LOS ANGELES DEPARTMENT OF WATER AND POWER

WATER SYSTEM RATE ACTION REPORT

Chapter 1: Executive Summary

July 2015

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1.1 PURPOSE AND OBJECTIVES FOR THE PROPOSED NEW RATES AND RATE STRUCTURE

The Los Angeles Department of Water and Power (LADWP or the Department) is the nation's largest municipal utility and supplies water to nearly four million citizens of Los Angeles. The Board of Water and Power Commissioners (Board) is currently obligated under Charter Section 609(c)[1] and the Master Resolution to establish rates for water service (Water Rates) and collect charges in an amount which, together with other available funds, will be sufficient to service the Department's Water System indebtedness and pay the necessary expenses of operating and maintaining the Water System. Necessary expenses include meeting regulatory mandates, investing in infrastructure for better reliability, and accelerating the availability of local water supply sources.

Since the last water base rate action in 2009, LADWP has taken important steps to reduce the need for base rate increases. However, given the nature of LADWP's obligations and commitments, the Department is at a point where rate increases are necessary to provide continued system reliability, meet regulatory obligations and maintain a healthy financial standing. To meet financial and conservation requirements, the Department is proposing several changes to both its water rates and overall rate structure.

In addition, given the current drought in California and the Mayor's Executive Directive 5 (ED-5) to reduce Los Angeles water consumption by 20% on a per capita basis by the end of 2017, a primary objective of LADWP's rate structure and rates is to provide price signals that continue to encourage customers to conserve.

Through the duration of the proposed five-year rate period, revenue collected will allow the Department to improve customer service and achieve the following business goals:

- Water Quality—Invest $1.4 billion to comply with State and Federal water quality regulations;
- Water Infrastructure—Invest $3.7 billion to complete projects such as replacing approximately 1 million feet of distribution mainline, replacing 25 water distribution valves, replacing 125,000 small meters, and refurbishing the LA Aqueduct (LAA) system;
- Local Supply—Invest $1.4 billion in local supply projects through effective water conservation programs, expansion of groundwater basins, increase of recycled water use to 50,000 acre-feet per year (AFY), and increase of stormwater capture by 31,000 AFY through centralized and distributed projects;

[1] For full text see: http://www.amlegal.com/nxt/gateway.dll?f=jumplink$jumplink_x=Advanced$jumplink_vpc=first$jumplink_xsl=querylink.xsl$jumplink_sel=title;path;content-type;home-title;item-bookmark$jumplink_d=california(laac)$jumplink_q=[field%20folio-destination-name:%27Ch609.%27]$jumplink_md=target-id=JD_Ch609

- Owens Valley—Conserve LAA water through alternative dust mitigation measures and complete final projects required for dust suppression.

1.2 REVENUE REQUIREMENT AND RATE DRIVERS

In developing the rate proposal, LADWP is committed to striking the right balance among continuing to meet regulatory requirements, providing reliable service, planning for a sustainable and secure water supply, and maintaining affordable rates. The key programs that contribute to revenue requirements include:

- Water Quality;
- Infrastructure Reliability;
- Sustainable Local Water Supply (Customer Conservation, Recycled Water, Stormwater Capture, Groundwater Remediation and Clean-up);
- Purchased Water; and
- Owens Valley Regulatory Compliance.

The Department is planning to spend a total of $7.3 billion on operations and maintenance (O&M) and capital across all the programs mentioned above (excluding purchased water) over the next five years[2]. To meet the Water System's business goals, revenues will need to increase by an average incremental amount of $90 million annually (excluding the impact of purchased water) for the period of fiscal year (FY) 2015-16 through FY 2019-20. The incremental revenue requires an average annual rate increase of 4.96% to finance and cash-fund these programs, as reflected below in Figure 1.

[2] All budget and revenue requirement information is based on Financial Plan Case Number 33 including depreciation, net interest expense, and retained earnings and which assumes normal precipitation. If precipitation is below normal as it has been in the most recent two years, the revenue requirement is likely to be higher.

Figure 1: Year-Over-Year (YOY) Rate Driver Breakdown of Proposed Retail Rate and Revenue Requirement Increase (Assuming Normal Precipitation)

Rate Driver	Average Revenue Requirement Increase ($M)	Average Annual System Retail Rate Increase (cents/HCF)	Average Annual Rate Increase (%)
Conservation (Securitization)	-6[3]	-0.13	-0.50%
Groundwater (Securitization)	5	0.54	0.40%
Stormwater	2	0.18	0.13%
Recycled Water	4	1.31	0.35%
Owens Valley	4	0.32	0.35%
Water Quality	22	0.36	2.06%
Infrastructure – Base	16	-0.04	1.96%
Infrastructure – Pass-Through	44	4.32	3.72%
Total before Purchased Water	90	7.13	8.48%
Purchased Water	-44	-1.24	-3.53%
Total	46	5.89	4.96%

More detail about the financial case upon which the proposed rates and revenue requirements were determined can be found in Chapter 3 – Appendix B.

1.3 ASSUMPTIONS AND RISKS ASSOCIATED WITH THE PROPOSED PLAN

For the proposed rate action, LADWP has based future financial plans on certain assumptions. Figure 2 summarizes some of these assumptions and potential risks.

[3] Many conservation investments are eligible for lower financing through securitization, resulting in a reduction in revenue requirement for conservation projects.

Figure 2: Major Assumptions and Risks Associated With the Proposed Plan

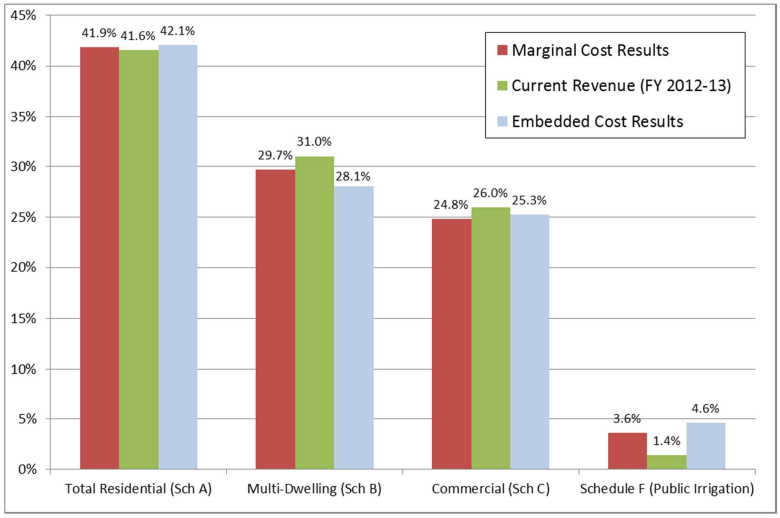
Assumption	Description	Risk/Implication
Conservation	The Mayor's ED-5 has set an aggressive goal of 20% water usage reduction per capita by 2017.	If actual consumption is different from projections in the financial plan, the proposed decoupling mechanism will ensure LADWP receives adequate revenue to cover its fixed costs and customers will not overpay.
Hydrology	Assumes normal hydrology.	California may not return to normal hydrology, and it is likely FY 2015-16, the first year of these proposed rates, could be dryer than usual. This situation could require more purchased water, causing rates to increase. However, the pass-through nature of the proposed Water Supply Cost Adjustment factor will ensure cost recovery for the higher amount of purchased water and help ensure adequate supply for customers.
Financial Market Conditions	Assumes current market conditions with low steady inflation, returns on investment and bond rating.	If market conditions change, LADWP's proposed decoupled rate structure will ensure adequate cost recovery in the case of higher borrowing costs and eliminate over-collection if market conditions become more favorable.
Securitization	Assumes LADWP has access to this financing mechanism.	Securitization is a cheaper mechanism to finance debt. If securitization were not possible, LADWP's strong financial position should provide access to traditional borrowing sources, although at a slightly higher debt service cost. LADWP's decoupled rate structure provides the ability to recover the higher borrowing costs, if required.

1.4 COST OF SERVICE STUDY PROCESS AND SUMMARY RESULTS

On October 2, 2012, the Los Angeles City Council approved the LADWP's Incremental Electric Rate Ordinance No. 182273 to provide incremental rate increases for FY 2012-13 and 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 cost of service study for its Water System to evaluate its water service cost structure and ensure that its rates are appropriate for the customer classes[4]. Figure 3 provides the cost allocation comparisons among the marginal cost of service study results, embedded cost analysis results, and current revenue (for the FY 2012-13 test year) for each major customer class.

[4] Even in the absence of the Council's Motion, periodic cost of service studies are a common industry practice.

Figure 3: Comparison of Cost of Service 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. However, for Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports Service (Schedule F), the customer class marginal cost percentage is significantly different - 3.6% compared to the current revenue level of 1.4%.

As an added step to consider allocation of costs among customer classes in relation to cost of service, the Department conducted an embedded cost of service analysis[5]. The embedded cost of service analysis[6] confirms the marginal cost of service study in that the results are in the same direction; further, the revenue requirement percentages using both methodologies are close to the current revenue requirement percentages of each customer class except Schedule F[7].

1.5 RATE DESIGN SUMMARY

The proposed rate structure will facilitate the Mayor's conservation goals with minimal bill impacts for low usage customers, while continuing support of business development in the City. The proposed rates also consider legal requirements, including those from Proposition 218

[5] Embedded Cost is also referred to as Average Embedded Cost.

[6] Data used for the embedded cost of service analysis was based on Financial Plan Case Number 33.

[7] LADWP's embedded cost of service analysis was prepared following both a forward-looking approach based on the financial plan and a historical approach based on FY 2012-13 accounting records. In both cases, the results supported the marginal cost of service study.

(California Constitution Articles XIII C and D), as well as guidance from various Court decisions that have interpreted Proposition 218, including the recent decision by the Fourth Appellate District of the California Court of Appeal in Capistrano Taxpayers Association v. City of San Juan Capistrano. The proposed rates are designed to provide the amount of revenue necessary to cover the Department's revenue requirement.

1.5.1 Proposed Rate Structure

The proposed rate structure will continue to include base rates and adjustment factors. Rates will continue to be volumetric; however, several changes are proposed to adjustment factors to increase the alignment of costs and revenues. The major proposed changes to the rate structure include, but are not limited to, the following items:

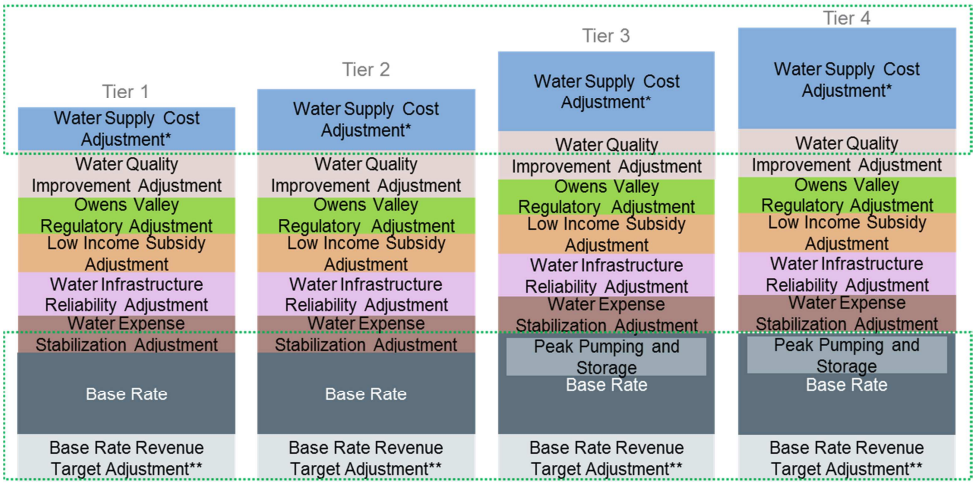
- Increase the number of tiers for Single-Dwelling Unit Residential customers from two to four.
- Establish a Water Supply Cost Adjustment (WSCA) factor that includes the cost of all water supply sources to replace the Water Procurement Adjustment (WPA) factor. The WSCA will be used to align tier rates directly with water supply costs based on the cost of supply and level of usage.
- Separately identify the cost for peak pumping and storage costs in base rates for tiers 3 and 4 (Schedule A) and tier 2 (Schedule B and C)[8].
- Establish a Water Infrastructure Reliability Adjustment (WIRA) factor to recover the capital costs of specific investments to maintain and improve the reliability of the water distribution system.
- Eliminate the Water Security Adjustment (WSA) factor.
- Establish a Water Expense Stabilization Adjustment (WESA) factor to maintain funds, representing approximately 5% of average annual capital expenditures, to help stabilize rates in the event of unforeseen events impacting water service delivery.
- Establish a Base Rate Revenue Target Adjustment (BRRTA) factor to ensure complete recovery of the base rate revenue for each major customer class, tracking over/under-recovery of costs.[9]

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. Figure 4 outlines the proposed overall rate structure for Single-Dwelling Unit Residential customers.

[8] The tier 2 Schedule F rate was developed based on tier 2 Schedule C rate

[9] The BRRTA will replace the previous Water Revenue Adjustment (WRA) factor.

Figure 4: Proposed Single-Dwelling Unit Residential LADWP 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 factor is consolidated with the Water Quality factor (or base rates depending on the cost component).

1.5.2 Water Budget Allotments

For the proposed rate design, the water budget approach will be maintained, but a few changes will be made to encourage conservation for Single-Dwelling Unit Residential customers in the following manner:

- Eliminate the household size allotment, and set the tier 1 allotment to 8 HCF to reflect indoor use; and
- Retain five lot size groups, but set allotments for lot sizes four and five equal to each other.

Also, Tier 1 Multi-Dwelling Unit Residential allotments will continue to rely on historical usage and will be reduced over time to help meet the Mayor's goal for a 20% per capita reduction in water usage.

Additionally, Commercial, Industrial, Governmental and Temporary Construction customers' allotments will stay constant for the low season and initially increase (by 5%) for the high season.

1.5.3 Decoupling

Since utilities typically base financial plans upon sales volumes, conservation efforts introduce uncertainty regarding customer consumption, which complicates usage forecasting and

budgeting. To alleviate the risk associated with revenue variation in a fair manner, LADWP proposes to implement a symmetrical decoupling mechanism for all major customer classes using the new BRRTA factor.

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 these costs. This type of adjustment works for over-collection, as well. If usage exceeds forecasts, resulting in an over-recovery of fixed costs, customers receive a credit. With decoupling, the issue of over or under-collection is resolved in the following accounting period, through an adjustment in rates (either as a reduced or increased charge to customers).

1.5.4 Proposed Rates[10]

The following tables show the Department's proposed rates for the five-year rate action for three customer classes: Single-Dwelling Unit Residential, Multi-Dwelling Unit Residential and Commercial, Industrial, Governmental and Temporary Construction. The rates for each class are contained in separate Schedules.

Figure 5: Proposed Single-Dwelling Unit Residential Rates (Schedule A)

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$ 4.96	$ 4.45	$ 4.61	$ 4.92	$ 5.18	$ 5.32
Tier 2	$ 5.90	$ 5.41	$ 5.78	$ 6.29	$ 6.67	$ 7.32
Tier 3		$ 6.31	$ 6.59	$ 7.47	$ 8.37	$ 8.11
Tier 4		$ 7.91	$ 8.29	$ 8.77	$ 9.01	$ 9.97

Figure 6: Proposed Multi-Dwelling Unit Residential Rates (Schedule B)

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.97	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.90	$7.82	$7.48	$7.65	$8.03	$8.68

[10] All rates for all customer classes in this section are based on Financial Plan Case Number 33 as modified by Financial Case Number 77a. See Chapter 3 – Appendix B and Chapter 5 for more information.

Figure 7: Proposed Commercial, Industrial and Governmental and Temporary Construction Rates (Schedule C)

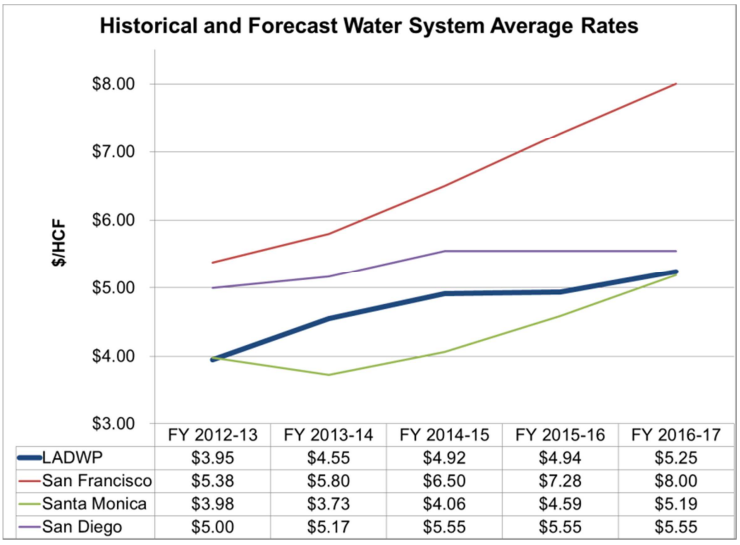
	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.06	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.90	$6.86	$7.23	$7.74	$8.11	$8.77

Recycled Water Service (Schedule D) will continue to be contract-based. Private Fire Service (Schedule E) service availability charges will increase by rate of inflation. Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports Service (Schedule F) will increase smoothly over the five-year rate period to align with the cost of service.

1.5.5 Peer Utility Rate Comparisons

Water utility rates have been increasing throughout California. As shown in Figure 8, other major city water utilities in California have increased rates and/or have announced future rate increases; however, with the proposed rate increases, LADWP's system average rates will continue to be less than those of other large cities in the State.

Figure 8: Estimated Historical and Forecast Water Utility System Average Rates



	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
LADWP	$3.95	$4.55	$4.92	$4.94	$5.25
San Francisco	$5.38	$5.80	$6.50	$7.28	$8.00
Santa Monica	$3.98	$3.73	$4.06	$4.59	$5.19
San Diego	$5.00	$5.17	$5.55	$5.55	$5.55

1.6 SUMMARY OF MAJOR ACCOMPLISHMENTS SINCE LAST RATE ACTION

Since the last base rate action in 2009, the LADWP Water System has made significant accomplishments in regulatory compliance, cost reduction and infrastructure investment. These accomplishments include, but are not limited to, the following:

- Working with the Ratepayer Advocate - LADWP has been working closely with the Ratepayer Advocate (RPA), holding bi-weekly meetings since July 2013, and they have exchanged many concepts and approaches concerning this rate action.
- Labor agreement - In September 2013, LADWP implemented a revised labor contract, forecasted to save $456 million from October 2013 to September 2017.
- Cost reduction savings - From February 2011 to June 2014, the Department implemented a cost reduction plan that saved over $460 million. These initiatives had immediate and measurable impacts on expenses and helped to keep rates reasonable.
- Conservation - Conservation programs supported by a volumetric-based rate structure have contributed to a reduction of approximately 16.4% in water usage since the implementation of shortage year rates[11] from June 2009 through August 2014.
- Major Water System investments - Major investments have been made in water quality, groundwater remediation, local supply, infrastructure reliability and Owens Lake regulatory compliance.
- Financial actions taken to minimize rate increases - Opportunities in securitization, refinancing, regulatory asset treatment, State 0% loans, and grants have reduced costs significantly.
- High-level benchmarking - The Department recently completed an initial high-level benchmarking study to analyse operating metrics such as O&M costs, service interruptions, and wage rates to understand where the Department is doing well and where there may be areas for improvement.

Many of the benefits realized continue to be ongoing. Process improvements and other cost savings opportunities have become a major strategic focus area for LADWP.

[11] Under shortage year rates, tier 1 water allocation, which is the standard allocation every customer gets per billing cycle, is reduced by 15%. A residential customer's allocation is currently based on number of family members, temperature zone and lot size.

1.7 ANALYSIS OF ALTERNATIVES

In order to understand the sensitivity of the rate plan to the assumptions and risks outlined in Section 1.3 and the potential impact of delaying or altering the proposed rate action, LADWP has developed a series of sensitivity analyses in conjunction with the Ratepayer Advocate. These analyses indicate that the selected financial plan assumptions and proposed rates will provide the best option for our customers. Any delays in the rate action would either result in a deterioration of key financial metrics (which would negatively impact the Department's ability to borrow) or necessitate spending cuts that would prevent LADWP from making critical investments in infrastructure reliability, a sustainable local water supply and water quality projects. The results of the scenario analyses are summarized in Chapter 3, "Rate Drivers."

1.8 BEYOND THE FIVE-YEAR PROPOSED RATE PLAN

The Department will continue to assess rate and revenue requirements associated with both externally mandated costs as well as various levels of funding for other programs for FY 2020-21 and beyond. Costs for these time periods are still subject to uncertainty but are anticipated to require future adjustments in rates. According to the current financial plan, a system average rate increase of 5.90% (including purchased water) would be expected for FY 2020-21 to keep up with revenue requirements that support the programs discussed in this report. However, budgets and other program specifics for FY 2020-21 are currently preliminary.

LOS ANGELES DEPARTMENT OF WATER AND POWER

WATER SYSTEM RATE ACTION REPORT

Chapter 2: Introduction & Background

July 2015

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2.1 PURPOSE AND OBJECTIVES FOR THE PROPOSED RATES

The Los Angeles Department of Water and Power (LADWP or the Department) is the nation's largest municipal utility and supplies water to nearly four million citizens of Los Angeles through the operation of over 7,200 miles of water transmission and distribution mains.

The LADWP Board of Water and Power Commissioners (Board) is currently obligated under Charter Section 609(c)[1] and the Master Resolution to establish rates for water service (Water Rates) and collect charges in an amount which, together with other available funds, will be sufficient to:

- Service the Department's Water System indebtedness; and
- Pay the necessary expenses of operating and maintaining the Water System.

The obligation of the Department under the Charter and the Master Resolution is known as the rate covenant. Necessary expenses include meeting regulatory mandates, investing in infrastructure for better reliability, and accelerating the availability of local water supply sources.

Water Rates are subject to the approval of the Los Angeles City Council (City Council) by ordinance (a rate ordinance). The Charter provides that such rates will, except as otherwise authorized by the Charter, be of uniform operation for customers of similar circumstances throughout the City, taking into consideration, among other things, the nature of the uses, the quantity supplied and the value of the service.

Since the last water base rate increase in 2009, LADWP has taken important steps to reduce the need for additional base rate increases. However, given the nature of LADWP's obligations and commitments, the Department is at a point where rate increases are necessary to provide continued system reliability, meet regulatory obligations and maintain a healthy financial standing.

The proposed rate action puts forward an updated rate design, including new rates, which will enable the Department to comply with the rate covenant and other legal obligations. The objectives of the proposed rate action include;

- Maintaining affordable water rates;
- Continuing to encourage business development in Los Angeles;
- Encouraging water conservation;
- Accelerating the development of sustainable local water supply;
- Transforming infrastructure through increasing upgrades to provide reliable service;

[1] For full text of the Charter, see: www.amlegal.com/library/ca/losangeles.shtml

The proposed rates allow LADWP to meet all of these objectives while continuing to maintain competitive rates relative to peer utilities and benefiting the overall City of Los Angeles.

This section outlines the following considerations of the updated rate design:

- Alignment with Mayor's Budget Policy and Goals;
- Providing price signals to address current drought conditions;
- Providing cost recovery for major programs and protecting LA's drinking water
- Legal considerations; and
- Cost of service alignment.

2.1.1 Alignment with Mayor's Budget Policy and Goals

The Department's operations align with the Mayor's larger policy goals for the City of Los Angeles. Especially pertinent to the Water System are the Mayor's Budget Policy and Goals and Executive Directive 5.

Fiscal Year 2015-16 Budget Policy and Goals

On September 22, 2014, the Mayor of the City of Los Angeles issued his Fiscal Year (FY) 2015-16 Budget Policy and Goals to the General Managers of all City Departments. The Mayor outlined five "Priority Outcomes[2]" that focus on the results that he believes matter most to the residents of Los Angeles. These outcomes are:

1. Make Los Angeles the best run big city in America
2. Promote good jobs for Angelenos all across Los Angeles;
3. Create a more sustainable and livable City;
4. Ensure our communities are the safest in the nation; and
5. Partner with citizens and civic groups to build a greater City.

The Department's investments and initiatives outlined in this proposed rate plan were developed with the Mayor's objectives in mind and strongly align with each Priority Outcome. For example, LADWP's significant planned investments in infrastructure improvements promote economic development and job growth in the region (Mayor's Priority Outcome 2) and the significant planned investments in local water supply help to make Los Angeles more sustainable (Mayor's Priority Outcome 3). For more examples of how LADWP's rates are guided by Mayor's Priority Outcomes, see Chapter 2 - Appendix A.

[2] See http://sanpedrocity.org/wp-content/uploads/2014/09/FY15-16-Budget-Policy-Letter.pdf

Executive Directive 5

In response to extreme drought conditions affecting California, on October 14, 2014, the Mayor issued Executive Directive 5, calling for a 20% reduction in per capita water use by 2017, and a reduction of per capita imported water use of 50% by 2024. The directive also called for the creation of an integrated water strategy that increases local water supplies and improves water security in the context of climate change and seismic vulnerability.

Given these circumstances, as well as new water supply and seismic infrastructure initiatives, LADWP must adopt new rate structures and other mechanisms to recover costs, implement conservation programs and continue to provide reliable service to the City of Los Angeles.

2.1.2 Providing Price Signals to Address Current Drought Conditions

LADWP's proposed rate structure will continue to incentivize conservation, using water budget allotments and tiered rates. LADWP's volumetric rate design ties customers' bills directly to the level of consumption and has continued to contribute to significant conservation.

Due to drought conditions, shortage year allotments and shortage year rates have been in effect since 2009 to provide an incentive for reduced consumption. Under shortage year rates, the first tier allotment was reduced by 15%, and second tier rates were increased by multiplying the existing high season tier 2 rate by 1.442.

The Department's proposed rate plan is designed to facilitate even lower levels of usage despite growth in the region.

2.1.3 Providing Cost Recovery for Major Programs and Protecting LA's Drinking Water

The Department has not increased water base rates since July 2009, the month that shortage year rates were implemented; however, capital investments in major programs continued to increase. Figure 1 shows the increase in the major Water System programs and the increase in investments from FY 2009-10 to FY 2019-20. More detail on why these programs are important can be found in Chapter 3, "Rate Drivers."

Figure 1: Increase in Capital Costs for Major Water System Programs Between Year of Last Base Rate Increase and Last Year of Proposed Rate Action ($M)[3]

Category	FY 2009-10	FY 2019-20	Change	% Increase	CAGR[4]
Water Conservation	$0.7	$40.3	$39.6	5657%	50%
Water Quality	$172.3	$179.6	$7.3	4%	0.4%
Water Reclamation	$30.0	$273.5	$243.5	812%	25%
Water Security Plus Infrastructure	$255.2	$708.4	$453.2	178%	11%
Total	**$458.2**	**$1,201.8**	**$743.6**	**162%**	**10%**

All together, the total yearly expense of the Department is known as the "revenue requirement." In general, the revenue requirement is the annual revenue required to cover operations, maintenance, cash funded capital, administrative costs, debt service costs and other expenses to provide safe and reliable service to LADWP's customers. These major spending categories are required to meet the obligations defined under the rate covenant.

The Department's annual revenue requirement is determined by the "cash-needs approach," and is comprised of the following:

- Operating & Maintenance Expenses (O&M): the normal and recurring expenses incurred to run the Water System including, but not limited to, employee costs, water, supplies and administrative costs.
- Cash Funded Capital Expenditures: The amount of cash the Department will spend from its operating revenue in a given year on capital after deducting all other funding sources.
- Debt Service Cost: the principal as well as the interest on all outstanding debt for required payments to the Department's creditors.

The proposed rates are designed to meet the obligations associated with operating the Water System for the five-year period FY 2015-16 through FY 2019-20. The proposed revenue requirement funds critical LADWP activities, recognizes the Mayor's directive and legal mandates, and maintains the current fiscal health of the organization.

2.1.4 Legal Considerations

A number of legal considerations provide guidance in developing proposed rates for water service. These include, but are not limited to:

[3] All budgeted cost and revenue requirement calculations are based on Financial Plan Case Number 33.

[4] The Compound Annual Growth Rate (CAGR) represents an annualized growth rate over the period in question (in this case ten years).

- Proposition 218 (California Constitution Article XIII D, Section 6) which provides that:
  - "(1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service."
  - "(2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed."
  - "(3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel."
- The California Court of Appeal decision concerning Proposition 218 (Griffith vs. Pajaro Valley Water Management Agency, Sixth Appellate District) that supports grouping similar customers into classes and setting rates by customer class as a reasonable way to apportion the cost of service.
- California Constitution Article X, Section 2, which encourages prevention of waste or unreasonable use of water and the exercise of conservation.
- City Charter Section 676, Rate Setting, which states: "rates shall be of uniform operation for customers of similar circumstances…, as near as may be, and shall be fair and reasonable, taking into consideration (1) the nature of the uses; (2) the quantity supplied; (3) the value of the service."

2.1.5 Cost of Service Alignment Confirmation

On October 2, 2012, the Los Angeles City Council approved LADWP's Incremental Electric Rate Ordinance Number 182273 to provide incremental rate adjustments for FY 2012-13 and 2013-14. In its action to approve LADWP's power rates, the City Council requested 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 cost of service study for its Water System rates to evaluate its water service cost structure and ensure that its rates are cost based.

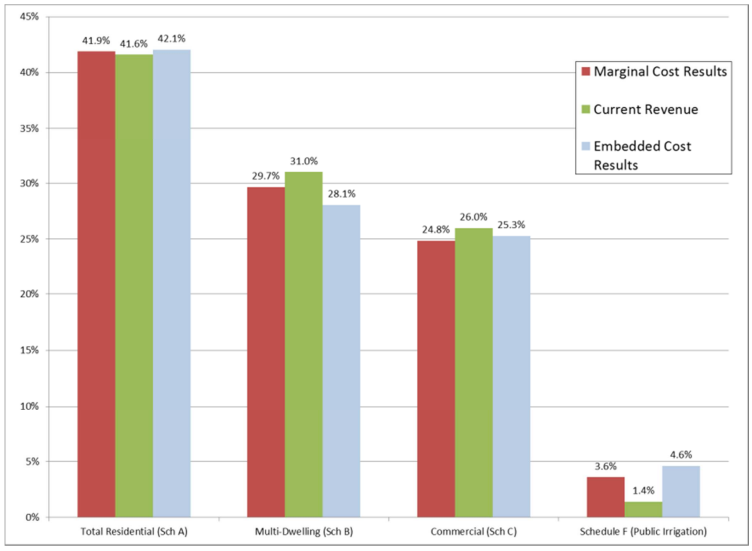
LADWP has chosen to use a marginal cost approach to determine the cost of providing service to the major customer classes and to guide the development of rates. Marginal costs reflect the change in cost incurred to serve a small increment in demand for utility services. Marginal cost is an accepted methodology for utility cost of service studies in the United States and globally.

The current use of marginal forward-looking costs (projected expenditures instead of historical expenditures) for setting rates has fundamentally contributed to water demand management in the LADWP service area during periods of water scarcity, supply uncertainties, and water supply and demand imbalances. Since 1970, water usage by LADWP customers has been virtually unchanged despite a significant growth in population in the region. LADWP looks to continue this success story.

In addition, LADWP has also conducted an embedded cost of service analysis to validate the marginal cost of service study results and to provide additional guidance for allocating the revenue requirement to major customer classes.

Figure 2 below illustrates the results of the marginal cost of service study and embedded cost of service analysis compared to the current revenue percentages for each customer class. The results indicate that the percentage of current revenues for Single-Dwelling Unit Residential and Public Irrigation customers are less than the cost of service, while the percentage of revenues for Multi-Dwelling Unit Residential and Commercial, Industrial, Governmental and Temporary Construction customers are slightly higher than the cost of service. However, as discussed in Chapter 5, Water Rate Design, the cost of service and current revenue percentages are within a reasonable range to avoid significant reallocating of revenue requirement for all customer classes, except uses described in Schedule F. The complete cost of service study report can be found in Chapter 4.

Figure 2: Cost of Service Study Results



2.2 BENEFITING CONSUMERS AND THE OVERALL CITY

A rate increase will benefit present and future citizens of Los Angeles. The proposed rate action will allow LADWP to provide Los Angeles with effective water conservation programs, high quality water, new infrastructure resulting in increased service reliability and improved customer service, thus improving the standard of living for citizens of LA.

Water is a scarce and precious resource; LADWP's proposed investments to develop a sustainable local water supply will also ensure that the citizens of LA continue to have access to reasonably priced sources of water in the future.

Many customers have noted an aesthetic improvement of tap water. This result is due in part to improvements that LADWP has made over the past ten years to provide state-of-the-art large scale ultraviolet disinfection and chloramine as a secondary disinfectant to minimize the formation of disinfection byproducts, provide longer lasting disinfection, and improve the taste of tap water. Of equal importance, LADWP has effectively reduced the levels of naturally occurring arsenic in the Los Angeles Aqueduct (LAA) supply since 2000.

Inductive economic analysis done by the Los Angeles Economic Development Corporation (LAEDC) suggests that Department expenditures for major projects in Los Angeles create jobs and stimulate additional economic output. The LAEDC estimated that, in FY 2011-12, Water System expenditures, totaling $992 million, supported 12,290 jobs (direct, indirect, and induced) and created an additional economic output of $2,717 million[5]. If the local characteristics of the current Los Angeles economy remain similar to the assumptions made by the LAEDC, the average annual Water System spending of $1,463 million per year over the five-year rate action will support an annual 18,000 jobs and induce an annual $4 billion in additional economic activity and output.

2.3 MAJOR ACCOMPLISHMENTS SINCE THE LAST RATE ACTION

Since the last base rate action in 2009, the LADWP Water System has achieved significant accomplishments in many areas of operations that have resulted in cost savings, efficiencies, and infrastructure investment. These accomplishments include, but are not limited to:

- Working with the Ratepayer Advocate;
- Labor agreement;
- Cost Reduction Plan and other cost-saving reductions;
- Conservation;
- Major Water System investments;
    - Local water supply
    - Water quality
    - Infrastructure
    - Eastern Sierra environmental commitments; and

[5] Exhibit 3-2, page 14. "Los Angeles Department of Water and Power: Supplying Power, Water and Jobs for Los Angeles," September 2012. Economic and Policy Analysis Group; Los Angeles County Economic Development Corporation.

- Financial planning to avoid rate increases (securitization, refinancing, regulatory asset treatment, State 0% loans, and grants).

This section discusses some of these accomplishments; however, given the nature of these accomplishments, many of the benefits are yet to be realized.

2.3.1 Ratepayer Advocate Input

LADWP has been working closely with the Ratepayer Advocate (RPA), holding bi-weekly meetings 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:

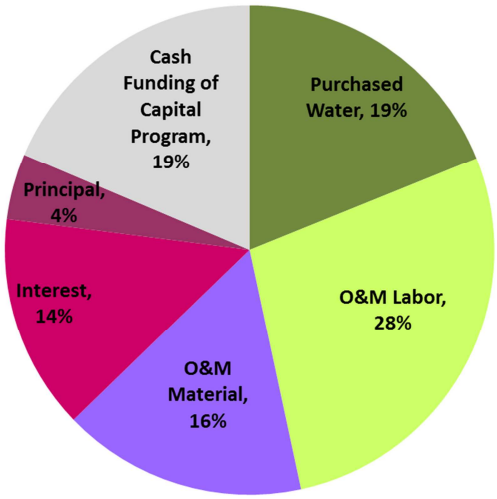
- Major initiatives and capital projects;
- Monthly cash/variance reports;
- Quarterly Board packages for estimated water quality improvement, demand side management (water conservation), recycled water, and water security expenditures;
- Financial plans that may potentially be used in the rate action;
- Marginal Cost Study results;
- Water rate design options; and
- Various sensitivity cases to stress test the revenue requirement (approximately 30 cases).

For this rate action, the proposed rate design and financial plans were jointly reviewed to address any concerns or questions. The RPA requested that LADWP develop several alternative financial scenarios to evaluate the proposed financial plan and rates. This list was compiled in a working effort between LADWP and the Ratepayer Advocate, based upon possible scenarios that the Water System may face. It is noted that the RPA did ask for a few scenarios that potentially had impacts on funding for water quality projects. For these cases, the analysis was completed in a manner that kept water quality projects fully funded so as to keep in compliance with Federal regulations. The financial plan results for each scenario are provided in Chapter 3.

2.3.2 Labor Agreement and Reduction in Labor Costs

The Department has aggressively managed O&M costs through a wide variety of labor-related cost reduction efforts. Collectively, wages and benefits represent 28% of the Water System's $1,108 million revenue requirement for FY 2015-16. Figure 3 shows the current portion of the Water System's revenue requirement represented by wages and benefits in operating and maintenance expenses, inflation (in the form of cost of living adjustments or "COLA") and pension costs.

Figure 3: Water System FY 2015-16 Revenue Requirement Components



Labor Agreement

In September 2013, IBEW union workers approved revisions to the labor contract, or Memorandum of Understanding (MOU) between their union and the Department. Under the proposal, the four-year package freezes salaries for three years and then limits a cost-of-living increase to 2.9% in the final year[6]. It also includes provisions to permit LADWP and IBEW, by mutual agreement, through the Joint Labor/Management Resolution Board, to reexamine various existing work rules, pay bonus structures, and resolves a lawsuit filed by the LADWP Pension Board over payments to workers who transferred into the utility.

From October 2013 to September 2017, LADWP will save approximately $456 million from the new contract, as summarized in Figure 4.

[6] Inflation impact of non-labor expenses are forecasted to be an average of 2.66% per year, based on "Los Angeles County Long-Term Forecast", UCLA Anderson, July 2014.

Figure 4: Key Components of the Labor MOU

Key Components of the MOU	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. The contract takes a 2% salary increase to cover employee health care costs. It makes a number of changes to the pension system, including moving the retirement age from 55 to 63 and capping payouts at 80% of the last three years average salary, resulting in an estimated savings of $1.8 billion. The biggest savings, estimated at $4.22 billion, will come from salary savings. Other savings will come from reduced payments to contract out and a change in sick leave.

There will also be savings of $180 million to $210 million (from the settlement of reciprocity lawsuit) in the calculations of retirement benefits for employees who transfer into the LADWP system.

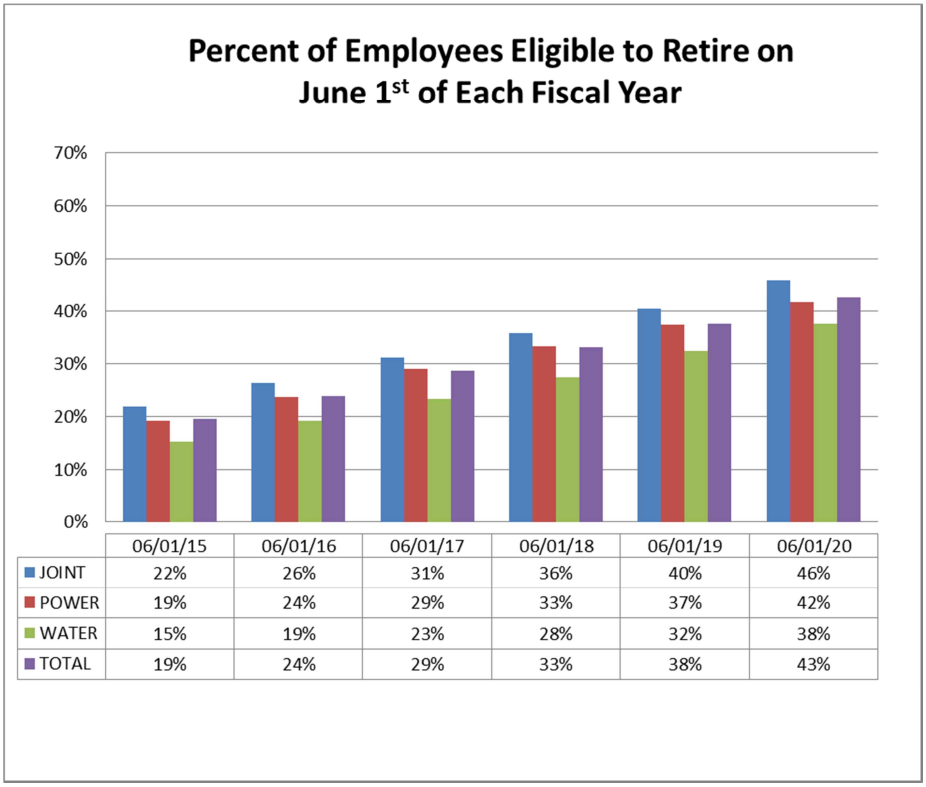
LADWP identified a unique opportunity to place new hires in a new Tier 2 pension that provides for a reduced pension calculation. Given its current workplace demographic, over the next four years this approach is estimated to save the Department $41 million. Approximately 58% of the workforce will be eligible to retire in ten years. Therefore, savings will be significant as more and more new hires take the place of retiring employees.

Retirement & Overtime

A significant aspect of LADWP's three-year cost reduction plan (more detail on the cost reduction plan can be found in Section 2.3.3) was reducing labor costs by managing headcount through attrition (mainly retirements) and overtime.

As shown in Figure 5, 43% of LADWP's workforce is eligible to retire by June 1, 2020.

Figure 5: LADWP Retirement Eligible Personnel 2015-2020[7]



	06/01/15	06/01/16	06/01/17	06/01/18	06/01/19	06/01/20
JOINT	22%	26%	31%	36%	40%	46%
POWER	19%	24%	29%	33%	37%	42%
WATER	15%	19%	23%	28%	32%	38%
TOTAL	19%	24%	29%	33%	38%	43%

To prepare for the expected retirements and associated loss of institutional knowledge, the Department is increasing recruiting and training efforts in advance of expected retirements in critical functional areas. New hires will enter the Department at a new Tier 2 pension level, which will provide LADWP with additional savings.

The original cost reduction plan also targeted reductions in overtime. Figure 6 outlines the overtime targets set in 2011 and interim results, as well as targets for the future.

Figure 6: LADWP Overtime Performance and Targets (Excluding Daily Exempts) Budgeted Overtime as a Percentage of Total Labor Costs

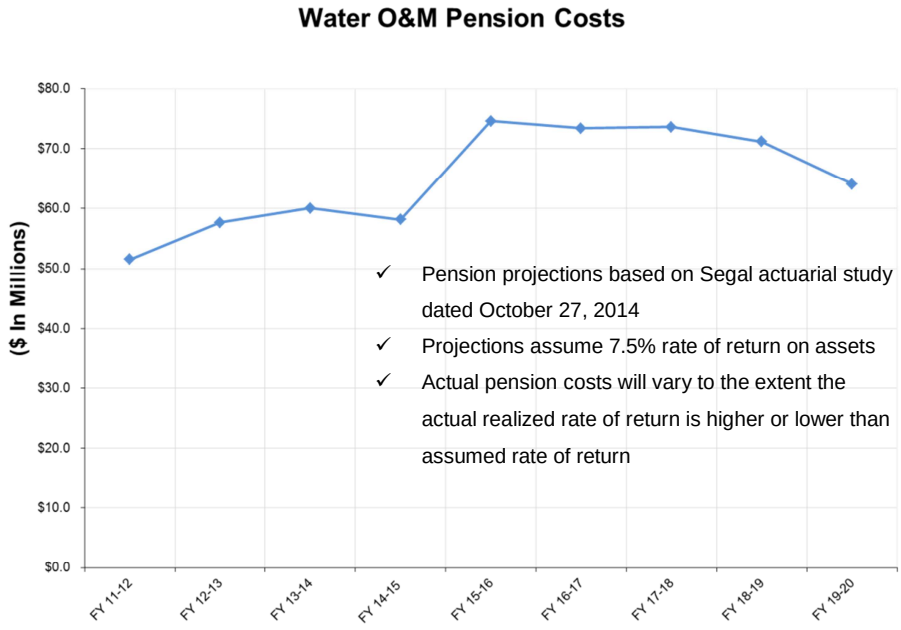
	Average FY 2008-09 through FY 2010-11	Cost Reduction Plan Target	FY 2011-12 through FY 2013-14	Average FY 2014-15 through FY 2019-20
Water System	12.4%	10.0%	12.7%	9.8%
Power System	25.3%	22.0%	20.6%	17.5%
Joint System	12.4%	10.0%	12.4%	9.1%

[7] Criteria for retirement eligibility are defined as "age 55 with over thirty years of service" or "age 60 with five or more years of service." LADWP data estimated as of June 1st of each year.

