used to calculate factors that recover costs of providing water service to customers. The recovery of these factors funds the Local Water Supply plan of the Water System, improves water quality throughout the City of Los Angeles, allows replacement of aging infrastructure and provides security to the Water System. The WSCA and WQIA factors will be adjusted every six months, and the WIA will be adjusted each year, based on changes in these costs, and all are subject to review by the Board and the Office of Public Accountability.

CEQA

The approval of the rates in the proposed Ordinance is exempt, as well as the adoption of an official notice concerning the proposed Ordinance and direction for the notice to be mailed to comply with Proposition 218's requirements, are exempt from the requirements of the California Environmental Quality Act under the provisions of the Public Resources Code, Section 21080(b)(8). The proposed rates meet financial needs of LADWP, including operating and capital expenses, as described in this letter and its Appendices.

CITY COUNCIL APPROVAL

City Council approval of the proposed Ordinance is required.