Pensions

Figure 7 summarizes the O&M pension expense for the Water System in recent years and over the proposed rate period. The increase from FY 2014-15 to FY 2015-16 is a result of a more granular and accurate method of allocation of shared service costs between Water System and Power System capital and O&M expenditures. The more granular approach resulted in an allocation of additional shared service costs to the Water System with a corresponding decrease in costs allocated to the Power System.

Figure 7: Water System O&M Pension Costs



2.3.3 Cost Reduction Plan Highlights

From February 2011 to June 2014, the Department implemented a multiyear, multimillion dollar, enterprise-wide cost reduction plan that focused on initiatives that would have an immediate and measurable impact on the Department's expenses. This plan included changes in areas such as labor, operations and capital expenditures to help keep rates reasonable.

In 2011, the Department examined its portfolio of recurring and non-recurring projects and related labor and non-labor expenses to identify areas to reduce costs in the short-term. The major components identified for the Department's original cost reduction plan were as follows:

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

- Capital cost savings.

The cost reduction plan was developed to balance the need to maintain reasonable customer rates and financial stability with LADWP's major Water and Power System initiatives.

LADWP exceeded its original $459 million target by $7.8 million dollars. As of June 2014, LADWP had saved an estimated $467 million dollars across the entire Department over the three-year period.

Figure 8: Cost Reduction Plan Current Results (Water and Power Systems)

Source	February 2011-June 2014 Savings ($M)
Labor	$230.0
Non-Labor	$142.8
Capital	$94.1
Total	**$466.9**

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

Additional Cost-Savings Initiatives

In addition to savings associated with the official cost reduction plan, LADWP has implemented many other initiatives to control or reduce costs.

- Shade Balls: LADWP has pioneered the use of cost-efficient shade balls to meet water quality regulatory compliance, saving $80 million dollars that would have been spent on floating reservoir covers.
- Electronic Water Quality Report (WQ Report): In 2014, LADWP provided an interactive WQ Report online and notified customers of the availability of the electronic report, which saved $400,000 in mailing costs[8].
- Pipe Material Evaluations: LADWP has commenced pilot projects to test and evaluate alternate pipe materials to maximize the life of pipeline infrastructure and reduce the long-term cost of ownership.
- Outsourcing: LADWP continues to examine opportunities for outsourcing as a cost-effective way to complete capital projects and plans to contract out an estimated 61% of

[8] Full report can be found here: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB401710&RevisionSelectionMethod=LatestReleased

its total Water System capital work[9] on average over the next five years compared to 42% in FY 2013-14.

- City Coordination: Improved planning and coordination with the Bureau of Street Services of the Department of Public Works has reduced paving costs and improved the long-term durability of streets.
- Maximo System Replacement: The replacement of the Maximo Work Management System will assist in the Water System's asset management program and maximize efficiencies in procurement and inventory management by reducing carrying costs.
- Real Estate Consolidation: LADWP is in the process of acquiring a 17.35 acre property adjacent to its 35 acre Valley Center facility to consolidate operations. The consolidated property is expected to provide opportunities to optimize facilities/real estate and reduce staff.
- Procurement Card Program: Tighter internal controls are being implemented on procurement cards so that charges are only authorized on approved contracts, taking advantage of wholesale prices and competitive bidding processes.

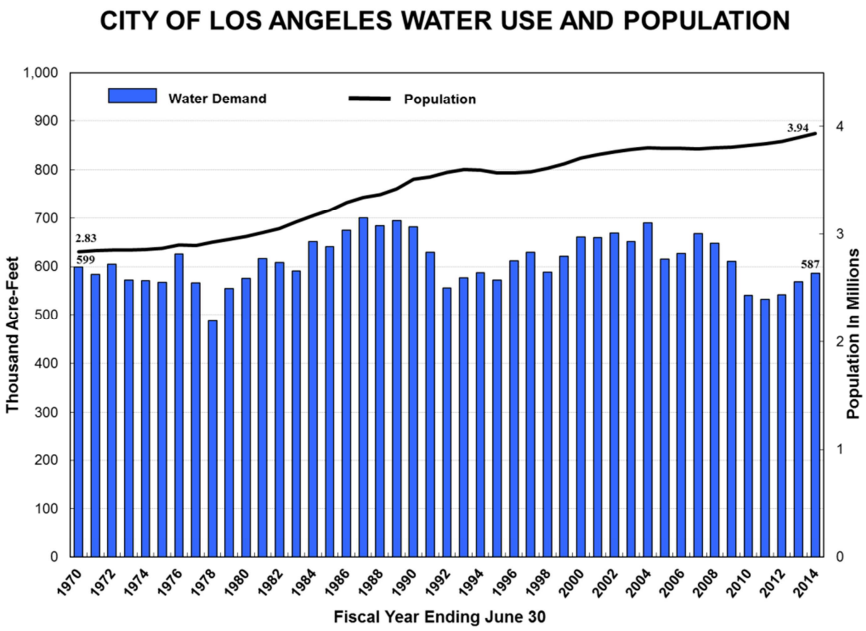
These and many other operational improvement initiatives are discussed throughout this report. Process improvements and other cost savings opportunities have become a major strategic focus area for LADWP. Initiatives are organized through LADWP's Corporate Performance Improvement Group. This group is responsible for promoting, monitoring, and reporting on performance improvement efforts.

2.3.4 Conservation

The Department takes great pride in the fact that, despite a growing population in Los Angeles, water conservation efforts have kept water usage relatively stable. Within the proposed rate period, conservation will be even more important, given the continued drought and the Mayor's call for a 20% reduction in per capita water use by 2017. During FY 2013-14, water use was below 1970 levels despite significant population growth, as shown in Figure 9.

[9] Includes the portion of support services/shared services (Joint) capital projects allocated to the Water System.

Figure 9: Water Demand and Los Angeles Population 1970-2014[10]



The Department and its customers have been very successful in reducing water usage through conservation programs supported by a volumetric-based rate structure. In part, this trend can be attributed to the implementation of shortage year rates[11]. From June 2009 through August 2014, a period in which shortage year rates have been applied, water usage has been reduced by approximately 16.4%. The reductions in consumption for specific customer classes during that time period are shown in Figure 10.

[10] Population was updated with 2010 US Census data. Records are subject to change on findings from the Water Loss Component Audit.

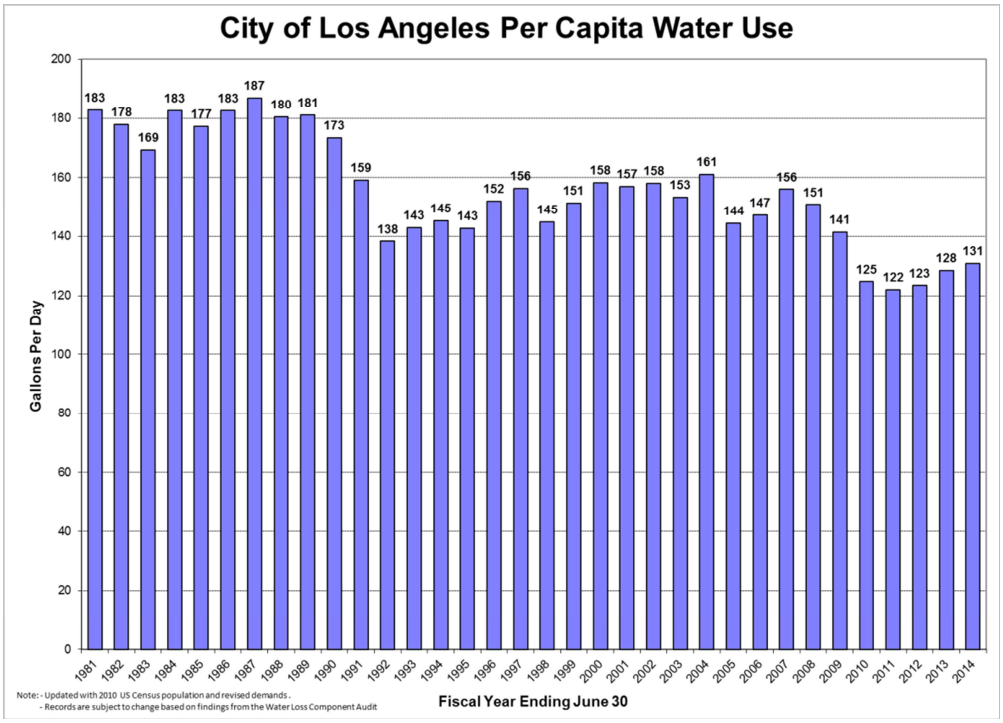
[11] Under shortage year rates, the tier 1 water allocation, which is the standard allocation every customer gets per billing cycle, is reduced by 15%. A residential customer's allocation is currently based on the household size, temperature zone, lot size and season.

Figure 10: Conservation by Customer Class (June 2009-August 2014)

Customer Class	Cumulative Conservation (June 2009–August 2014)
Single-Dwelling Unit Residential	-20.8%
Multi-Dwelling Unit Residential	-11.1%
Commercial	-13.5%
Industrial	-19.2%
Governmental	-17.1%
Total Water Usage	**-16.4%**

This trend is also apparent in Figure 11, a chart of per capita water consumption in LA from 1980 to 2014.

Figure 11: City of Los Angeles Per Capita Water Use



To help continue conservation efforts, LADWP's proposed rate structure, discussed in Chapter 5, strives to make allotments similar to the current shortage year rates permanent.

Customer Conservation Programs

LADWP provides one of the most comprehensive water conservation programs in the country. Some of the achievements of customer programs include:

- From 2009 through early 2015, over 14 million square feet of turf has been removed and replaced with California Friendly Landscapes in commercial and residential properties, saving 480 million gallons of water per year.
- Over 1.5 million ultra-low-flush and high-efficiency toilets have been installed in the City.
- Over 1.8 million water-efficient showerheads have been distributed.

The following table shows the cost effectiveness of the water conservation rebate programs. The average cost of the water conservation rebate programs ranges from $450 to $500 per acre-foot (AF), which is highly cost effective in comparison to Metropolitan Water District (MWD) purchased water, as shown in Figure 12.

Figure 12: Cost of Conservation Programs Versus MWD Purchased Water

Program	Cost/AF
Residential Rebates	$424
Commercial Rebates	$380
Technical Assistance Program	$229
Residential Turf Removal	$1,296
Commercial Turf Removal	$741
Average Rebate Program Cost	$450 to $500
MWD Purchased Water	$890 to $1,032

Given recent drought conditions, LADWP seeks to continue its successful conservation programs. A complete list of current programs can be found in Chapter 2 - Appendix B.

Water Loss Audit

LADWP completed its first in-depth Water Loss Audit and Component Analysis Project in the Fall of 2013[12]. The audit examined the efficiency of the Water System by auditing losses in the distribution system for FY 2010-11.

The report found that LADWP's Water System does not have significant volumes of real losses[13] (3.5%), reflecting a well-performing system. LADWP's Infrastructure Leakage Index (ILI) was

[12] The executive summary for this report can be found here: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB402320&RevisionSelectionMethod=LatestReleased

determined to be an impressive 1.26 for FY 2010-11. However, LADWP will act on the report's additional recommendations to improve infrastructure and reliability, as many assets are reaching the end of their useful life, and preventative maintenance is more cost effective than emergency maintenance. For a more complete summary of the audit findings, refer to Chapter 2 - Appendix E.

In October 2014, LADWP founded its Water Loss Task Force (Task Force) to implement the audit recommendations. The Task Force will assess the findings from the audit, prioritize recommendations, and execute action plans to further decrease water loss and improve LADWP's Water System performance.

2.3.5 Major Water System Investments

Major investments have been made to improve the LADWP Water System since the previous rate action in the areas of water quality, groundwater remediation, local water supply, infrastructure and Owens Lake regulatory compliance. The next section has a high level overview of these investments; for more details on specific projects in each area, please see Chapter 2 - Appendix C.

Water Quality

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[14] (LT2ESWTR) and the Stage 2 Disinfectants and Disinfection Byproducts Rule[15] (Stage 2 D-DBPR) recently promulgated by the United States Environmental Protection Agency (EPA). LADWP publishes a quarterly Water Quality report on all completed and current projects. Please see Chapter 2 - Appendix D for the most recent update.

- Reservoir Covers and Decommissioning: The Department has designed covers to protect reservoirs such as Santa Ynez, or is developing new reservoirs to take non-compliant reservoirs (Upper and Lower Hollywood, Silver Lake, and Ivanhoe) out of commission. To replace these reservoirs, Headworks East was completed in November 2014, and Headworks West is 60% complete.
- Trunk Lines: Trunk line projects are required for water quality reservoir compliance projects to redistribute water from existing reservoirs as LADWP takes non-compliance reservoirs. Since 2000, LADWP has replaced approximately 224,000 feet of water quality related trunk line projects and has assessed another 34 projects to determine

[13] "Real losses" are losses such as leaks and theft. These losses are in contrast to "apparent losses," that include meter inaccuracies and billing errors.

[14] For more information see: http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/regulations.cfm

[15] For more information see: https://www.federalregister.gov/articles/2006/01/04/06-3/national-primary-drinking-water-regulations-stage-2-disinfectants-and-disinfection-byproducts-rule

priority. Construction on the First Street trunk line has been completed. City Trunk Line South projects are under construction.

- Chloramination: LADWP has spent the past ten years converting its water supply from chlorine to chloramine disinfection to reduce disinfection byproducts. Both chlorine and chloramines are effective killers of bacteria and other microorganisms, but chloramines form less byproducts and do not have a chlorine odor. Since May 2014, chloraminated water has been served throughout the LADWP Water System. Construction is complete on chloramination stations at the Van Norman station (1 and 2), Manhattan Station well-field, Tujunga Wells, North Hollywood pump station, Green Verdugo Reservoir, Stone Canyon filtration plant, and Mission Wells pump station. The 99th Street Station is in progress and is expected to be complete in FY 2017-18.
- River Supply Conduits (RSC): RSCs are major transmission pipelines built in the 1940's. RSC improvement is necessary for improving water pressure as required by California Department of Public Health regulations. It will also allow for greater operational flexibility to compensate for loss of water storage within the distribution system; for example, RSC improvement would assist in facilitating planned changes to the method of disinfection. Approximately 30,000 linear feet of the RSC that runs between North Hollywood pump station and the Headworks Spreading Grounds site, located near Forest Lawn Drive just west of Victory Boulevard, will be replaced with a larger diameter steel pipe. Units 1B, 2B, 3 and 4 have been completed. Units 5, 6, and 7 are scheduled to be completed within the next five years.
- Ultra Violet (UV) light: LADWP determined that a specific wavelength of UV light can inhibit the growth of bacteria that cause nitrification. LADWP is developing a schedule for installation of UV lights in tanks based on frequency of nitrification, operating needs, and roof conditions. Design of the LA Reservoir Filtration Plant is 98% complete.
- Sanitary Survey: The LADWP has conducted watershed sanitary surveys since 1995 in the Owens River/Mono Basin watershed of the LAA. The survey assesses the potential sources of contamination in the watershed and recommends improvements to the source water protection program.

Overall, investments in water quality projects have been effective and LADWP has complied with or exceeded goals, providing the citizens of Los Angeles some of the best quality water in the area.

Local Water Supply

In order to reduce reliance on purchased water and mitigate the volatility of available water during dry years, the Department has made significant investments to develop local water supplies.

- Conservation: Conservation is a key part of local water supply, given drought conditions. Please see Section 2.3.4 for accomplishments in this area.

- Recycled Water: In 2012, the Department published its Recycled Water Master Plan Report to identify ways to meet the Urban Water Management Plan[16] goals of increasing recycled water use Citywide to approximately 59,000 acre-feet per year (AFY) by 2035. From November of 2012 to December of 2013, the Department installed 6,652 feet of Purple Pipe projects, and will connect new customers to this infrastructure. Recycled water supply increased by 34% from 7,480 AFY in FY 2012-13 to 10,050 AFY in FY 2013-14.
- Groundwater: LADWP is currently undergoing a study that will outline how to remove contamination from groundwater for the betterment of the environment. In 2014, LADWP acquired Central Basin water rights that will increase supply by an additional 1,546 AFY. The water rights will be owned by the City of Los Angeles in perpetuity, thereby reducing the City's reliance on purchased water supplies.
- Stormwater capture: The Department has implemented centralized and decentralized projects that have increased the amount of stormwater captured by an average of 10,600 AFY and 254 AFY, respectively.

Infrastructure

In the context of the Water System, the term infrastructure refers to aqueducts, reservoirs, tanks, pumping stations, regulator stations, distribution mainlines, trunk lines[17], and hydrants.

Most major water systems in the United States are facing aging infrastructure problems in the coming years. It is estimated that during the years 2009 through 2028, local governments in the United States will spend anywhere from $2.5 trillion to $4.8 trillion on water and wastewater infrastructure[18].

The City of Los Angeles' water system was largely constructed between 1920 and 1970; therefore, much of the water infrastructure is approaching its useful service life. LADWP has strategically utilized currently available funding to maintain infrastructure reliability.

- Mainline Replacements: From FY 2009-10 through FY 2013-14, the Department replaced 540,000 feet of mainline. This investment has decreased the number of blowouts and leaks from 1,454 in FY 2009-10 to 1,149 in FY 2013-14.
- The LAA requires rehabilitation of pipelines' internal coating, external coating, structural support and cathodic protection system, as well as removal of decaying roofs on the

[16] For the full report see: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=QOELLADWP005416&RevisionSelectionMethod=LatestReleased

[17] Some trunk line projects are designed to help meet water quality regulations; due to the alternative funding sources available for water quality improvements, LADWP separately tracks water quality and general trunk line investments.

[18] Trends in Local Government Expenditures on Public Water and Wastewater Services and Infrastructure. For full report see: http://www.usmayors.org/publications/201002-mwc-trends.pdf

conduit portion. LADWP has been replacing sections of the LAA cover over many years; the remaining 16,000 feet is being replaced this year.

- Seismic Retrofits: LADWP has completed the Terminal Hill Tunnel and Shaft Project to mitigate seismic hazards. In September of 2014, the Water System completed a study in conjunction with the Mayor's Office evaluating the Water System's seismic resiliency and sustainability, which created a program that will continuously mitigate seismic risks.
- Regulator Stations: In September 2003, LADWP commenced a retrofit program that has reduced the number of call-outs (failures in which Department personnel must attend to the station outside of regularly scheduled maintenance) per year from over 200 to less than 10. To date, approximately 200 stations and tank altitude valves have gone through complete retrofitting, which involves replacing everything in the vaults, gate valves, regulator valves, etc.

2.3.6 Eastern Sierra Environmental Commitments

Dust Mitigation

The Department is continuing dust mitigation efforts at Owens Lake to comply with agreements with the Great Basin Unified Air Pollution Control District (GBUAPCD or the District).

- Since November 2003, the Department has spent more than a billion dollars to mitigate dust at Owens Lake. This number reflects the costs of construction, O&M, and the value of water diverted to Owens Lake for dust mitigation instead of delivery to Los Angeles for drinking water supply. The Department has been allocating up to 95,000 acre-feet of drinking water each year for this practice. As a result of past efforts, 90% of the dust on Owens Lake is now controlled.
- In October of 2012, LADWP completed Phase 8 of the Owens Lake Dust Mitigation project and Phases 9 and 10 will be completed by the end of 2017.

Owens Lake December 2014 Stipulated Judgment

In November 2014, LADWP and the GBUAPCD reached an agreement regarding the remainder of dust mitigation measures as well as dust mitigation methods. In this agreement, which was subsequently approved in a December 2014 stipulated judgment, LADWP will mitigate a maximum of 53.4 square miles and can replace shallow flooding methods with alternative dust mitigation techniques such as tillage (physical contouring and maintenance). Upon completion, LADWP will be in full compliance with dust mitigation requirements.

This agreement benefits ratepayers, as LADWP will no longer be subjected to additional litigation regarding areas of dust mitigation. In addition, the use of new, low-water use dust mitigation methods is likely to decrease the amount of water for dust suppression.

Mono Basin Agreement

In August 2013, the LADWP Board approved an agreement among LADWP, the Mono Lake Committee, California Trout, and the California Department of Fish and Wildlife to protect the Mono Basin environment and the four major streams that flow into Mono Lake. The agreement has conditions that will be in LADWP's Water Diversion License. LADWP remains committed to the Mono Basin environment through the conditions of the agreement and its Water Diversion License. Among such conditions are the following:

- LADWP will construct modifications to the spillway at Grant Lake Dam, which will allow higher water flows-assisting the movement of sediment, creating deep pools for trout, and improving stream habitat quality. Design is 30% complete on a modification to the Great Lake Reservoir spillway that will include an adjustable weir, allowing water to be discharged from the reservoir to Lower Rush Creek, restoring the eco-system in Rush Creek.
- The annual supply of water to Los Angeles from the Mono Basin will be determined by pre-existing rules.
- LADWP will fund a team, governed by all four partners, which will oversee continuous scientific study of Mono Lake and Mono Basin stream conditions.

2.3.7 Keeping Rates Competitive and Financial Planning

One of LADWP's main strategic goals is to maintain an overall rate advantage while funding essential utility needs. Developing the proposed rates is a balancing act between the need to plan for a long-term water supply, provide reliable quality service, and continue to meet regulatory mandates and the desire to maintain reasonable rates. In addition, contractual obligations for wages, benefits and pensions and the impact of inflation must be considered.

As discussed throughout this report, LADWP has made significant investments in the Water System and requires additional investments in the future. Most of these investments are typically financed through borrowed funds, making it imperative that LADWP has regular and continued access to capital markets at reasonable interest rates. The Department has taken advantage of several financial strategies to keep ratings high through securitization, bond refinancing, regulatory asset accounting, State 0% loans, and grants.

Securitization

In total, LADWP's estimated $4,964 million of capital spending over the next five years is approximately 78% higher than the level over the preceding five-year period of about $2.8 billion. Major drivers for this spending increase include infrastructure improvements, the development of an enhanced local water supply program and the impact of compliance with State and Federal mandates (including the Safe Drinking Water Program). The five-year capital forecast is summarized in Figure 13.

Figure 13: Five-Year Capital Investment Program Summary (FY 2015-16 through FY 2019-20)

Program Area	Total Capital ($M)
Water Conservation	$195
Water Quality	$1,354
Infrastructure	$2,447
Local Water Supply	$712
Owens Valley	$256
Total	**$4,964**

LADWP forecasts the need for external financing (borrowed funds) for about 74%[19] of capital spending over the next five years. External financing allows the costs of the 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. However, given the substantial increase in capital spending levels that is anticipated, even with borrowing, rate increases will be required.

In October 2013, the California legislature enacted AB 850 which expanded the financing powers of a Joint Powers Authority (JPA) by authorizing JPAs to issue "rate reduction bonds" secured by utility project charges to finance water conservation, reclamation and mitigation projects. LADWP will participate in the formation of a qualifying JPA that will issue some of the required debt related to water quality and related investments at lower interest rates. This approach will help minimize the rate increase by reducing additional revenue needed in FY 2015-16 by $45.6 million[20].

LADWP anticipates using securitization to finance a substantial portion of capital projects over the next five years, as shown in Figure 14.

[19] Includes non-securitized and planned securitized debt amounts.

[20] Based on Sensitivity Case Number 50 (more information on the sensitivity cases can be found in Chapter 3).

Figure 14: LADWP Securitization and Non-Securitization Borrowing

$M	Historical			Projected					
	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	5-Year Total
LADWP Borrowing (Non-Securitized)	$352	$509	$436	$112	$233	$259	$416	$395	$1,414
Borrowing for Securitization				$409	$475	$427	$409	$542	$2,261
Total				**$511**	**$708**	**$686**	**$825**	**$937**	**$3,675**

Due to the differences in the required debt service payments under securitization compared to normal borrowing, LADWP may not see significant benefits from securitization in the short-term, but in the long-term, LADWP will benefit from cost savings through securitization. In addition, securitized debt would not contribute to the debt service coverage ratio. LADWP anticipates forming a JPA in FY 2015-16. Additional information about the creation of a JPA is provided in Chapter 2 - Appendix F.

Bond Refinancing

LADWP's bond refinancing through the cost reduction program reduced borrowing costs by an estimated $91 million from FY 2011-12 through FY 2014-15[21] for both Water and Power Systems. It is expected that refinancing measures will save $357 million over the lifetime of the bonds, $85 million of which is from Water System bonds[22]. For more details on this refinancing, please see Chapter 2 - Appendix G. LADWP will aggressively continue its initiatives to refinance debt as market conditions permit more favorable borrowing costs.

Regulatory Assets

Beginning in FY 2011-12, LADWP has treated conservation and reclamation programs as well as the unfunded pension liability as regulatory assets, allowing the cost to be amortized over the life of the programs rather than being collected in one year. Regulatory asset accounting will benefit LADWP by deferring the impact of these programs on customer rates without impacting the debt to equity ratio. With the growth of the programs, this classification has helped to minimize the immediate rate impact of applicable programs.

[21] This amount includes projected savings through the end of FY 2014-15.

[22] Present value dollars.

State 0% 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 15 shows the total amount received by the Department 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 are available. For more information on the amount of each loan, specific projects, and calculation of avoided interest costs, refer to the latest Water Quality Project Update in Chapter 2 - Appendix D.

Figure 15: 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**

Grants

LADWP maximizes its opportunity to obtain grants for major projects, as summarized in Figure 16. During the past five years, LADWP has received a total of approximately $33.2 million in grant funding. To the extent these grants are available, LADWP will continue to pursue additional grant resources.

Figure 16: Grant Funding from FY 2010-11 through FY 2014-15

Project	Source	Grant Amount ($M)
MWD RFP on Stormwater Capture Master Plan Grant	MWD	$0.4
Water recycling/conservation programs and initiatives, including the Commercial/Industrial Drought Resistant Landscape Incentive Program; the Groundwater Replenishment Pilot Study; and the LADWP Distribution System Water Audit and Component Analysis from the United States Bureau of Reclamation.	Federal	$1.7
State Water Resources Control Board Laurel Canyon Boulevard Green Street Project–Prop 84	State	$2.0
State Water Resources Control Board for Woodman Avenue Multi-Beneficial Stormwater Capture Project–Prop 50	State	$1.6
California Department of Public Health's Proposition 50 Chapter 3 Security Grant Program for the LADWP Water System Security Upgrades and Intertie Project	State	$10.0

Project	Source	Grant Amount ($M)
California Department of Water Resources' Proposition 84 Integrated Regional Water Management (IRWM) Program • Manhattan Well Improvements ($3 million; shared with project partners) • Terminal Island Water Reclamation Plan Advanced Purification Facility and Distribution System Expansion Project ($2.5 million) • Los Angeles–Burbank Groundwater System Interconnection ($500,000, shared with project partners) • Mission Wells Improvement ($3 million)	State	$9.0
California Department of Water Resources' Proposition 84 IRWM Program • Central Los Angeles County Regional Water Recycling Project ($2.5 million) • Tujunga Spreading Grounds Enhancement Project ($3 million) • Pacoima Spreading Grounds Improvement Project ($3 million; shared with project partners)	State	$8.5
Total		**$33.2**

Proposition 1 Funding

On November 4, 2014, California voters approved Proposition 1 (Prop 1), the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Prop 1 is a general obligation bond measure of $7.545 billion that will provide funding to restore and protect ecosystems and watersheds, provide safe drinking water to disadvantaged communities, build new storage projects, protect and clean up groundwater, and support regional water security through local resource development.

Most Prop 1 funding is subject to appropriation by the Legislature through the budget process. LADWP will monitor budget discussions, track and engage on any proposed legislation related to Prop 1 implementation, and ultimately participate in the guideline development process to optimize the City's ability to compete for and be awarded Prop 1 funding.

Prop 1 gives priority to projects that provide matching funds. LADWP does not expect Prop 1 to fully fund any critical water projects. However, it could fund up to half of important water projects such as the San Fernando Basin Groundwater Remediation Project, expected to cost between $600 million and $900 million, and the Groundwater Replenishment Project, which is expected to cost about $400 million or more.

Water Resources Reform and Development Act of 2014 (WRRDA)

The WRRDA, which President Obama signed in in June 2014, is the primary legislation by which Congress authorizes the US Army Corps of Engineers (ACOE) Federal and non-Federal water infrastructure and restoration projects.

Section 1014 of WRRDA provides a new authorization mechanism for the study, planning, and construction of new water projects by non-Federal interests. Under Section 1014, an applicant may submit a feasibility study to the ACOE for review. LADWP, LA Sanitation, and other water agencies are awaiting ACOE's finalization of implementation guidance for Section 1014. As these guidelines are developed and finalized, Water System management will identify a priority project that fits the opportunity and would provide the most benefit to City ratepayers. If the City is granted a project authorization through this new approval process, the cost savings to ratepayers could be significant, possibly in the tens of millions of dollars.

2.3.8 High-Level Benchmarking

In February 2015, the Department completed an initial high-level benchmarking study. The study identified areas where LADWP is comparable or better than industry performance and where LADWP has opportunities for improvement. Key findings of the benchmarking study for the Water System are summarized in Figure 17.

Figure 17: Water System High-Level Benchmarking Results

Benchmarking Area	Quartile	Notes
Total O&M Costs	2nd/3rd	The Water System total O&M costs on a per customer and per gallon basis are 2nd/3rd quartiles. These results include the $56 million of O&M costs for the LAA, an expense most water utilities do not have. If this cost was excluded, results for these metrics would improve by one full quartile.
Customer Service O&M Costs	4th	The Water System benchmark for customer service O&M per account fell into the 4th quartile. This result could be lower as a result of business strategies for mostly publicly owned utilities within the AWWA peer set.
Total Planned Service Disruptions per Customer	1st/2nd	LADWP's 1st and 2nd quartile results are favorable benchmarks relative to National and Western Regional peers, respectively.
Total Unplanned Service Disruptions per Customer	2nd	LADWP 2nd quartile result is a favorable benchmark relative to both National and Western Regional peers.
Real System Losses	2nd/3rd	The 2nd and 3rd quartile results show that the Water System losses are roughly in-line with the peer median.
LA Metro Wage Rates	N/A	Compared to other regions of the US, wage rates for the LA Metro area can range from 13% to 33% higher than peer utilities. Labor costs, including overtime and benefits, represents 73% of the Water System's total O&M expense.
Regional Water Rates	N/A	LADWP's rates were competitive with neighboring water utilities in all customer classes for FY 2012-13. Most water utilities in California are increasing rates in response to both State and Federal regulatory requirements as well as much needed water storage and recycling infrastructure programs.
Key Financial Metrics	N/A	LADWP's key financial metrics are in line with industry peer sets.

The high-level benchmarking summary provides a roadmap that will help identify areas for further study and analysis. Some of the processes to study will include, but may not be limited to customer service, outside contracting and salary/pension/healthcare costs. Processes that may present opportunities for improving financial and/or Departmental performance will also undergo business process mapping studies. These studies will compare industry best practices and identify next steps for LADWP to move toward best practices.

2.4 CUSTOMER REBATE AND SAVINGS PROGRAMS

The purpose of this rate action is to increase current rates to recover increasing O&M and capital costs incurred by the Water System to provide high quality water to the citizens of Los Angeles. Though, on a per unit basis, rates may increase, LADWP provides many customer rebate and savings programs to mitigate increases in total bills through conservation efforts.

A sample list of programs that are available to LADWP customers include, but are not limited to, the following programs.

- Commercial/Industrial Rebate Incentive Program- This program is a partnership with MWD to offer rebates for business customers who purchase and install water conservation equipment such as high-efficiency toilets and urinals, weather-based irrigation controllers, cooling tower conductivity controllers and other measures.
- Residential Rebate Program- This program is a partnership with MWD to offer numerous rebates for residential customers who purchase and install water conservation equipment. Rebates are offered for various measures such as high-efficiency clothes washers, high-efficiency toilets, weather-based irrigation controllers, and others.
- Residential Landscape Incentive Program- This program provides rebates to residential customers for turf removal and replacement with California Friendly Landscapes, mulch, permeable pathways, and artificial turf. Customers can get up to $3.75 per square foot of turf removed.
- Consultant Services for Residential Field Audits- Contractors will provide a Field Audit Program, performing on-site water-use evaluations for residential and commercial customers' properties. The contractor will provide customized water-efficiency recommendations, including information about LADWP rebates and other assistance programs, to help customers eliminate water waste and reduce their potable water use. The Program will initially target 2,000 customers.

A comprehensive list of customer rebate and savings programs can be found in Chapter 2 - Appendix B.

2.5 RESPONSE TO CITY COUNCIL RECOMMENDATIONS

On September 25, 2012, the City Council adopted an amended committee report with ten recommendations associated with third-party review of LADWP's Incremental Electric Rate Ordinance. LADWP has made significant progress toward addressing the recommendations by working collaboratively with the Ratepayer Advocate, Chief Legislative Analyst, and Chief Administrative Officer. The last report was provided to the City Council in June of 2014 outlining the Department's status for addressing each recommendation. While the recommendations are originally addressed to the Power System, several also have relevance to the Water System, and the current status is included in Chapter 2 - Appendix H. The City Council adopted the following ten recommendations:

a. Conduct negotiations with labor to find common ground that allows for greater flexibility to contract out effectively and bring salaries and benefits closer to other power utility providers.
b. Revaluate and consider replacing the surcharge-based restructuring approach with fully restructured permanent rates once legal considerations allow.
c. Conduct a new formal cost of service study in order to prepare for future power rate restructuring.
d. Conduct a benchmarking assessment to review the cost per project for the repowering program and the Power Reliability Program to ensure cost reasonableness.
e. Identify opportunities to contract out and explore the potential savings, including the benchmarking of staffing and outsourcing levels against utility peers.
f. Review overtime expenses allocation, as well as the Department's contractual requirements that have an impact on overtime.
g. Complete a rigorous review of the Department's hedging plan to lock in low fuel prices.
h. Establish a plan for energy efficiency that maintains expenditure levels at an achievable and cost effective level.
i. Seek greater Departmental efficiencies by pursuing process improvement efforts across a range of areas and practices.
j. Submit a semi-annual report to the Mayor and City Council regarding the status of the Renewable Portfolio Standards program and its impact on rates.

Programs or other activities have been developed and implemented to address all of the recommendations. While some activities are ongoing, LADWP has made significant progress in each area. A detailed status of each of these recommendations from the City Council is included in Chapter 2 - Appendix H.

2.6 RECENT RATE ACTION HISTORY

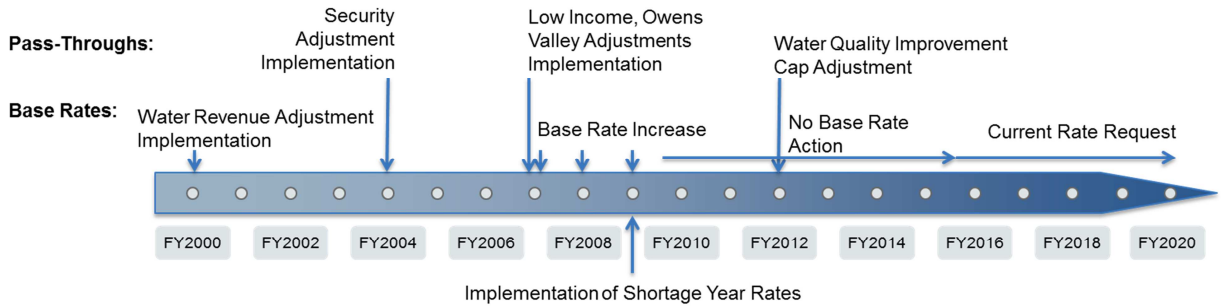
The Department has not increased water base rates since July 2009, the month that shortage year rates were implemented. By the time the proposed rates are implemented later in 2015, over six years will have elapsed since the last change to base rates.

To help mitigate the impact of water quality programs on base rates, on February 8, 2012, the City Council approved a $0.35 per hundred cubic feet (HCF) increase in the cap for the Water Quality Improvement Adjustment (WQIA) factor. This increase was implemented on March 19, 2012 and ensured that LADWP had sufficient revenues to fund an adequate portion of specific water quality projects needed to comply with drinking water regulations through the issuance of revenue bonds.

While the implementation of the increased WQIA factor allowed the Department 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. In addition, the WQIA factor does not recover the growing costs of other programs such as local water supply investments and infrastructure improvements. 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.

Figure 18 summarizes LADWP's water rate actions from 1998 to 2009.

Figure 18: Historical Timeline of Water Rate Actions (1998-2009)



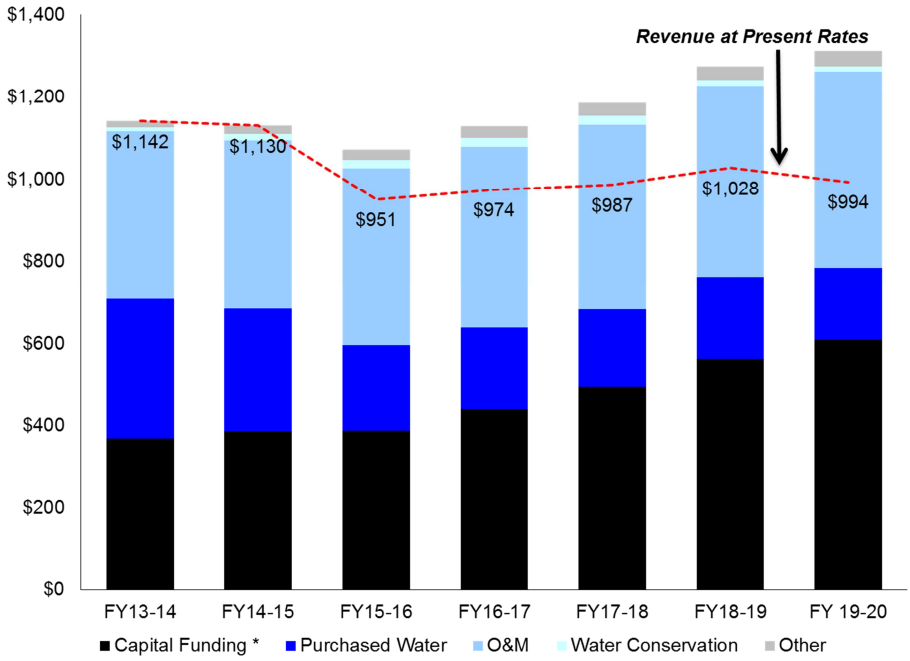
2.7 WHY IS A RATE INCREASE NEEDED NOW?

This report highlights major actions that LADWP has taken to reduce the need for interim rate actions up until this point. However, given the nature of the necessary projects and other obligations, the Department is at a point where a rate increase is required to improve Water System infrastructure, continue to meet regulatory requirements and develop sustainable local water supply, while maintaining a healthy financial standing. This new rate action allows

LADWP to meet its objectives and obligations while continuing to maintain competitive rates relative to peer utilities.

Current revenues will be inadequate to fund the major Water System programs, as summarized by a graphical representation of the income statement in Figure 19.

Figure 19: Current Revenue Shortfall (Given No Rate Increase, Including Purchased Water)



Note: Expenses are based on Financial Plan Case Number 33, which assumes normal precipitation. If precipitation is below normal as it has been in the most recent two years, the revenue requirement is likely to be higher.

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

To meet the Water System's revenue requirement, revenues will have to increase by an average incremental amount of $90 million an nually (excluding the impact of purchased water) through the period of FY 2015-16 to FY 2019-20. This translates to an average annual rate increase of 8.48%, as reflected below in Figure 20. Assuming normal precipitation and including the impact of purchased water, the average annual rate increase would equal 4.96%.

Figure 20: Year-Over-Year (YOY) Rate Driver Breakdown of Proposed Retail Rate and Revenue Requirement Increase (Assuming Normal Precipitation)

Rate Driver	Average Revenue Requirement Increase ($M)	Average System Retail Rate Increase ($/HCF)	Average Annual Rate Increase (%)
Conservation (Securitization)	-6[23]	0.13	-0.50%
Groundwater (Securitization)	5	0.54	0.40%
Stormwater	2	0.18	0.13%
Recycled Water	4	1.31	0.35%
Owens Valley	4	0.32	0.35%
Water Quality	22	0.36	2.06%
Infrastructure (Base)	16	-0.04	1.96%
Infrastructure (Pass-Through)	44	4.32	3.72%
Total before Purchased Water	90	7.13	8.48%
Purchased Water	-44	-1.24	-3.53%
Total	46	5.89	4.96%

2.7.1 Financial Metrics

The Department must closely manage and monitor the Water System's key financial metrics in the current environment throughout the five-year rate period to avoid the metrics deteriorating to a level that might cause a ratings downgrade resulting in higher customer rates.

The Department faces a significant challenge to maintain financial stability while funding both ongoing operations and the additional capital and O&M expenditures. With several large mandated investments required over the next five years, rate increases are necessary to both finance the required programs and maintain access to capital markets at the lowest rates possible.

Without a rate increase, O&M costs continue to rise and impact important financial metrics:

- Debt Service Coverage Ratio (DSC): This ratio divides the funds available for debt service by the sum of long-term principal and total interest payments. It is the amount of

[23] Many conservation investments are eligible for lower financing through securitization, resulting in a reduction in revenue requirement for conservation projects.

cash flow available to meet annual interest and principal payments on the Department's debt.

- Capitalization Ratio: Defined as the long-term debt level divided by the sum of long-term debt plus equity. Companies with extraordinarily high capitalization ratios are considered to be a higher risk. Companies with a high capitalization ratio may also find it difficult to secure additional bond issues in the future.
- Operating Cash Target: Minimum target for operating cash reserves (often defined as days cash on hand or a total cash target amount).

As summarized in Figure 21, absent a rate increase, financial metrics would deteriorate dramatically by FY 2019-20.

Figure 21: Selected Financial Metrics Without Rate Increase

Fiscal Year-End 2019-2020	Days of Operating Cash (With Debt Service)	Capitalization Ratio	Debt Service Coverage
Target With Proposed Rate Increase	150	0.61	1.75
Results Assuming No Rate Increase[24]	54	0.75	0.46

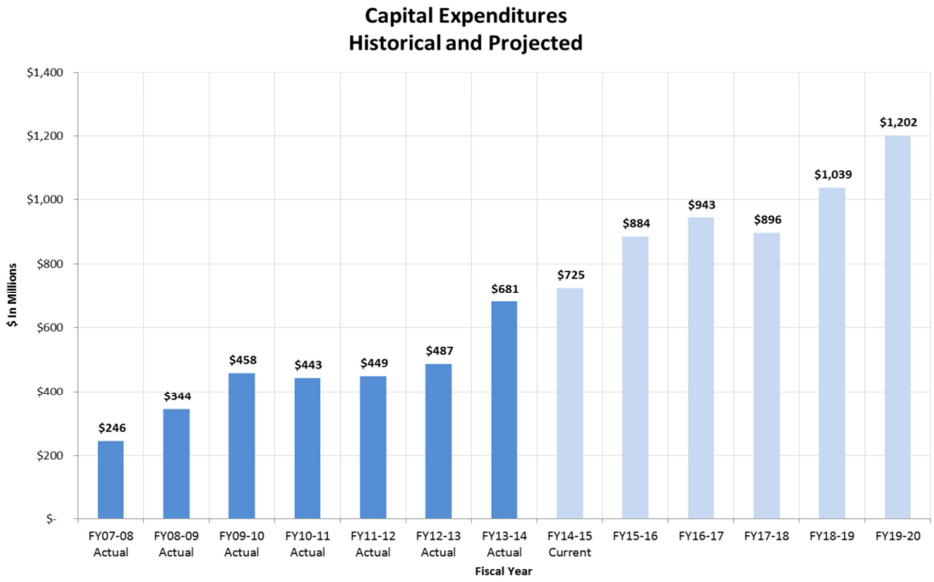
The situation is clearly unsustainable as the Department would not be able to raise the financing for its mandated water quality programs, much less the required infrastructure improvement and the needed local supply investments.

2.7.2 Capital Spending Requirements

As previously discussed, the funding of the Department's initiatives to enhance infrastructure, meet externally imposed mandates and enhance water conservation and local supply will drive significant increases in its capital spending. As shown in Figure 22, proposed capital spending will increase by an average of $79 million annually over the next five years (FY 2015-16 through FY 2019-20).

[24] Based on Sensitivity Case Number 46 (no rate increase for five years and no offsetting cuts to O&M expense). More information on the sensitivity cases can be found in Chapter 3.

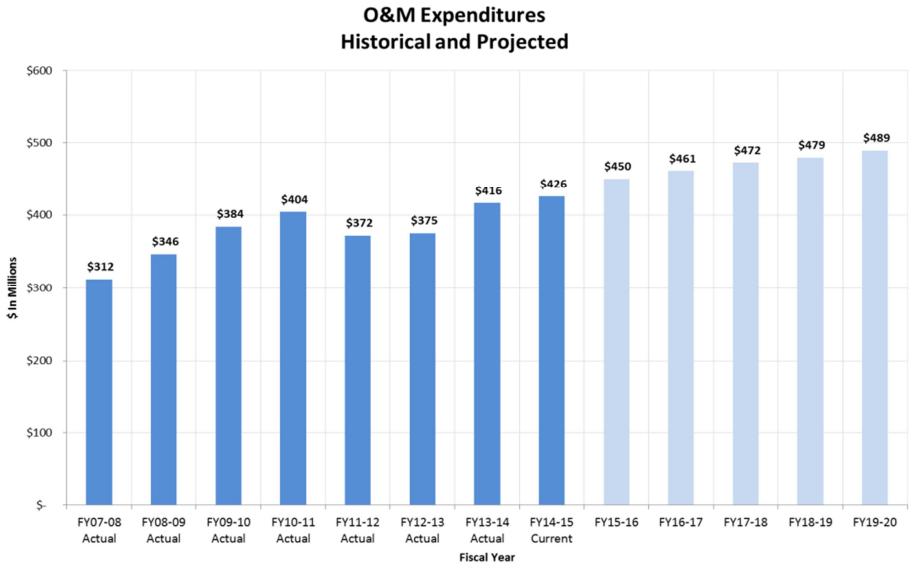
Figure 22: Capital Expenditures Historical and Projected



2.7.3 Operations and Maintenance Expense Requirements

Operations & maintenance expenditures will grow to support major Water System projects. A forecast of O&M expenses, shown in Figure 23, increases at an average rate of $10 million per year from FY 2015-16 through FY 2019-20 (excluding purchased water).

Figure 23: Operations and Maintenance Expenditures Historical and Projected



The proposed increases in capital spending and O&M expenses are required to begin implementing a more sustainable infrastructure and water supply for the future of Los Angeles.

In order to reduce O&M costs, LADWP has also taken significant steps to reduce the higher than normal level of uncollectible revenue that has temporarily resulted from the recent new customer information system (CIS) implementation. Efforts to increase revenue collection include, but are not limited to:

- Implementing on-line, self-service payment options;
- Redoubling review of bill accuracy (planning an audit in 2015);
- Forming system defect remediation team that has already reduced critical defects to approximately 100 with plans to eliminate remaining known critical defects by Fall 2015;
- Reducing estimated bills to 5% of total bills (which is the current target level);
- Decreasing call wait times to pre-implementation levels; and
- Reducing collection thresholds (amount past due and length of time past due before collection efforts begin).

As system remediation allows, additional payment and other self-service options will be added and budget billing (i.e., level pay) will be introduced. Customer outreach and education plans about programs and services will also be expanded. These efforts are designed to reduce the level of LADWP's uncollectibles from 1.42% in FY 2014-15 to 0.97% in FY 2019-20 of total operating revenue (before securitization).

2.7.4 Rating Agency Considerations

Standard and Poor's (S&P), Fitch Ratings, and Moody's currently rate bond offerings of the Water System at AA, AA, and Aa2, respectively. The Department's proposed expenditures and rates take into account financial targets that are designed to avoid a ratings downgrade.

Figure 24 shows the current Board approved financial metrics, alongside financial metrics at the time of the previous base rate increase. Public Resources Advisory Group (PRAG) undertook a review of these financial metrics in June 2013 and found that there was some potential for relaxing the financial metrics for the Water System, which in turn helps to reduce the revenue requirement and customer rates. Based on PRAG's advice, the Department adopted these financial metrics for FY 2014-15 and used them to develop the current financial plan. (PRAG's full advisory note is in Chapter 2 - Appendix I).

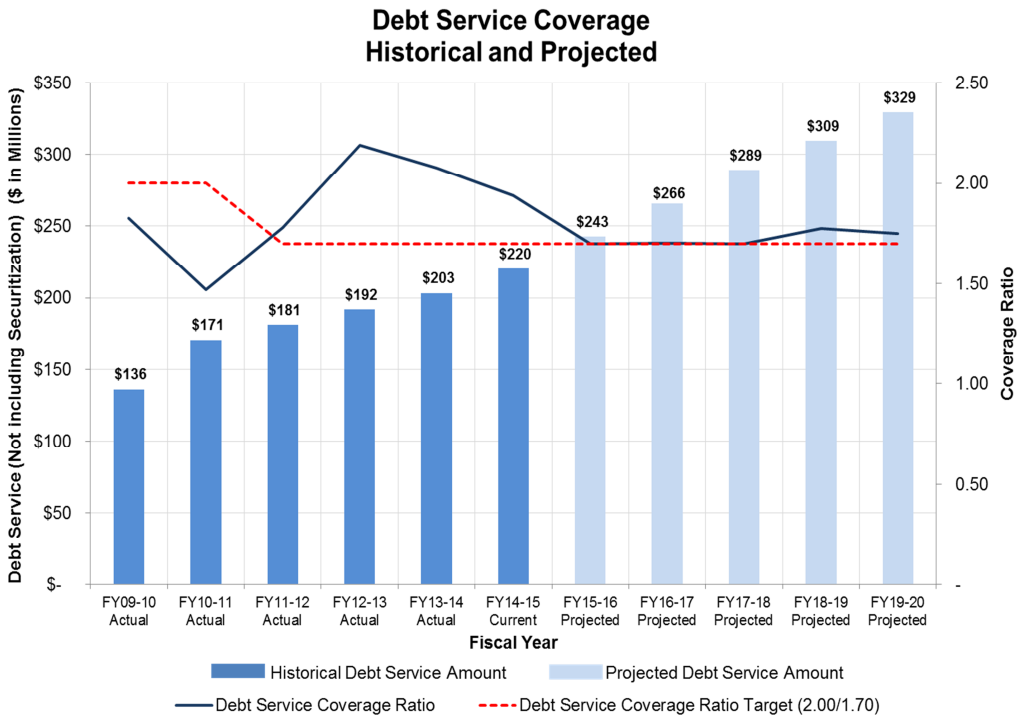
Figure 24: Current Water System Financial Metrics (Approved by Board)

Metric	Current Target (As of May 2014)	Previous Target
Debt Service Coverage Ratio	1.70	2.0
Capitalization Ratio	Less Than 65%	Less Than 60%
Operating Cash Target	150 Days Operating Cash on Hand	$200M[25]

In addition, the Department is required to satisfy an Additional Bond Test Ratio (adjusted net income divided by maximum debt service) of at least 1.25 under existing bond covenants. This ratio represents the minimum coverage ratio required in order to issue new parity long-term debt when issuing additional parity obligations. It is a test for ensuring that the Department can meet the debt service requirements of issuing any new additional bonds.

Under the proposed rates, the Department will meet these targets over the next five years. The Department's historical and projected debt service coverage ratio, capitalization ratio, and days of operating cash results are shown in Figure 25, Figure 26 and Figure 27.

Figure 25: Historical and Projected Debt Service Coverage



[25] Sufficient cash to support operating costs for approximately 110 days.

Figure 26: Projected Water System Debt Outstanding and Capitalization Ratio (Excludes Securitization)

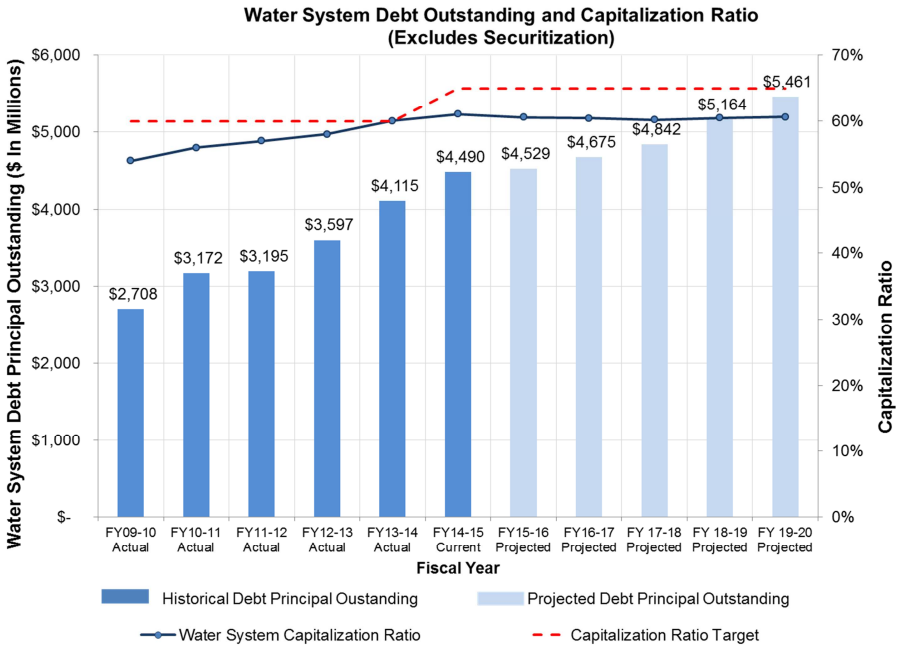
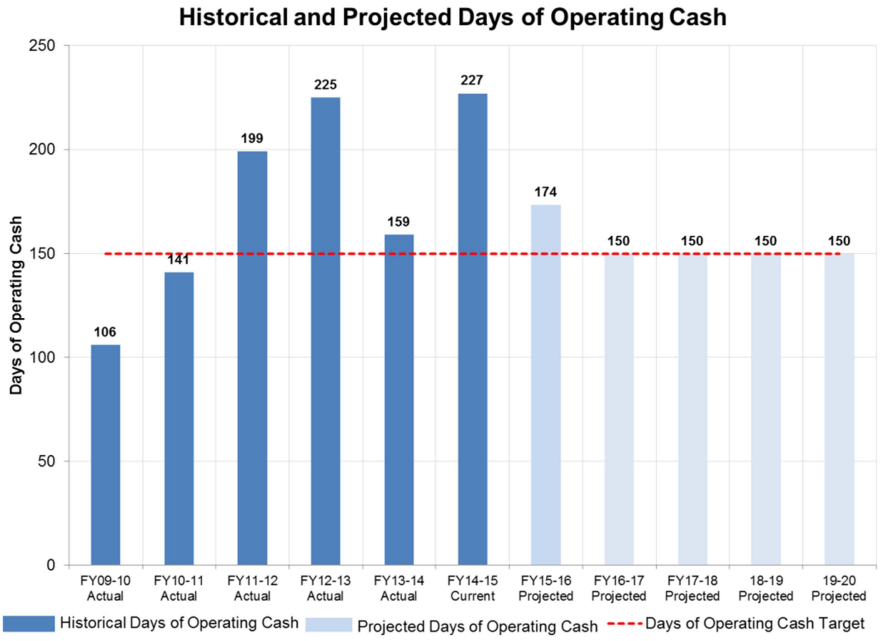


Figure 27: Historical and Projected Days of Operating Cash[26]



[26] With the change in the financial metric, post-2013, operating cash target is calculated by "days" instead of a set target amount.

2.7.5 Risks of Downgrade

If the relaxed financial metrics were to result in a ratings downgrade from AA/AA/Aa2 to AA-/AA/Aa3, there would be an increase in borrowing costs. It is estimated, with a lower rating in a worst case scenario, borrowing costs could increase by 40 basis points, as shown in Figure 28.

Figure 28: Projected Increase in Borrowing Costs from Water System Downgrade (AA to AA-)

Scenario	Increase in Borrowing Cost
Current Market Fixed	+20 bps
Worst Case Market Fixed	+40 bps
Current Market Variable	+10 bps
Worst Case Variable	+25 bps

A ratings downgrade increases the Department's cost of borrowing, negatively affecting the Department's days operating cash on hand. Therefore, the Department and its customers benefit from the Water System maintaining its current bond ratings.

To finance the required investments, it is critical the Department maintain the appropriate credit ratings to convey to the market a strong financial health for a large diversified California municipal utility. The proposed rates are designed to allow LADWP to meet the financial metrics to maintain its current bond ratings.

A ALIGNMENT OF MAYOR'S PRIORITY OUTCOMES TO LADWP WATER SYSTEM INITIATIVES AND INVESTMENTS

On September 22, 2014, the Mayor of the City of Los Angeles issued his Fiscal Year 2015-16 Budget Policy and Goals to the General Managers of all City Departments. The Mayor outlined five "Priority Outcomes[1]" that focus on the results that he believes matter most to the residents of Los Angeles. These are:

1. Make Los Angeles the best run big city in America
2. Promote good jobs for Angelenos all across Los Angeles;
3. Create a more sustainable and livable City;
4. Ensure our communities are the safest in the nation;
5. Partner with citizens and civic groups to build a greater City.

The Department's investments and initiatives outlined in this proposed rate plan were developed with the Mayor's objectives in mind and strongly align with each Priority Outcome. Figure 1 provides examples of how the Water System will align to each Priority Outcome through the proposed five-year rate action.

[1] See http://sanpedrocity.org/wp-content/uploads/2014/09/FY15-16-Budget-Policy-Letter.pdf

Figure 1: Alignment of Mayor's Priority Outcomes With Department's Initiatives and Investments

Priority Outcome	LADWP Water Rate Action Alignment
Make Los Angeles the Best Run Big City in America	**Live within our means** • LADWP's rate action considers the continuation of cost reduction initiatives as well as opportunities for process improvements. The creation of the Corporate Performance group will ensure that process improvements are sustained. • The new rate design builds in adjustment factors that protect LADWP customers from being overcharged, as LADWP will only seek to recover costs that are actually incurred. **Provide outstanding customer services to our residents and businesses** • LADWP has invested many resources into improving customer services; the proposed financial plan and rates continue to support this trend. • LADWP provides a comprehensive portfolio of water conservation programs to both residents and businesses. • **Deploy innovation and the best technology** The Water System seeks to invest in the most cost-effective and innovative technologies that are available in order to provide LA with the best quality water possible. For example, LADWP has pioneered the use of Shade Balls to cover large reservoirs and is installing seismic-resistant water infrastructure where appropriate. **Restore pride and excellence in public service** • The Water System will continue to work with the Ratepayer Advocate (RPA) to increase transparency. Large projects that LADWP has discussed with the RPA include the Owens Lake 2014 Stipulated Judgment, Bay-Delta Issues, and MWD purchased water contracts.

Priority Outcome	LADWP Water Rate Action Alignment
Promote Good Jobs for All Angelenos All Across Los Angeles	• LADWP's Water System currently employs approximately 4,000 citizens of Los Angeles and neighboring areas. When employing contractors, LADWP has a preference for local businesses. • Inductive economic analysis done by the Los Angeles Economic Development Corporation (LAEC) suggests that Department expenditures for major projects in Los Angeles create jobs and stimulate additional economic output. The LAEDC estimated that, in FY 2011-12, Water System expenditures, totaling $992 million, supported 12,290 jobs (direct, indirect, and induced) and created an additional economic output of $2,717 million[2]. If the local characteristics of the current Los Angeles economy remain similar to the assumptions made by the LAEDC, the average annual Water System spending of $1,463 million per year over the five-year rate action will support approximately 18,000 jobs and induce an annual $4 billion in additional economic activity and output annually.
Create a More Sustainable and Livable City	• Water conservation is a key part of sustainable living and an area in which LADWP has accomplished major goals. Sample water conservation programs include residential rebates for California Friendly Landscapes or water-efficient technologies, as well as commercial services such as efficiency audits and direct install partnerships. • LADWP continues to increase local sustainable water supplies to decrease usage of expensive imported water. • Water quality projects ensure that the community has high quality water. • Infrastructure projects help ensure that pipes, reservoirs, and pumping stations are well-maintained. Less emergency maintenance will be required, decreasing the need for sudden road closures, service disruptions, and other disturbances.
Ensure Our Communities Are the Safest in The Nation	• To provide safe drinking water, the Water System will invest in the most cost-effective and innovative technology to ensure compliance in the future. • Availability of water and water security are high priorities for the Water System. The Water System is investing many resources to develop more local sources of supply through conservation, groundwater, stormwater, and recycled water. • The Water System has been working with the Mayor's office to improve earthquake resiliency as a measure to ensure water supply security. Water System capital projects will be carried out with earthquake-resistant infrastructure when appropriate. • Fire service is an important public safety measure that the Water System provides to ensure that both private and public fire protection systems can be used in emergencies. • The Water System strives to invest in new technologies that reduce health and safety risks. For example, an emergency chlorine dry scrubber replaced a conventional wet scrubber at the North Hollywood Chlorination Station to reduce potential exposure to toxic chlorine gas.

[2] Exhibit 3-2, page 14. "Los Angeles Department of Water and Power: Supplying Power, Water and Jobs for Los Angeles," September 2012. Economic and Policy Analysis Group; Los Angeles County Economic Development Corporation.

Priority Outcome	LADWP Water Rate Action Alignment
Partner With Residents and Civic Groups to Build a Greater City	• Several of the Water System's investments are joint projects with local and State organizations. • Several stormwater projects are partnerships with local community organizations such as schools, Council Districts, and homeowners' associations. • LADWP will continue planning and coordination with the Bureau of Street Services of the Department of Public Works when opening streets for infrastructure projects. • LADWP has partnered with the Mono Lake Committee, California Trout, and the California Department of Fish and Wildlife to protect the Mono Basin environment and the four major streams that flow into Mono Lake.

B CUSTOMER REBATE AND SAVINGS PROGRAMS

This appendix provides a list of customer rebate and savings programs offered by the LADWP Water System that will help reduce ratepayer total bills through conservation.

Project Name	Project Description
Commercial/Industrial Rebate Incentive Program	This program is a partnership with the Metropolitan Water District (MWD) to offer rebates for business customers who purchase and install water conservation equipment such as high-efficiency toilets and urinals, weather-based irrigation controllers, cooling tower conductivity controllers and other measures.
Commercial Landscape Incentive Program	This program provides rebates to business customers for turf removal and replacement with California Friendly Landscapes, mulch, and permeable pathways or artificial turf. Customers can get up to $3.00 per square foot of turf removed.
City Parks Irrigation Efficiency Program	This program provides funding to the Los Angeles Department of Recreation and Parks for upgrading public parks with inefficient irrigation systems, leaks and runoff problems, and includes use of recycled water. City parks are retrofitted with water efficient irrigation systems, sprinkler heads, weather-based irrigation controllers, and planting of California Friendly Landscapes.
LADWP Facility Retrofits	This program retrofits Department-owned facilities with high efficiency plumbing fixtures and converts outdoor areas into California Friendly Landscapes with efficient irrigation systems.
Direct Install Partnerships	This program involves partnerships with LADWP's Power System and Southern California Gas Company to achieve mutual benefits in water, energy, and gas savings. There are four programs to install water conserving fixtures and devices in homes and businesses: Small Business Direct Install Program (SBDI), Home Energy Improvement Program (HEIP), Los Angeles Unified School District Water Conservation Device Replacement Program, and the Multifamily Direct Thermal Savings Program.
Technical Assistance Program (TAP)	LADWP's TAP offers incentives to assist customers implementing custom water conservation projects. TAP incentives are available to commercial, industrial, institutional, and multi-family customers installing pre-approved water conservation measures including equipment, devices, products, fixtures, and technologies of a permanent nature. The financial incentive is calculated at the rate of $1.75 per 1,000 gallons of water saved over a period of two years (minimum of 150,000 gallon savings required). Proposed projects are first evaluated to ascertain feasibility, cost and savings. Incentives are paid after project installation and verified operation.
Residential Rebate Incentive Program	This program is a partnership with the MWD to offer various rebates for residential customers who purchase and install water conservation equipment. Rebates are offered for various measures such as high-efficiency clothes washers, high-efficiency toilets, weather-based irrigation controllers, and others.

Project Name	Project Description
Residential Landscape Incentive Program	This program provides rebates to residential customers for turf removal and replacement with California Friendly Landscapes, mulch, permeable pathways, and artificial turf. Customers can get up to $3.75 per square foot of turf removed.
Water Conservation Awareness and Outreach	This program is a multi-channel public education campaign to heighten and maintain customer awareness of the need and importance of efficient water use. This program includes a general public awareness campaign using various market channels, promotion of specific water conservation programs, and school education programs and materials.
Consultant Services for Water Conservation Program Technical Support	Contractors will develop business plans and provide technical support for the implementation of new rebate, technical assistance, educational, and/or other programs identified to assist with meeting the Mayor's Executive Directive 5 water conservation goals. Contractor will also provide technical support to implement the recommendations of the Water Conservation Potential Study, which is currently scheduled to be completed in 2015.
Consultant Services for Outdoor Landscaping Outreach	Contractors will provide training and educational outreach targeting residential and commercial customers, landscaping services providers, and gardening organizations. The outreach will focus on turf removal rebates and the design, construction, operation and maintenance of water-efficient or drip irrigation systems to ensure maximum water-use efficiency while still maintaining the landscape. Outreach on new programs developed through the Water Conservation Potential Study may also be provided. Additional topics may include graywater systems, recycled water use for irrigation, stormwater capture, and blackwater systems.
Consultant Services for Outdoor Landscaping Hands on Workshops	Contractors will provide hands-on workshops for residential customers that train participants on landscaping with California Friendly plants; drip irrigation systems; and on-site stormwater capture options, such as rainbarrels, raingardens, and cisterns. The scope of the workshops may be expanded to include graywater systems, irrigation submeters, recycled water for irrigation uses, and black water systems as those programs are developed further.
Consultant Services for Landscape Architecture Design Support	Contractors will provide design support to LADWP and other City Departments as facilities install more water-efficient landscaping, replacing turf lawn with California Friendly plants and installing drip irrigation systems. The contractor will also provide technical expertise for outreach materials and the new landscaping website; review and evaluate potential code changes; and support future implementation of the Water Conservation Potential Study recommendations, which could include new rebates and educational outreach on new or expanded topics.
Consultant Services for Residential Field Audits	Contractors will provide a Field Audit Program, performing on-site water-use evaluations for residential and commercial customers' properties. The contractor will provide customized water-efficiency recommendations, including information about LADWP rebates and other assistance programs, to help customers eliminate water waste and reduce their potable water use. The program will initially target 2,000 customers.
Consultant Services for City Facilities Field Audits	Contractors will provide a Field Audit Program, performing on-site water-use evaluations for City facilities. The contractors will provide customized water-efficiency recommendations, including information about LADWP rebates and other assistance programs, to help City departments eliminate water waste and reduce their potable water use. The program will initially target 800 City facilities.

Project Name	Project Description
Consultant Services for Water Conservation Home Water Use Reports	The contractor will provide a customer engagement platform for Single-Dwelling Unit Residential customers. The contractor will be tasked to perform water use analysis of participating customers and provide them with bi-monthly personalized reports on their water use to encourage increased water conservation. The contractor will also provide a customized online platform for tracking participant efficiency. The program will initially target 150,000 customers.

C MAJOR INVESTMENTS IN THE WATER SYSTEM

Major investments have been made to improve the LADWP Water System since the previous rate action in the areas of water quality, local supply, infrastructure, and Eastern Sierra regulatory compliance.

C.1 Water Quality

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 publishes a quarterly Water Quality report on all completed and current projects. Please see Chapter 2 - Appendix D for the most recent update.

Long Term 2 Enhanced Surface Water Treatment Rule[1]

This rule includes a requirement that all open treated water distribution reservoirs are either covered, removed from service, or provide re-treated water. The Department has a Compliance Agreement with the California Department of Public Health (CDPH) that has multiple interim deadlines and requires full compliance by 2022. The Department met the April 1, 2009, deadline for the approval of a negotiated Compliance Agreement for the LT2ESWTR Rule with CDPH.

The Stage 2 Disinfectants and Disinfection Byproducts Rule[2]

On January 4, 2006, the Environmental Protection Agency (EPA) promulgated the Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D-DBPR Rule) in connection with the 1996 amendments to the Safe Drinking Water Act (the Safe Drinking Water Act Amendments of 1996), which set certain standards for the byproducts produced during water disinfection. The Stage 2 D-DBPR Rule requires compliance with disinfection byproducts standards by April 1, 2014, assuming a two-year extension that was granted for capital projects.

To comply with the Stage 2 D-DBPR Rule, the Department is converting its secondary disinfection from chlorine to chloramine disinfection. The conversion is intended to reduce the levels of disinfection byproducts and requires the construction of ammonization facilities at each

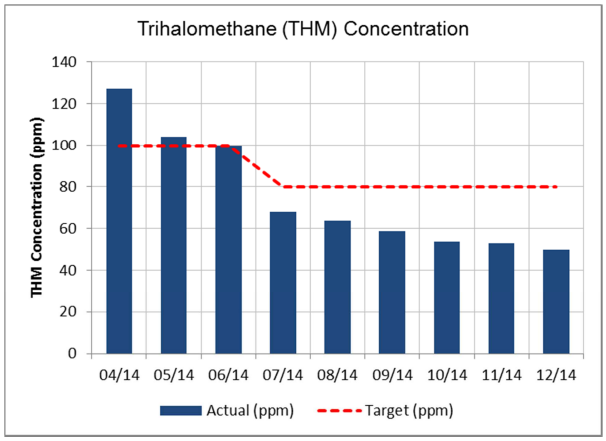
[1] For more information see: http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/regulations.cfm

[2] For more information see: https://www.federalregister.gov/articles/2006/01/04/06-3/national-primary-drinking-water-regulations-stage-2-disinfectants-and-disinfection-byproducts-rule

major chlorination station. The Department is working closely with regulators on the best approach and schedule for a phased conversion to chloramine disinfection.

Investments in water quality projects have been effective. Since April 2014, LADWP has complied with goals to remain below the Maximum Contaminant Level (MCL) of 80 parts per million for total trihalomethane (THM), providing the citizens of Los Angeles with high quality drinking water.

Figure 1: Trihalomethane (THM) Concentration



Reservoir Covers and Decommissioning

To comply with the LT2ESWTR rule, the Department has designed covers to cover open water reservoirs such as the LA, Santa Ynez, or Elysian reservoirs, or is designing new reservoirs to take non-compliant reservoirs out of commission such as Silver Lake and Ivanhoe Reservoirs. Many of these reservoir projects not only require covers but also trunk lines to take reservoirs out of service. Headworks East was placed into operation in December 2014, design on Headworks West is 60% complete.

For the projects that require covers, given the size of these reservoirs, solutions to comply with the EPA rules have required innovative engineering. Each solution was designed to take into account both cost effectiveness and water quality improvement effectiveness. One example of innovative engineering is the use of shade balls, which was a cost-effective temporary solution to cover huge surface areas.

Of the fourteen major reservoirs, eight are actively used for potable distribution and six are out-of-service, although four of these out-of-service are maintained for emergency operation. To protect water quality, five reservoirs are already covered, with plans in progress to cover two more reservoirs.

- Current In-Service Reservoirs – (8) Eagle Rock, Elysian, Lower Franklin No. 2, Green Verdugo, Los Angeles, Van Norman Bypass, Upper Stone Canyon, and Santa Ynez

- Out-of-Service Reservoirs – (6) Ivanhoe, Encino, Upper and Lower Hollywood, Lower Stone Canyon, and Silver Lake
- Future Reservoir – (1) Headworks East/West is currently under construction and will replace Ivanhoe
- Covered Reservoirs – (5) Eagle Rock, Lower Franklin No. 2, Green Verdugo, Van Norman Bypass, Santa Ynez
- Future Covered Reservoirs – (2) Elysian, Upper Stone Canyon

Trunk Line Projects

Trunk line projects are required for reservoir projects to take reservoirs out of commission by redistributing water from existing reservoirs. Since 2000, LADWP has completed approximately 264,000 feet of trunk line projects and has assessed another 34 projects to determine replacement priority.

Disinfection of the Stone Hollywood Trunk Line has been completed using an innovative "slug method". The "slug method" was able to save approximately 4 million gallons of system water, and reduced the operation duration by at least 30 days.

Chloramination

LADWP has spent the past ten years converting its water supply from chlorine to chloramine disinfection to reduce disinfection byproducts in compliance with the Stage 2 D-DBPR Rule. Both chlorine and chloramines are effective killers of bacteria and other microorganisms, but chloramines form less byproducts and do not have a chlorine odor.

Since May 2014, chloraminated water has been served throughout the LADWP water system. Construction is complete on chloramination stations at the Van Norman Station (1 and 2), Manhattan Station, Tujunga Wells, North Hollywood pump station, Green Verdugo Reservoir, Stone Canyon filtration plant, and Mission Wells pump station. The 99th Street station is in progress and is expected to be complete in FY 2017-18.

River Supply Conduit (RSC) Projects

RSCs are major transmission pipelines built in the 1940's. RSC improvement is necessary for improving water pressure as required by California Department of Public Health regulations. It will also allow for greater operational flexibility to compensate for loss of water storage within the distribution system; for example, RSC improvement would assist in facilitating planned changes to the method of disinfection. Approximately 30,000 linear feet of the RSC that runs between North Hollywood pump station and the Headworks Spreading Grounds site, located near Forest Lawn Drive just west of Victory Boulevard, will be replaced with a larger diameter steel pipe.

Units 1B, 2B, 3 and 4 have been completed. Units 5, 6, and 7 are scheduled to be completed within the next five years.

Ultra Violet Light for Nitrification Control

Ultra Violet (UV) light is known as an effective disinfectant. LADWP researched and determined that a specific wavelength of UV light can inhibit the growth of bacteria that cause nitrification. Pilot and full-scale tests were performed and the results show that UV light is an effective and practical treatment alternative to repeated chlorination. LADWP is developing a schedule for installation of UV lights in tanks based on frequency of nitrification, operating needs, and roof conditions. Design of the LA Reservoir Filtration Plant is complete, and construction advertisements will begin in June 2015.

Sanitary Survey

A major program component to providing high quality drinking water is source protection. The LADWP has conducted watershed sanitary surveys since 1995 in the Owens River/Mono Basin watershed of the Los Angeles Aqueduct (LAA). The survey assesses the potential sources of contamination in the watershed and recommends improvements to the source water protection program.

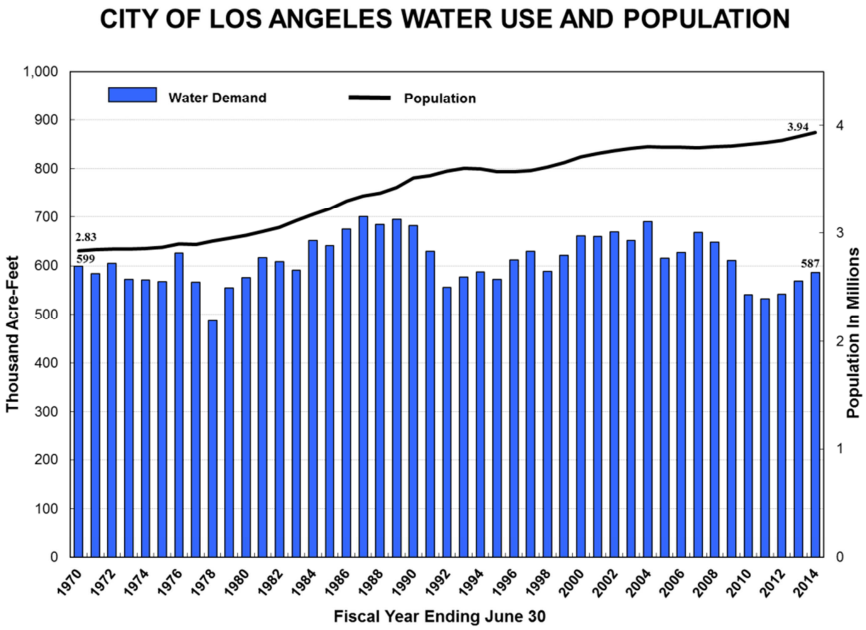
C.2 Local Water Supply

In order to reduce reliance on purchased water expenses and mitigate volatility of available water during dry years, the Department has made significant investments to develop local water supplies. The three main components of local supply programs are conservation, recycled water, and stormwater recapture.

Conservation

The Department takes great pride in the fact that despite a growing population in Los Angeles, water conservation efforts have kept water usage relatively stable. During FY 2014-15, water use was below 1970 levels despite significant population growth as shown in Figure 2.

Figure 2: Water Demand and Los Angeles Population 1970-2014[3]



The Department and its customers have been very successful in reducing water usage through conservation programs supported by a volumetric-based rate structure. In part, this trend can be attributed to the implementation of shortage year rates[4]. From June 2009 to August 2014, shortage year rates have been applied, reducing total water usage by 16.4%. The reductions in consumption for specific customer classes during that time period are shown in Figure 3.

Figure 3: Conservation by Customer Class (June 2009-August 2014)

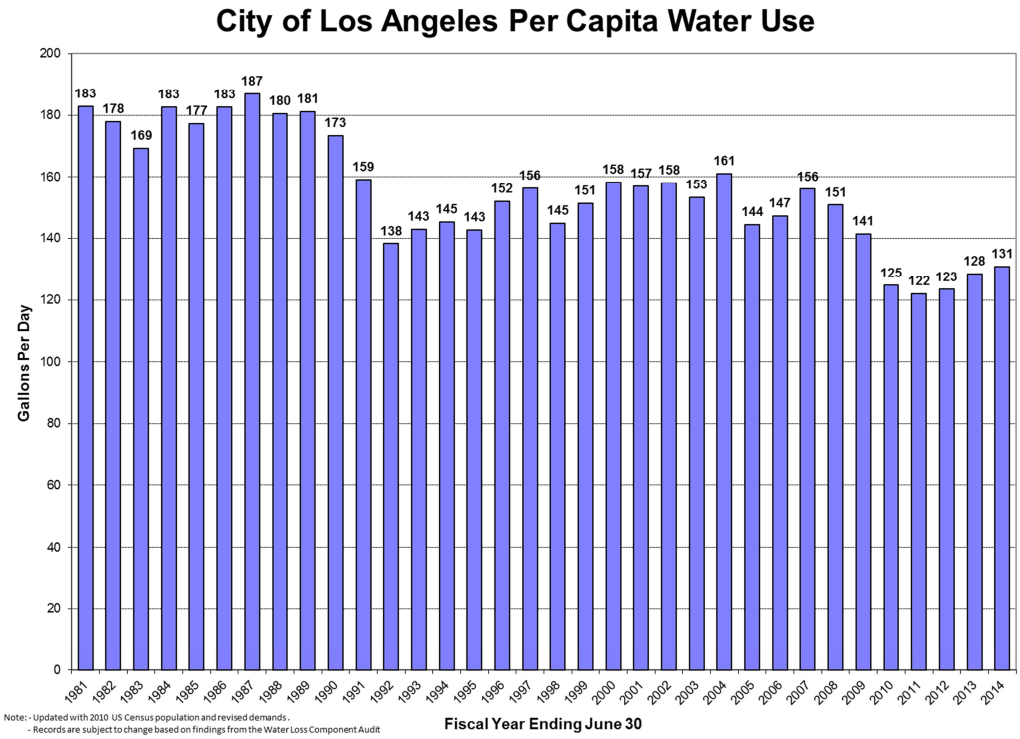
	Cumulative Conservation 6/09-8/14
Single-Dwelling Unit Residential	-20.8%
Multi-Dwelling Unit Residential	-11.1%
Commercial	-13.5%
Industrial	-19.2%
Governmental	-17.1%
Total Water Usage	**-16.4%**

[3] Population was updated with 2010 US Census data. Records are subject to change on findings from the Water Loss Component Audit.

[4] Under shortage year rates, tier 1 water allocation, which is the standard allocation every customer gets per billing cycle, is reduced by 15%. A residential customer's allocation is currently based on the number of family members, temperature zone and lot size.

This trend is also apparent in Figure 4, which shows the per capita water consumption in LA from 1980 to 2014.

Figure 4: City of Los Angeles Per Capita Water Use



To help continue conservation efforts, LADWP's proposed rate structure discussed in Chapter 5 proposes to make allotments similar to the current shortage year rates permanent.

Water Loss Audit

LADWP completed its first in-depth Water Loss Audit and Component Analysis Project in the Fall of 2013[5]. The audit examined the efficiency of the Water System by auditing losses in the distribution system for FY 2010-11.

The report found that LADWP's Water System does not have a significant volume of real losses[6] (3.5%), reflecting a well-performing system. LADWP's Infrastructure Leakage Index (ILI) was determined to be an impressive 1.26 for FY 2010-11. However, LADWP will act on the report's

[5] The executive summary for this report can be found at: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB402320&RevisionSelectionMethod=LatestReleased

[6] "Real losses" are losses such as leaks and theft. They are in contrast to "apparent losses," that include meter inaccuracies and billing errors.

additional recommendations to improve infrastructure and reliability, as many assets are reaching the end of their useful life and preventative maintenance and asset replacement is more cost effective than emergency maintenance. For a complete list of the audit findings, refer to Chapter 2 - Appendix E.

In October 2014, LADWP formed its Water Loss Task Force (Task Force) to implement the audit recommendations. The Task Force will assess the findings from the audit, prioritize recommendations, and execute action plans to further decrease water loss and improve LADWP's Water System performance.

Recycled Water

As early as 1960, the City recognized the potential for water reuse and invested in infrastructure that processed water to tertiary quality, a high treatment standard for wastewater which meets Federal and State standards for non-potable water uses. These system enhancements paved the way for the City to expand recycled water projects to supplement local and imported water supplies. Irrigation and industrial use of recycled water are collectively called "Purple Pipe Projects," in reference to the color of the pipe designating recycled water.

In 2012, the Department published its Recycled Water Master Plan Report to identify ways to further utilize recycled water in the City to meet the Urban Water Management Plan goals of increasing recycled water use Citywide to approximately 59,000 acre-feet per year (AFY) by 2035.

Recycled water supply increased by 34% from 7,480 AFY in FY 2012-13 to 10,050 AFY in FY 2013-14, as a result of the Terminal Island Treatment Plant coming back online. In FY 2013-14, the Department installed 10,314 feet of Purple Pipe projects, bringing the total installed pipeline to 296,650 feet (56 miles).

Groundwater

The Department is investing in treatment facilities and projects to recharge local basins to develop local supply. LADWP completed construction of 26 groundwater monitoring wells in various areas of the easterly portion of the San Fernando Valley. These new wells, along with a network of more than 70 existing wells, are being used to establish the basin's groundwater quality and develop a complex of comprehensive groundwater remediation facilities for removing contamination from the City's major well fields in the San Fernando Basin.

LADWP has completed a Groundwater System Improvement Study (GSIS) that will outline how to remove contamination from the groundwater to grow supply and for the betterment of the environment. LADWP will review the findings with the California Department of Public Health (CDPH) and will work with CDPH to gain approval to start the design and permitting, and begin construction on two major groundwater treatment facilities. These facilities will be designed to remove contamination from the local groundwater to protect the environment and the public.

In 2014, LADWP increased the City's water rights in Central Basin through the projects outlined in Figure 5:

Figure 5: New Groundwater Rights Acquisitions

Date	Description	AFY	Payback Period	Return on Investment
June 2014	LADWP successfully bid on Central Basin water rights in a public auction and paid $460,000 to the Central Basin Municipal Water District.	46	24 years	9%
December 2014	LADWP also completed a private transaction, paying $15 million to Aqua Capital Management for water rights.	1,500	15 years	10%

The water rights will be owned by the City of Los Angeles in perpetuity, thereby reducing the City's reliance on purchased imported water supplies.

Stormwater Capture

Stormwater capture is an important factor of the LADWP's overall plan to enhance the local water supply. The principle involves capturing rainfall and runoff from roads, upstream national forests and open spaces, and allowing the water to percolate into the groundwater basin in the San Fernando Valley for future use.

Completed Centralized Projects

The Department has implemented centralized projects that have increased the amount of stormwater captured by an average of 10,600 AFY. Figure 6 below provides a sample of recently implemented centralized stormwater capture projects:

Figure 6: Completed Centralized Stormwater Projects

Project Name	Date Completed	Recharge (AFY)	Description
Sheldon-Arleta Gas Management System	2009	4,000	Installed a methane gas abatement system mitigating methane migration during groundwater recharge operations at Tujunga Spreading Grounds.
Big Tujunga San Fernando Basin Groundwater Enhancement Project	2012	4,500	Retrofitted the Big Tujunga Dam to meet State seismic and spillway requirements and increased the reservoir's storage capacity.
Hansen Spreading Grounds Upgrade	2013	2,100	Combined and deepened the spreading basins; upgraded the intake structure to increase recharge capacity.

Completed Distributed Projects

Distributed projects already implemented by LADWP have increased the amount of stormwater that could potentially be captured by an average of 254 AFY. Figure 7 is a sample of recently implemented distributed projects:

Figure 7: Completed Stormwater Distributed Projects

Project Name	Date Completed	Recharge (AFY)	Description
Sun Valley Park	2013	30	Installed stormwater pretreatment system, infiltration gallery, and retention system.
Garvanza Park	2012	51	Installed a stormwater pretreatment system, infiltration gallery, and retention system.
Elmer Avenue Neighborhood Green Street/Elmer Paseo Green Alley	2011/2013	41	Installed stormwater underground retention infiltration system under the street, vegetated swales and rain gardens in the parkway and private property.
North Hollywood Alley Retrofit BMP Demo	2013	29	Retrofitted four alleys with pervious surfaces to facilitate stormwater infiltration.
Glenoaks-Sunland	2013	28	Constructed dry wells and parkway infiltration swales along a portion of sidewalks which currently have no storm drains.
Woodman Avenue Median	2014	55	Replaced an existing concrete median with vegetated swales and an underground retention system for infiltration.
Hollywood/Los Angeles Beautification	Ongoing	20	Joint project between LA Department of Public Works, Bureau of Street Services and Bureau of Sanitation, Sun Valley Beautiful Committee, Council District 6, and the LAUSD that will involve installing sidewalk filtration, rain barrels, rainwater diversion, and tree well capture.

C.3 Infrastructure

In the context of the Water System, the term infrastructure refers to aqueducts, reservoirs, tanks, pumping stations, regulator stations, distribution mainlines, trunk lines, and hydrants.

Most major water systems in the United States are facing aging infrastructure problems in the coming years. It is estimated that during the years 2009 through 2028, local governments in the United States will spend anywhere from $2.5 to $4.8 trillion dollars on water and wastewater infrastructure[7].

[7] *Trends in Local Government Expenditures on Public Water and Wastewater Services and Infrastructure*. For full report: http://www.usmayors.org/publications/201002-mwc-trends.pdf

The City of Los Angeles' water system was largely constructed between 1920 and 1970; therefore, much of the water infrastructure is approaching its useful service life. LADWP has strategically utilized currently available funding to maintain infrastructure reliability.

Mainline Replacements

From FY 2009-10 through FY 2013-14, the Department replaced 540,000 feet of mainline. This investment has decreased the number of blowouts and leaks.

Los Angeles Aqueduct Replacement

The LAA requires rehabilitation of pipelines' internal coating, external coating, structural support and cathodic protection system, as well as removal of decaying roofs on the conduit portion. LADWP has been replacing sections of the LAA cover over many years; the remaining 16,000 feet is being replaced this year.

Seismic Retrofits

LADWP has completed the Terminal Hill Tunnel and Shaft Project to mitigate seismic hazards. In September of 2014, the Water System completed a study in conjunction with the Mayor's Office regarding the Water System's seismic resiliency and sustainability, and created a program that will continuously mitigate seismic risks. The Department will focus seismic mitigation projects on sites that are community assets and have been deemed critical to the function of the entire water system in the event of another major earthquake.

Construction has already begun on installation of 6,500 feet of high-tech Earthquake Resistant Ductile Iron Pipe (ERDIP) on streets surrounding the Northridge Hospital Medical Facility.

Reduced Regulator Station Call Outs

In September 2003, LADWP commenced a retrofit program for regulator stations, as station call-outs (failures in which Department personnel must attend to the station outside of regularly scheduled maintenance) were averaging over 200 a year. This retrofit program has been a success, reducing call-outs to an average of less than ten per year, as shown in Figure 8. To date, approximately 200 stations and tank altitude valves have gone through complete retrofitting, which involves replacing everything in the vaults, gate valves, regulator valves, etc.

Figure 8: Regulator Station Failures

Calendar Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of Call Outs	227	202	134	126	65	58	38	13	13	10 or less	10 or less	10 or less	10 or less

LADWP will continue the routine maintenance program as well as the retrofit program. With over 500 regulator stations and tank altitude valves and more to come, the retrofit program will be an ongoing cycle.

C.4 Eastern Sierra Environmental Commitments

Dust Mitigation

The Department is continuing dust mitigation efforts at Owens Lake to comply with agreements with the Great Basin Unified Air Pollution Control District (GBUAPCD or the District).

Since November 2003, the Department has spent more than a billion dollars to mitigate dust at Owens Lake. This number reflects the costs of construction, O&M, and the value of water diverted to Owens Lake for dust mitigation instead of delivery to Los Angeles for drinking water supply. The Department has been allocating up to 95,000 AFY of drinking water each year for this practice. As a result of past efforts, 90% of the dust on Owens Lake is now controlled.

In October of 2012, LADWP completed Phase 8 of the Owens Lake Dust Mitigation project and Phases 9 and 10 will be completed by the end of 2017.

Owens Lake December 2014 Stipulated Judgment

In November 2014, LADWP and the GBUAPCD reached an agreement regarding the remainder of dust mitigation measures as well as dust mitigation methods. In this agreement, which was subsequently approved in a December 2014 stipulated judgment, LADWP will mitigate a maximum of 53.4 square miles and can replace shallow flooding methods with alternative dust mitigation techniques such as tillage (physical contouring and maintenance). Upon completion, LADWP will be in full compliance with dust mitigation requirements.

This agreement benefits ratepayers, as LADWP will no longer be subjected to additional litigation regarding areas of dust mitigation. In addition, the use of new, low-water use dust mitigation methods is likely to decrease the amount of water for dust suppression.

Mono Basin Agreement

In August 2013, the LADWP Board approved an agreement among LADWP, the Mono Lake Committee, California Trout, and the California Department of Fish and Wildlife to protect the Mono Basin environment and the four major streams that flow into Mono Lake. The agreement has conditions that will be in LADWP's Water Diversion License. LADWP remains committed to the Mono Basin environment through the conditions of the agreement and its Water Diversion License. Among such conditions are the following:

- LADWP will construct modifications to the spillway at Grant Lake Dam, which will allow higher water flows-assisting the movement of sediment, creating deep pools for trout, and improving stream habitat quality. Design is 30% complete on a modification to the Great Lake Reservoir spillway that will include an adjustable weir, allowing water to be discharged from the reservoir to Lower Rush Creek, restoring the eco-system in Rush Creek.

- The annual supply of water to Los Angeles from the Mono Basin will be determined by pre-existing rules.

- LADWP will fund a team, governed by all four partners, which will oversee continuous scientific study of Mono Lake and Mono Basin stream conditions.

D QUARTERLY STATUS REPORT ON WATER QUALITY REGULATORY COMPLIANCE PROJECTS

This appendix provides the Quarterly Status Report on Water Quality Regulatory Compliance Projects dated January 12, 2015 presented to the Board of Water and Power Commissioners.

Los Angeles Department of Water & Power

RESOLUTION NO. _____

INFORMATIONAL BOARD LETTER APPROVAL

MARTIN L. ADAMS
Senior Assistant General Manager
Water System

MARCIE L. EDWARDS
General Manager

DATE: January 12, 2015

SUBJECT: Quarterly Status Report on Water Quality Regulatory Compliance Projects – Second Quarter for October 1 to December 31, 2014

Water Quality Regulations Update

Water System continues to plan and execute projects to comply with two regulations promulgated in December 2005 by the United States Environmental Protection Agency (EPA): Long Term 2 Enhanced Surface Water Treatment Rule (Enhanced Rule), and Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 Rule). LADWP met the April 1, 2009, deadline for the approval of a negotiated Compliance Agreement for Enhanced Rule with the State Water Resources Control Board, Division of Drinking Water (DDW), formerly the California Department of Public Health (CDPH). This agreement identifies a final date of December 2020, to bring the now four remaining open distribution reservoirs into compliance with Enhanced Rule, and includes several interim milestones and dates that are enforceable and must be adhered to. Stage 2 Rule requires compliance with disinfection byproduct standards by April 1, 2012. A two-year extension was granted by EPA and DDW to Water System for construction of capital facilities to reduce disinfection byproducts. The new facilities, necessary to convert from chlorine to a chloramine residual disinfectant, were completed before April 1, 2014, in compliance with the extension. Use of chloramines will reduce the disinfection byproducts and enable LADWP to comply with new standards.

Compliance Strategy for Drinking Water Regulations

Water System's compliance plan is based on:

a. Covering, removing from service, or re-treating water in the four remaining open reservoirs in the water distribution system.
b. Switching the water distribution system disinfectant from chlorine to chloramines.

There are four remaining reservoirs that need to be addressed: Ivanhoe, Elysian, Upper Stone Canyon, and Los Angeles (LA). The fifth reservoir, Santa Ynez, was placed back in service with a floating cover in June 2011. The sixth reservoir, Silver Lake, was removed from service in December 2013. The current plan is to remove Elysian and Upper Stone Canyon Reservoirs from service to construct floating covers by August 2015 and January 2017, respectively; and have ultraviolet (UV) treatment operational for LA Reservoir by December 2020. A six-month time extension, from November 28, 2014, to May 28, 2015, to remove Ivanhoe Reservoir from service was approved by DDW on November 19, 2014. The time extension is to provide Water Operations with a longer duration to safely integrate significant infrastructure changes made to the existing distribution system due to completion and commissioning of the new Headworks West Reservoir. Water Operations is scheduled to take Ivanhoe Reservoir out of service in January 2015.

Removing reservoirs from service is an important milestone because it ensures water is no longer served from a reservoir until required improvements are completed. The attached schedule of Water Quality Improvement Projects (Projects) needed for Enhanced Rule Regulatory Compliance (Attachment 1) shows the most recent timeline for completing projects necessary for Enhanced Rule compliance. In addition, Projects are differentiated by crosshatching to indicate those needed for reducing the public health vulnerability of an open body of drinking water (i.e., taking open reservoirs out of service), and other projects that will return the City of Los Angeles (City) to its original level of operational reliability after all necessary changes.

Both types of projects are equally important for regulatory compliance. Attachment 2 shows the projects and timelines needed for Stage 2 Rule compliance. Attachment 3 is a Summary of Project Milestones for Compliance with Enhanced Rule.

Conversion of the water distribution system to chloramines was completed the week of May 5, 2014. LA Reservoir is being covered with shade balls and will stay on a reduced dosage of chlorine. The water disinfectant is being converted to chloramines upon exiting the reservoir. Water System has also finished the construction of five ammoniation facilities which are used to produce chloramines. One station at the 99th Street Wells location is in design, and another at the Mission Wells location will be postponed until new production wells are built. Current estimated total cost for complying with the above two regulations is over $1.4 billion.

Water Quality Improvement Program Funding

Water System continues to actively pursue funding through State Water Resources Control Board, Division of Financial Assistance (DFA), formerly CDPH, for the Water Quality Improvement Program, largely in the form of low to zero-interest loans from the State of California's Safe Drinking Water State Revolving Fund (SDWSRF).

SDWSRF program goals reflect both federal and state legislative intent to provide funding to correct infrastructure and drinking-water-related deficiencies based upon a

prioritized funding system. This funding system utilizes a comprehensive, multi-year Project Priority List in which certain projects receive higher funding priority than other eligible projects. Higher priority is assigned to public water system projects addressing public health risks; public water system projects needed to comply with the Federal Safe Drinking Water Act; and projects assisting public water systems most in need on a per-household affordability basis. SDWSRF funding has supported critical water quality improvement projects that are required to bring LADWP into compliance with federal drinking water regulations, specifically Enhanced Rule and Stage 2 Rule.

To date, LADWP has been awarded a total of $848,113,152 from SDWSRF as follows:

Funding Type	Total Award to Date
American Recovery and Reinvestment Act 100 Percent Principal Forgiveness	$ 45,000,000
Grants	$ 14,000,000
Low-Interest Loans	$ 272,907,164
Zero-Interest Loans – Construction	$ 514,705,988
Zero-Interest Loans – Planning	$ 1,500,000
TOTAL	**$ 848,113,152**

Attachment 4 is a detailed list of Water System's SDWSRF funding agreements.

Current Status of Water Quality Regulatory Compliance Projects

Of the 23 capital projects needed for compliance with the new regulations, 13 are completed, 3 are in construction, 3 are in procurement, and 4 are in design.

Water System continues to meet with EPA and DDW to ensure its plan will successfully comply with water quality regulations. A key component of the compliance plan is securing the necessary engineering and construction contracts in a timely manner.

In addition, Water System staff continues to work closely with DDW to meet the administrative and financial requirements of the SDWSRF program.

Completed Projects

Project Name	Date Completed
Tujunga Wells Ammoniation Station	March 2009
North Hollywood Ammoniation Station	August 2010
Santa Ynez Water Quality Improvement Project - Reservoir In-Service	June 2011
River Supply Conduit (RSC) Improvement - Lower Reach, Unit 3	February 2012
Van Norman Chloramination Stations No. 1 and No. 2	February 2012
Metropolitan Water District LA-29 Connection	April 2012
City Trunk Line - South, Unit 2	May 2012

Project Name (continued)	Date Completed
First Street Trunk Line	March 2013
RSC Improvement – Lower Reach, Unit 4	August 2013
North Hollywood Chlorination Stations	November 2013
Manhattan Wells Ammoniation Station	January 2014
RSC Improvement – Lower Reach, Unit 1B	March 2014
LA Aqueduct Filtration Plant UV Disinfection Facility (Dr. Pankaj Parekh Ultraviolet Disinfection Facility)	March 2014

Project Status

- RSC Improvement - Upper Reach, Units 5 and 6
  - Design completed November 2013
  - Construction contract awarded August 9, 2014
  - Notice to Proceed issued December 2, 2014
  - Construction start scheduled for March 2015
- RSC Improvement - Upper Reach, Unit 7
  - Design 99 percent complete
  - Real Estate appraisals and property acquisition on-going
  - Construction start scheduled for December 2016
- Silver Lake Bypass Line and Regulator Station
  - Design completed March 2014
  - Project advertised April 15, 2014
  - Bidding closed October 2, 2014
  - Contract awarded November 18, 2014
  - Notice to Proceed anticipated February 2015
  - Construction start scheduled for summer 2015
- Headworks Reservoir
  - Headworks East Reservoir placed into service December 3, 2014
  - Headworks West Reservoir design 60 percent complete; Geotechnical analysis is on-going
- RSC Improvement - Upper Reach, Unit 1A Trunk Line
  - RSC Improvement Unit 1A was separated into two projects; 1A East and 1A West
  - RSC Improvement Unit 1A East placed into service December 3, 2014

- Construction start for RSC Improvement 1A West is scheduled for July 2, 2018

- Elysian Reservoir

  - Final Environmental Impact Report (EIR) released September 9, 2011
  - Board approved floating cover alternative April 17, 2012
  - Final Planning completed April 2013
  - Design 100 percent complete
  - Construction documents advertised December 29, 2014
  - Construction start scheduled for October 2015

- Upper Stone Canyon Reservoir

  - Final EIR released January 10, 2012
  - Board approved floating cover alternative February 7, 2012
  - Final Planning completed August 2013
  - Design start October 1, 2014
  - Design 30 percent complete anticipated March 2015

- LA Reservoir Bull Creek Extension

  - Mitigated Negative Declaration completed June 2012
  - Design completed December 2013
  - Construction performed by Power Construction and Maintenance (PCM)
  - Phase I hillside grading complete
  - Phase II realigning the main channel and diversion channel completion anticipated June 2015
  - Phase III widening the storm water conveyance channel, constructing a new overflow, and modifying the Lower San Fernando Dam spillway construction start June 2014
  - Construction completion anticipated January 2017

- 99th Street Wells Chloramination Station

  - Final Planning completed July 2011
  - Design 90 percent complete anticipated January 2015
  - Additional environmental documents being prepared for Board review February 2015
  - Continue project information outreach with Council District, Neighborhood Council, and the Los Angeles Unified School District

- LA Reservoir UV Disinfection Treatment Plant

  - Final Planning completed
  - Design 100 percent complete anticipated January 2015

- Construction documents advertise anticipated June 2015

SDWSRF Status

SDWSRF Reimbursements

Since the last quarterly update (July 1 to September 30, 2014), LADWP has received a total of $21,713,106.50 in SDWSRF reimbursements as follows:

Project Name	Reimbursement Received
Headworks East Reservoir	$ 13,780,979.57
RSC Improvement – Lower Reach, Unit 1A East	$ 7,554,798.60
RSC Improvement – Upper Reach, Unit 5&6	$ 264,825.01
RSC Improvement – Upper Reach Unit 7	$ 112,503.32
TOTAL	**$ 21,713,106.50**

Water System staff continues to work closely with DFA to meet all legal and administrative requirements of SDWSRF funding, including timely submittal of claims for reimbursement.

Three-Month Look Ahead

- Remove Ivanhoe Reservoir from service
- Complete design and construction specifications for the LA Reservoir UV Disinfection Treatment Plant Project
- Issue Silver Lake Bypass Line and Regulator Station Notice to Proceed
- Start construction on RSC Improvement - Upper Reach, Units 5 and 6

Future Challenges

- RSC Improvement – Upper Reach, Unit 7
  - Design is 95 percent complete, but it is impacted by real estate issues
  - Real estate appraisals and property acquisition continue to be a challenge

Attachments

- Water Quality Improvement Projects Needed for Long Term 2 Enhanced Surface Water Treatment Rule Regulatory Compliance (Attachment 1)
- Water Quality Improvement Projects Needed for Stage 2 Disinfectants and Disinfection Byproduct Rule Regulatory Compliance (Attachment 2)
- Summary of Project Milestones for Compliance with Long Term 2 Enhanced Surface Water Treatment Rule Regulatory Compliance (Attachment 3)
- LADWP Water System Safe Drinking Water State Revolving Fund Loans for Water Quality Improvement Projects (Attachment 4)

Print Date: Tue 1/6/15
Updated Date: 1/6/15

Water Quality Improvement Projects Needed For Long Term 2 Enhanced Surface Water Treatment Rule Regulatory Compliance

ATTACHMENT 1

Estimated Construction Schedules and Total Project Costs

ID	Task Name	Total Project Cost	Compliance Date	Start	Finish
1				Wed 4/1/09	Wed 4/1/09
2				Mon 4/2/12	Mon 4/2/12
3				Tue 4/1/14	Tue 4/1/14
4					
5	**Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR)**	**$1.356 billion**			
6	**Projects Needed to Take Silver Lake Reservoir Out-of-Service (5 TL Projects)**			**Fri 2/15/08**	**Mon 3/31/14**
7	First Street Trunk Line - COMPLETED	$73.2 million		Fri 2/15/08	Thu 3/28/13
8	River Supply Conduit (RSC) Lower Reach Unit 1B - COMPLETED	$28.8 million		Tue 1/17/12	Mon 3/31/14
9	City Trunk Line South Unit 2 - COMPLETED	$52.7 million		Tue 6/23/09	Thu 5/10/12
10	River Supply Conduit (RSC) Lower Reach Unit 3 - COMPLETED	$73.3 million		Mon 3/16/09	Tue 2/28/12
11	River Supply Conduit (RSC) Lower Reach Unit 4 - COMPLETED	$63.8 million		Mon 3/15/10	Fri 8/30/13
12	SILVER LAKE RESERVOIR- OUT-OF-SERVICE		12/31/13	Tue 12/31/13	Tue 12/31/13
13	**Projects Needed to Take Ivanhoe Reservoir Out-of-Service (Headworks Reservoir East In-service & 4 Trunk Line Projects)**			**Fri 8/29/08**	**Wed 11/18/15**
14	North Hollywood Ammoniation Station - COMPLETED			Fri 8/29/08	Mon 8/2/10
15	River Supply Conduit (RSC) Lower Reach Unit 1A EAST	$39.2 million		Thu 1/17/13	Wed 11/18/15
16	River Supply Conduit (RSC) Lower Reach Unit 1A EAST - Pipe In Servcie			Wed 12/3/14	Wed 12/3/14
17	Headworks Reservoir East - IN SERVICE	$131.6 million		Mon 1/14/13	Wed 11/18/15
18	Headworks Reservoir East - Reservoir In Service			Wed 12/3/14	Wed 12/3/14
19	Rowena Temporary Regulator Station - COMPLETED			Fri 8/15/14	Fri 9/12/14
20	IVANHOE RESERVOIR - OUT-OF-SERVICE		5/28/15	Fri 1/30/15	Fri 1/30/15
21	**Santa Ynez Reservoir**		7/31/12	**Mon 10/4/10**	**Mon 6/27/11**
22	Floating Cover - COMPLETED	$31.3 million		Tue 11/2/10	Mon 6/20/11
23	SANTA YNEZ RESERVOIR OFF-LINE			Mon 10/4/10	Mon 6/27/11
24	**Upper Stone Canyon Reservoir**			**Mon 5/24/10**	**Mon 6/17/19**
25	Charing Cross & Hilgard Reg Sta Bypass Line	$8.4 million		Tue 6/30/15	Fri 1/15/16
26	Modifications at LA-29 Connection (Sunset) - COMPLETED	$13.5 million		Mon 5/24/10	Mon 4/30/12
27	Reservoir Out of Service		1/2/17	Mon 1/2/17	Mon 1/2/17
28	Floating Cover	$39.6 million		Fri 3/17/17	Mon 6/17/19
29	In-Service			Mon 6/17/19	Mon 6/17/19
30	**Elysian Reservoir**			**Mon 8/3/15**	**Thu 9/14/17**
31	Reservoir Out of Service		8/3/15	Mon 8/3/15	Mon 8/3/15
32	Floating Cover	$30.5 million		Mon 10/19/15	Thu 9/14/17
33	In-Service			Thu 9/14/17	Thu 9/14/17
34	**Los Angeles Reservoir**		12/31/20	**Wed 9/26/12**	**Fri 11/2/18**
35	LA Reservoir WQIP-Bull Creek Extension Realignment	$82.9 million		Wed 9/26/12	Tue 1/31/17
36	LA Reservoir UV Treatment Process	$111.0 million		Tue 6/14/16	Fri 11/2/18
37					
38	**Water System Reliability**				
39	Headworks Reservoir West	$127.9 million		Fri 12/11/15	Wed 12/27/17
40	Headworks Power Plant	$48.1 million		Fri 7/7/17	Thu 6/13/19
41	Headworks Ecosystem Restoration	$10.7 million		Wed 8/23/17	Fri 8/10/18
42	Upper Stone Canyon Res. Landslides Project	$15.6 million		Mon 2/29/16	Thu 2/23/17
43	River Supply Conduit (RSC) Upper Reach Unit 5 & 6	$170.5 million		Tue 3/24/15	Wed 11/8/17
44	River Supply Conduit (RSC) Upper Reach Unit 7	$151.8 million		Tue 12/6/16	Tue 10/13/20
45	Silver Lake Bypass & Regulating Station	$51.7 million		Fri 5/15/15	Thu 2/23/17
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*Total Project Cost includes direct charges, department overhead, and inflation adjustment using 3% CPI

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Print Date: Tue 1/6/15
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Water Quality Improvement Projects Needed For Stage 2 Disinfectants and Disinfection Byproduct Rule Regulatory Compliance

ATTACHMENT 2

Estimated Construction Schedules and Total Project Costs

ID	Task Name	Total Project Cost	Start	Finish
1				
2			Wed 4/1/09	Wed 4/1/09
3			Mon 4/2/12	Mon 4/2/12
4			Tue 4/1/14	Tue 4/1/14
5	**Projects Meeting Stage 2 Disinfectants and Disinfection Byproduct Rule (Stage 2DBP) Regs**	**$308.3 million**		
6	**Ammoniation, Chloramination, Nitrification Control Program, UV Treatment Process and Shade Balls**		**Wed 6/20/07**	**Tue 7/14/26**
7	Tujunga Wells Ammoniation Station - COMPLETED	$11.2 million	Wed 6/20/07	Mon 3/30/09
8	Van Norman Chloramination Station 1 - COMPLETED	$37.6 million	Tue 8/26/08	Tue 2/28/12
9	Van Norman Chloramination Station 2 - COMPLETED	$33.0 million	Mon 8/11/08	Tue 2/28/12
10	LAAFP UV Treatment Plant - COMPLETED	$110.6 million	Tue 3/15/11	Mon 3/31/14
11	Shade Balls - LA Reservoir	$26.2 million	Wed 4/17/13	Mon 3/2/15
12	Shade Balls - Upper Stone Canyon Reservoir - COMPLETED	$2.3 million	Wed 11/14/12	Fri 4/12/13
13	North Hollywood Ammoniation Station - COMPLETED	$43.3 million	Fri 8/29/08	Mon 8/2/10
14	North Hollywood Chlorination Stations - COMPLETED		Thu 7/12/12	Thu 11/14/13
15	Tank and Reservoir Nitrification Control Plan	$44.1 million	Tue 2/12/13	Tue 7/14/26
16				
17	**Water System Reliability**	**$58.3 million**		
18	99th Street Wells Chloramination Station	$24.3 million	Tue 8/11/15	Thu 8/17/17
19	Manhattan Wells Ammoniation Station - COMPLETED	$19.1 million	Mon 11/14/11	Fri 1/10/14
20	Mission Wells Chloramination Station	$14.9 million	Tue 10/28/25	Thu 7/22/27
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22	**Total WQIP Cost ***	**$1.730 billion**		
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*Total Project Cost includes direct charges, department overhead, and inflation adjustment using 3% CPI

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ATTACHMENT 3

Summary of Project Milestones for Compliance with Long Term 2 Enhanced Surface Water Treatment Rule Regulatory Compliance

Distribution Reservoir	Required Compliance Date (DDW)	Current Schedule for Compliance	Projects that Must be Completed for Water Quality Regulatory Compliance (1)	Required Compliance Date (DDW)	Current Schedule for Compliance	Projects to be Completed for Operational Reliability Regulatory Compliance	Required Compliance Date (DDW)	Current Schedule for Compliance
Santa Ynez	**November 2011**	**November 2010**	None required			None required		
Silver Lake	**December 2013**	**December 2013**	**RSC Trunk Line Unit 1B** **RSC Trunk Line Unit 3** **RSC Trunk Line Unit 4** **First Street Trunk Line** **City Trunk Line – South, Unit 2**	**November 28, 2014** **January 31, 2013** **November 28, 2014** **December 31, 2013** **June 29, 2012**	**March 2014** **February 2012** **August 2013** **June 2013** **May 2012**	None required		
Ivanhoe	May 2014 (6)	January 2015	Silver Lake Bypass and Regulator Station **RSC Trunk Line Unit 1A East** **Headworks Reservoir East**	November 30, 2017 **September 30, 2014 (3)** **November 28, 2014**	August 2016 **November 2014** **November 2014**	RSC Trunk Line Unit 5 RSC Trunk Line Unit 6 RSC Trunk Line Unit 7 Headworks Reservoir West	December 31, 2018 December 31, 2018 August 31, 2020 TBD	February 2017 February 2017 December 2020 June 2017
Elysian	August 2015	August 2015	None required			None required		
Upper Stone Canyon	January 2017	January 2017	**MWD LA–29** Charing Cross & Hilgard Reg. Sta. Bypass Line (5)	**June 2016 (2)** January 2017 (2)	**April 2012** December 2015	None required		
Los Angeles	December 2020	January 2018	UV Los Angeles Reservoir	December 2020	January 2018	Bull Creek Extension Realignment	December 30, 2018	January 2017

Completed
Project behind schedule but not critical

ATTACHMENT 4

LOS ANGELES DEPARTMENT OF WATER AND POWER - WATER SYSTEM
SAFE DRINKING WATER STATE REVOLVING FUND (SDWSRF) LOANS FOR WATER QUALITY IMPROVEMENT PROJECTS

	Projects with Executed SDWSRF Funding Agreements	Funding Agreement Execution Date	Project Complete	In Repayment	STATE REVOLVING FUND Award	Rates	Terms	Total Interest	BOND FINANCING Rates	Total Interest	ESTIMATED SAVINGS Total	Annual	Value of Savings at Time of Project Initiation/Water Revenue Bond Sale PV of ESTIMATED SAVINGS Total	Annual
1	Stone Hollywood Trunk Line (TL) Unit 3	Jan-02	Yes	Yes	$ 17,751,425	2.32%	20 yrs	$ 4,536,625	5.08%	$ 10,732,618	$ 6,195,994	$ 309,800	$ 3,861,380	$ 193,069
2	Stone Hollywood TL Unit 4	Jun-07	Yes	Yes	$ 25,335,671	2.60%	20 yrs	$ 7,316,312	4.84%	$ 14,481,606	$ 7,165,293	$ 358,265	$ 4,559,265	$ 227,963
3	Encino Reservoir	Sep-07	Yes	Yes	$ 36,432,000	2.45%	20 yrs	$ 9,877,543	4.84%	$ 20,824,152	$ 10,946,609	$ 547,330	$ 6,965,310	$ 348,266
4	Lower Stone Canyon Reservoir	Jul-09	Yes	Yes	$ 38,684,250	2.29%	20 yrs	$ 9,760,256	5.12%	$ 23,571,190	$ 13,810,933	$ 690,547	$ 8,581,830	$ 429,092
5	River Supply Conduit Lower Reach Unit 4	Jun-10	No	No	$ 46,842,500	0.00%	20 yrs	$ -	5.25%	$ 29,378,440	$ 29,378,440	$ 1,468,922	$ 18,054,875	$ 902,744
6	Santa Ynez Reservoir	Jun-10	Yes	Yes	$ 9,573,792	0.00%	20 yrs	$ -	5.25%	$ 6,004,442	$ 6,004,442	$ 300,222	$ 3,690,102	$ 184,505
7	City TL South Unit 2	Jun-10	Yes	Yes	$ 10,000,000	0.00%	20 yrs	$ -	5.25%	$ 6,271,749	$ 6,271,749	$ 313,587	$ 3,854,379	$ 192,719
8	River Supply Conduit Lower Reach Unit 3	Jun-10	Yes	Yes	$ 20,000,000	0.00%	20 yrs	$ -	5.25%	$ 12,543,498	$ 12,543,498	$ 627,175	$ 7,708,758	$ 385,438
9	River Supply Conduit Lower Reach Unit 1B	Jun-11	No	No	$ 33,030,000	0.00%	20 yrs	$ -	4.35%	$ 16,761,992	$ 16,761,992	$ 838,100	$ 11,119,230	$ 555,962
10	Santa Ynez Reservoir (with 100% Principal Forgiveness)	Aug-09	Yes	N/A	$ 10,000,000	-	-	$ -	5.25%	$ 6,271,749	$ 16,271,749	$ 813,587	$ 10,000,000	$ 500,000
11	City TL South Unit 2 (with 100% Principal Forgiveness)	Aug-09	Yes	N/A	$ 10,000,000	-	-	$ -	5.25%	$ 6,271,749	$ 16,271,749	$ 813,587	$ 10,000,000	$ 500,000
12	River Supply Conduit Lower Reach Unit 3 (with 100% Principal Forgiveness)	Aug-09	Yes	N/A	$ 25,000,000	-	-	$ -	5.25%	$ 15,679,372	$ 40,679,372	$ 2,033,969	$ 25,000,000	$ 1,250,000
13	River Supply Conduit Lower Reach Unit 4 (Grant)	Jun-10	No	N/A	$ 1,000,000	-	-	$ -	5.25%	$ 627,175	$ 1,627,175	$ 81,359	$ 1,000,000	$ 50,000
14	Santa Ynez Reservoir (Grant)	Jun-10	Yes	N/A	$ 1,000,000	-	-	$ -	5.25%	$ 627,175	$ 1,627,175	$ 81,359	$ 1,000,000	$ 50,000
15	Headworks East Reservoir	Jun-12	No	No	$ 127,235,853	0.00%	30 yrs	$ -	4.25%	$ 99,079,914	$ 99,079,914	$ 3,302,664	$ 55,703,222	$ 1,856,774
16	River Supply Conduit Lower Reach Unit 1A	Jun-12	No	No	$ 64,769,179	0.00%	30 yrs	$ -	4.25%	$ 50,436,449	$ 50,436,449	$ 1,681,215	$ 28,355,623	$ 945,187
17	River Supply Conduit Upper Reach Units 5&6	Jun-13	No	No	$ 100,972,990	0.00%	30 yrs	$ -	4.47%	$ 83,370,378	$ 83,370,378	$ 2,779,013	$ 45,665,632	$ 1,522,188
18	River Supply Conduit Upper Reach Unit 7	Jun-13	No	No	$ 102,281,674	0.00%	30 yrs	$ -	4.47%	$ 84,450,919	$ 84,450,919	$ 2,815,031	$ 46,257,492	$ 1,541,916
19	Elysian Reservoir Water Quality Improvement Project (Planning)	Jun-13	No	No	$ 500,000	0.00%	5 yrs.	$ -	1.47%	$ 20,435	$ 20,435	$ 4,087.00	$ 19,632	$ 3,926.40
20	Los Angeles Reservoir Water Quality Improvement Project-Ultraviolet Light Treatment (Planning)	Jun-13	No	No	$ 500,000	0.00%	5 yrs.	$ -	1.47%	$ 20,435	$ 20,435	$ 4,087.00	$ 19,632	$ 3,926.40
21	Upper Stone Canyon Reservoir Water Quality Improvement Project Planning)	Jun-13	No	No	$ 500,000	0.00%	5 yrs.	$ -	1.47%	$ 20,435	$ 20,435	$ 4,087.00	$ 19,632	$ 3,926.40
22	Los Angeles Aqueduct Filtration Plant Ultraviolet Light Treatment	Jun-14	No	No	$ 73,757,219	2.09%	30 yrs	$ 25,828,413	4.11%	$ 55,254,462	$ 29,426,049	$ 980,868.30	$ 16,823,155	$ 560,771.83
23	Manhattan Wells Ammoniation Station	Jun-14	No	No	$ 11,364,849	2.09%	30 yrs	$ 3,979,760	4.11%	$ 8,513,860	$ 4,534,100	$ 151,136.67	$ 2,592,189	$ 86,406.30
24	North Hollywood Ammoniation Station	Jun-14	No	No	$ 25,630,600	2.09%	30 yrs	$ 8,975,362	4.11%	$ 19,200,900	$ 10,225,538	$ 340,851.27	$ 5,846,039	$ 194,867.97
25	Silver Lake Reservoir Bypass & Regulating Station	Jun-14	No	No	$ 43,951,150	2.09%	30 yrs	$ 15,390,879	4.11%	$ 32,925,552	$ 17,534,673	$ 584,489.10	$ 10,024,741	$ 334,158.03
26	Los Angeles Aqueduct Filtration Plant Ultraviolet Light Treatment (Grant)	Jun-14	No	No	$ 3,000,000	-	-	$ -	4.11%	$ 5,247,419	$ 5,247,419	$ 174,913.97	$ 3,000,000	$ 100,000.00
27	Manhattan Wells Ammoniation Station (Grant)	Jun-14	No	No	$ 3,000,000	-	-	$ -	4.11%	$ 5,247,419	$ 5,247,419	$ 174,913.97	$ 3,000,000	$ 100,000.00
28	North Hollywood Ammoniation Station (Grant)	Jun-14	No	No	$ 3,000,000	-	-	$ -	4.11%	$ 5,247,419	$ 5,247,419	$ 174,913.97	$ 3,000,000	$ 100,000.00
29	Silver Lake Reservoir Bypass & Regulating Station (Grant)	Jun-14	No	No	$ 3,000,000	-	-	$ -	4.11%	$ 5,247,419	$ 5,247,419	$ 174,913.97	$ 3,000,000	$ 100,000.00
					$ 848,113,152			**$ 85,665,150**		**$ 624,330,321**	**$ 585,665,171**	**$ 22,624,993**	**$ 338,722,118**	**$ 13,223,805**

E WATER LOSS AUDIT SUMMARY AND INFORMATION

E.1 Introduction

LADWP completed its first in-depth Water Loss Audit and Component Analysis Project (Project) in the Fall of 2013. The audit examined the efficiency of the Water System by auditing the distribution system for fiscal year (FY) 2010-11. The Project addressed three specific tasks:

1. Examine the Water System's current ability to accurately identify water losses;
2. Determine the economic optimum level of water losses; and
3. Identify, prioritize, and recommend the most efficient and cost-effective loss intervention strategies to minimize future water loss.

The goal of the audit was to fulfil the Best Management Practice 1.2 (BMP 1.2) required by the California Urban Water Conservation Council (CUWCC). With the passage of AB 1420, effective in 2009, water loss studies are mandatory for water agencies to qualify for State grants and loans.

Because the CUWCC BMP 1.2 requires a water loss audit to be conducted by water utilities annually and a component analysis to be conducted every four years, LADWP also implemented a training component. The training will allow Water Resources staff to perform future water loss audit and component analyses for ongoing BMP compliance.

Figure 1 provides performance indicators for LADWP during FY 2010-11. "Real Losses" are described as wet water losses, for instance leaks and theft. Whereas "Apparent Losses" are described as non-wet water losses, for instance meter inaccuracies and billing errors.

Figure 1: Performance Indicators for FY 2010-11

Performance Indicator (PI)	Description of Use	PI for LADWP (FY 2010-11)
Infrastructure Leakage Index (ILI)	ILI values close to 1 indicate a water system with very low leakage. The ILI is calculated by comparing the annual volume of Real Losses against a standard quantifying the lowest Real Losses achievable for the Water System.	1.26
Real Losses in Gallons per Service Connection per Day	This is the preferred basic operational performance indicator for analyzing leakage management performance and one of the most reliable.	23.21
Apparent Losses in Gallons per Service Connection per Day	This performance indicator is useful for comparing losses against average annual consumption per customer.	10.60
Real Losses as a % of System Input Volume	Real Losses are the physical water lost from the distribution system. It is the annual volume of water lost through all types of leaks, breaks, and overflows. The Real Loss volume depends on break frequencies, flow rates, and the duration of individual failures.	3.5%

E.2 Additional Recommendations

Beyond the findings identified by the Project, many additional recommendations were established to further decrease water loss and improve LADWP's Water System performance. The following are highlights of some key recommendations for improving supply and demand volume accuracy, reducing apparent losses, and reducing real losses.[1]

1. Use new meters for future calculation of system input volumes for the Los Angeles Aqueduct Filtration Plant.
2. Install an ultrasonic multi-point meter to capture flow through the West Outlet.
3. Improve measurements of groundwater production by installing meters on all collector lines.
4. Streamline the Supervisory Control and Data Acquisition (SCADA) system organization.
5. Track reservoir level data, so that total increases or decreases in storage volume can be included in calculation of the system input volume and authorized consumption.
6. Install a meter at the LA-25 MWD connection.

[1] For full report, see https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB402321&RevisionSelectionMethod=LatestReleased

7. Correct the inaccuracies between the Work Management Information System (WMIS) and the Customer Information System (CIS).
8. Investigate meters and/or accounts highlighted by the Project for proper meter sizing and potential revenue enhancement.
9. Track authorized unbilled/unmetered consumption volumes.
10. Investigate further what portion of fire service meters register consumption, and read the fire service meters on a regular basis.
11. Upgrade fire service meters with Automated Meter Reading and Advanced Metering Infrastructure (AMR/AMI) for easier tracking throughout LADWP's service area.

E.3 Recommended Strategy for Reduction of Apparent Losses

Figure 2 summarizes the timeline and associated strategies recommended for reduction of apparent losses:

Figure 2: Summary of Recommendations for Apparent Losses

Fiscal Year	Small Meter Testing	Small Meter Replacement	Large Meter Maintenance	Unbilled Consumption
FY 13–14	Ongoing Random Small Meter Testing	Replace targeted size/create meter groups	Initiate the overhaul program	Read fire services regularly
FY 14–15			Begin consumption profiling for highest revenue-generating customers	
FY 15 Through FY 18		Revisit replacement economics and target revised group of small meters	Upgrade meters with appropriate technology replacement and meter size where necessary	Upgrade fire services to AMI/ AMR

E.4 Recommended Strategy for Reduction of Real Losses

The following table summarizes the timeline and associated strategies recommended for reduction of real losses:

Figure 3: Summary of Recommendations for Real Losses

Fiscal Year	Proactive Leak Detection	Improved Location and Repair Times for Reported Leaks	Pressure Management Program
FY 13-14	Prepare for implementation of proactive leak detection program	Focus on collection of better leak repair data	Prepare for implementation of pressure monitoring pilot in 5 to 10 pressure zones
FY 14-15	Detailed leak detection in 10% to 15% of the distribution network using LADWP leak detection staff	Focus on collection of better leak repair data	Implement Step 1 of the pressure management program
FY 15-16	Detailed leak detection in 10% to 15% of the distribution network using LADWP leak detection staff	Update analysis on improved location and repair times, and evaluate the necessary additional budget for reducing the average location and repair time for reported mains leaks	
FY 16-17	Detailed leak detection in 10% to 15% of the distribution network using LADWP leak detection staff	If cost effective, deploy additional repair crews to reduce average location and repair times to optimum levels	
FY 17-18	Detailed leak detection in 10% to 15% of the distribution network using LADWP leak detection staff		Implement Step 2 of the pressure management program
FY 18-19	Detailed leak detection in 10% to 15% of the distribution network using LADWP leak detection staff		
FY 19-20	Evaluate results of detailed leak detection efforts and update strategy according to findings over the past four years		
FY 20 Through FY 26	Implement updated proactive leak detection strategy and if/where AMI is implemented utilize AMI and SCADA data for prioritizing areas for ongoing leak detection based on calculated leakage loss levels by pressure zone		Implement Step 3 of the pressure management program

F JOINT POWERS AUTHORITY (JPA)

F.1 Introduction

LADWP has embarked on an aggressive sustainability plan to increase its local water supply and decrease reliance on imported water while handling significant challenges of groundwater contamination. In addition, LADWP faces numerous other challenges in the years ahead including increasing its infrastructure investments and meeting an array of Federal and State environmental mandates. Solutions addressing these challenges will put significant pressure on water rates.

Securitization is the process in which certain types of income producing assets are pooled so they can be repackaged into interest-bearing securities. The interest and principal payments from the assets are passed through to the purchasers of the securities[1]. The issuance of rate reduction bonds, a type of securitization, will help reduce future water rate increases by funding certain qualifying capital projects such as water quality and related investments on a more affordable basis.

Under an AB 850 securitization, the interest and principal on the interest-bearing securities, in this case rate reduction bonds, are paid from a legislatively authorized non-bypassable charge that the JPA or an LLC formed by the JPA can impose directly on the water customers of a qualifying publicly owned water utility such as LADWP. The charge constitutes a separate property right that is not part of the assets or water revenues of LADWP. This allows LADWP to obtain an anticipated AAA bond rating on rate reduction bonds, which could result in lower ongoing interest costs of 10 to 20 basis points compared to LADWP's water system revenue bonds, which have current ratings of Aa2/AA/AA.

An additional benefit is that the rate reduction bonds are not treated as a debt of the LADWP water system for rating purposes, which helps LADWP to maintain the credit ratings on the water system revenue bonds and thereby reduces the cost of other water capital projects financed with water system revenue bonds. In addition, in order to maintain its Aa2/AA/AA ratings on its water system revenue bonds, LADWP is required to maintain a debt service coverage ratio of 1.70 on its water system revenue bonds from water rates. It is anticipated that LADWP will not be required to include the debt service on the rate reduction bonds in calculating this coverage amount.

[1] "Back to Basics: What is Securitization?", Finance and Development, September 2008.

Finally, LADWP may be able to treat the rate reduction bonds as "off balance sheet" for accounting purposes. Issuance of securitized debt through the JPA creates some anomalies in the income statement. When the debt is issued, funds are treated as contributions in aid of construction and booked as revenue which creates the perception on the books of increased net income. Over time as the cash from the securitized funds is spent, the amortization of the debt service costs decreases net income.

The recovery of the debt service costs associated with the securitized rate reduction bonds impacts the rate design by requiring a special rate element or elements for payment of the securitized debt service cost. In the case of LADWP, more than one cost element normally recovered through the Water Quality Infrastructure Adjustment, Water Procurement Adjustment factor, and possibly a portion of base rates will be securitized. Each element will appear as a separate line item on the customer bill.

In the end, the rate component total will be less than the total which would have resulted in the absence of securitization. In addition, consistent with current rate structure, securitization cost recovery charges will be volumetric. This process allows customers the ability to transparently track the cost of qualifying projects, as well as, mitigate bill impact through continued conservation.

F.2 Joint Powers Authorities: Rate Reduction Bonds

The City of Los Angeles sponsored Assembly Bill 850 (Nazarian) to amend the Joint Exercise of Powers Act of the California Government Code to authorize joint power authorities to issue rate reduction bonds to finance local publicly-owned water conservation, reclamation, and mandated projects until December 31, 2020. According to Nazarian, "AB 850 will result in interest savings, lower debt service, and reduce local borrowing costs to decrease utility rate increases." AB 850 was signed into law by the Governor of California on October 8, 2013.

LADWP sought this financing structure because it qualifies for a higher bond-rating (AAA) than other types of financing available, thereby reducing interest rates and financing costs, and ultimately, rates to customers. In order to qualify for these rate reduction bonds, a public agency must pledge a portion of revenues only to the rate reduction bondholders using a special tariff that is dedicated as a secured asset to rate reduction bondholders. This cannot be accomplished using revenue bonds, LADWP's typical long-term financing mechanism.

AB 850's authority to finance utility projects via rate reduction bonds is limited to JPAs whose financing activities are limited to financing utility projects and projects for the use and benefit of public water agencies. Individual water agencies cannot issue rate reduction bonds. Two or more public agencies may form a JPA if one of the public agencies owns and operates a utility furnishing water service to retail customers, where a separate charge can be added to the water service bill.

Eligible projects must be for conservation or reclamation purposes, or must be necessary to comply with a mandate such as the Safe Drinking Water Act. Bond proceeds can fund projects that reduce the amount of potable water supplied by the utility or reduce the amount of water imported by the utility. This would include stormwater capture and treatment, water recycling, development of local groundwater resources, groundwater recharging, and water reclamation.

In applying for JPA financing, the water agency must specify the utility projects to be financed, the maximum principal amount, the maximum interest rate, and the maximum stated terms of the rate reduction bonds. State approval is required through the California Pollution Control Financing Authority.

A JPA which finances the cost of a utility project with rate reduction bonds, is authorized and directed to impose and collect a utility project charge. In addition, upon the effective date of the financing resolution related to the rate reduction bonds, a first priority statutory lien exists on the utility project property to secure payment.

The Joint Exercise of Powers Act requires a separate entity distinct from the municipal water agency (such as a JPA) to issue the rate reduction bonds. By being legally isolated from the utility, the JPA's bondholders are not at risk in the event of a bankruptcy of the municipal water agency.

F.3 Formation of the Joint Powers Authority

LADWP proposes partnering with another Southern California water agency to form a new JPA. Approval by the legislative body of both agencies participating in the JPA would be needed to move forward with the actual formation.

The costs of establishing a JPA are minimal for LADWP. The LADWP has incurred up-front legal and staff costs in the preparation of this concept. Ongoing associated administrative costs would be shared as mutually agreed upon by the participants of the JPA. Annually, direct costs are expected to be in the low six figure range. However, savings due to lower costs of financing are expected to far exceed the administrative costs.

The high-level steps involved in forming a JPA are shown in Figure 1.

Figure 1: Forming a JPA

Step	Description
Develop JPA Agreement	LADWP and prospective partner develop a JPA agreement that specifies the purpose, governance structure and operation of the JPA. LADWP has such a draft agreement.
Execute JPA Agreement	Execution of the JPA Agreement for LADWP involves approval by the Board of Water and Power Commissioners (Board) and the City Council/Mayor. The JPA agreement would be executed on behalf of the City of Los Angeles by LADWP. Execution of the JPA Agreement by LADWP's partner agency would require approval of that agency's governing authority. Upon approval by the governing bodies of both entities, the General Manager would be authorized to execute the Agreement and associated enabling documents.
Legally Form JPA	(a) File notice of JPA Agreement with Secretary of State, 30 days after effective date as required by California Government Code Section 6503.5. (b) File JPA Agreement with Controller as required by California Government Code Section 6503.6. (c) File notice with Secretary of State and clerk of each county in which the JPA maintains an office, within 70 days of commencement of the JPA's existence, as required by California Government Code Section 53051.
Establish JPA Infrastructure	JPA infrastructure is anticipated to be minimal. No dedicated permanent staff is anticipated at this time. Instead, "for contract" professional services would provide any necessary services, including legal counsel, accounting, financial advisory services, trustee and banking services, and independent manager services for sub-entities of the JPA that may be formed related to each financing.

There are several key considerations in the formation and operation of the proposed JPA:

- Transactions undertaken by the JPA will be structured so that JPA members do not bear any financial obligation or other liabilities for projects other than as may be separately incurred under off-take or other agreements.
- LADWP has significant experience working with JPAs for our Power System. For over 33 years, LADWP has participated in the Southern California Public Power Authority with 11 other municipal utilities for several joint power projects. However, LADWP has not yet had a comparable JPA for water projects.
- The membership of the JPA could also be expanded, with the consent of the existing members, and subsequent revisions to the JPA Agreement.
- The Board and City Council retain existing authority as to whether or not to proceed with constructing particular projects, and how to finance such projects.

Subsequent to the formation of the JPA, LADWP anticipates applying for securitized financing for water projects included in the FY 2015-16 budget. LADWP staff would follow the steps shown below to issue debt through the JPA. The execution of these steps would likely entail a six- to nine-month process.

F.4 Detailed Steps Involved in a Securitization Financing Through the Proposed JPA

1. LADWP identifies the funding needs.
2. LADWP identifies the preferred financing source—grant funds, State revolving funds, financing through the JPA, or LADWP issued tax-exempt revenue bonds.
3. In order to finance through the JPA, LADWP obtains authorization of both the Board of Water and Power Commissioners (Board) and the City Council to apply for financing through the JPA.
4. The Board shall make determinations that the project is a utility project as defined in AB 850, the source of payment for the rate reduction bonds will be the utility project property, and the use of rate reduction bonds is expected to result in lower rates.
5. LADWP applies for financing through the JPA.
6. The California Pollution Control Financing Authority reviews the rate reduction bonds and determines whether the issue is qualified under AB 850.
7. JPA Governing Board approves the financing.
8. JPA provides notification to affected customers of the charge to be levied for repayment of bonds (Proposition 218 notice), and holds a public hearing. If not more than 50 percent of customers object through return of notification cards, the financing advances.
9. JPA issues the rate reduction bonds.
10. JPA remits the bond proceeds to LADWP.
11. LADWP utilizes the bond proceeds to pay for the local resource or mandated capital projects.
12. The bonds would be repaid by a dedicated charge on LADWP customers' bills. LADWP, as the servicing agent, issues the bills, collects the charge and remits it to the JPA to pay for the debt service on the JPA bonds.
13. The rate reduction bond investors are repaid from funds derived from the charge remitted to the JPA.

G BOND REFINANCING SAVINGS (WATER & POWER SYSTEMS)

This appendix shows the refinancing savings for both Water and Power System bonds since June 2009.

Refunding Savings Since June 2, 2009

Adjusted Savings

WATER SYSTEM REFUNDING SAVINGS

Date	Wtr Systm Savings	PV
6/30/2012	956,089.67	882,425.03
6/30/2013	5,976,561.76	5,781,480.71
6/30/2014	6,502,526.26	6,083,251.29
6/30/2015	15,162,286.26	14,342,313.54
6/30/2016	14,205,611.26	13,055,450.29
6/30/2017	2,677,636.26	2,276,617.65
6/30/2018	6,818,792.50	5,491,773.60
6/30/2019	1,895,830.00	1,542,150.95
6/30/2020	1,892,200.00	1,494,778.36
6/30/2021	1,889,487.50	1,448,713.07
6/30/2022	1,891,900.00	1,407,873.77
6/30/2023	4,228,750.00	3,272,645.02
6/30/2024	4,226,468.76	3,193,550.94
6/30/2025	4,214,756.26	3,108,415.36
6/30/2026	4,208,193.74	3,030,723.05
6/30/2027	4,203,887.50	2,956,017.49
6/30/2028	1,214,937.50	687,709.19
6/30/2029	1,215,450.00	663,869.97
6/30/2030	1,215,368.74	640,577.30
6/30/2031	1,214,693.74	617,835.43
6/30/2032	1,213,368.74	595,622.14
6/30/2033	2,996,143.74	1,442,053.59
6/30/2034	2,634,618.76	1,223,052.16
6/30/2035	1,060,343.76	467,963.26
6/30/2036	1,051,787.50	447,150.19
6/30/2037	2,985,487.50	1,247,617.05
6/30/2038	2,982,956.26	1,203,283.76
6/30/2039	2,984,562.50	1,161,940.99
6/30/2040	2,964,862.52	1,114,490.44
6/30/2041	2,957,306.26	1,074,361.39
6/30/2042	2,973,750.00	1,043,959.73
6/30/2043	2,963,000.00	1,004,969.32
6/30/2044	2,960,000.00	969,816.13
	0.00	0.00
	118,539,615.25	84,974,452.16

Adjustments:

FY 2012	(6,994,270.42)	(6,994,270.42)
FY 2013	527,584.58	527,584.58

Per Pricing Report - Unadjusted

Total	**125,006,301.09**	**91,441,138.00**

Adjusted Savings

POWER SYSTEM REFUNDING SAVINGS

Date	Pwr Systm Savings	PV
6/30/2010	(337,654.44)	(332,854.08)
6/30/2011	836,265.82	819,734.79
6/30/2012	32,460,363.08	32,246,398.74
6/30/2013	21,389,689.72	20,648,883.55
6/30/2014	26,379,300.01	25,061,475.92
6/30/2015	58,773,349.94	55,455,819.97
6/30/2016	57,156,657.50	52,682,498.93
6/30/2017	47,640,612.50	43,859,053.89
6/30/2018	17,041,843.76	15,590,759.00
6/30/2019	1,973,453.13	1,567,587.61
6/30/2020	1,977,837.51	1,530,601.76
6/30/2021	1,878,740.63	1,408,669.35
6/30/2022	1,881,540.62	1,375,825.46
6/30/2023	6,155,637.50	3,605,963.07
6/30/2024	6,409,075.00	3,704,954.29
6/30/2025	1,748,700.00	1,306,903.55
6/30/2026	1,761,575.00	1,284,906.10
6/30/2027	1,762,275.00	1,254,883.62
6/30/2028	1,758,400.00	1,221,431.41
6/30/2029	1,758,400.00	1,192,826.43
6/30/2030	1,760,650.00	1,166,433.29
6/30/2031	1,739,750.00	1,125,924.98
6/30/2032	1,730,800.00	1,094,267.26
6/30/2033	1,728,750.00	1,067,941.10
6/30/2034	1,724,900.00	1,041,232.80
6/30/2035	1,723,850.00	1,016,921.70
6/30/2036	1,725,000.00	994,526.95
	302,539,762.28	272,993,571.44

Adjustments:

FY 2013	(2,062,023.17)	(2,062,023.17)

Per Pricing Report - Unadjusted

Total	**304,601,785.45**	**275,055,594.61**

Adjusted Savings

COMBINED WATER & POWER SAVINGS

Date	Combined Savings	Combined PV
6/30/2012	33,416,452.75	33,128,823.77
6/30/2013	27,366,251.48	26,430,364.26
6/30/2014	32,881,826.27	31,144,727.21
6/30/2015	73,935,636.20	69,798,133.51
6/30/2016	71,362,268.76	65,737,949.22
6/30/2017	50,318,248.76	46,135,671.54
6/30/2018	23,860,636.26	21,082,532.60
6/30/2019	3,869,283.13	3,109,738.56
6/30/2020	3,870,037.51	3,025,380.12
6/30/2021	3,768,228.13	2,857,382.42
6/30/2022	3,773,440.62	2,783,699.23
6/30/2023	10,384,387.50	6,878,608.09
6/30/2024	10,635,543.76	6,898,505.23
6/30/2025	5,963,456.26	4,415,318.91
6/30/2026	5,969,768.74	4,315,629.15
6/30/2027	5,966,162.50	4,210,901.11
6/30/2028	2,973,337.50	1,909,140.60
6/30/2029	2,973,850.00	1,856,696.40
6/30/2030	2,976,018.74	1,807,010.59
6/30/2031	2,954,443.74	1,743,760.41
6/30/2032	2,944,168.74	1,689,889.40
6/30/2033	4,724,893.74	2,509,994.69
6/30/2034	4,359,518.76	2,264,284.96
6/30/2035	2,784,193.76	1,484,884.96
6/30/2036	2,776,787.50	1,441,677.14
6/30/2037	2,985,487.50	1,247,617.05
6/30/2038	2,982,956.26	1,203,283.76
6/30/2039	2,984,562.50	1,161,940.99
6/30/2040	2,964,862.52	1,114,490.44
6/30/2041	2,957,306.26	1,074,361.39
6/30/2042	2,973,750.00	1,043,959.73
6/30/2043	2,963,000.00	1,004,969.32
6/30/2044	2,960,000.00	969,816.13
	420,580,766.15	357,481,142.89

Adjustments:

FY 2012	(6,994,270.42)	(6,994,270.42)
FY 2013	(1,534,438.59)	(1,534,438.59)

Per Pricing Report - Unadjusted

Total	**429,109,475.16**	**366,009,851.90**

H RESPONSE TO COUNCIL RECOMMENDATIONS

On September 19, 2012, the Los Angeles City Council (Council) Energy and Environment Committee adopted a report with ten recommendations associated with third-party review of LADWP's Incremental Electric Rate Ordinance. The full Council adopted the same recommendations in connection with its approval of the Incremental Electric Rate Ordinance on October 2, 2012. Many of these recommendations stemmed from the recommendations found in Appendix E of the "Los Angeles Department of Water and Power (LADWP) - Power System Financial Review and Rate Restructuring Analysis" report issued to the City Council on August 23, 2012 (RPA Power Report).

A summary of the activities and status for each of the applicable recommendations is included in this report. While these recommendations were directed at the LADWP Power System, several also have relevance to the Water System. Therefore, a summary of the activities and status for each of the applicable recommendations is included in this report to the extent the specific item directly impacts the Water System's operations and revenue requirement.

LADWP has made significant progress towards addressing each item, including working collaboratively with the Ratepayer Advocate (RPA), Chief Legislative Analyst (CLA) and Chief Administrative Officer (CAO).

As shown in the table below, formal programs or other activities are underway to address all of the recommendations, and LADWP has made significant progress in each area.

Response to City Council Recommendations

a. Conduct negotiations with labor to find common ground that allows for greater flexibility to contract out effectively and bring salaries and benefits closer to other power utility providers.

In December of 2013, the Council approved a new Memorandum of Understanding (MOU) with IBEW Local 18 that provides significant savings to LADWP ratepayers and makes significant progress towards addressing this recommendation. Specifically, the new MOU makes progress in the following major areas:

- MOU term was extended from 10/1/14 to 9/30/17
- Defer the existing 2.9% COLA from 10/1/13 to 10/1/16
- Create new lower (Tier 2) pension benefits for new employees
- Entry level salaries are reduced for 34 common classes

- Contracting out overtime restriction – reduction from 10% to 5%
- Sick time medical certification requirement for three days rather than the previous five days

As a result of these changes, LADWP is projected to reduce labor costs by $456 million over the next four years.

Key MOU Components	Four-Year Savings Estimate
Defer COLA 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

b. Re-evaluate and consider replacing the surcharge-based restructuring approach with fully restructured permanent rates once legal considerations allow.

(This item is specific to the Power System and is therefore not discussed in this report)

c. Conduct a new formal cost of service study in order to prepare for future power rate restructuring.

LADWP has new cost of services studies for both the Water and Power Systems. These studies are based on marginal cost principles to allocate the overall water & power revenue requirement to each major customer class.

The new cost of service studies by themselves have no impact on the overall revenue requirements; however, they will be used to allocate revenues between customer classes and provide guidance on rate design. This methodology is consistent with industry best practice and leads to the most efficient use of utility resources by LADWP customers. This methodology is also consistent with the requirements of Proposition 218.

d. Conduct a benchmarking assessment to review the cost per project for the repowering program and the Power Reliability Program to ensure cost reasonableness.

(This item is specific to the Power System and is therefore not discussed in this report)

e. Identify opportunities to contract out and explore the potential savings, including the benchmarking of staffing and outsourcing levels against utility peers.

As part of the recent LADWP reorganization by the General Manager, a new Corporate Performance function has been created. This new function will focus on:

- High-level benchmarking: As of February 2015, the Department has completed its initial high-level benchmarking. The study identifies areas where LADWP is comparable or better than industry performance and where there are opportunities for improvement. This high-level study provides a "roadmap" for follow-up in-depth studies to be conducted. Key findings of the benchmarking study for the Water System include:
  - Total O&M costs: The Water System total O&M costs on a per customer and per gallon basis are 2nd/3rd quartiles. This includes the $56 million of O&M for the Los Angeles Aqueduct that most water utilities do not have. If this cost was excluded, these metrics would improve by one full quartile.
  - Reliability metrics: LADWP is 2nd quartile for both planned and unplanned service disruptions, as well as system losses.
  - The LADWP's key financial metrics are in line with industry peer sets.
  - Customer Service O&M: The Water System benchmark for customer service O&M per account fell into the 4th quartile. This result could be lower as a result of business strategies for mostly publicly owned utilities within the AWWA peer set.
  - LA Metro wage rates - Compared to other regions of the US, wage rates for the LA Metro area can range from 13% to 33% higher than peer utilities. The labor component, including overtime and benefits, represents 73% of the Water System's total O&M expense.
  - Regional water rate - LADWP's rates remain competitive with neighboring water utilities in all customer classes for FY 2012-13. Water utilities in California are increasing rates in response to both State and Federal regulatory requirements as well as much needed water storage and recycling infrastructure programs.
  - Real system losses - This metric benchmarks in the 2nd and 3rd quartile and shows that the Water System losses are roughly in line with the median of the peer set.
  - Total unplanned service disruptions per customer - LADWP 2nd quartile result is a favorable benchmark relative to both National and Western Regional peers.
  - Total planned service disruptions per customer - LADWP's 1st and 2nd quartile results are favorable benchmarks relative to National and Western Regional peers, respectively.
- Follow-up in-depth studies: As a result of the high level benchmarking study, there will be a number of areas that require further study and analysis. While the specific areas to be studied will be identified after completion of the initial study, some potential components of this study will be:
  - Determine number of employees and overtime.
  - Provide contracting amounts as a percent of total for various functions and sub functions.
  - Conduct more detailed salary/pension/healthcare benchmark study with adjustments for cost of living in the greater Los Angeles area.
  - Identify areas/processes where benchmarking data shows that there is room for improvement. These areas/processes will be the subject of future business process improvement studies.
  - Determine financial impacts of the significant policies that increase LADWP's costs.

- Business process mapping studies: As a result of the above studies, there will be a number of areas that will present opportunities for significantly improving financial and/or Departmental performance. These functions will be the subject of specific business process mapping studies. These studies will compare industry best practices and evaluate what steps need to be taken for LADWP to move towards the best practice.

f. Review overtime expenses allocation, as well as the Department's contractual requirements that have an impact on overtime.

The current MOU with IBEW Local 18 has key provisions in it for reducing overtime as a consequence of obtaining contracting services. Overtime at a utility is affected by several factors; many of which are operational in nature and in some cases outside the immediate control of the utility; for example, emergency mainline breaks or regulator station call-outs.

Additionally, overtime is considered a safe and cost effective means of obtaining needed resources when used in moderation. In general, it is good utility practice to use overtime at the rate of roughly 15% of regular labor costs. Currently, LADWP is limited in its ability to recruit replacement employees in a timely manner. This is resulting in somewhat higher overtime levels. For the Water System, overtime was higher than the budget at 15.6% for FY 2013-14, this is offset by underspending in regular labor due to the slow hiring process. The approved budget for overtime for the Water System in FY 2014-15 is 8.4% with a proposed five-year average of 9.8%.

g. Complete a rigorous review of the Department's hedging plan to lock in low fuel prices.

(This item is specific to the Power System and is therefore not discussed in this report)

h. Establish a plan for energy efficiency that maintains expenditure levels at an achievable and cost effective level.

(This item is specific to the Power System and is therefore not discussed in this report)

i. Seek greater Departmental efficiencies by pursuing process improvement efforts across a range of areas and practices.

In FY 2011-12, LADWP initiated a Department-wide $459 million, three-year cost reduction program. The final results from the cost reduction plan, concluded in June 2014, exceeded the total $459 million cost reduction plan target. The source of the cost savings has changed somewhat, and the Department has saved more through non-labor and capital budgets; however, LADWP has managed the overall portfolio of savings opportunities and exceed the original target by $7.8 million.

Source ($M)	Original Target	Total Savings	Feb. 2011 - June 2012 Savings	FY 12-13 Savings	FY 13-14 Savings	Difference between target
Total	$459.1	$466.9	$188.7	$168.5	$109.8	$7.8

LADWP has created a new Corporate Performance function. This function will first seek to evaluate the overall performance by conducting a high-level benchmarking study, followed by a

more in-depth follow-up study to specifically evaluate where there are opportunities to improve cost, reliability, and/or customer service performance of LADWP. Ultimately, the results of these studies will result in a number of business process mapping studies where LADWP operations can be compared to and moved toward industry best practice. Some potential changes could require the "meet and confer" process, as well as require subsequent MOU changes.

Additionally, consistent with the Mayor's goal of making City government more efficient and effective, LADWP will be implementing the COMSTAT key performance indicator tool and process throughout the Department, beginning with a soft launch in April 2015. COMSTAT is built on a single platform with four tiers of performance indicators, each tailored to the appropriate audience. The targeted data monitors and manages dozens of key performance indicators at the Departmental, System, and Division levels, and the integrated COMSTAT platform enables LADWP to evaluate and verify the integrity of the indicators. The goal of the COMSTAT system is to define a "single source of truth" for key indicators and enable transparency for the Mayor, the City, and the public. LADWP expects the COMSTAT tool to be fully operational by the end of 2015.

As a result of these cost reduction efforts, LADWP had no rate ordinance changes for both Water and Power Systems in FY 2014-15. It should be noted that LADWP has used cost containment programs to limit rate actions in the past. Results of these programs are:

- Water System: The Water System has not had a base rate increase for five years, with the last base rate increase taking place in FY 2009-10. The last rate ordinance change took place with the Water Quality Improvement Adjustment factor cap increase in FY 2011-12.
- Power System: Over the five-year period, Power System has gone through three of the years (FY 2010-11, FY 2011-12, and FY 2014-15) without any base rate increase. The last rate ordinance change was a two-year rate action for FY 2012-13 and FY 2013-14.

j. Submit a semi-annual report to the Mayor and Council regarding the status of the Renewable Portfolio Standards program and its impact on rates.

(This item is specific to the Power System and is therefore not discussed in this report)

I PRAG FINANCIAL METRICS

This appendix provides Public Resources Advisory Group's June 12, 2013 memorandum to LADWP regarding financial metrics.

LOS ANGELES DEPARTMENT OF WATER AND POWER

WATER SYSTEM RATE ACTION REPORT

Chapter 3: Rate Drivers

July 2015

CONTENTS

FIGURES AND TABLES

FIGURES

3.1 INTRODUCTION

In developing the rate proposal, LADWP was 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 reasonable 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:

- Water Quality;
- Infrastructure Reliability;
- Sustainable Local Water Supply:
  - Customer Conservation;
  - Recycled Water;
  - Stormwater Capture;
  - Groundwater Remediation and Clean-up;
  - Bay Delta Conservation Plan;
- Purchased Water; and
- Owens Valley Regulatory Compliance.

3.1.1 Water Quality

Water quality investments remain a top priority for the Water System. The Department is undertaking a number of projects in order to remain in compliance with water quality mandates. Specifically, these projects include: covering or removing from service all open treated-water distribution reservoirs such as Santa Ynez, as shown in Figure 1; making investments in state-of-the-art disinfection facilities to minimize the formation of disinfection byproducts; as well as other infrastructure upgrades.

Figure 1: Santa Ynez After Installation of Floating Cover as Required by Regulation

3.1.2 Infrastructure Reliability

LADWP delivers water to its customers through a complex and expansive network. The Department manages and maintains over 300 miles of Los Angeles Aqueduct (LAA) tunnels, 9 active reservoirs, 114 storage tanks, 2,668 large valves, large and small pipes measuring more than 7,200 miles in length, 94 pump stations, 327 pressure regulator and relief stations, and approximately 700,000 meters.

Much of LADWP's infrastructure is nearing the end of its useful life. Some planned infrastructure investments over the next five years include, but are not limited to:

- Replace approximately 1 million feet of distribution mainline;
- Replace 25 valves;
- Retrofit 20 pressure regulator and relief stations;
- Replace 125,000 small meters; and
- Conduct in-place refurbishments of the LAA system
  - Reline 7 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
  - Replace and improve 10-15 old and corroded 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 cost and inconvenience of service disruptions due to infrastructure failures. Figure 2 illustrates the potential extent of damage from main breaks.

Figure 2: Image of 2014 UCLA Main Break

In order to upgrade infrastructure in the most cost effective and efficient manner, all major components of the Water System infrastructure are evaluated as part of the ongoing Asset Management (AM) Program. As outlined in the Water Infrastructure Plan (WIP), the Department determines the appropriate level and priority of all infrastructure investments by assessing and balancing equipment condition and risk of failure with long-term (e.g. construction) and short-term (maintenance and repair) facility costs.

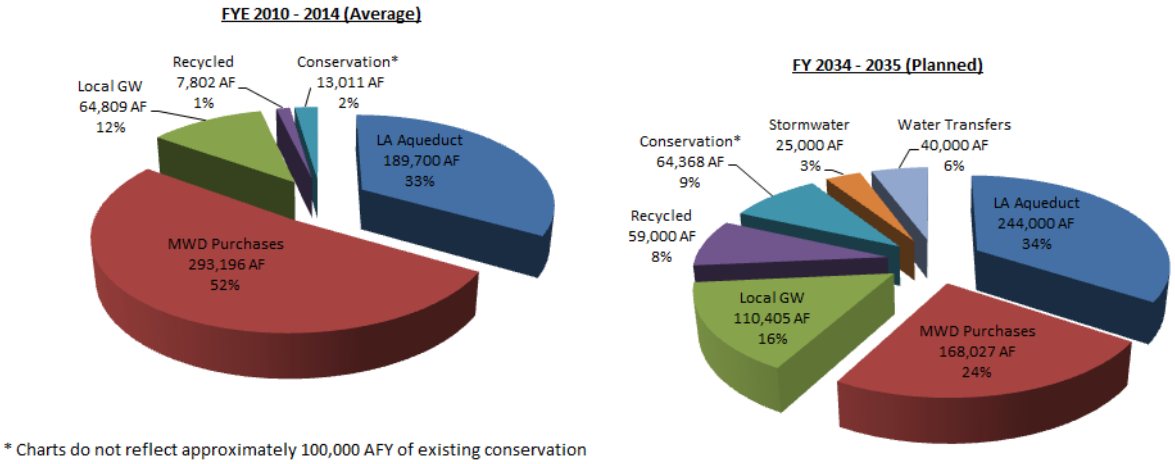
3.1.3 Sustainable Local Water Supply

"Our relationship with water must evolve. We cannot afford the water policies of the past…We must conserve, recycle and rethink how we use our water to save money and make sure that we have enough water to keep L.A. growing." - Mayor Eric Garcetti [1].

Historically, the Department has obtained the majority of its water supply from the Eastern Sierra Nevada Mountains (through the LAA). This water source is entirely dependent on snowfall and highly volatile. In drought years, the shortfall in the water supply is made up through water purchases from the Metropolitan Water District (MWD). Both of these sources of supply, which come from hundreds of miles away, are becoming increasingly limited and expensive. In addition, they are 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 multipronged program to ensure a sustainable local water supply. Figure 3 below depicts the expected breakdown of water supply from the various sources in FY 2034-35, given planned levels of investment as of 2010[2]. Water purchases are projected to decrease from 52% of the water supply to 24% of the total supply, as LADWP continues investments in water conservation, stormwater capture, groundwater replenishment and remediation, and recycled water. The proposed rates are designed to help support this transition.

Figure 3: Planned Shift in Water Supplies



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

[1] For full text see:
http://www.lamayor.org/mayor_garcetti_issues_executive_directive_on_water_conservation_to_address_ongoing_drought

[2] Breakdown of water supply in FY 2034-35 from 2010 Urban Water Management Plan. The projected breakdown will be adjusted for new developments, such as Mayor's Executive Directive 5, in the 2015 Urban Water Management Plan (currently under development).

3.1.4 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. Between calendar years 2010 and 2015, the price of Tier 1 untreated water from MWD increased by 3.76% per year and the price of MWD Tier 1 treated water increased by 5.66% per year. Between calendar year 2015 and 2020, the price of Tier 1 treated/untreated water from MWD is expected to increase at a rate of approximately 3.31% per year[3]. This increase is being driven by infrastructure investments as well as rising O&M costs. In addition, MWD will be responsible for 25% 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.

3.1.5 Owens Valley Regulatory Compliance

California Health and Safety Code Section 42316 requires the City of Los Angeles to comply with reasonable mitigation orders issued by a local air regulator, which has determined that the City's water activities are primarily responsible for the air quality impacts associated with the Owens Lake region. Since 2001, LADWP has operated the Owens Lake Dust Mitigation Program.

The Department's efforts in Owens Lake have eliminated more than 90% of the excess blowing dust. However, this success has come at a high cost to Angelenos. LADWP allocates about 95,000 AF of water to Owens Lake annually and has spent $1.3 billion since 2000 to control dust at Owens Lake.

The Department recognized that using drinking water for dust mitigation practices is unsustainable and has looked for long-term solutions to dust mitigation in Owens Valley that would reduce the need for water diversion without subjecting it to additional litigation. On November 14, 2014 the City of Los Angeles and the Great Basin Unified Air Pollution Control District (GBUAPCD or the District) announced they had reached an historic agreement over the implementation of dust control measures on Owens Lake (the Stipulated Judgment). Effectively, the Stipulated Judgment will allow LADWP to use waterless dust control methods, including tillage, at Owens Lake, resulting in potentially significant water and monetary savings. The Judgment also provides Los Angeles with the certainty of knowing the full extent of its liability for dust mitigation at Owens Lake.

Compliance with the Stipulated Judgment is expected to cost approximately $500 million. In the long run, the proposed project is expected to be revenue neutral and will save the Department

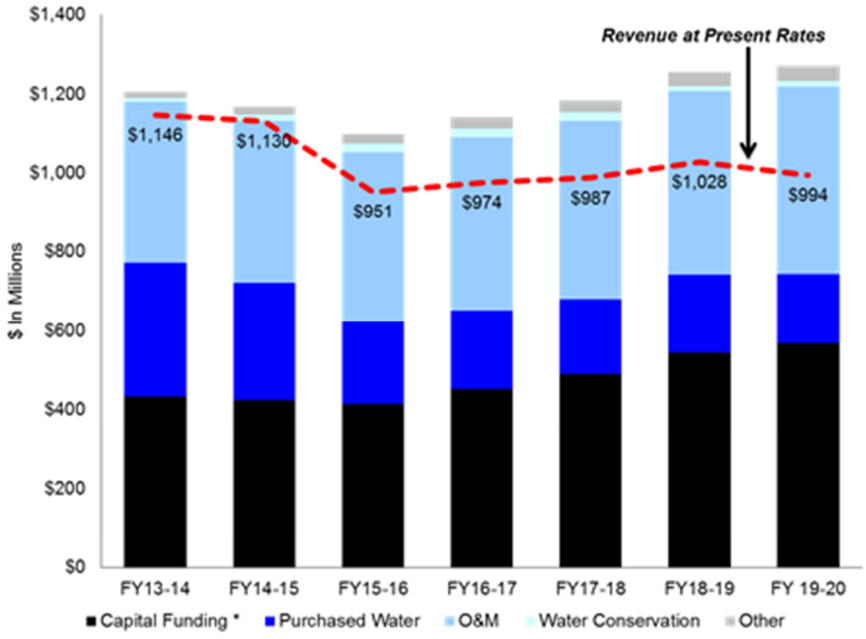
[3] Percentages reflect CAGR (Compound Annual Growth Rate).

(and customers) money as less water is diverted from the LAA for dust control (and less purchased water is required).

3.1.6 Revenue Requirement

Current revenues will be inadequate to fund the above programs. as summarized by a graphical representation of the income statement in Figure 4.

Figure 4: Current Revenue Shortfall (Given No Rate Increase, Including Purchased Water)



Note: Expenses are based on the current five-year financial plan which assumes normal precipitation. If precipitation is below normal as it has been in the most recent two years, the revenue requirement is likely to be higher.

* All amounts based on income statement and Capital Funding include depreciation, net interest expense, and retained earnings

To meet the Water System's revenue requirement, revenues will have to increase by an average incremental amount of $90 million annually (excluding the impact of purchased water) through the period of FY 2015-16 to FY 2019-20, as reflected below in Figure 5. This translates to an average annual system rate increase of 8.48%. Assuming normal precipitation, purchased water would have a negative impact on the Department's revenue requirement. Including the impact of purchased water, the average annual revenue requirement impact would go down to $46 million, and the average annual system rate increase would go down to 4.96%.

Figure 5: Year-Over-Year (YOY) Rate Driver Breakdown of Proposed Retail Rate and Revenue Requirement Increase (Assuming Normal Precipitation)[4]

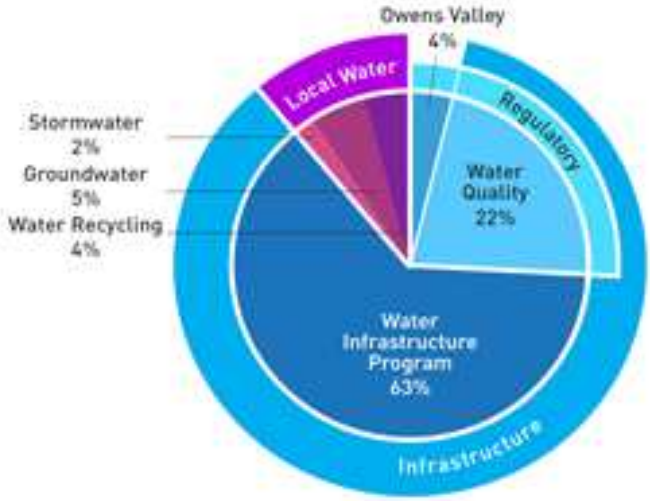
Rate Driver	Average Annual Revenue Requirement Increase ($M)	Average Annual System Retail Rate Increase (Cents/HCF)	Average Annual Rate Increase (%)
Conservation (Securitization)	-6[5]	0.13	-0.50%
Groundwater (Securitization)	5	0.54	0.40%
Stormwater	2	0.18	0.13%
Recycled Water	4	1.31	0.35%
Owens Valley	4	0.32	0.35%
Water Quality	22	0.36	2.06%
Infrastructure – Base	16	-0.04	1.96%
Infrastructure – Pass-Through	44	4.32	3.72%
Total before Purchased Water	90	7.13	8.48%
Purchased Water	-44	-1.24	-3.53%
Total	46	5.89	4.96%

Figure 6 outlines the major components of the cumulative revenue requirement for the five-year rate period. As outlined above, higher costs are primarily driven by infrastructure improvements, securing new sources of local water supply and meeting regulatory mandates.

[4] All revenue requirement calculations are based on Financial Plan Case Number 33.

[5] Many conservation investments are eligible for lower financing through securitization, resulting in a reduction in revenue requirement for conservation projects.

Figure 6: Major Rate Drivers (Cumulative FY 2015-16 through FY 2019-20)



The percentage increases outlined in Figure 5 and Figure 6 reflect average changes to revenue requirements and rates when calculated year-over-year (YOY)[6]. Throughout this report, we will continue to present YOY numbers. However, in order to understand the potential impact of compounding on the rate drivers by the end of the rate period, the Department has also computed "cumulative" rate increase percentages.

Figure 7 compares the percentage rate increases using the two different calculation methodologies. Using the cumulative methodology, the average annual rate increase is 5.44% instead of 4.96% (including purchased water).

[6] In essence, the percentage increase in FY 2015-16 is computed using the revenue requirement/rate in FY 2014-15 as a base. In turn the percentage increase in FY 2016-17 is computed using the revenue requirement/rate in FY 2015-16 as a base and so on.

Figure 7: YOY vs. Cumulative Percentage Rate Increases

Rate Driver	Average Annual System Retail Rate Increase (YOY)	Average Annual System Retail Rate Increase (Cumulative)
Conservation (Securitization)	-0.50%	-0.50%
Groundwater (Securitization)	0.40%	0.44%
Stormwater	0.13%	0.15%
Recycled Water	0.35%	0.41%
Owens Valley	0.35%	0.38%
Water Quality	2.06%	2.13%
Infrastructure – Base	1.96%	2.00%
Infrastructure – Pass-Through	3.72%	4.01%
Total before Purchased Water	8.48%	9.03%
Purchased Water	-3.53%	-3.59%
Total	4.96%	5.44%

Regardless of how the average annual rate increase percentage is calculated, the end result is the same; between FY 2014-15 and FY 2019-20, the revenue requirement will go from $1,152 million to $1,382 million, and the average retail rate will go from $4.92 to $6.25 per HCF (including purchased water).

The Department is planning to spend a total of $7,315.1 million on O&M and capital across all the programs discussed in this section (excluding purchased water) over the next five years, as shown in Figure 8.

Figure 8: Summary of Budgeted Rate Driver Costs

($M)		Current	Proposed Rate Period						
		FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*[7]
Water Quality	O&M	$53.6	$84.1	$88.2	$92.8	$97.3	$98.2	$460.6	*$101.4*
	Capital	$162.7	$300.5	$304.7	$181.8	$115.3	$84.8	$987.1	*$59.2*
	Total	$216.3	$384.6	$392.9	$274.6	$212.6	$183.0	$1,447.7	*$160.6*
Infrastructure	O&M	$239.4	$261.6	$263.2	$267.3	$275.7	$283.9	$1,351.7	*$289.4*
	Capital	$414.7	$318.6	$411.8	$432.5	$599.4	$640.0	$2,402.3	*$755.3*
	Total	$654.2	$580.2	$675.0	$699.8	$875.1	$923.9	$3,754.0	*$1,044.7*
Sustainable Local Water Supply	O&M	$27.1	$31.5	$32.4	$32.8	$24.3	$24.0	$145.0	*$23.2*
	Capital	$129.1	$192.0	$195.8	$215.3	$261.8	$408.6	$1,273.5	*$708.8*
	Total	$156.2	$223.5	$228.2	$248.1	$286.1	$432.6	$1,418.5	*$732.0*
Owens Valley Regulatory Compliance	O&M	$32.3	$31.0	$34.2	$34.9	$35.9	$36.2	$172.2	*$36.4*
	Capital	-	$73.3	$30.8	$66.3	$62.1	$68.4	$300.9	*$65.1*
	Total	$32.3	$104.3	$65.0	$101.2	$98.0	$104.6	$473.1	*$101.5*
Pumping	O&M	$39.3	$41.4	$43.1	$44.6	$45.8	$47.0	$221.8	*$48.4*
Security	O&M	$33.7	-	-	-	-	-	-	-
	Capital	$18.9	-	-	-	-	-	-	-
	Total	$52.6	-	-	-	-	-	-	-
All Programs (Excluding PW)	O&M	$425.4	$449.6	$461.0	$472.3	$479.0	$489.3	$2,351.3	*$498.8*
	Capital	$725.4	$884.4	$943.1	$895.9	$1,038.6	$1,201.8	$4,963.8	*$1,588.4*
	Total	$1,203.5	$1,334.0	$1,404.1	$1,368.2	$1,517.6	$1,691.1	$7,315.1	*$2,087.2*
Purchased Water	O&M	$298.0	$209.3	$198.7	$189.4	$198.0	$175.7	$971.1	*$172.2*
All Programs (Including PW)	O&M	$723.4	$658.9	$659.7	$661.7	$677.0	$665.0	$3,322.4	*$671.0*
	Capital	$725.4	$884.4	$943.1	$895.9	$1,038.6	$1,201.8	$4,963.8	*$1,588.4*
	Total	$1,501.5	$1,543.3	$1,602.8	$1,557.6	$1,715.6	$1,866.8	$8,286.2	*$2,259.4*

Expenditures that are categorized as O&M are immediately passed through to the customers and, therefore, have a dollar for dollar impact on rates. In contrast, capital costs are generally funded through the issuance of debt (bonds). External financing allows the costs of the financed

[7] Budgeted figures for FY 2020-21 are presented in line with Financial Plan Case Number 33. LADWP has analyzed expense and revenue requirement projections beyond the five-year timeframe; while additional analysis is required, it is possible further rate increases beyond the current rate period may be necessary.

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. On average, $14 of capital has roughly the same impact on rates as $1 of O&M.

In developing the proposed rates, LADWP was 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 reasonable rates. The remainder of this section describes in greater detail the nature, scope and importance of the key programs that contributed to the proposed costs, revenue requirements and rates.

3.2 WATER QUALITY

The Water System is undertaking a number of projects in order to comply 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).

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 the cap for the Water Quality Improvement Adjustment (WQIA) factor. While the implementation of the increased WQIA factor allowed the Department 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.

Over the next five years, the Department has budgeted for a capital investment of $987.1million[8] in water quality projects. The amount currently budgeted for projects required to comply with LT2ESWTR and Stage 2 D-DBPR is $651.8 million. Budgeted capital and O&M expenditures are summarized in Figure 9.

[8] In addition to the costs of compliance with the Long-Term 2 Enhanced Surface Water Treatment Rules and the Stage 2 Disinfectants and Disinfection Byproducts Rule, this amount also captures ongoing capital work for Water Quality related to corrosion as well as reservoir and tank improvements.

Figure 9: Capital and O&M Expenditures – Water Quality Programs

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$53.6	$84.1	$88.2	$92.8	$97.3	$98.2	$460.6	*$101.4*
Capital	$162.7	$300.5	$304.7	$181.8	$115.3	$84.8	$987.1	*$59.2*
Total	**$216.3**	**$384.6**	**$392.9**	**$274.6**	**$212.6**	**$183.0**	**$1,447.7**	***$160.6***

As shown in Figure 10, over the five-year proposed rate period, these projects will increase the revenue requirement by an average of $22 million per year but will have no average impact on the system average rate. The decline in the revenue requirement growth and average retail rate over the five-year proposed rate period reflects the fact that investments will be decreasing relative to current high levels as the Department completes the majority of investments required for compliance with LT2ESWTR and Stage 2 D-DBPR.

Figure 10: Water Quality Impact on Revenue Requirement and Rates

	YOY Increase						
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Average	*FY 2020-21*
Increase in Revenue Requirement ($M)	39	36	13	13	7	22	*6*
Increase in System Average Retail Rate (cents/HCF)	18.9	0.45	-10.32	-2.54	-3.87	0.36	*0.89*
Increase in System Average Retail Rate (%)	**3.68%**	**3.76%**	**1.57%**	**1.00%**	**0.31%**	**2.06%**	***0.43%***

3.2.1 Program Overview

The Stage 2 D-DBPR required LADWP to make substantial capital improvements to minimize the formation of disinfection byproducts. The Department's strategy for compliance was to add state-of-the-art Ultra Violet light disinfection facilities for primary disinfection and to change the secondary disinfectant from chlorine to chloramine, a much more stable compound that does not form as many byproducts. This conversion was conducted in phases over ten years due to the enormity of the water distribution system and is nearly complete.

The LT2ESWTR requires LADWP to cover, treat, or remove from service six uncovered distribution reservoirs. The Department has a Compliance Agreement with California Department of Public Health (CDPH) that has multiple interim deadlines and requires full compliance by 2022.

The amount currently budgeted for these projects over the next five years is $651.8 million. However, some of the projects will extend beyond the five-year period. The status of the remaining projects is shown in Figure 11. Chapter 2 - Appendix C provides more description of each of these major programs.

Figure 11: Major Water Quality Projects

Future Projects	Status as of April 2015	Budgeted Amounts (FY 15-16 to FY 19-20) O&M and Capital ($M)	Total Projected Cost ($M)
River Supply Conduit Improvement – Upper Reach, Units 5 and 6	Design complete Construction scheduled for March 2015	$146.1	$170.5
River Supply Conduit Improvement – Upper Reach, Unit 7	Design 99% complete Construction scheduled for December 2016	$130.5	$151.8
Silver Lake Bypass Line and Regulator Station	Design complete Construction scheduled for Summer 2015	$34.0	$51.7
Headworks Reservoir West	Design 60% complete	$114.9	$127.9
River Supply Conduit Improvement – Upper Reach, Unit 1A Trunk Line	1A East placed into service 1A West construction scheduled for July 2018	$15.0	$39.2
Elysian Reservoir Cover	Design complete Construction scheduled for October 2015	$24.3	$30.5
Upper Stone Canyon Reservoir	Design 30% complete	$35.4	$39.6
LA Reservoir Bull Creek Extension	Construction underway. Completion anticipated January 2017	$26.0	$82.9
99th Street Wells Chloramination Station	Design 90% complete	$15.8	$24.3
LA Reservoir UV Disinfection Treatment Plant	Design complete	$110.2	$111.0
TOTAL		**$651.8**	**$829.4**

3.3 MAINTAINING INFRASTRUCTURE AND RELIABILITY

Much of LADWP's infrastructure is nearing the end of its useful life. Major capital projects to improve the reliability of LADWP water service infrastructure are crucial. Infrastructure issues often result in significant property damage and disruptions for people and businesses.

Furthermore, costs associated with emergency repairs, litigation, and claims from infrastructure failures greatly outweigh routine preventative maintenance and replacement costs.

The Water System's Capital Improvement Program (CIP) is a ten-year plan focused on maintaining or replacing existing components of the Water System, and constructing new facilities to ensure LADWP fulfills its mission of providing reliable and high quality water to the residents of Los Angeles. In addition, the Department has a five-year Water Infrastructure Plan (WIP) focused on maintaining infrastructure and by extension improving water system reliability. Some planned infrastructure investments over the next five years include, but are not limited to:

- Replace approximately 1 million feet of distribution mainline;
- Replace 25 valves;
- Retrofit 20 pressure regulator and relief stations;
- Replace 125,000 small meters; and
- Conduct in-place refurbishments of the LAA system;
  - Reline 7 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
  - Replace and improve 10-15 old and corroded water measuring stations.

Overall, expenditures for infrastructure projects over the next five years will total $3,754.0 million in capital and O&M, as outlined in Figure 12.

Figure 12: Capital and O&M Expenditures – Water Infrastructure[9]

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	FY 2020-21
O&M	$239.4	$261.6	$263.2	$267.3	$275.7	$283.9	$1,351.7	$289.4
Capital	$414.7	$318.6	$411.8	$432.5	$599.4	$640.0	$2,402.3	$755.3
Total	**$654.2**	**$580.2**	**$675.0**	**$699.8**	**$875.1**	**$923.9**	**$3,754.0**	**$1,044.7**

Over the five-year proposed rate period, these projects will increase the revenue requirement by an average $60 million per year and the system average rate by an average of 4.28 cents per HCF annually, as shown in Figure 13[10].

[9] Amounts shown do not include operating support.

Figure 13: Water Infrastructure Impact on Revenue Requirement and Rates

		YOY Increase						
		FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**	**Five-Year Average**	***FY 2020-21***
Increase in Revenue Requirement ($M)	Base	25	26	23	2	7	16	0
	Pass-Through	104	-2	26	39	50	44	26
Increase in System Average Retail Rate (Cents/HCF)	Base	14.82	3.92	-2.61	-16.45	0.11	-0.04	0.47
	Pass-Through	45.6	-44.41	12.66	4.52	3.76	4.32	-9.80
Increase in System Average Retail Rate (%)	Base	3.01%	3.79%	3.07%	-0.06%	-0.04%	1.96%	0.04%
	Pass-Through	**9.17%**	**0.13%**	**2.54%**	**3.15%**	**3.63%**	**3.72%**	**1.89%**

LADWP's proposed rate plan balances the appropriate investment levels for infrastructure reliability and compliance with external mandates, while minimizing the impact on customer rates. The proposed rates are designed to maintain and improve the level of reliability most efficiently by allocating resources between base labor, overtime, and contractors in the most cost effective manner. The Department has developed its plans for reliability enhancements in a strategic way that is most cost effective and least disruptive to customers based on an asset management program focusing on scheduled infrastructure investment projects, as opposed to emergency maintenance programs. A systematic replacement program has been shown to be more effective in lowering costs and customer impacts than performing reactive or emergency asset replacement. On average, pipeline breaks cost $33,000 per incident, and no mainline is actually replaced in emergency repair. In addition, unlike emergency break repairs, planned infrastructure replacement efforts can be coordinated with the Bureau of Street Services and other agencies to minimize street repairs and replacements.

Several of the major projects designed to replace and/or improve the condition of aged infrastructure are discussed below.

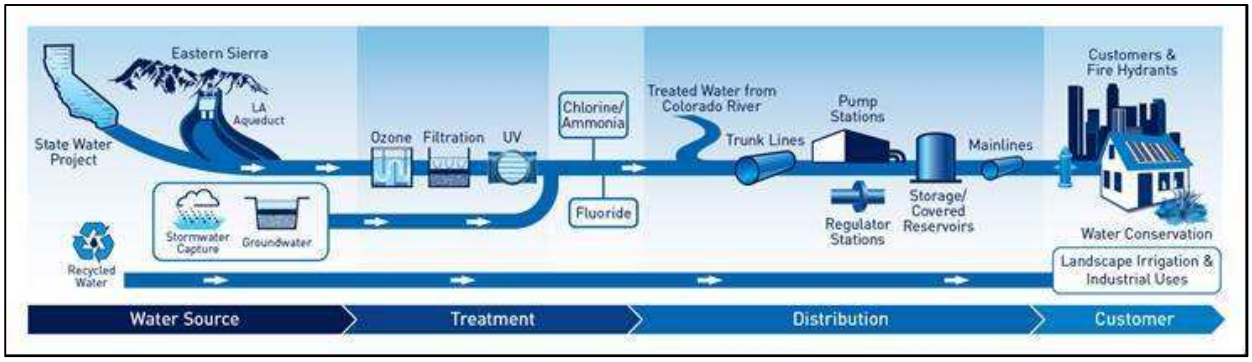
3.3.1 Infrastructure Overview

LADWP delivers water to its customers through a complex and expansive network. Raw water is conveyed to treatment plants through 300 miles of aqueduct tunnels. After treatment, water is

[10] In Chapter 5, the Department outlines a new proposed infrastructure reliability adjustment factor component in the rate structure which is designed to provide specific funding for new infrastructure capital in a transparent manner. Infrastructure costs associated with high priority core facilities are included in the adjustment factor.

stored in 9 reservoirs and 114 storage tanks across the system until it is needed. The water is delivered to customers through a network of large and small pipes, with varied functions, measuring more than 7,200 miles in length. Trunk lines are pipes with a diameter greater than 20 inches that transport water from wells and aqueducts to reservoirs and enable the movement of water from one area of the City to another. Trunk lines connect to smaller pipes known as distribution mains that supply water to the customer's service connection. Consumption of the delivered water is measured by 700,000 water meters that provide the basis for determining a customer's water bill. In addition, there are 2,668 valves, 94 pump stations and 327 pressure regulator and relief stations throughout the system, which together maintain the flow of water. Figure 14 provides an illustration of a sample water supply system.

Figure 14: Illustration of Sample Water Supply System



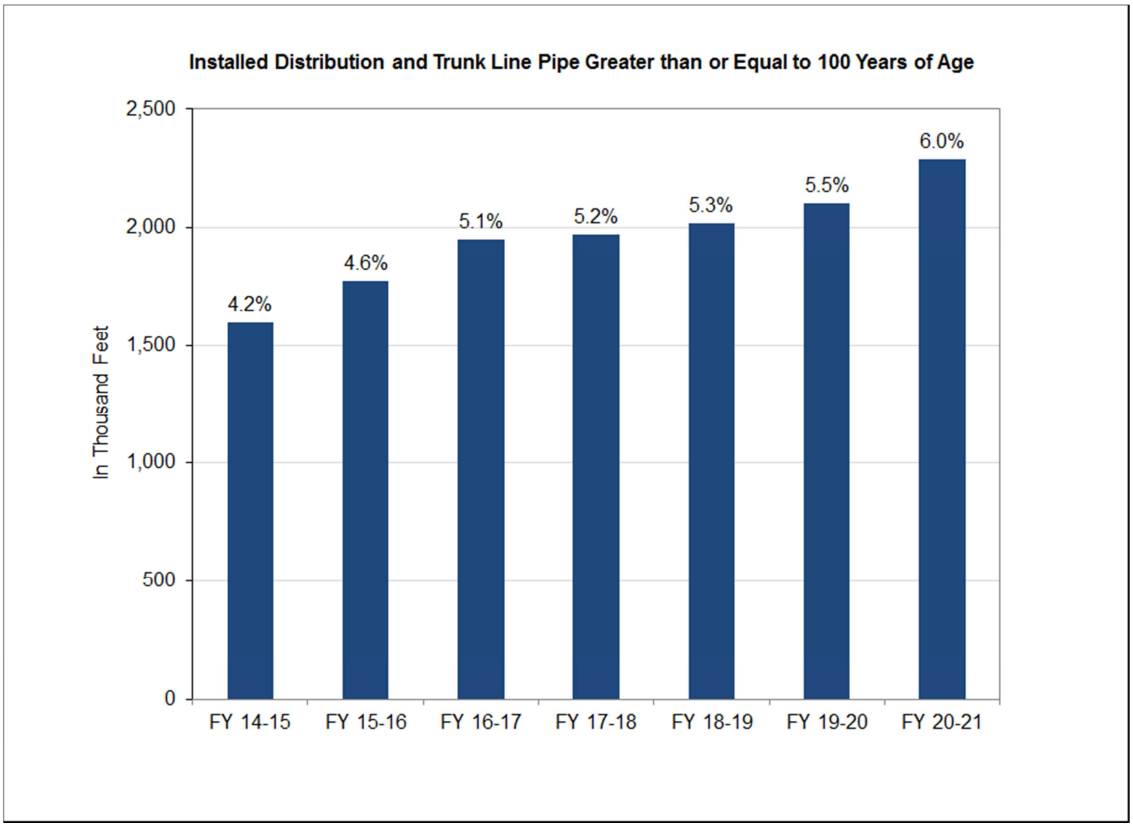
3.3.2 Pipeline Projects

The Department began extensive rehabilitation and replacement of the distribution system pipe over 30 years ago.

Figure 15: Pipeline Installation

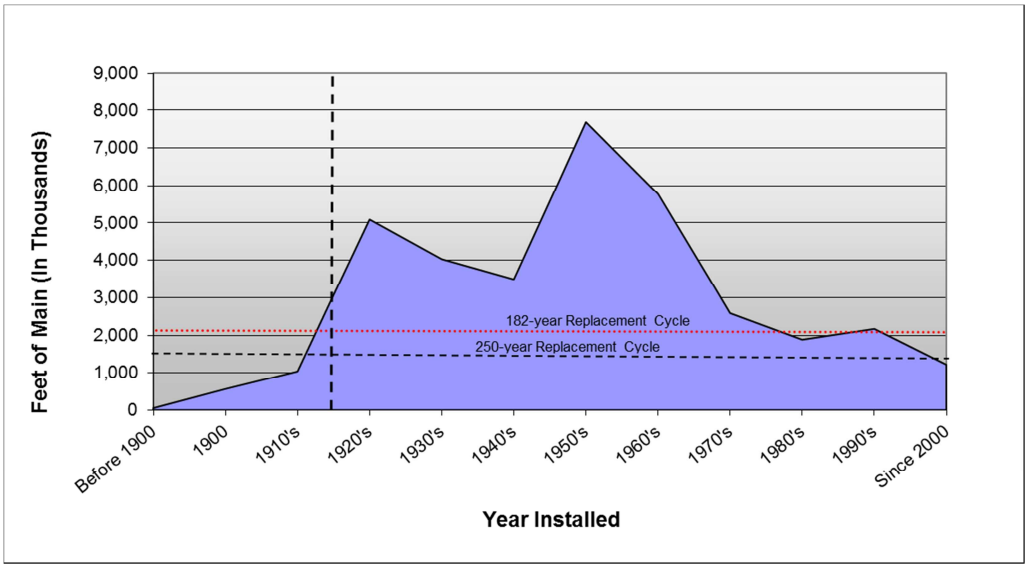
In early 2007, the Department completed a program of nearly 30 years to cement mortar line 10 million feet of older mainline, which was installed prior to lining becoming a standard practice. The lining provides a smooth, alkaline finish which inhibits internal corrosion, thereby improving water quality, and hydraulic capacity of the line and adding to the useful life of the asset. In addition, LADWP has replaced nearly 600,000 feet of distribution mainline in the past five years. These investments not only strengthen the Department's infrastructure and help maintain reliability but also improve water quality. However, as shown in Figure 16, as of 2015, over 1.5 million feet of water pipes remaining to be replaced are older than 100 years.

Figure 16: LADWP's Aging Pipeline



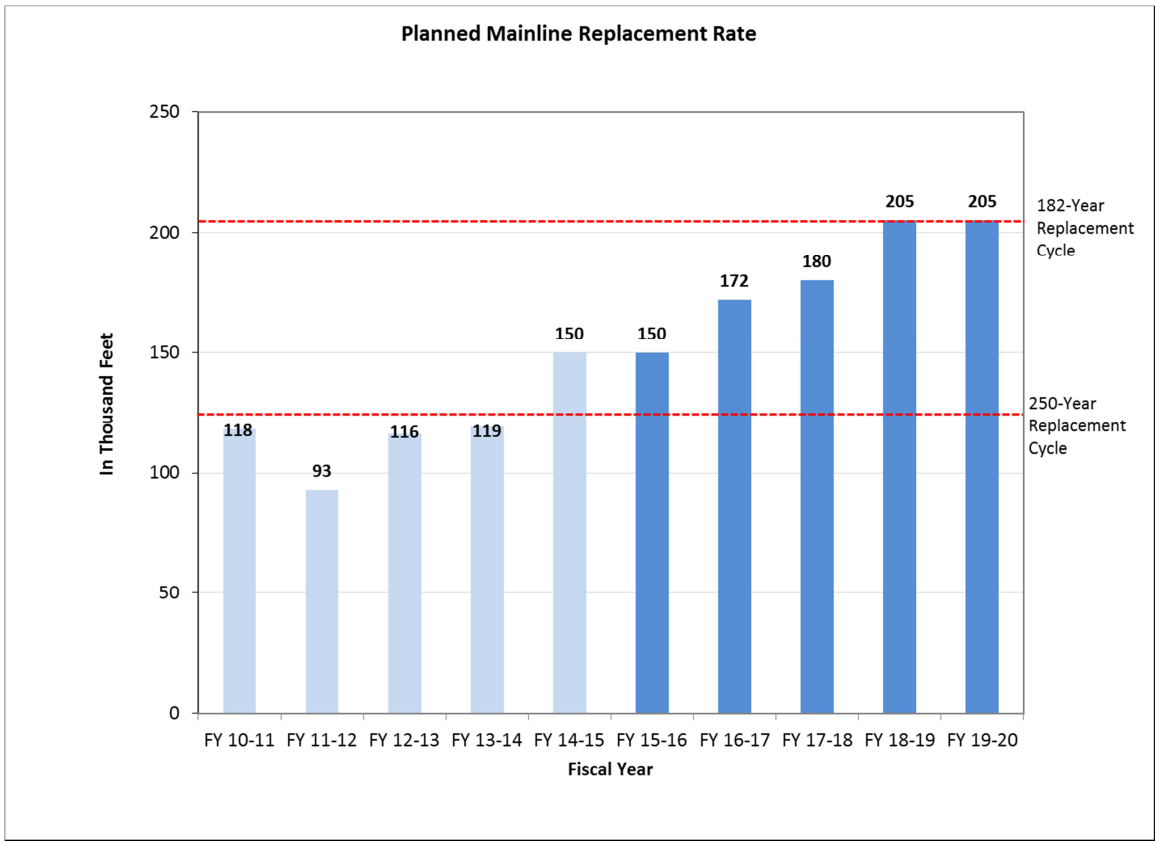
As can be seen in Figure 17 below, the bulk of the Department's mainline installation occurred after 1920; thus, an increasingly large proportion of installed mainlines will cross the critical 100-year mark in the coming years (much of this pipeline was not designed for service beyond 100 years). Therefore, the Department will need to further accelerate mainline replacement in order to mitigate the effects of this rapid aging and increased vulnerability over the long term.

Figure 17: Feet of Mainline by Installation Date and Replacement Cycle



The Department's mainline replacement rate is expected to increase from 150,000 feet per year to 205,000 feet per year by 2020. Currently, the 150,000-feet-a-year replacement rate still puts the system at a 250-year replacement cycle. An increase to 205,000 feet a year would decrease the replacement cycle to 182 years. While still high, reducing the replacement cycle to this level in conjunction with the Department's strategic replacement prioritization process should allow LADWP to continue the downward trend in blowouts and major leaks.

Figure 18: Planned Mainline Replacement Rate

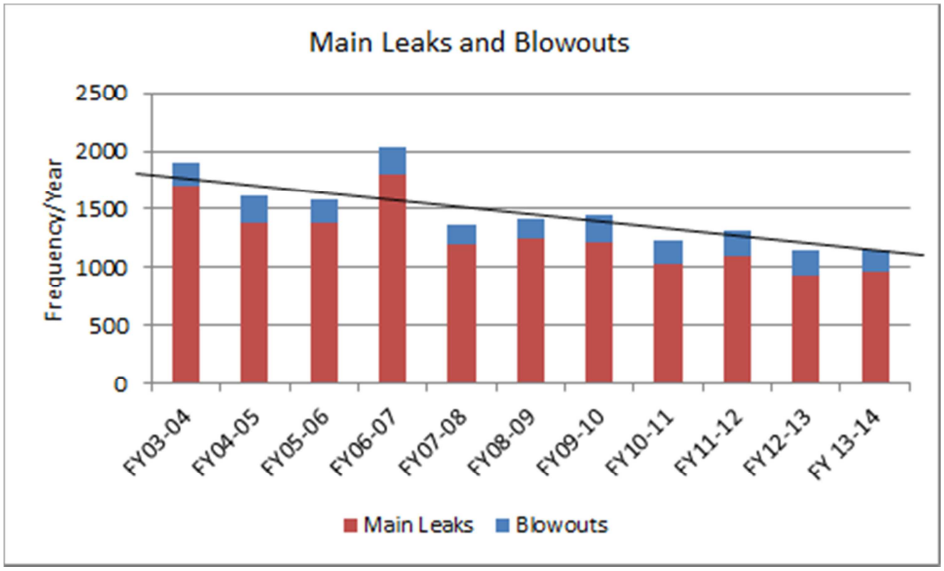


The Water Main Replacement Program was established to strategically replace high impact distribution mains that:

- Have high frequency of leaks;
- Have deteriorated due to external or internal corrosion;
- Restrict fire or domestic water supplies;
- Negatively impact water quality;
- Create conflicts with critical City public works improvement projects; and/or
- Are located in unstable soils.

The intended benefits of this program are to minimize customer service interruptions, potential property damage and main leaks. Other long-term benefits include reduced water main maintenance costs, improved water quality, reduction of water loss due to leakage and improved water flow for fire emergencies. Since LADWP has started replacing mainline, the rate of main leaks has decreased, as shown by Figure 19.

Figure 19: Trend in Annual Main Leaks and Blowouts



In addition, there are approximately 2.9 million feet of trunk lines Citywide. The Department plans to replace, test, repair and preserve portions of approximately 200,000 feet of moderate to high risk pipe over the next ten years. Trunk line replacements are typically multi-year projects.

Delaying action until the infrastructure ages further would risk reversing the positive trend in main leaks and blowouts. Infrastructure projects require long lead times as the Department develops sufficient capacity to undertake the proposed work (negotiate contracts, hire and train teams, secure permission, etc.).

In addition, credit rating agencies recognize the value of asset replacement programs. Moody's believes: "The condition of a utility's capital assets determines its ability to comply with environmental regulations and continue delivering adequate service with existing resources… Utilities that delay investing in their systems, replacing aging plant and equipment, and modernizing their facilities often find it more expensive to do so later. Further, systems whose facilities deteriorate often run afoul of environmental regulations."[11] Fitch Ratings' "…takes into account comprehensive plans to maintain existing facilities and replace aging or obsolete assets. Consequently, Fitch views trends of deferred maintenance as a credit risk."[12]

Current water loss data do not suggest that the Department has lower Water System reliability than its peers. The Department's water loss percentage, a metric commonly used by water utilities, compares favorably with other utilities across the country and is below the median for

[11] Moody's Investor Service, Rating Methodology, "US Municipal Utility Revenue Debt", December 15, 2014.

[12] Fitch Ratings Public Finance Revenue Criteria Report, "U.S. Water and Sewer Revenue Bond Rating Criteria", July 31, 2013.

water utilities in the western United States. Water loss is shown in Figure 20. However, water loss is not the only measurement of line breaks. In addition, water loss ratios are impacted by the points of measurement in the water system and type of water supply system, among other factors. Regardless, breaks impact water supply reliability and frequently result in property damage, in some cases significant.

Figure 20: Real Water Loss as Percent of Water Introduced to System[13]

	Top Quartile	Median	Bottom Quartile	Department Five-Year Average Water Loss
Utility Water Loss by Region (West United States)	0.4%	2.1%	6.5%	3.5%[14]
Utility Water Loss Nationally	1.0%	5.9%	9.5%	

3.3.3 Non-Pipeline Infrastructure Projects

Major non-pipeline infrastructure projects being undertaken by the Water System are outlined in this section.

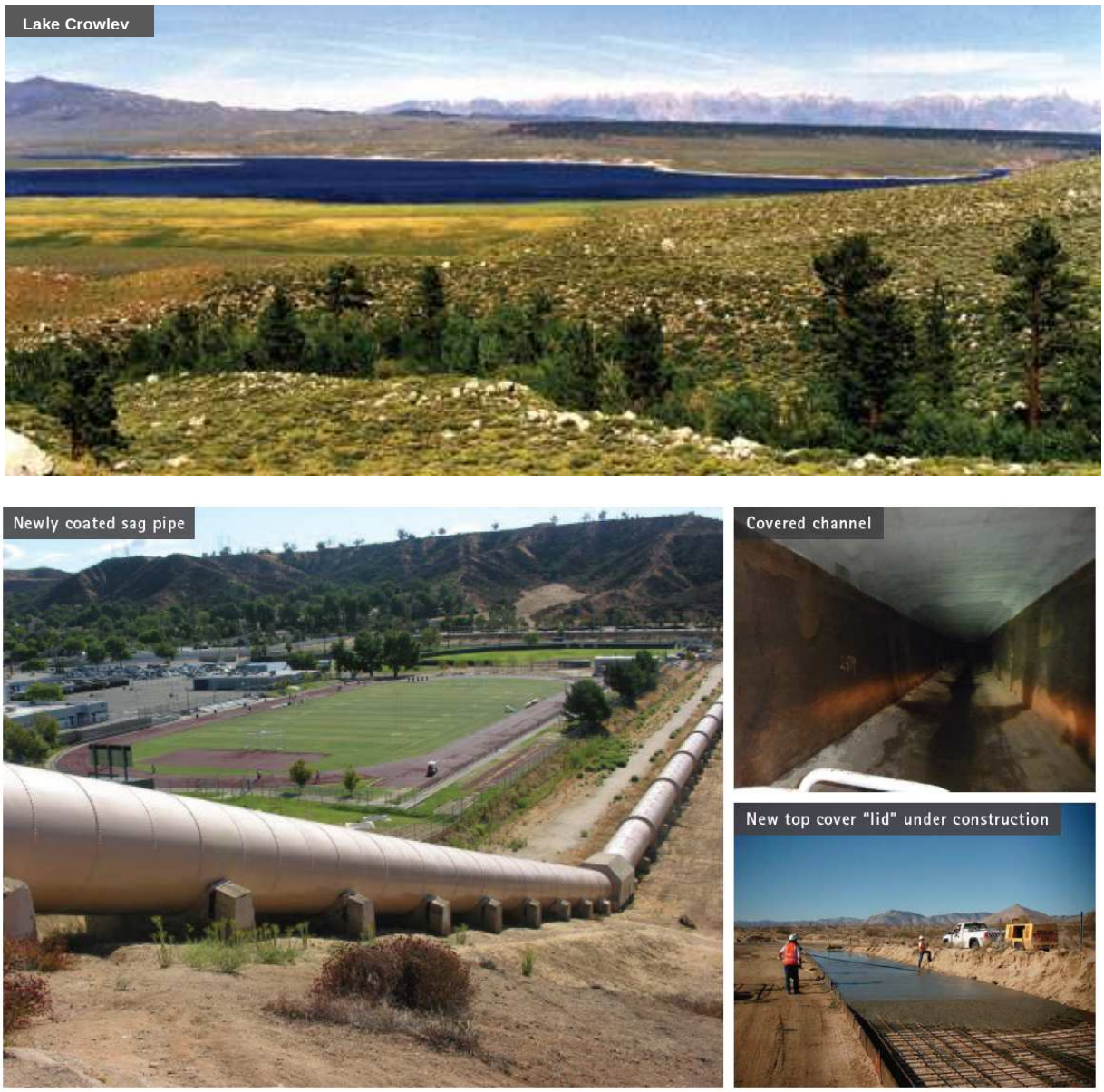
Aqueduct Projects

Built in 1913, the LAA consists of approximately 300 miles of tunnels, open channels, covered channels, and sag pipes that convey water from the Eastern Sierra and Owens Valley to Los Angeles.

[13] Source: 2013 AWWA Utility Benchmarking Report. For full text see: http://www.awwa.org/resources-tools/water-and-wastewater-utility-management/benchmarking.aspx

[14] Source: The Water Loss Audit and Component Analysis. For full text see: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB402320&RevisionSelectionMethod=LatestReleased

Figure 21: Los Angeles Aqueduct Images



Given that the LAA recently celebrated its centennial, the Department has plans to maintain operations through in-place refurbishment of the entire LAA system. Specific short-term projects planned are described in the WIP and outlined in Figure 22. These targets reflect the best available current information; however, targets will be monitored and adjusted as needed to reflect any changing priorities over the five-year proposed rate period.

Figure 22: Los Angeles Aqueduct Planned Refurbishment

Planned Project	Goals	Goals for FY 2014-15
Reline cracked concrete channel	7 miles within 3 years	2 miles
Recoat exterior of sag pipes	Completed 9.5 miles to date with 5 miles remaining	400 feet
Replace concrete lid on covered channels	3 miles per year (21 miles have been completed to date with 77 miles remaining)	15,000 feet
Re-drill and replace inoperable or less efficient groundwater wells	1-2 per year (currently 95 of 130 groundwater wells are inoperable)	1-2 wells
Replace and improve old and corroded water measuring stations	2-3 per year	2-3 stations
Construct cathodic protection stations	2 per year (14 stations out of 30 in total have been completed to date)	2 stations
Replace pipelines that bring creek supply to the LAA	1,000 feet per year	1,000 feet

Pump Station Projects

Under the Pump Station Refurbishment Program, the Department will purchase and install replacement equipment, make renovations and alterations at various existing pump stations as necessary, and replace damaged and obsolete equipment. This program will ensure that pump stations continue to operate efficiently and maintain reliability in the distribution system. The Department will also analyze pump-tank system infrastructure – identifying, planning and constructing improvements. The Department's goal is to replace approximately 12 pump and/or motor units per year for the proposed rate period. The goal stated in the Water Infrastructure Plan (WIP)[15] for FY 2014-15 is to replace 14 pumps and motors that are near or have exceeded their expected useful life.

[15] For full text see: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=OPLADWPCCB421332&RevisionSelectionMethod=LatestReleased

Figure 23: Repaired Pump Station

Reservoir Improvements

The Department is planning improvements to the reliability and seismic safety of dams and other facilities through seismic stability evaluations including the realignment of sections of the LAA for risk mitigation.

Pressure Regulator and Relief Station Retrofits

Pressure regulating systems are critical to controlling water pressure and volume within the service area. There are 229 regulator stations and 98 relief stations, totaling 327 stations combined in the service area. LADWP's goal is to replace four to six pressure regulating stations per year through 2022.

Figure 24: Pressure Regulator Before and After Replacement

Corrosion Protection Anode Stations Replacements

There are approximately 20,000 corrosion protection anodes in LADWP's service area. These anodes protect the water distribution system by preventing external corrosion. LADWP seeks to replace 200 anodes annually through FY 2017-18. Replacement targets for FY 2018-19 through FY 2019-20 will be set at a later date as the Water System continues to analyze and balance the Water System's many infrastructure needs.

Water Tank Cleaning and Rehabilitation

There are over 100 in-City tanks and reservoirs in LADWP's service area. Steel tanks have a useful life of 60 years and concrete tanks have a useful life of 100 years. They are cleaned/ rehabilitated based on condition assessment. They are re-roofed based on a 20-year cycle and recoated on a 30-year cycle. Water tanks that are not cleaned and rehabilitated would corrode, which would result in poor quality water and eventual failure. During the five-year rate action period, the goal is to clean six water tanks per year.

Figure 25: Water Tank Before and After Cleaning

Large Valve Replacements

Large valves are needed for flow changes, operational changes, system isolation, or temporary pipe shutdowns. There are 2,668 large valves (16''-108'') in the system. Currently there are 43 valves identified for replacement, and the goal from FY 2014-15 to FY 2019-20 is to replace five valves a year. For the last seven years, LADWP has exceeded this target and replaced eight valves annually.

Small Meter Replacements

There are approximately 700,000 small meters (less than 3'') in LADWP's service area, and they typically have a 20-year replacement cycle. Timely meter replacements result in greater accuracy and confidence in billing. Currently, the goal is to replace 25,000 small meters annually; however, with the possibility of implementing more advanced metering technology, this number may increase in the future.

3.4 CREATING A SUSTAINABLE LOCAL WATER SUPPLY

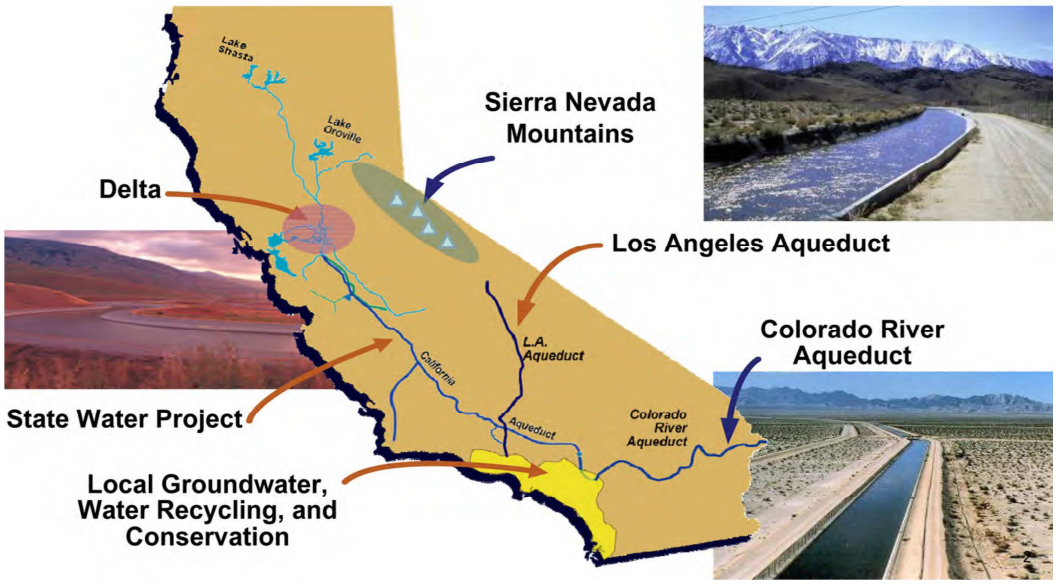
3.4.1 Local Water Supply Summary

The Department is responsible for having sufficient water supply to meet the needs of its customers. Over the last century, LADWP has built and maintained a massive system that transports, treats, and delivers hundreds of millions of gallons of water to its customers in Los Angeles every day. The current water supply consists of the following sources:

- Local water supply;
  - Conservation
  - Recycled water
  - Groundwater
  - Stormwater
- The Los Angeles Aqueduct (from the Eastern Sierra Nevada Mountains); and
- MWD Purchased water (from Sacramento-San Joaquin Bay Delta and the Colorado River).

The locations of the various sources of water are illustrated in Figure 26.

Figure 26: Sources of Water[16]



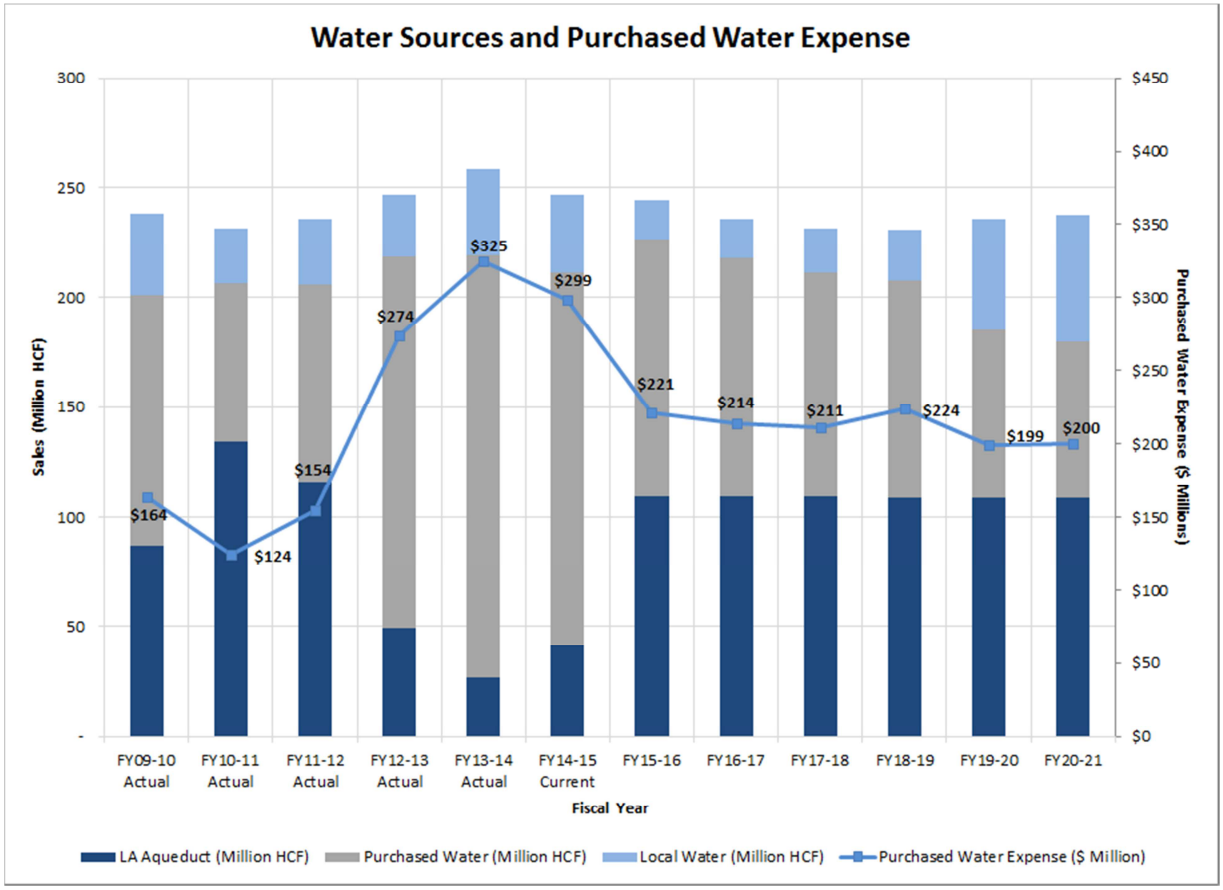
Water supplied from the LAA and from MWD is considered "imported," as it is obtained from outside LADWP's service area. Water is imported to satisfy demand that cannot be met with local supplies. These supplies, which come from hundreds of miles away, are increasingly expensive and at risk, limited by legal and environmental mandates and threatened by climate change.

To reduce reliance on expensive and at-risk imported water supplies, which will help comply with the Mayor's Executive Directive 5 ("Emergency Drought Response – Creating a Water Wise City"), LADWP is pursuing a multipronged sustainable local water supply initiative that includes stormwater capture, groundwater replenishment and remediation, water conservation, and recycled water.

Figure 27 shows the current and forecasted contributions of the various sources of water outlined above as well as the current and projected purchased water expense (projected values are based on normal precipitation).

[16] The State Water Project and the Colorado River Aqueduct represent sources of purchased water.

Figure 27: Water Sources and Purchased Water Expense



Water sources have varied significantly over time, as shown in Figure 27. This difference is largely driven by the variance in the Eastern Sierras snowpack.

The Department has conducted studies to assess the cost effectiveness of investments in sustainable local water supply and conservation over a 50-year time horizon and found that, in the long term, these investments will result in additional water security as well as lower water costs, even though currently some local sources may be more expensive.

Figure 28: Cost of Water Supply by Source (From 2010 Urban Water Management Plan[17]. Purchased Water Costs Reflect Current MWD Prices as of January 1, 2015)

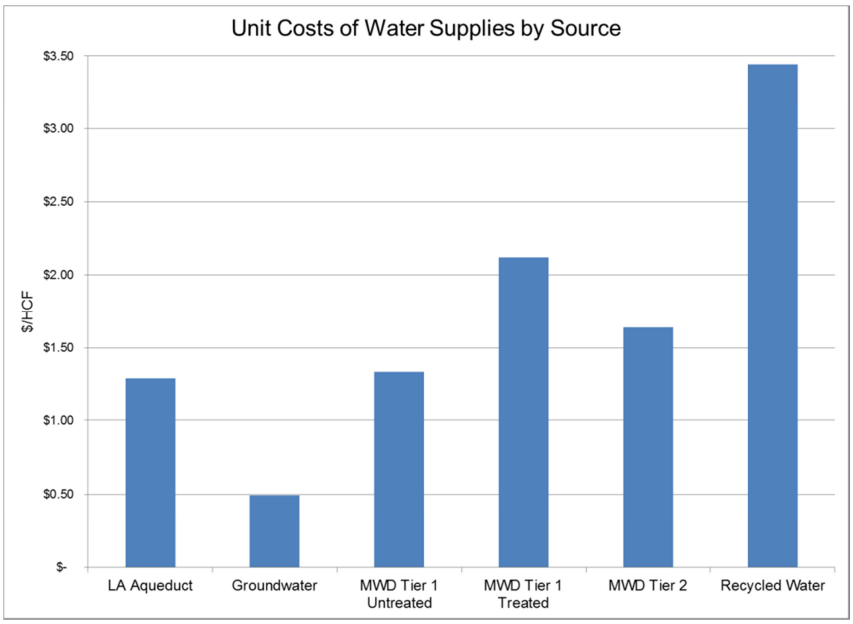
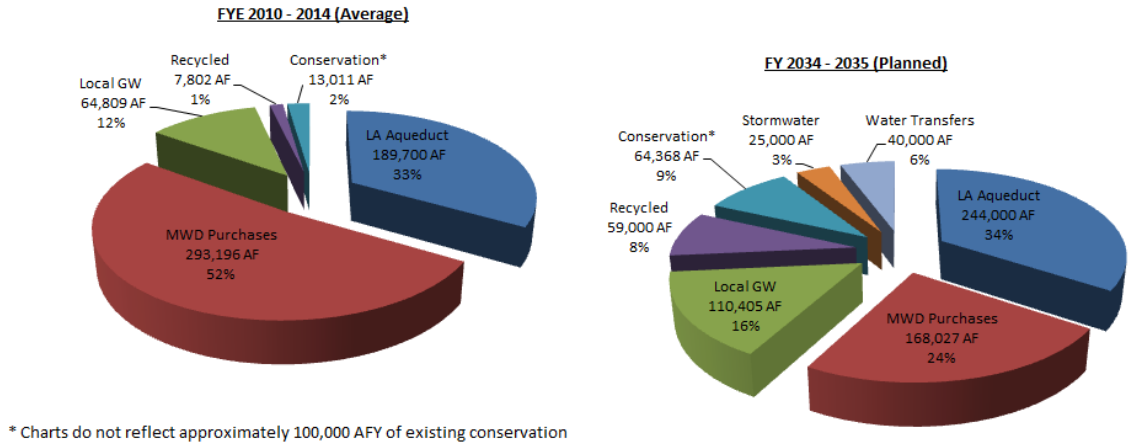


Figure 29 below depicts the expected breakdown of water from the various sources in FY 2034-35 given planned levels of investment. Water purchases are projected to decrease from 52% of the water supply to 24% of the total supply, largely due to increased water from the local sources discussed in this section. The projected breakdown of water supply in FY 2034-35 is from the 2010 Urban Water Management Plan (UWMP). The projected breakdown continues to be adjusted to reflect new developments, such as the Mayor's Executive Directive 5. Updates are currently under discussion and will be released as part of the 2015 Urban Water Management Plan.

[17] For full text see: https://www.ladwp.com/cs/idcplg?IdcService=GET_FILE&dDocName=QOELLADWP005416&RevisionSelectionMethod=LatestReleased

Figure 29: Planned Shift in Water Supplies[18]



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

The investments associated with each source of water supply are discussed in more detail below.

The Department is planning to spend a total of $1,418.5 million in local water supply programs discussed in this section over the next five years, as shown in Figure 30.

Figure 30: Summary of Local Water Supply Costs

($M)		Current	Proposed Rate Period						
		FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
Conservation	O&M	$16.5	$21.4	$21.8	$22.3	$12.8	$13.1	$91.4	*$13.3*
	Capital	$20.5	$37.5	$38.6	$38.8	$39.6	$40.3	$194.8	*$41.0*
	Total	**$37.0**	**$58.9**	**$60.4**	**$61.1**	**$52.4**	**$53.4**	**$286.2**	***$54.3***
Groundwater	O&M	$1.4	$2.3	$1.9	$1.8	$2.4	$2.1	$10.5	*$2.1*
	Capital	$32.5	$49.5	$50.9	$68.9	$103.0	$94.8	$367.1	*$388.0*
	Total	**$33.9**	**$51.8**	**$52.8**	**$70.7**	**$105.4**	**$96.9**	**$377.6**	***$390.1***
Recycled Water	O&M	$6.7	$5.9	$6.9	$6.6	$7.0	$6.5	$32.9	*$5.8*
	Capital	$49.7	$72.4	$75.3	$62.5	$83.6	$238.4	$532.2	*$243.9*
	Total	**$56.4**	**$78.3**	**$82.2**	**$69.1**	**$90.6**	**$244.9**	**$565.1**	***$249.7***
Stormwater Capture	O&M	$2.5	$1.9	$1.8	$2.1	$2.1	$2.3	$10.2	*$2.0*
	Capital	$26.4	$32.6	$31.0	$45.1	$35.6	$35.1	$179.4	*$35.9*

[18] The LAA water supply increases from FY 2010 - 14 to FY 2034 - 35 due to the fact that the earlier projection contained three "dry" years out of five. The FY 2034-35 projection was adjusted slightly downward to account for probable climatic change.

($M)		Current	Proposed Rate Period						
		FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
	Total	**$28.9**	**$34.5**	**$32.8**	**$47.2**	**$37.7**	**$37.4**	**$189.6**	***$37.9***
Total Local Water Supply	O&M	$27.1	$31.5	$32.4	$32.8	$24.3	$24.0	$145.0	*$23.2*
	Capital	$129.1	$192.0	$195.8	$215.3	$261.8	$408.6	$1,273.5	*$708.8*
	Total	**$156.2**	**$223.5**	**$228.2**	**$248.1**	**$286.1**	**$432.6**	**$1,418.5**	***$732.0***

The revenue requirement impact of the sustainable local water supply investments are shown in Figure 31.

Figure 31: Sustainable Local Water Supply Impact on Revenue Requirement and Rates

		YOY Increase						
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Average	*FY 2020-21*
Increase in Revenue Requirement ($M)	Conservation	-29.22	-1.97	-0.09	-0.70	1.73	-6.05	*2.27*
	Groundwater	3.25	3.35	4.53	6.78	6.24	4.83	*25.53*
	Stormwater	-0.65	1.66	2.72	1.80	2.15	1.54	*2.30*
	Recycled Water	-4.07	3.53	3.32	3.70	15.23	4.34	*15.87*
	Total	**-30.69**	**6.58**	**10.48**	**11.57**	**25.34**	**4.66**	***45.97***
Increase in System Average Retail Rate (Cents/HCF)	Conservation	-12.23	11.76	0.73	-0.62	1.02	0.13	*0.38*
	Groundwater	1.42	0.13	0.65	0.88	-0.37	0.54	*8.89*
	Stormwater	0.24	1.05	0.54	-0.54	0.11	0.18	*0.13*
	Recycled Water	-1.64	3.41	-0.07	-0.05	4.89	1.31	*0.66*
	Total	**-12.70**	**16.34**	**1.84**	**-0.34**	**5.65**	**2.16**	***10.07***
Increase in System Average Retail Rate (%)	Conservation	-2.49%	-0.10%	0.05%	-0.07%	0.11%	-0.50%	*0.17%*
	Groundwater	0.29%	0.31%	0.42%	0.54%	0.45%	0.40%	*1.85%*
	Stormwater	-0.05%	0.16%	0.26%	0.14%	0.15%	0.13%	*0.17%*
	Recycled Water	-0.33%	0.36%	0.32%	0.29%	1.10%	0.35%	*1.15%*
	Total	**-2.58%**	**0.74%**	**1.05%**	**0.91%**	**1.81%**	**0.38%**	***3.34%***

Together, sustainable local supply investments will be responsible for an average annual revenue requirement increase of $5 million and an average annual rate increase of 0.38%. These investments will all yield significant savings in the long term as they displace more expensive purchased water. The negative impact of conservation on the revenue requirement and rate is being driven by securitization of the capital expenses. As is evident from Figure 30,

conservation expenditures (particularly capital) will actually rise over the duration of the rate period.

3.4.2 Conservation Programs

Conservation is an important component of the local supply program because it is immediately cost effective - the cheapest water is water not used. LADWP has successfully implemented a balanced approach to water conservation with a combination of:

- Rebates;
- Incentive programs;
- Technical assistance;
- Outreach; and
- Partnership programs.

The majority of these programs are major recurring initiatives that have proven to produce reliable results. In most cases, the budgets have been established based on at least three fiscal years of experience and performance track records. Prior results have suggested a direct link between funding levels and usage reduction results.

The proposed level of spending on water conservation totals $286.2 million for the period FY 2015-16 to FY 2019-20, as outlined in Figure 32.

Figure 32: Conservation Budget FY 2015-16 to FY 2019-20

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$16.5	$21.4	$21.8	$22.3	$12.8	$13.1	$91.4	$13.3
Capital	$20.5	$37.5	$38.6	$38.8	$39.6	$40.3	$194.8	$41.0
Total	**$37.0**	**$58.9**	**$60.4**	**$61.1**	**$52.4**	**$53.4**	**$286.2**	**$54.3**

The specific conservation programs planned are as follows:

- SoCal Watersmart Commercial Rebate Incentive Program;
- Commercial California Friendly Landscape Incentive Program;
- City Parks Irrigation Efficiency Program;
- LADWP Facility Retrofits;
- Direct Install Partnerships;

- Technical Assistance Program (TAP);
- SoCal Watersmart Residential Rebate Incentive Program;
- Residential California Friendly Landscape Incentive Program;
- Water Conservation Outreach & Education; and
- Water Conservation Ordinances.

For descriptions of these programs, see Chapter 2 - Appendix B.

Note that the water conservation costs and savings do not include the proposed Owens Valley Master Plan which is discussed in more detail in Section 3.6.2.

Conservation program investments completed to-date have produced significant savings in purchased water costs. Many of the measures already implemented are long-term in nature, and will continue to produce savings in purchased water costs during (and beyond) the five-year window covered by the current proposed rates even if no new water conservation investments are made.

3.4.3 Groundwater Clean-up and Remediation

The City of Los Angeles owns water rights in San Fernando Basin (SFB), Central Basin, Sylmar Basin, Eagle Rock Basin, and West Coast Basin. The SFB is the largest of these resources, accounting for nearly 80% of all local groundwater pumped by LADWP. As of FY 2014-15, groundwater accounted for approximately 12% of LADWP's water supply.

Man-made pollution caused by industrial activities beginning in the 1940's has severely impaired the quality of the SFB groundwater, forcing closure of half of LADWP's production wells and significantly impacting the amount of local water supply. LADWP is removing the contamination from the groundwater to increase supply and for the betterment of the environment and the public. This effort is also critical to achieving the local supply plan; if the groundwater basins are not cleaned up, the recycled water and stormwater capture programs will not be viable (for additional information about these programs, see Section 3.4.4 and Section 3.4.5).

LADWP has recently completed a Groundwater System Improvement Study (GSIS) that identified additional groundwater remediation projects. LADWP will review the findings with the State Water Resources Control Board – Division of Drinking Water (SWRCB) and will work with the SWRCB to gain approval to start the design, permitting, and construction of two major groundwater treatment facilities. Over the next five years, the Water System will be investing heavily in groundwater decontamination and wells so that when projects come online by FY 2022-23, local groundwater will provide approximately 20% of LADWP supply. The financial

plan includes $377.6 million in spending on groundwater programs in the five-year period, as shown in Figure 33.

Figure 33: Groundwater Budget FY 2015-16 to FY 2019-20

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$1.4	$2.3	$1.9	$1.8	$2.4	$2.1	$10.5	*$2.1*
Capital	$32.5	$49.5	$50.9	$68.9	$103.0	$94.8	$367.1	*$388.0*
Total	**$33.9**	**$51.8**	**$52.8**	**$70.7**	**$105.4**	**$96.9**	**$377.6**	***$390.1***

The various groundwater sources are described below.

San Fernando Basin (SFB)

Major investments will be made to the SFB to continue to monitor water quality and remediate this major source of groundwater.

The SFB has been the source of approximately 82% of the groundwater supply over the five-year period from FY 2009-10 to FY 2013-14. The Department believes that, if additional effective mitigation and clean-up measures are not put in place, the various contaminants found in the SFB will ultimately present a threat to this important component of Los Angeles' drinking water supply. In fact, the Department predicts that, without water quality investments, most of the groundwater production in the SFB would be lost by 2018 due to upcoming changes to Federal/State regulations[19]. If all groundwater in the SFB were lost to contamination, more water would need to be purchased from the MWD.

Central Basin

The Central Basin has been the source of approximately 12.5% of the groundwater supply over the five-year period from FY 2009-10 to FY 2013-14. The Department has two sets of production wells at this basin, the Manhattan Wells and the 99th Street Well. The Manhattan Wells are approaching the end of their useful lives; therefore, the Department has plans to construct two new production wells to replace the old capacity.

Sylmar Basin

The Sylmar Basin has been the source of approximately 5.6% of the groundwater supply over the five-year period from FY 2009-10 to FY 2013-14. The basin is composed of four wells; one

[19] The Department expects future Federal/State regulations to prohibit blending of water from operating wells exceeding Maximum Contaminant Levels (MCLs). Currently, groundwater exceeding MCLs can be blended with water from other sources as long as the blended water meets all Federal and State water quality standards.

of these wells has been removed from service. The Sylmar Basin has experienced some water quality issues due to Trichloroethylene (TCE) contamination; however, the groundwater effluent has been managed such that it still meets quality standards and the factor limiting production is actually the deterioration of the pumping equipment. The Mission Wells Improvement Project should upgrade the pumping infrastructure and result in an increase of water production from the Sylmar Basin.

Eagle Rock Basin

The Eagle Rock Basin currently has no measurable safe yield. At the moment, the basin is being pumped by a third party that reimburses the Department for water pumped.

West Coast Basin

The City's wells in the West Coast Basin are contaminated and have been closed down since the 1980's, but the water rights in this basin might be exercised in the Central Basin under recent amendments made to the judgments for both basins.

3.4.4 Recycled Water

Recycled water is a sustainable, economically feasible, and environmentally sensitive way to augment the City's water supplies. Recycled water is highly treated wastewater that can be safely used for irrigation and industrial purposes, seawater intrusion prevention, and other environmental uses. In addition, recycled water can be used for groundwater replenishment (the process of recharging or refilling the groundwater basin with recycled water).

The proposed rates and financial plan include $565.1 million in spending on recycled water programs in the five-year period, as shown in Figure 34.

Figure 34: Recycled Water Budget FY 2015-16 to FY 2019-20

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$6.7	$5.9	$6.9	$6.6	$7.0	$6.5	$32.9	*$5.8*
Capital	$49.7	$72.4	$75.3	$62.5	$83.6	$238.4	$532.2	*$243.9*
Total	**$56.4**	**$78.3**	**$82.2**	**$69.1**	**$90.6**	**$244.9**	**$565.1**	***$249.7***

LADWP outlined specific goals to expand its recycled water supply in the 2010 Urban Water Management Plan (UWMP). In March 2012, LADWP published its Recycled Water Master Plan[20] (RWMP) to evaluate strategies to increase the delivery of recycled water from 6,428 AFY

[20] Source: Recycled Water Annual Report FY 2013-14

to 59,000 AFY for City-use by 2035. LADWP's stated recycled water use targets for the short to medium term are outlined in Figure 35.

Figure 35: Recycled Water Use (AFY)

	Actual AFY		Target AFY	
	FY 2009-10[21]	**FY 2013-14[22]**	**FY 2018-19[23]**	**FY 2034-35[24]**
Deliveries (Municipal and Industrial)	6,703	6,428	16,052	29,000
Groundwater Supply Replenishment	-	-	-	30,000
Subtotal	**6,703**	**6,428**	**16,052**	**59,000**
Environmental Uses	25,008	25,600	25,740	26,990
Seawater Intrusion Barrier	3,000	3,986	7,396	3,000
Grand Total	**31,711**	**35,924**	**49,188**	**88,990**

LADWP's ability to meet the above targets is dependent on the City's wastewater treatment infrastructure. In addition, the State Water Resources Control Board requires that recycled water be delivered in purple pipelines, separate and distinct from drinking water. LADWP's existing distribution system has 56 miles of purple pipelines. LADWP's growth targets are based on identifying potential clients that can be served using the existing distribution infrastructure.

Groundwater conveyance and replenishment is also an important part of the recycled water strategy. Groundwater replenishment is the process of recharging or refilling a groundwater basin so that groundwater supplies can eventually be withdrawn, treated, and used as a potable water supply. The proposed Groundwater Replenishment (GWR) Project will provide up to 30,000 AFY of purified recycled water to replenish the San Fernando Basin (SFB). Using state-of-the-art technology, the groundwater replenishment project will treat recycled water from a reclamation plant to near-distilled water quality using the New Advanced Water Purification Facilities. This purified recycled water has been shown through pilot testing to meet or exceed State and Federal drinking water standards. The purified recycled water would then be conveyed to spreading grounds, from which it would percolate into natural underground aquifers and become part of the groundwater supply. After the required residence time within the aquifer, the water could be extracted or pumped from the existing groundwater basins for treatment and distribution to LADWP drinking water customers. The entire process is depicted in Figure 36.

For full text see: https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-water/a-w-recycledwater/a-w-rw-annualreport

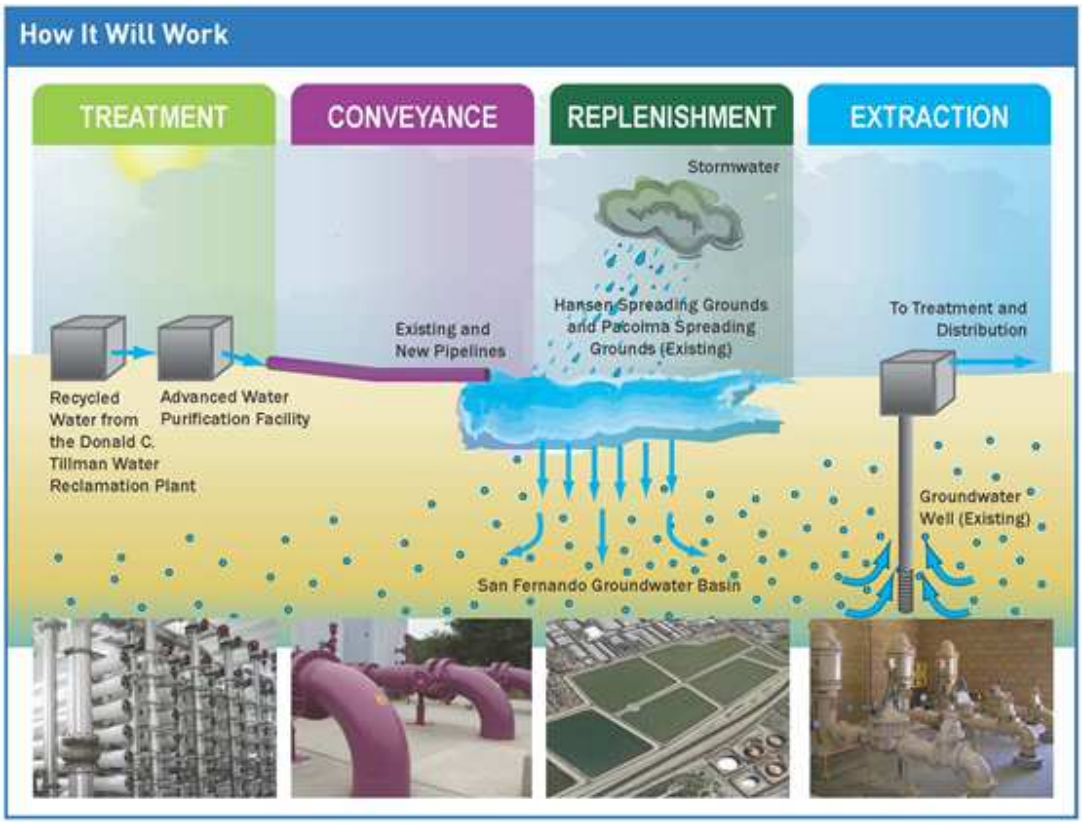
[21] Source: 2010 UWMP.

[22] Source: Recycled Water Annual Report FY 2013-14.

[23] Source: Recycled Water Annual Report FY 2013-14.

[24] Source: 2010 UWMP.

Figure 36: Recycled Water Conveyance and Replenishment



The GWR project is in the planning stage and the environmental analysis is being performed. The project is expected to be completed and operational by 2022.

3.4.5 Stormwater Capture

Stormwater runoff is an underutilized resource. On average, 120,000 AFY (more than 39 billion gallons a year) of stormwater runoff leaves the San Fernando Valley through the Los Angeles River. To put this in perspective, LADWP's annual water sales in FY 2013-14 totaled 179 billion gallons.

Local groundwater aquifers replenished by stormwater are receiving less recharge with every passing year due to increased urbanization. The majority of stormwater runoff is directed to storm drains and ultimately discharged to the Pacific Ocean via the City's rivers and tributaries; this unused stormwater carries pollutants harmful to sensitive marine ecosystems.

Today, it is estimated that an average of 27,000 AFY (more than 8.8 billion gallons) of stormwater is captured each year at centralized spreading grounds. Existing stormwater capture facilities in Los Angeles do not have sufficient capacity to capture all potential runoff in years with high levels of precipitation. The Department plans to continue investing in stormwater

projects, especially enhancements to existing spreading grounds and basins. Within the next five years, the Department will be implementing centralized projects, outlined in Figure 37, which will provide an additional 30,498 AFY of groundwater recharge. For program descriptions see Chapter 3 - Appendix A.

Figure 37: Summary of Major Centralized Stormwater Capture Projects

Program Name	Scheduled	Projected Water Capture
Big Tujunga Dam Sediment Removal Project	Construction expected to begin in 2016	2,700 AFY
Pacoima Dam Sediment Removal Project	Construction expected to begin in 2016	3,200 AFY
Tujunga Spreading Grounds Enhancement Project	Construction expected to begin in 2015	8,000 AFY
Lopez Spreading Grounds Upgrade	Construction expected to begin in 2016	500 AFY
Branford Spreading Basin Upgrade	Construction expected to begin in 2017	590 AFY
Pacoima Spreading Grounds Upgrade	Construction expected to begin in 2016	10,500 AFY
Valley Generating Station Stormwater Capture Project	Construction expected to begin in 2016	118 AFY
Whitnall Highway Power Line Easement Stormwater Capture Project	Construction expected to begin in 2016	110 FY
Rory M. Shaw Wetlands Park Project (Strathern Pit)	Construction expected to begin in 2016	590 AFY
Bull Creek Stormwater Capture Project	Construction expected to begin in 2018	1,500 AFY
Canterbury Power Line Easement Stormwater Capture Project	Construction expected to begin in 2018	1,300 AFY
Strathern Park Infiltration System Project	Construction expected to begin in 2018	750 AFY
Old Pacoima Wash Stormwater Capture Project	Construction expected to begin in 2018	500 AFY
San Fernando Road Stormwater Capture Project	Construction expected to begin in 2018	140 AFY
	Total	**30,498 AFY**

In the next five years, distributed projects (generally smaller-scale and localized projects), cumulatively providing an estimated 458 AFY of increased groundwater recharge, are expected to be implemented. Figure 38 provides a summary of these future projects.

Figure 38: Summary of Major Distributed Stormwater Capture Projects

Program Name	Scheduled	Projected Water Capture
Laurel Canyon Boulevard Green Street Stormwater Infiltration Project	Construction expected to begin in 2015	40 AFY
Burbank Boulevard Stormwater Capture Project	Construction expected to begin in 2015	53 AFY
Sun Valley Economic Development Administration Public Improvement Project	Construction expected to begin in 2015	93 AFY
Arundo Donax Removal Project	Construction expected to begin in 2015	20 AFY
LAUSD Conserving for Our Kids Program	Project is in planning phases	55 AFY
Victory-Encino Stormwater Infiltration Project	Construction expected to begin in 2016.	25 AFY
Victory-Goodland Median Stormwater Capture Project	Construction expected to begin in 2018.	25 AFY
Glenoaks-Nettleton Stormwater Infiltration Project	Construction expected to begin in 2016.	37 AFY
Van Nuys Blvd Median Stormwater Capture Project	Construction expected to begin in 2018.	35 AFY
Glenoaks-Filmore Stormwater Capture Project	Construction expected to begin in 2018.	75 AFY
	Total	**458 AFY**

The financial plan includes $189.6 million in spending on stormwater capture programs over the next five years, as shown in Figure 39. The Department has secured grant funding that will cover some of the costs associated with these programs. In addition, many of these programs are also being undertaken in conjunction with partners, such as the L.A. Department of Sanitation, that own these facilities. Any spending on a facility owned by an external partner is categorized as O&M.

Figure 39: Stormwater Capture Budget FY 2015-16 to FY 2019-20

($M)	Current	Proposed Rate Period						
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**	**Five-Year Total**	***FY 2020-21***
O&M	$2.5	$1.9	$1.8	$2.1	$2.1	$2.3	$10.2	*$2.0*
Capital	$26.4	$32.6	$31.0	$45.1	$35.6	$35.1	$179.4	*$35.9*
Total	**$28.9**	**$34.5**	**$32.8**	**$47.2**	**$37.7**	**$37.4**	**$189.6**	***$37.9***

Given the importance of stormwater capture for local supply, LADWP is finalizing the stormwater master planning process. The Stormwater Capture Master Plan will outline LADWP's strategies to implement stormwater and watershed management programs in Los Angeles to contribute to more sustainable local water supplies. Its intended purpose is to be a guiding document for policymakers to consider while making decisions about programs and policies that impact the City's water resources. The Master Plan will be finalized by mid-2015 and presented to the Board for adoption and implementation.

3.5 PURCHASED WATER

There is currently insufficient water supply from the LAA and local sources to meet the needs of the citizens of Los Angeles. In an average precipitation year, about one-half of customers' demand for water is met by purchases from the MWD. This water is delivered hundreds of miles both through the State Water Project from northern California (California Aqueduct) and from the Colorado River (Colorado River Aqueduct).

The price of purchased water from MWD has risen significantly in the past and is expected to continue to increase steadily. As shown in Figure 40, between calendar year 2011 and 2015, the price of Tier 1 untreated water from MWD has increased at a Compound Annual Growth Rate (CAGR)[25] of 3.76% and the price of MWD Tier 1 treated water has increased at a CAGR of 5.52%.

Figure 40: Actual MWD Purchased Water Prices by Calendar Year

$/HCF	2010	2011	2012	2013	2014	2015	CAGR
Tier 1 Untreated	$ 1.11	$ 1.21	$ 1.29	$ 1.36	$ 1.36	$ 1.34	
Change		+8.88%	+6.26%	+5.89%	+0.00%	-1.85%	+3.76%
Tier 1 Treated	$ 1.61	$ 1.71	$ 1.82	$ 1.94	$ 2.04	$ 2.12	
Change		+6.13%	+6.72%	+6.68%	+5.08%	+5.15%	+5.66%

As shown in Figure 41, between calendar year 2015 and 2020, the price of Tier 1 untreated/treated water from MWD is expected to increase at a CAGR of 3.31%. The increase in prices is being driven by investments that MWD has made as well as rising O&M costs. The implementation of the Bay Delta Conservation Plan (BDCP) discussed in Section 3.5.1 will only further increase these costs in the future.

Figure 41: Projected MWD Purchased Water Prices by Calendar Year

$/HCF	2015	2016	2017	2018	2019	2020	CAGR

[25] The CAGR represents the annual rate at which the price would grow if it grew at a steady rate over the five-year period.

Tier 1 Untreated	$ 1.34	$ 1.36	$ 1.40	$ 1.45	1.50	1.57	
Change		+2.06%	+3.00%	+3.00%	+3.50%	+5.00%	+3.31%
Tier 1 Treated	$ 2.12	$ 2.16	$ 2.23	$ 2.29	$ 2.37	$ 2.49	
Change		+2.06%	+3.00%	+3.00%	+3.50%	+5.00%	+3.31%

As shown in Figure 42, for the period of FY 2015-16 through FY 2019-20, it is estimated that the Department will spend $971.1 million dollars on purchased water expenses, based on returning to normal precipitation conditions. These costs are all categorized as O&M and, therefore, have a direct impact on rates.

Figure 42: Purchased Water Expenses FY 2014-15 to FY 2019-20

($M)	**Current**	**Proposed Rate Period**						
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**	**Five-Year Total**	***FY 2020-21***
O&M (Total)	**$298.0**	**$209.3**	**$198.7**	**$189.4**	**$198.0**	**$175.7**	**$971.1**	***$172.2***

If dry-conditions persist, the total spend on purchased water for the next five years could increase to $1,366.4 million.

Figure 43: Purchased Water Expenses FY 2014-15 to FY 2019-20 (Assuming Four Dry Years out of the Five-Year Period)

($M)	**Current**	**Proposed Rate Period**						
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**	**Five-Year Total**	***FY 2020-21***
O&M (Total)	**$298.0**	**$268.1**	**$328.1**	**$301.5**	**$292.7**	**$176.0**	**$1,366.4**	***$172.2***

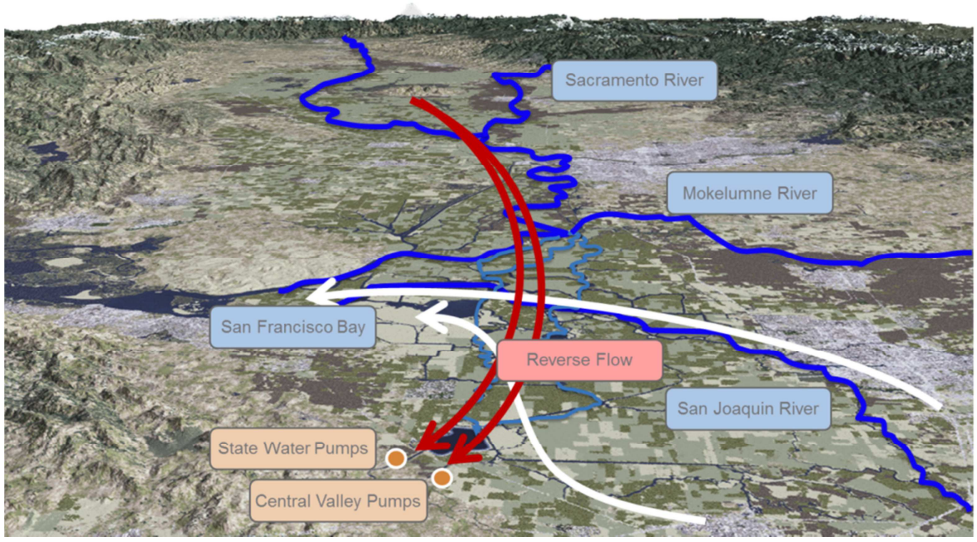
3.5.1 The Bay Delta Conservation Plan and the Increasing Need for Development of Local Supply and Water Conservation

The Sacramento-San Joaquin Delta is currently a major source of LADWP's water supply; during 2008-2012 LADWP received 44% of its water through MWD purchases that flowed through the Delta. The Delta is also one of the largest estuaries on the West Coast and is home to a variety of wildlife including over 750 different plant, bird, animal, and fish species. However, there is increasing pressure on the water supply from this source.

Currently, water is pumped from the Sacramento River southward, through the Delta to other pumps that then carry the water to regions south of the Delta (through the California Aqueduct or

other conveyance facilities). Figure 44 shows a diagram of major water flows through the area. This pumping of water has impacted the Delta ecosystem in irreversible ways. Fish populations have been declining, outdated infrastructure may not withstand seismic activity, and sea level rising bring risks of flooding.

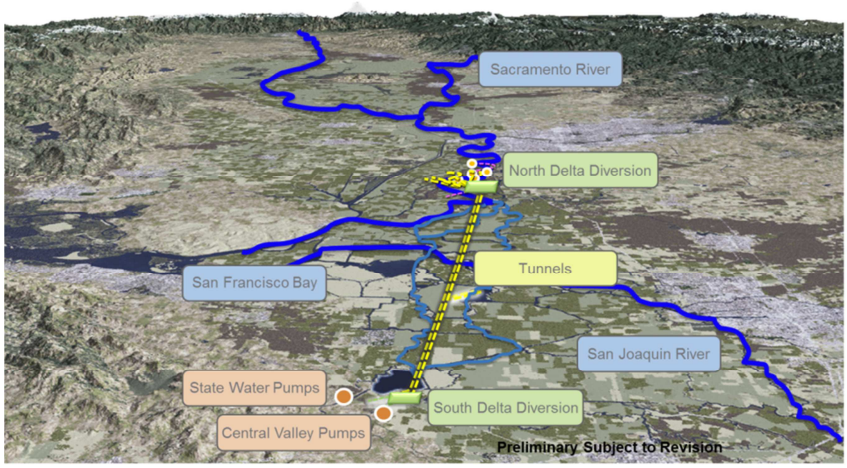
Figure 44: Water Flows Through the Bay Delta



The use of Delta water supplies has been on an unsustainable path, both for wildlife and future water supply, leading to much concern over its current state from environmental, water quality, and water scarcity perspectives.

To alleviate the stress on the Bay Delta habitats, stakeholders such as the state of California, National Oceanic Atmospheric Administration (NOAA Fisheries, and US Secretary of the Interior, have proposed the Bay Delta Conservation Plan (BDCP). This plan includes construction of a conveyance that would divert water under the Bay Delta area to avoid pumping through the Delta, as well as a component for eco-restoration, as shown in Figure 45.

Figure 45: Proposed Plan for Tunnels Under the Bay Delta



The costs for this project are significant, as summarized in Figure 46. The BDCP will affect LADWP because it will increase the cost of purchased water significantly, as MWD would be responsible for about 25% of the State and Federal contractor's share (roughly $6 billion over the next 50 years). These costs would then be passed through to LADWP (and other MWD customers) through higher prices of purchased water each year.

Figure 46: Total Costs (50 years) for the Bay Delta Conservation Plan ($B)

Improvements	Capital ($B)	O&M ($B)	Funding Source
Conveyance	$14.5	$1.5	Water Contractors
Eco-restoration & other stressors	$5.2	$3.3	Federal/State/Water Contractors/Other
Total Capital/O&M	$19.7	$4.8	
Total BDCP	**$24.5**		

Therefore, LADWP investments in conservation and local supply as described above are necessary to reduce dependency on more expensive imported water supplies and mitigate the risk of accelerating costs of purchased water.

The project plan and environmental impact study/environmental impact report are currently being revised. The plan was released for public comment in early 2015. If the BDCP is not adopted, there are still major implications for LADWP water supply. Environmental degradation would continue, and the pumps may be restricted due to environmental sensitivities. In addition, if there was a major levee failure, LADWP may experience disruption in water deliveries for up to

three years, which could result in a total revenue loss to Los Angeles of $240 billion, according to the Los Angeles Economic Development Committee[26].

3.6 EASTERN SIERRA ENVIRONMENTAL COMPLIANCE AND OWENS VALLEY DUST MITIGATION

LADWP continues its programs to comply with its responsibilities in the Eastern Sierra Valley and Owens Valley. Costs for this program have been a large part of LADWP's overall revenue requirement, and LADWP has expended many resources on these efforts, including the diversion of valuable drinking water.

Currently, the Department is providing approximately 121,000 AFY of water for Eastern Sierra Environmental Compliance and Owens Valley Dust Mitigation. The various uses of LAA water are summarized in Figure 47.

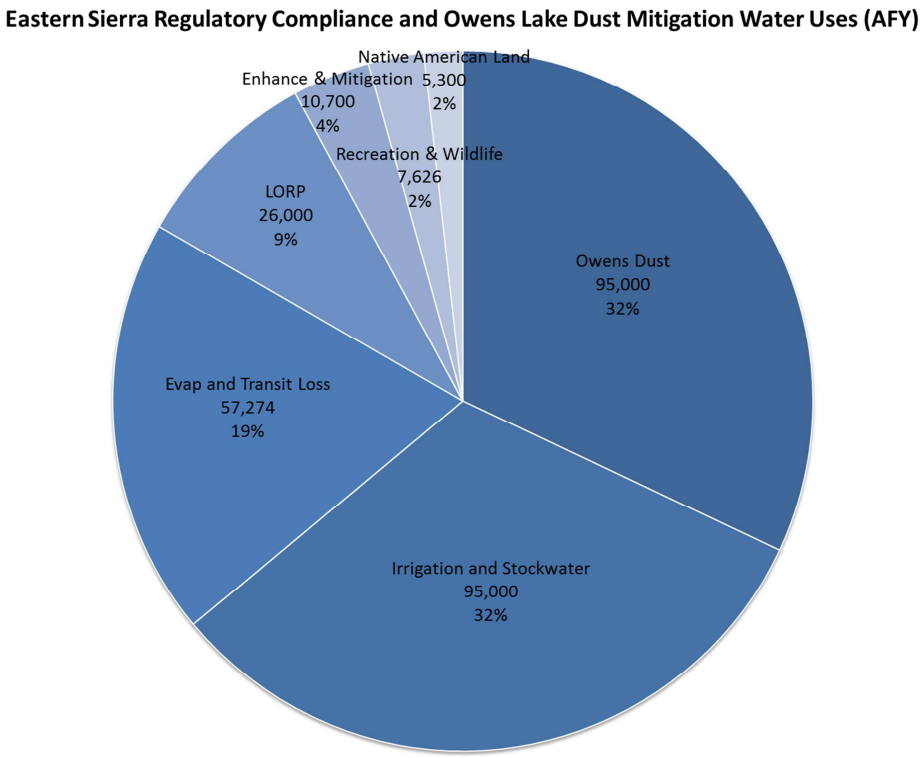
Figure 47: Eastern Sierra Environmental Compliance and Owens Valley Dust Mitigation Water Uses

Use	Description
Owens Valley Dust Mitigation	Control measures such as flooding and managed vegetation to control windblown dust
Evaporation and Transit Loss	Water flowing from the LAA will inevitably experience evaporation and transit loss during transportation
Lower Owens River Project (LORP)	Diversion of water restores 62 miles of land along the Lower Owens River and creates a warm water fishery, which LADWP is required to monitor
Irrigation and Stockwater	LADWP has entered agreements to provide water for irrigation purposes along the LAA
Recreation and Wildlife	Improvement of natural habitats and recreational land
Enhancement and Mitigation	Additional enhancement and environmental hazard mitigation measures
Native Land	LADWP has entered agreements to provide water for Native lands

The use of the water is summarized in Figure 48. The amount of water used for LORP and the enhancement and mitigation projects is in addition to the releases that provide environmental benefits in the Mono Basin and Owens Lake. These environmental enhancements have resulted in reducing the amount of water delivered to Los Angeles through the LAA by almost half.

[26] Reference: LAEDC, 2012; "Total Regional Economic Losses from Water Supply Disruptions to the Los Angeles County Economy," 54 pages, November 29.

Figure 48: Projected Eastern Sierra Regulatory Compliance and Owens Lake Dust Mitigation, based on average year (AFY) [27]



Currently, the financial plan and proposed rates reflect $473.1 million in capital and O&M for LADWP's responsibilities in the Eastern Sierra, as outlined in Figure 49.

Figure 49: Eastern Sierra Regulatory Compliance Budget FY 2015-16 to FY 2019-20

($M)	Current	Proposed Rate Period						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$32.3	$31.0	$34.2	$34.9	$35.9	$36.2	$172.2	*$36.4*
Capital	-	$73.3	$30.8	$66.3	$62.1	$68.4	$300.9	*$65.1*
Total	**$32.3**	**$104.3**	**$65.0**	**$101.2**	**$98.0**	**$104.6**	**$473.1**	***$65.1***
Purchased Water Equivalent[28]	$71.8	$70.4	$71.9	$74.0	$76.3	$78.9	$371.5	$82.9

[27] Total amounts and proportion may change depending on wet or dry year conditions.

[28] Based on cost of Tier 1 Untreated MWD water (consistent with current MWD water usage conditions). This amount is included in the overall cost of purchased water included in Section 3.5.

These costs will be responsible for an average annual revenue requirement increase of $4 million but on average will have no impact on the rate.

Figure 50: Eastern Sierra Regulatory Compliance and Owens Lake Dust Mitigation Summary Impact on Revenue Requirement and Rates

	YOY Increase						
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**	**Five-Year Average**	***FY 2020-21***
Increase in Revenue Requirement ($M)	2	4	3	5	4	4	*5*
Increase in System Average Retail Rate (cents/HCF)	1.33	1.05	-0.38	0.10	-0.51	0.32	*0.49*
Increase in System Average Retail Rate (%)	**0.27%**	**0.48%**	**0.38%**	**0.37%**	**0.27%**	**0.35%**	***0.33%***

3.6.1 Owens Valley Dust Mitigation

Historically, the Owens River was the main source of water for Owens Lake. Diversion of water from the river, first by farmers in the Owens Valley and then by the City of Los Angeles, resulted in the lake drying up completely by the late 1920's. The exposed lakebed became a significant source of windblown dust resulting in the United States Environmental Protection Agency (EPA) classifying the southern Owens Valley as a serious non-attainment area for particulates (dust) in 1991. The EPA required the Great Basin Unified Air Pollution Control District (GBUAPCD or the District) to prepare a State Implementation Plan (SIP) to bring the region into compliance with Federal air quality standards by 2006. Since 2001, the Department has diverted water from the LAA to the lakebed as part of the Owens Lake Dust Mitigation Program.

The completed phases of the Owens Lake Dust Mitigation Program are summarized in Figure 51. The costs reflect construction contract amounts only.

Figure 51: Owens Lake Dust Mitigation Plan – Construction Contract Amounts

Phase	Description	Date of Order	Cost ($M) [29]
Phase 1 North	13.5 sq. miles Shallow Flooding	1998	$74.5
Phase 1 South	0.57 sq. miles Shallow Flooding 3.7 sq. miles Managed Vegetation	1998	$56.3
Phase 2 South	1.33 sq. miles of Shallow Flooding	1998	$15.1
Phase 3 South	Infrastructure Project	1998	$33.6
Phase 4	3.7 sq. miles Shallow Flooding	1998/2003	$22.3
Phase 5	11.2 sq. miles of Shallow Flooding (includes reconstruction of 4.5 sq. miles) 0.14 sq. miles of Gravel Blanket	2003	$99.7
Phase 7[30]	9.2 sq. miles Shallow Flooding 0.5 sq. miles Channel Area 3.5 sq. miles yet to be determined	Nov. 2006	$119.0
Phase 7a	3 sq. miles of new dust control plus 3 sq. miles of hybrid dust control (total 6 sq. miles)	March 2011	$160.0
Phase 8	2.03 sq. miles of 4-in Gravel Blanket	2010	$60.0
		Total	**$640.5**

In addition, $308.5 million has been spent on purchased water to replace the water diverted to Owens Lake since 2002.

3.6.2 Owens Lake Stipulated Judgment

The Department's efforts in Owens Lake have eliminated more than 90% of the excess blowing dust. However, this success has come at a high cost to Angelenos. LADWP allocates about 95,000 AF of water to Owens Lake annually and has spent $1.3 billion since 2000 to control dust at Owens Lake. It has been estimated that nearly two months out of every Los Angeles ratepayer's annual water bill is spent on Owens Lake dust mitigation.

The Department recognized that using drinking water for dust mitigation practices is unsustainable and has looked for long-term solutions to dust mitigation in Owens Valley that would reduce the need for water diversion without subjecting it to additional litigation.

[29] These costs reflect only construction contract amounts. They do not include O&M costs or purchased water costs (for the equivalent amount of water diverted for mitigation and enhancement projects).

[30] There is no Phase 6.

On November 14, 2014 the City of Los Angeles and the District announced that they had reached an historic agreement over the implementation of dust control measures on Owens Lake (Stipulated Judgment). As part of the Stipulated Judgment, LADWP has agreed to:

- Analyze the environmental impacts under the California Environmental Quality Act and prepare the necessary environmental documents for implementation of the additional 3.62 square miles of dust mitigation measured on Owens Lake playa in accordance with the District's 2011 and 2012 Supplemental Control Requirements Determinations (SCRDs). The environmental impact analysis and associated documents(s) must be certified by LADWP on or before July 1, 2015;
- Construct the additional 3.62 square miles of dust mitigation measures on Owens Lake playa by December 31, 2017. Upon completion of this work, LADWP will have mitigated dust emissions from approximately 48.6 square miles of the Owens Lake playa;
- Construct up to an extra 4.8 square miles of dust mitigation measures on Owens Lake playa if so ordered, in whole or in part, by the District. Such order(s) may not be issued until after January 1, 2016. Upon completion of this extra work, LADWP will have mitigated dust emissions from approximately 53.4 square miles of Owens Lake; and
- Withdraw outstanding appeals and complaints associated with the District's 2011, 2012, 2013, and 2014 SCRDs.

The District has in turn agreed to the following:

- District will not order LADWP to mitigate dust emissions from Owens Lake playa beyond the 53.4 square miles;
- District will grant approval of the Tillage with Best Available Control Measures (BACM)[31] Backup (TwB2) as a variation of Shallow Flooding Dust Control Measure (DCM);
- LADWP may transition up to 3.0 square miles of any Dust Control Areas (DCA) per dust season in lieu of 1.5 square miles as previously permitted in the 2008 Owens Valley PM10 Planning Area Demonstration State Implementation Plan (2008 SIP);
- Development of Dynamic Water Management to assist LADWP to further reduce the use of water on Owens Lake playa;
- Support LADWP in securing the necessary permits, leases, and approvals from oversight agencies; and
- Establishment of Owens Lake Scientific Advisory Panel to evaluate, assess, and provide ongoing advice on the reduction of airborne dust in the Owens Valley through research, development, and implementation of waterless and low-water use BACMs.

[31] Currently Shallow Flooding, Gravel Cover and Managed DCMs are the only approved BACMs

Effectively, the Stipulated Judgment will allow LADWP to use waterless dust control methods, including tillage, at Owens Lake, resulting in potentially significant water and monetary savings. The Judgment also provides Los Angeles with the certainty of knowing the full extent of its liability for dust mitigation at Owens Lake.

Figure 52 summarizes the estimated costs associated with the Stipulated Agreement.

Figure 52: Estimated Cost of Stipulated Agreement Compliance

Project	Costs ($M)
3.62 square miles of dust mitigation	$200.0
4.8 square miles of DCM	$218.5
12.0 – 18.0 square miles of conversion to TwB2	$10.0 - $18.0
Total	**$428.5 - $436.5**

It is estimated that, in aggregate, the Stipulated Judgment will save LADWP approximately $1,574.9 million in design and construction costs. In addition, once LADWP finishes converting the shallow flooding to TwB2, it will save between $17.9 million and $26.8 million a year in purchased water costs.

3.7 ASSUMPTIONS AND RISKS ASSOCIATED WITH THE PROPOSED PLAN – WHY THE PROPOSED RATE PLAN IS OPTIMAL

For the proposed rate action, LADWP has based future financial plans on certain assumptions. However, as is the case with most assumptions, there is always the possibility that these assumptions may change due to unforeseen and/or external events that cannot be predicted at this time. **Error! Reference source not found.** provides some of the major assumptions and potential risks.

Figure 53: Assumptions and Risks Associated with the Proposed Plan

Assumption	Description	Risk/Implication
Conservation	The Mayor's ED-5 has set an aggressive goal of 20% water usage reduction per capita by 2017.	If actual consumption is different from projections in the financial plan, the proposed decoupling mechanism will ensure LADWP receives adequate revenue to cover its fixed costs and customers will not overpay.
Hydrology	Assumes normal hydrology.	California may not return to normal hydrology, and it is likely FY 2015-16, the first year of these proposed rates, could be dryer than usual. This situation could require more purchased water, causing rates to increase. However, the pass-through nature of the proposed Water Supply Cost Adjustment factor will ensure cost recovery for the higher amount of purchased water and help ensure adequate supply for customers.
Financial Market Conditions	Assumes current market conditions with low steady inflation, returns on investment and bond rating.	If market conditions change, LADWP's proposed decoupled rate structure will ensure adequate cost recovery in the case of higher borrowing costs and eliminate over-collection if market conditions become more favorable.
Securitization	Assumes LADWP has access to this financing mechanism.	Securitization is a cheaper mechanism to finance debt. If securitization were not possible, LADWP's strong financial position should provide access to traditional borrowing sources, although at a slightly higher debt service cost. LADWP's decoupled rate structure provides the ability to recover the higher borrowing costs, if required.

3.8 ANALYSIS OF ALTERNATIVES

Chapter 2 highlights major actions that LADWP has taken to reduce the need for interim rate actions up until this point. However, given the nature of the necessary projects described in this section as well as other obligations (contractual obligations for wages, benefits and pensions, and the impact of inflation), the Department is at a point where a rate increase is required to finance important water quality, infrastructure, local water supply and Owens Valley programs which benefit all of Los Angeles in a manner that maintains a healthy financial standing for the organization.

The proposed rate action allows LADWP to meet its objectives and obligations while continuing to maintain competitive rates relative to peer utilities. LADWP believes that these rates strike the optimal balance between planning for a sustainable and secure water supply, providing reliable service, continuing to meet regulatory requirements and maintaining reasonable rates.

In order to understand how a delayed rate action would impact operations, LADWP has developed a series of sensitivity analyses while working with the Ratepayer Advocate. Figure 54 provides a summary of the different scenarios. More detail of each scenario can be found in Chapter 3 – Appendix B.

Figure 54: Financial Planning Stress Test Scenario Results

Cumulative Retail Rates Increase Difference		Five-Year Average Rate Impact	Other Implications
Case Number 33 (Base Case) Cumulative Average System Retail Rate Increase ($/HCF)		4.96%	
Case	**Brief Description**		
44	Defer Rate Increase by one year with securitization and no O&M cuts	5.68%	• Additional borrowing to maintain the minimum operating cash • Deterioration of Debt Service Ratio from for FY 2015-16 • Failure to meet additional bond test in FY 2016-17 will mean that the Department cannot issue parity debt and must issue subordinate debt at much higher interest costs.
45	Defer Rate Increase by one year with securitization and O&M cuts to meet financial metrics	5.46%	• Difficult to achieve. May result in deterioration of operations / infrastructure
46	No rate increase for five years with no O&M cuts	-1.73%	• Additional borrowing to maintain the minimum operating cash • Deterioration of Debt Service Ratio • Failure to meet additional bond test in FY 2016-17 will mean that the Department cannot issue parity debt and must issue subordinate debt at much higher interest costs.
47	No rate increase for five years with O&M cuts to meet financial metrics	-1.73%	• Difficult to achieve. May result in deterioration of operations / infrastructure
48	One-notch downgrade in current market condition	4.95%	• Deterioration of financial metrics
49	One-notch downgrade in worst market condition (high interest environment)	5.01%	• Deterioration of financial metrics • Interest rate increases
50	Securitization delay by one year for local water supply, conservation, and water quality	5.00%	• Additional borrowing will be needed to maintain the minimum operating cash • Ratepayers will pay increased interest expense of $16M on average annually over the next five years.
51	Purchased water – Normal case (normal conservation, average hydrology for four years)	3.43%	• Impacts mitigated by sustainable local water supply investments
52	Purchased water – Best case (20% reduction in residential use, wet hydrology for four years)	5.05%	• Impacts mitigated by sustainable local water supply investments

Cumulative Retail Rates Increase Difference		Five-Year Average Rate Impact	Other Implications
53	Purchased water – Worst case (20% reduction in residential use, dry hydrology for four years)	5.34%	• Impacts mitigated by sustainable local water supply investments
54	Purchased Water – Potential (20% reduction in residential use, dry hydrology for FY 2015-16)	4.95%	• Impacts mitigated by sustainable local water supply investments
55	Purchased Water – Potential (20% reduction in residential use, dry hydrology for FY 2015-16 and FY 2016-17)	5.00%	• Impacts mitigated by sustainable local water supply investments
56	Base case with using 6% equity (3% inflation x 2) for the WACC return on investment [32]	8.18%	• Interest Expense decreases an average of $22M in five years. • Debt borrowing decrease on average of $203M in FY 2015-16 to FY 2019-20 to maintain the minimum operating cash of 150 days.
57	Cut labor to FY 2012-13 level ($328,360,500 – FY 2012-13 in FY 2014-15 Water Receipts and Appropriation (R&A Report)) for each year of the five-year rate action period (FY 2015-16 through FY 2019-20)	4.86%	• Labor cuts could result in deterioration of infrastructure
58	Cut health care costs to FY 2012-13 level ($62,552,300 – FY 2012-13 in FY 2014-15 Water R&A Report) for each year of the five-year rate action period (FY 2015-16 through FY 2019-20)	4.66%	• Not viable until next MOU in 2017
59	Cut pension costs to FY 2012-13 level ($140,790,000 – FY 2012-13 in FY 2014-15 Water R&A Report) for each year of the five-year rate action period (FY 2015-16 through FY 2019-20)	5.09%	• Not viable until next MOU in 2017
60	Cut capital to 75% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - no securitization	4.23%	• Deterioration of financial metrics • Deterioration of infrastructure
61	Cut capital to 75% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - with securitization	3.46%	• Deterioration of infrastructure
62	Cut capital to 80% of proposed budget	4.48%	• Deterioration of infrastructure

[32] As described in the manual "Financial Planning for Municipal Utilities" lectured by Dawn Lund of Utility Financial Solutions at APPA (American Public Power Authority) training.

Cumulative Retail Rates Increase Difference		Five-Year Average Rate Impact	Other Implications
	for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - no securitization		
63	Cut capital to 80% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - with securitization	3.78%	• Deterioration of infrastructure
64	Cut capital to 85% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - no securitization	4.72%	• Deterioration of infrastructure • Deterioration of financial metrics
65	Cut capital to 85% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - with securitization	4.08%	• Deterioration of infrastructure
66	Increase capital to 105% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - no securitization	5.66%	• Deterioration of financial metrics
67	Increase capital to 105% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - with securitization	5.22%	• Capital expenditures increase by an average of $50 million per year for next five years • Increase in average borrowing of $25 million per year for next 5 years
68	Increase capital to 110% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - no securitization	5.88%	• Deterioration of financial metrics
69	Increase capital to 110% of proposed budget for each year of the five-year rate action period (FY 2015-16 through FY 2019-20) - with securitization	5.50%	• Capital expenditures increase by an average of $99 million per year for next five years • Increase in average borrowing of $50 million per year for next five years

These analyses indicate that the financial plan assumptions and proposed rates are one of the best options for customers, investors and LADWP itself.

3.9 BEYOND THE FIVE-YEAR PROPOSED RATE PLAN

The Department will continue to assess rate and revenue requirements associated with both externally mandated costs as well as various levels of funding for other programs for FY 2020-21 and beyond. Costs for these time periods are still subject to uncertainty but are anticipated to

require future adjustments in rates. According to the current financial plan, a system average rate increase of 5.90% (including purchased water) would be expected for FY 2020-21 to keep up with revenue requirements that support the programs discussed in this report. However, budgets and other program specifics for FY 2020-21 are currently preliminary.

A STORMWATER CAPTURE

The following is a summary of future scheduled stormwater projects. In total, recharge will potentially be increased by 30,498 acre-feet per year (AFY).

Program Name	Project Description	Scheduled Construction Start Year	Projected Water Capture
Big Tujunga Dam Sediment Removal Project	Scope includes removing sediment upstream of Big Tujunga Dam in order to protect valves and increase storage capacity.	2016	2,700 AFY
Pacoima Dam Sediment Removal Project	Scope includes removing sediment upstream of Pacoima Dam in order to protect valves and increase storage capacity.	2016	3,200 AFY
Tujunga Spreading Grounds Enhancement Project	Scope includes consolidating and deepening existing spreading basins, installing two high-flow rubber dam intakes, and modifying the existing intake to remove sediments. In addition, a new intake structure will allow diversion of flows from Pacoima Wash into the spreading grounds.	2015	8,000 AFY
Lopez Spreading Grounds Upgrade	Scope includes expanding and deepening existing spreading basins, excavating sediment to improve infiltration rates, and improving the intake structure.	2016	500 AFY
Branford Spreading Basin Upgrade	Scope includes installing a pump to divert water from the Branford Basin into the Tujunga Spreading Grounds.	2017	590 AFY
Pacoima Spreading Grounds Upgrade	Scope includes consolidating existing spreading basins, excavating sediment to improve infiltration rates, and installing a new automated intake structure.	2016	10,500 AFY
Valley Generating Station Stormwater Capture Project	Scope includes capturing and directing stormwater runoff through a series of recharge basins, swales and overflow culverts to strategic points on-site.	2016	118 AFY
Whitnall Highway Power Line Easement Stormwater Capture Project	Scope includes capturing stormwater runoff at several locations along the easement and directing flow into a network of swales, culverts, hydrodynamic separators and infiltration basins for pre-treatment and infiltration.	2016	110 FY
Rory M. Shaw Wetlands Park Project (Strathern Pit)	Scope includes constructing detention ponds and wetlands to store and treat stormwater runoff. Treated water will be pumped to Sun Valley Park for infiltration.	2016	590 AFY

Program Name	Project Description	Scheduled Construction Start Year	Projected Water Capture
Bull Creek Stormwater Capture Project	The Van Norman Complex (VNC) has a 13 square mile tributary area and has large potential for stormwater capture. These flows exit the VNC through Bull Creek and are eventually lost to the ocean via the Los Angeles River. This project proposes conserving a portion of the lost water by diverting flows from Bull Creek, using a rubber dam, and conveying flows through a 48-inch pipeline to Pacoima Spreading Grounds, where it would spread and recharge the San Fernando Groundwater Basin.	2018	1,500 AFY
Canterbury Power Line Easement Stormwater Capture Project	Scope includes installing a series of stormwater infiltration basins in an existing power line easement.	2018	1,300 AFY
Strathern Park Infiltration System Project	The Strathern Park Infiltration System Project is located at a park site west of the Rory M. Shaw Wetlands Park Project. The Project will excavate three infiltration basins with a surface area of approximately 10.5 acres to provide additional storage and infiltration. The basins will be 5 to 10 feet deep and will accept runoff from the Tujunga Spreading Grounds and a nearby storm drain. The connection to the Tujunga Spreading Grounds allows it to receive large flows to supplement surface drainage such as releases from the Big Tujunga and Hansen Dam.	2018	750 AFY
Old Pacoima Wash Stormwater Capture Project	The Old Pacoima Wash Stormwater Capture Project seeks to utilize the existing Los Angeles County Flood Control District property to capture and infiltrate local stormwater runoff. Before the Pacoima Diversion Channel and the Pacoima Spreading Grounds were built, the Old Pacoima Wash was the natural waterway for stormwater flows emanating from the upper Tujunga Watershed. The proposed Project will be approximately 3,000 feet long and will be situated along the existing Old Pacoima Wash right-of-way; bordering Lassen Street to the north and Plummer Street to the south. The existing concrete used to line the wash will be removed, thus exposing natural soils, such as gravel and sandy soils. Surface flow inlets and drains will be installed along Lassen St. to convey local surface runoff into the Old Pacoima Wash. Existing stormwater flow lines will be modified to convey additional stormwater runoff from the neighboring tributary area into the Lassen St. inlet. The Project will be designed as a linear spreading ground with multiple basins. Depending on several factors, this project may incorporate open space attributes similar to those that the Pacoima Spreading Grounds will undergo in order to keep the same continuous green space amenities for the neighboring community.	2018	500 AFY
San Fernando Road Stormwater Capture Project	Scope includes directing street flows through pre-treatment devices and into a vegetated swale that will run alongside 1.75 miles of San Fernando Road.	2018	140 AFY
		Total	**30,498 AFY**

B WATER SYSTEM SENSITIVITY CASES

This appendix provides the details for several other financial cases in comparison to the Water System Financial Plan Case Number 33, the official case upon which the proposed rates and revenue requirement were originally determined.

The sensitivity cases include changes to assumptions including, but not limited to, hydrology, O&M levels and financial metric deterioration, as well as a no rate increase scenario.

Case 33 Sensitivity Cases

Annual Rate Increases (%)		Rate Action Period 2016	2017	2018	2019	2020	5 Yr YOY Avg.
Case 33	11 5 2014 Budget	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
Case 44	Defer Rate Increase by 1 year with securitization and no O&M cuts	-11.19%	24.75%	4.82%	5.10%	4.90%	5.68%
Case 45	Defer Rate Increase by 1 year with securitization and O&M cuts	-11.19%	23.88%	4.55%	5.15%	4.93%	5.47%
Case 46	No rate increase for 5 years with no O&M cuts	-11.19%	1.94%	1.72%	1.82%	-2.94%	-1.73%
Case 47	No rate increase for 5 years with O&M cuts	-11.19%	1.94%	1.72%	1.82%	-2.94%	-1.73%
Case 48	One-notch downgrade in current market condition	0.53%	6.12%	8.00%	5.15%	4.96%	4.95%
Case 49	One-notch downgrade in worst market condition	0.62%	6.15%	8.07%	5.19%	5.01%	5.01%
Case 50	Securitization delay by 1 year with Rate Action	4.42%	2.71%	7.85%	5.07%	4.95%	5.00%
Case 51	Purchased water – Normal case (normal conservation, average hydrology for 5 years)	-0.05%	1.86%	5.44%	4.89%	5.00%	3.43%
Case 52	Purchased water – Best case (ED5-Res reduction by 20%, wet hydrology for 4 years)	-12.27%	13.42%	10.05%	4.54%	9.50%	5.05%
Case 53	Purchased water – Worst case (ED5-Res reduction by 20%, dry hydrology for 4 years) provided by Water	7.06%	9.41%	7.43%	2.31%	0.51%	5.34%
Case 54	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16) provided by Water	6.59%	1.80%	6.72%	4.83%	4.81%	4.95%
Case 55	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16 and FY 16/17)	9.00%	5.66%	2.32%	3.48%	4.54%	5.00%
Case 56	6% equity (3% inflation x 2) for the WACC return on investment	14.53%	7.07%	8.31%	4.39%	6.62%	8.18%
Case 57	Cut labor to FY 12/13 level ($328,360,500) for each year of the 5-yr	0.78%	6.16%	7.25%	5.16%	4.94%	4.86%
Case 58	Cut health care costs to FY 12/13 level ($62,552,300) for each year of the 5-yr	-0.31%	5.89%	7.50%	5.22%	5.01%	4.66%
Case 59	Cut pension costs to FY 12/13 level ($140,790,000) for each year of the 5-yr	0.65%	6.54%	8.25%	5.11%	4.90%	5.09%
Case 60	Cut capital to 75% of proposed budget for each year of the 5-yr No Securitization	-1.23%	4.64%	7.90%	3.62%	6.20%	4.23%
Case 61	Cut capital to 75% of proposed budget for each year of the 5-yr with Securitization	-0.26%	4.53%	5.93%	3.63%	3.49%	3.46%
Case 62	Cut capital to 80% of proposed budget for each year of the 5-yr No Securitization	-0.65%	4.57%	8.32%	3.90%	6.28%	4.48%
Case 63	Cut capital to 80% of proposed budget for each year of the 5-yr with Securitization	-0.12%	4.78%	6.39%	4.05%	3.78%	3.78%
Case 64	Cut capital to 85% of proposed budget for each year of the 5-yr No Securitization	0.63%	3.72%	8.69%	4.18%	6.36%	4.72%
Case 65	Cut capital to 85% of proposed budget for each year of the 5-yr with Securitization	0.02%	5.15%	6.80%	4.36%	4.05%	4.08%
Case 66	Increase capital to 105% of proposed budget for each year of the 5-yr rate No Securitization	5.70%	0.56%	10.21%	5.19%	6.64%	5.66%
Case 67	Increase capital to 105% of proposed budget for each year of the 5-yr rate with Securitization	0.58%	6.70%	8.36%	5.35%	5.11%	5.22%
Case 68	Increase capital to 110% of proposed budget for each year of the 5-yr rate No Securitization	6.97%	0.30%	10.03%	5.42%	6.69%	5.88%
Case 69	Increase capital to 110% of proposed budget for each year of the 5-yr rate with Securitization	0.73%	7.06%	8.76%	5.55%	5.37%	5.50%

Delta Difference (%)	Rate Action Period 2016	2017	2018	2019	2020	5 Yr YOY Avg.
Case 33						
Case 44	-11.62%	18.51%	-3.24%	-0.02%	-0.04%	0.72%
Case 45	-11.62%	17.65%	-3.50%	0.03%	-0.01%	0.51%
Case 46	-11.62%	-4.30%	-6.34%	-3.30%	-7.88%	-6.69%
Case 47	-11.62%	-4.30%	-6.34%	-3.30%	-7.88%	-6.69%
Case 48	0.09%	-0.12%	-0.05%	0.03%	0.02%	-0.01%
Case 49	0.19%	-0.08%	0.02%	0.07%	0.07%	0.05%
Case 50	3.99%	-3.53%	-0.20%	-0.05%	0.01%	0.04%
Case 51	-0.48%	-4.37%	-2.61%	-0.23%	0.06%	-1.53%
Case 52	-12.70%	7.18%	2.00%	-0.58%	4.56%	0.09%
Case 53	6.63%	3.17%	-0.62%	-2.81%	-4.43%	0.39%
Case 54	6.15%	-4.43%	-1.33%	-0.29%	-0.13%	-0.01%
Case 55	8.57%	-0.58%	-5.73%	-1.64%	-0.40%	0.04%
Case 56	14.10%	0.83%	0.25%	-0.73%	1.68%	3.23%
Case 57	0.35%	-0.08%	-0.81%	0.04%	0.00%	-0.10%
Case 58	-0.75%	-0.35%	-0.56%	0.10%	0.07%	-0.30%
Case 59	0.21%	0.30%	0.19%	-0.01%	-0.04%	0.13%
Case 60	-1.66%	-1.60%	-0.15%	-1.50%	1.26%	-0.73%
Case 61	-0.70%	-1.71%	-2.12%	-1.49%	-1.45%	-1.50%
Case 62	-1.08%	-1.67%	0.26%	-1.22%	1.33%	-0.47%
Case 63	-0.56%	-1.46%	-1.66%	-1.07%	-1.16%	-1.18%
Case 64	0.20%	-2.52%	0.63%	-0.94%	1.42%	-0.24%
Case 65	-0.41%	-1.09%	-1.25%	-0.76%	-0.89%	-0.88%
Case 66	5.27%	-5.68%	2.16%	0.07%	1.70%	0.70%
Case 67	0.14%	0.47%	0.30%	0.23%	0.17%	0.26%
Case 68	6.54%	-5.94%	1.98%	0.30%	1.75%	0.93%
Case 69	0.30%	0.83%	0.71%	0.43%	0.43%	0.54%

Cumulative Rate Increases (%)		2016	2017	2018	2019	2020	5 Yr Cum Avg.
Case 33	11 5 2014 Budget	0.43%	6.70%	15.29%	21.19%	27.18%	5.44%
Case 44	Defer Rate Increase by 1 year with securitization and no O&M cuts	-11.19%	10.79%	16.13%	22.05%	28.03%	5.61%
Case 45	Defer Rate Increase by 1 year with securitization and O&M cuts	-11.19%	10.02%	15.03%	20.96%	26.92%	5.38%
Case 46	No rate increase for 5 years with no O&M cuts	-11.19%	-9.47%	-7.92%	-6.24%	-8.99%	-1.80%
Case 47	No rate increase for 5 years with O&M cuts	-11.19%	-9.47%	-7.92%	-6.24%	-8.99%	-1.80%
Case 48	One-notch downgrade in current market condition	0.53%	6.68%	15.21%	21.14%	27.15%	5.43%
Case 49	One-notch downgrade in worst market condition	0.62%	6.81%	15.44%	21.43%	27.52%	5.50%
Case 50	Securitization delay by 1 year with Rate Action	4.42%	7.25%	15.67%	21.54%	27.55%	5.51%
Case 51	Purchased water – Normal case (normal conservation, average hydrology for 5 years)	-0.05%	1.81%	7.36%	12.60%	18.23%	3.65%
Case 52	Purchased water – Best case (ED5-Res reduction by 20%, wet hydrology for 4 years)	-12.27%	-0.49%	9.51%	14.48%	25.35%	5.07%
Case 53	Purchased water – Worst case (ED5-Res reduction by 20%, dry hydrology for 4 years) provided by Water	7.06%	17.14%	25.84%	28.75%	29.40%	5.88%
Case 54	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16) provided by Water	6.59%	8.51%	15.81%	21.40%	27.24%	5.45%
Case 55	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16 and FY 16/17)	9.00%	15.17%	17.84%	21.94%	27.48%	5.50%
Case 56	6% equity (3% inflation x 2) for the WACC return on investment	14.53%	22.63%	32.81%	38.65%	47.83%	9.57%
Case 57	Cut labor to FY 12/13 level ($328,360,500) for each year of the 5-yr	0.78%	6.99%	14.74%	20.66%	26.63%	5.33%
Case 58	Cut health care costs to FY 12/13 level ($62,552,300) for each year of the 5-yr	-0.31%	5.56%	13.47%	19.39%	25.38%	5.08%
Case 59	Cut pension costs to FY 12/13 level ($140,790,000) for each year of the 5-yr	0.65%	7.23%	16.07%	22.00%	27.98%	5.60%
Case 60	Cut capital to 75% of proposed budget for each year of the 5-yr No Securitization	-1.23%	3.35%	11.52%	15.56%	22.72%	4.54%
Case 61	Cut capital to 75% of proposed budget for each year of the 5-yr with Securitization	-0.26%	4.25%	10.44%	14.44%	18.43%	3.69%
Case 62	Cut capital to 80% of proposed budget for each year of the 5-yr No Securitization	-0.65%	3.89%	12.53%	16.92%	24.26%	4.85%
Case 63	Cut capital to 80% of proposed budget for each year of the 5-yr with Securitization	-0.12%	4.65%	11.34%	15.85%	20.23%	4.05%
Case 64	Cut capital to 85% of proposed budget for each year of the 5-yr No Securitization	0.63%	4.38%	13.44%	18.18%	25.70%	5.14%
Case 65	Cut capital to 85% of proposed budget for each year of the 5-yr with Securitization	0.02%	5.17%	12.33%	17.23%	21.98%	4.40%
Case 66	Increase capital to 105% of proposed budget for each year of the 5-yr rate No Securitization	5.70%	6.30%	17.15%	23.23%	31.41%	6.28%
Case 67	Increase capital to 105% of proposed budget for each year of the 5-yr rate with Securitization	0.58%	7.32%	16.29%	22.51%	28.77%	5.75%
Case 68	Increase capital to 110% of proposed budget for each year of the 5-yr rate No Securitization	6.97%	7.29%	18.05%	24.45%	32.78%	6.56%
Case 69	Increase capital to 110% of proposed budget for each year of the 5-yr rate with Securitization	0.73%	7.85%	17.30%	23.81%	30.45%	6.09%

Cumulative Del	2016	2017	2018	2019	2020	5 Yr Cum Avg.
Case 33						
Case 44	-11.62%	4.09%	0.84%	0.86%	0.85%	0.17%
Case 45	-11.62%	3.32%	-0.26%	-0.24%	-0.27%	-0.05%
Case 46	-11.62%	-16.17%	-23.21%	-27.44%	-36.18%	-7.24%
Case 47	-11.62%	-16.17%	-23.21%	-27.44%	-36.18%	-7.24%
Case 48	0.09%	-0.02%	-0.08%	-0.05%	-0.03%	-0.01%
Case 49	0.19%	0.11%	0.15%	0.23%	0.33%	0.07%
Case 50	3.99%	0.55%	0.38%	0.35%	0.37%	0.07%
Case 51	-0.48%	-4.88%	-7.93%	-8.59%	-8.95%	-1.79%
Case 52	-12.70%	-7.19%	-5.78%	-6.72%	-1.83%	-0.37%
Case 53	6.63%	10.44%	10.55%	7.56%	2.22%	0.44%
Case 54	6.15%	1.81%	0.51%	0.21%	0.05%	0.01%
Case 55	8.57%	8.47%	2.55%	0.75%	0.29%	0.06%
Case 56	14.10%	15.93%	17.52%	17.45%	20.64%	4.13%
Case 57	0.35%	0.29%	-0.55%	-0.53%	-0.55%	-0.11%
Case 58	-0.75%	-1.14%	-1.82%	-1.80%	-1.81%	-0.36%
Case 59	0.21%	0.53%	0.78%	0.81%	0.80%	0.16%
Case 60	-1.66%	-3.35%	-3.77%	-5.63%	-4.46%	-0.89%
Case 61	-0.70%	-2.44%	-4.85%	-6.75%	-8.75%	-1.75%
Case 62	-1.08%	-2.80%	-2.76%	-4.28%	-2.93%	-0.59%
Case 63	-0.56%	-2.05%	-3.95%	-5.34%	-6.95%	-1.39%
Case 64	0.20%	-2.32%	-1.85%	-3.01%	-1.48%	-0.30%
Case 65	-0.41%	-1.52%	-2.96%	-3.96%	-5.20%	-1.04%
Case 66	5.27%	-0.40%	1.86%	2.04%	4.23%	0.85%
Case 67	0.14%	0.62%	1.00%	1.32%	1.59%	0.32%
Case 68	6.54%	0.59%	2.75%	3.25%	5.60%	1.12%
Case 69	0.30%	1.15%	2.00%	2.61%	3.27%	0.65%

Annual Rate Increases ($M)		2016	2017	2018	2019	2020	Cum Incr. Total	5 Yr YOY Incr.
Case 33	11 5 2014 Budget	-$17	$32	$64	$68	$83	$230	$46
Case 44	Defer Rate Increase by 1 year with securitization and no O&M cuts	-$148	$208	$28	$69	$83	$239	$48
Case 45	Defer Rate Increase by 1 year with securitization and O&M cuts	-$148	$199	$24	$69	$83	$227	$45
Case 46	No rate increase for 5 years with no O&M cuts	-$148	-$14	-$7	$22	-$16	-$163	-$33
Case 47	No rate increase for 5 years with O&M cuts	-$148	-$14	-$7	$22	-$16	-$163	-$33
Case 48	One-notch downgrade in current market condition	-$16	$30	$63	$69	$83	$230	$46
Case 49	One-notch downgrade in worst market condition	-$15	$31	$64	$69	$84	$234	$47
Case 50	Securitization delay by 1 year with Rate Action	$28	-$7	$62	$68	$83	$234	$47
Case 51	Purchased water – Normal case (normal conservation, average hydrology for 5 years)	$23	$27	$71	$68	$75	$263	$53
Case 52	Purchased water – Best case (ED5-Res reduction by 20%, wet hydrology for 4 years)	-$160	$97	$80	$58	$137	$211	$42
Case 53	Purchased water – Worst case (ED5-Res reduction by 20%, dry hydrology for 4 years) provided by Water	$58	$71	$62	$36	$28	$255	$51
Case 54	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16) provided by Water	$53	-$18	$49	$65	$83	$232	$46
Case 55	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16 and FY 16/17)	$80	$28	-$2	$49	$80	$234	$47
Case 56	6% equity (3% inflation x 2) for the WACC return on investment	$143	$47	$76	$68	$120	$454	$91
Case 57	Cut labor to FY 12/13 level ($328,360,500) for each year of the 5-yr	-$13	$31	$55	$69	$83	$224	$45
Case 58	Cut health care costs to FY 12/13 level ($62,552,300) for each year of the 5-yr	-$25	$28	$57	$69	$83	$210	$42
Case 59	Cut pension costs to FY 12/13 level ($140,790,000) for each year of the 5-yr	-$14	$35	$66	$69	$83	$239	$48
Case 60	Cut capital to 75% of proposed budget for each year of the 5-yr No Securitization	-$36	$14	$60	$48	$95	$181	$36
Case 61	Cut capital to 75% of proposed budget for each year of the 5-yr with Securitization	-$25	$13	$39	$48	$60	$135	$27
Case 62	Cut capital to 80% of proposed budget for each year of the 5-yr No Securitization	-$29	$13	$65	$52	$97	$198	$40
Case 63	Cut capital to 80% of proposed budget for each year of the 5-yr with Securitization	-$23	$16	$44	$53	$65	$154	$31
Case 64	Cut capital to 85% of proposed budget for each year of the 5-yr No Securitization	-$15	$4	$69	$56	$99	$214	$43
Case 65	Cut capital to 85% of proposed budget for each year of the 5-yr with Securitization	-$21	$20	$49	$58	$69	$173	$35
Case 66	Increase capital to 105% of proposed budget for each year of the 5-yr rate No Securitization	$43	-$32	$88	$70	$107	$276	$55
Case 67	Increase capital to 105% of proposed budget for each year of the 5-yr rate with Securitization	-$15	$37	$67	$72	$86	$247	$49
Case 68	Increase capital to 110% of proposed budget for each year of the 5-yr rate No Securitization	$57	-$36	$87	$74	$109	$291	$58
Case 69	Increase capital to 110% of proposed budget for each year of the 5-yr rate with Securitization	-$13	$41	$72	$75	$91	$265	$53

Delta Differenc	2016	2017	2018	2019	2020	5 Yr YOY Incr.
Case 33						
Case 44	-$131	$176	-$36	$0	$0	$2
Case 45	-$131	$168	-$39	$0	$0	-$1
Case 46	-$131	-$45	-$71	-$46	-$99	-$79
Case 47	-$131	-$45	-$71	-$46	-$99	-$79
Case 48	$1	-$1	-$1	$0	$0	$0
Case 49	$2	-$1	$0	$1	$1	$1
Case 50	$45	-$39	-$2	$0	$0	$1
Case 51	$39	-$5	$7	-$1	-$8	$7
Case 52	-$144	$65	$17	-$11	$54	-$4
Case 53	$75	$39	-$2	-$32	-$55	$5
Case 54	$69	-$50	-$15	-$4	$1	$0
Case 55	$97	-$4	-$66	-$20	-$3	$1
Case 56	$159	$15	$13	$0	$37	$45
Case 57	$4	-$1	-$9	$0	$0	-$1
Case 58	-$8	-$4	-$7	$0	$0	-$4
Case 59	$2	$3	$3	$0	$0	$2
Case 60	-$19	-$18	-$4	-$20	$12	-$10
Case 61	-$8	-$19	-$25	-$21	-$23	-$19
Case 62	-$12	-$18	$1	-$16	$14	-$6
Case 63	-$6	-$16	-$20	-$15	-$18	-$15
Case 64	$2	-$28	$6	-$13	$16	-$3
Case 65	-$5	-$12	-$15	-$11	-$14	-$11
Case 66	$60	-$64	$24	$2	$24	$9
Case 67	$2	$5	$4	$3	$3	$3
Case 68	$74	-$67	$23	$5	$26	$12
Case 69	$3	$9	$9	$7	$8	$7

Cumulative Rate Increases ($M)		2016	2017	2018	2019	2020	Cum. 5 Yr Avg.
Case 33	11 5 2014 Budget	-$17	$15	$79	$147	$230	$46
Case 44	Defer Rate Increase by 1 year with securitization and no O&M cuts	-$148	$60	$87	$156	$239	$48
Case 45	Defer Rate Increase by 1 year with securitization and O&M cuts	-$148	$51	$76	$144	$227	$45
Case 46	No rate increase for 5 years with no O&M cuts	-$148	-$162	-$169	-$147	-$163	-$33
Case 47	No rate increase for 5 years with O&M cuts	-$148	-$162	-$169	-$147	-$163	-$33
Case 48	One-notch downgrade in current market condition	-$16	$15	$78	$146	$230	$46
Case 49	One-notch downgrade in worst market condition	-$15	$16	$80	$149	$234	$47
Case 50	Securitization delay by 1 year with Rate Action	$28	$21	$83	$151	$234	$47
Case 51	Purchased water – Normal case (normal conservation, average hydrology for 5 years)	$23	$50	$120	$188	$263	$53
Case 52	Purchased water – Best case (ED5-Res reduction by 20%, wet hydrology for 4 years)	-$160	-$64	$16	$74	$211	$42
Case 53	Purchased water – Worst case (ED5-Res reduction by 20%, dry hydrology for 4 years) provided by Water	$58	$129	$191	$227	$255	$51
Case 54	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16) provided by Water	$53	$35	$84	$148	$232	$46
Case 55	Purchased Water – Probable (ED5-Res reduction by 20%, dry hydrology for FY 15/16 and FY 16/17)	$80	$108	$105	$154	$234	$47
Case 56	6% equity (3% inflation x 2) for the WACC return on investment	$143	$189	$266	$334	$454	$91
Case 57	Cut labor to FY 12/13 level ($328,360,500) for each year of the 5-yr	-$13	$18	$73	$141	$224	$45
Case 58	Cut health care costs to FY 12/13 level ($62,552,300) for each year of the 5-yr	-$25	$2	$59	$128	$210	$42
Case 59	Cut pension costs to FY 12/13 level ($140,790,000) for each year of the 5-yr	-$14	$21	$87	$156	$239	$48
Case 60	Cut capital to 75% of proposed budget for each year of the 5-yr No Securitization	-$36	-$22	$38	$87	$181	$36
Case 61	Cut capital to 75% of proposed budget for each year of the 5-yr with Securitization	-$25	-$12	$27	$75	$135	$27
Case 62	Cut capital to 80% of proposed budget for each year of the 5-yr No Securitization	-$29	-$16	$49	$101	$198	$40
Case 63	Cut capital to 80% of proposed budget for each year of the 5-yr with Securitization	-$23	-$7	$36	$90	$154	$31
Case 64	Cut capital to 85% of proposed budget for each year of the 5-yr No Securitization	-$15	-$10	$59	$115	$214	$43
Case 65	Cut capital to 85% of proposed budget for each year of the 5-yr with Securitization	-$21	-$2	$47	$104	$173	$35
Case 66	Increase capital to 105% of proposed budget for each year of the 5-yr rate No Securitization	$43	$11	$98	$169	$276	$55
Case 67	Increase capital to 105% of proposed budget for each year of the 5-yr rate with Securitization	-$15	$22	$89	$161	$247	$49
Case 68	Increase capital to 110% of proposed budget for each year of the 5-yr rate No Securitization	$57	$21	$108	$182	$291	$58
Case 69	Increase capital to 110% of proposed budget for each year of the 5-yr rate with Securitization	-$13	$28	$100	$175	$265	$53

Cumulative Del	2016	2017	2018	2019	2020	Cum. 5 Yr Avg.
Case 33						
Case 44	-$131	$45	$9	$9	$9	$2
Case 45	-$131	$36	-$3	-$3	-$3	-$1
Case 46	-$131	-$177	-$248	-$294	-$393	-$79
Case 47	-$131	-$177	-$248	-$294	-$393	-$79
Case 48	$1	$0	-$1	-$1	$0	$0
Case 49	$2	$1	$2	$3	$4	$1
Case 50	$45	$6	$4	$4	$4	$1
Case 51	$39	$35	$42	$41	$33	$7
Case 52	-$144	-$79	-$62	-$73	-$19	-$4
Case 53	$75	$114	$112	$80	$25	$5
Case 54	$69	$20	$5	$1	$2	$0
Case 55	$97	$93	$27	$7	$4	$1
Case 56	$159	$174	$187	$187	$224	$45
Case 57	$4	$3	-$6	-$6	-$6	-$1
Case 58	-$8	-$12	-$19	-$19	-$20	-$4
Case 59	$2	$6	$8	$9	$9	$2
Case 60	-$19	-$37	-$40	-$60	-$48	-$10
Case 61	-$8	-$27	-$52	-$72	-$95	-$19
Case 62	-$12	-$31	-$29	-$46	-$32	-$6
Case 63	-$6	-$22	-$42	-$57	-$76	-$15
Case 64	$2	-$25	-$20	-$32	-$16	-$3
Case 65	-$5	-$17	-$32	-$42	-$57	-$11
Case 66	$60	-$4	$20	$22	$46	$9
Case 67	$2	$7	$11	$14	$17	$3
Case 68	$74	$6	$29	$35	$61	$12
Case 69	$3	$13	$21	$28	$36	$7

Capital and O&M Additions/(Cuts) ($M)		2016	2017	2018	2019	2020
Case 45	**cuts**					
	a. Water Quality	(29)	-	-	-	-
	b. Water Reclamation	-	-	-	-	-
	c. Water Conservation	-	-	-	-	-
	d. In-City Pumping	-	-	-	-	-
	e. Water Security	38	-	-	-	-
	f. Owens Valley/LORP	-	-	-	-	-
	Pass Thru Subtotal	8	-	-	-	-
	g. Infrastructure	(140)	-	-	-	-
	Total O&M Adds/(Cuts)	(132)	-	-	-	-
	a. Water Conservation	-	-	-	-	-
	b. Water Quality	(34)	-	-	-	-
	c. Water Reclamation	-	-	-	-	-
	d. Water Security	43	-	-	-	-
	e. Owens Valley	(28)	-	-	-	-
	Pass Thru Subtotal	(20)	-	-	-	-
	f. Infrastructure	20	-	-	-	-
	Total Capital Adds/(Cuts)	0	-	-	-	-
Case 47	**No rate increase for 5 years with O&M cuts**					
	a. Water Quality	(29)	(30)	(32)	(33)	(33)
	b. Water Reclamation	-	-	-	-	-
	c. Water Conservation	-	-	-	-	-
	d. In-City Pumping	-	-	-	-	-
	e. Water Security	38	39	41	42	43
	f. Owens Valley/LORP	-	-	-	-	-
	Pass Thru Subtotal	8	9	9	9	9
	g. Infrastructure	(140)	(183)	(239)	(275)	(286)
	Total O&M Adds/(Cuts)	(132)	(174)	(230)	(266)	(277)
	a. Water Conservation	-	-	-	-	-
	b. Water Quality	(34)	(45)	(21)	(5)	(2)
	c. Water Reclamation	-	-	-	-	-
	d. Water Security	43	52	26	10	5
	e. Owens Valley	(28)	(31)	(66)	(62)	(68)
	Pass Thru Subtotal	(20)	(24)	(62)	(58)	(65)
	f. Infrastructure	20	24	62	58	65
	Total Capital Adds/(Cuts)	0	0	0	-	(0)

Capital and O&M Additions/(Cuts) ($M)		2016	2017	2018	2019	2020
Case 57	**the 5-yr**					
	a. Water Quality	-	-	-	-	-
	b. Water Reclamation	-	-	-	-	-
	c. Water Conservation	-	-	-	-	-
	d. In-City Pumping	-	-	-	-	-
	e. Water Security	-	-	-	-	-
	f. Owens Valley/LORP	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	g. Infrastructure	4	3	(6)	(12)	(15)
	Total O&M Adds/(Cuts)	4	3	(6)	(12)	(15)
	a. Water Conservation	-	-	-	-	-
	b. Water Quality	-	-	-	-	-
	c. Water Reclamation	-	-	-	-	-
	d. Water Security	-	-	-	-	-
	e. Owens Valley	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	f. Infrastructure	3	2	(4)	(8)	(10)
	Total Capital Adds/(Cuts)	3	2	(4)	(8)	(10)
Case 58	**year of the 5-yr**					
	a. Water Quality	-	-	-	-	-
	b. Water Reclamation	-	-	-	-	-
	c. Water Conservation	-	-	-	-	-
	d. In-City Pumping	-	-	-	-	-
	e. Water Security	-	-	-	-	-
	f. Owens Valley/LORP	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	g. Infrastructure	(9)	(11)	(17)	(22)	(24)
	Total O&M Adds/(Cuts)	(9)	(11)	(17)	(22)	(24)
	a. Water Conservation	-	-	-	-	-
	b. Water Quality	-	-	-	-	-
	c. Water Reclamation	-	-	-	-	-
	d. Water Security	-	-	-	-	-
	e. Owens Valley	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	f. Infrastructure	(7)	(8)	(11)	(15)	(17)
	Total Capital Adds/(Cuts)	(7)	(8)	(11)	(15)	(17)

Capital and O&M Additions/(Cuts) ($M)		2016	2017	2018	2019	2020
Case 59	**year of the 5-yr**					
	a. Water Quality	-	-	-	-	-
	b. Water Reclamation	-	-	-	-	-
	c. Water Conservation	-	-	-	-	-
	d. In-City Pumping	-	-	-	-	-
	e. Water Security	-	-	-	-	-
	f. Owens Valley/LORP	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	g. Infrastructure	2	5	7	11	16
	Total O&M Adds/(Cuts)	2	5	7	11	16
	a. Water Conservation	-	-	-	-	-
	b. Water Quality	-	-	-	-	-
	c. Water Reclamation	-	-	-	-	-
	d. Water Security	-	-	-	-	-
	e. Owens Valley	-	-	-	-	-
	Pass Thru Subtotal	-	-	-	-	-
	f. Infrastructure	2	4	5	7	11
	Total Capital Adds/(Cuts)	2	4	5	7	11
Case 60	**Cut capital to 75% of proposed budget for each year of the 5-yr No Securitization**					
	a. Water Conservation	(9)	(10)	(10)	(10)	(10)
	b. Water Quality	(87)	(89)	(63)	(55)	(45)
	c. Water Reclamation	(26)	(27)	(27)	(30)	(68)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(7)	(8)	(17)	(16)	(17)
	Pass Thru Subtotal	(130)	(133)	(116)	(110)	(140)
	f. Infrastructure	(91)	(103)	(108)	(150)	(160)
	Total Capital Adds/(Cuts)	(221)	(236)	(224)	(260)	(300)
Case 61	**Cut capital to 75% of proposed budget for each year of the 5-yr with Securitization**					
	a. Water Conservation	(9)	(10)	(10)	(10)	(10)
	b. Water Quality	(87)	(89)	(63)	(55)	(45)
	c. Water Reclamation	(26)	(27)	(27)	(30)	(68)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(7)	(8)	(17)	(16)	(17)
	Pass Thru Subtotal	(130)	(133)	(116)	(110)	(140)
	f. Infrastructure	(91)	(103)	(108)	(150)	(160)
	Total Capital Adds/(Cuts)	(221)	(236)	(224)	(260)	(300)

Capital and O&M Additions/(Cuts) ($M)		2016	2017	2018	2019	2020
Case 62	**Cut capital to 80% of proposed budget for each year of the 5-yr No Securitization**					
	a. Water Conservation	(8)	(8)	(8)	(8)	(8)
	b. Water Quality	(70)	(71)	(50)	(44)	(36)
	c. Water Reclamation	(21)	(21)	(22)	(24)	(55)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(6)	(6)	(13)	(12)	(14)
	Pass Thru Subtotal	(104)	(106)	(93)	(88)	(112)
	f. Infrastructure	(73)	(82)	(86)	(120)	(128)
	Total Capital Adds/(Cuts)	(177)	(189)	(179)	(208)	(240)
Case 63	**Cut capital to 80% of proposed budget for each year of the 5-yr with Securitization**					
	a. Water Conservation	(8)	(8)	(8)	(8)	(8)
	b. Water Quality	(70)	(71)	(50)	(44)	(36)
	c. Water Reclamation	(21)	(21)	(22)	(24)	(55)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(6)	(6)	(13)	(12)	(14)
	Pass Thru Subtotal	(104)	(106)	(93)	(88)	(112)
	f. Infrastructure	(73)	(82)	(86)	(120)	(128)
	Total Capital Adds/(Cuts)	(177)	(189)	(179)	(208)	(240)
Case 64	**Cut capital to 85% of proposed budget for each year of the 5-yr No Securitization**					
	a. Water Conservation	(6)	(6)	(6)	(6)	(6)
	b. Water Quality	(52)	(53)	(38)	(33)	(27)
	c. Water Reclamation	(16)	(16)	(16)	(18)	(41)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(4)	(5)	(10)	(9)	(10)
	Pass Thru Subtotal	(78)	(80)	(70)	(66)	(84)
	f. Infrastructure	(55)	(62)	(65)	(90)	(96)
	Total Capital Adds/(Cuts)	(133)	(141)	(134)	(156)	(180)
Case 65	**Cut capital to 85% of proposed budget for each year of the 5-yr with Securitization**					
	a. Water Conservation	(6)	(6)	(6)	(6)	(6)
	b. Water Quality	(52)	(53)	(38)	(33)	(27)
	c. Water Reclamation	(16)	(16)	(16)	(18)	(41)
	d. Water Security	-	-	-	-	-
	e. Owens Valley	(4)	(5)	(10)	(9)	(10)
	Pass Thru Subtotal	(78)	(80)	(70)	(66)	(84)
	f. Infrastructure	(55)	(62)	(65)	(90)	(96)
	Total Capital Adds/(Cuts)	(133)	(141)	(134)	(156)	(180)

Capital and O&M Additions/(Cuts) ($M)		2016	2017	2018	2019	2020
Case 66	**Increase capital to 105% of proposed budget for each year of the 5-yr rate No Securitization**					
	a. Water Conservation	2	2	2	2	2
	b. Water Quality	17	18	13	11	9
	c. Water Reclamation	5	5	5	6	14
	d. Water Security	-	-	-	-	-
	e. Owens Valley	1	2	3	3	3
	Pass Thru Subtotal	26	27	23	22	28
	f. Infrastructure	18	21	22	30	32
	Total Capital Adds/(Cuts)	44	47	45	52	60
Case 67	**Increase capital to 105% of proposed budget for each year of the 5-yr rate with Securitization**					
	a. Water Conservation	2	2	2	2	2
	b. Water Quality	17	18	13	11	9
	c. Water Reclamation	5	5	5	6	14
	d. Water Security	-	-	-	-	-
	e. Owens Valley	1	2	3	3	3
	Pass Thru Subtotal	26	27	23	22	28
	f. Infrastructure	18	21	22	30	32
	Total Capital Adds/(Cuts)	44	47	45	52	60
Case 68	**Increase capital to 110% of proposed budget for each year of the 5-yr rate No Securitization**					
	a. Water Conservation	4	4	4	4	4
	b. Water Quality	35	36	25	22	18
	c. Water Reclamation	11	11	11	12	27
	d. Water Security	-	-	-	-	-
	e. Owens Valley	3	3	7	6	7
	Pass Thru Subtotal	52	53	46	44	56
	f. Infrastructure	36	41	43	60	64
	Total Capital Adds/(Cuts)	88	94	90	104	120
Case 69	**Increase capital to 110% of proposed budget for each year of the 5-yr rate with Securitization**					
	a. Water Conservation	4	4	4	4	4
	b. Water Quality	35	36	25	22	18
	c. Water Reclamation	11	11	11	12	27
	d. Water Security	-	-	-	-	-
	e. Owens Valley	3	3	7	6	7
	Pass Thru Subtotal	52	53	46	44	56
	f. Infrastructure	36	41	43	60	64
	Total Capital Adds/(Cuts)	88	94	90	104	120

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#44 No Rate Increase for 1 Yr with Securitization No O&M Cuts

Assumptions

- Securitization for Conservation, Recycled Water, Water Quality and Owen Valley Capital Projects effective July 1, 2015
- Rate action with rate design changes effective July 1, 2016
- No O&M cuts in FY15/16 and let financial metrics deteriorate

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #44	YOY Rate Incr (%)	-11.19%	24.75%	4.82%	5.10%	4.90%	5.68%
	YOY Revenue ($M)	$ (148)	$ 208	$ 28	$ 69	$ 83	$ 48
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-11.62%	18.51%	-3.24%	-0.02%	-0.04%	0.72%
	YOY Revenue ($M)	$ (131)	$ 176	$ (36)	$ 0	$ 0	$ 2

Discussions

Since this scenario assumes no reduction in O&M, delay of rate increase action for one year will have the following impacts:

- 5-yr average rate increase of 0.72% or $2M annually.
- Additional borrowing of $90M in FY 15/16 to maintain the minimum operating cash of 150 days.
- Deteriation of Debt Service Ratio from 1.70x to 1.11x for FY15/16.
- Failure of meeting the additonal bond test in FY16/17 (1.01x versus the required 1.25x) and hence cannot issue parity debt. The Department has to issue subordinate debt at much higher interest costs.
- Likely to be dowgraded. Downgrade costs are not included in this scenario and can be substantial.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#45 No Rate Increase for 1 Yr with Securitization with O&M Cuts

Assumptions

- Securitization for Conservation, Recycled Water, Water Quality and Owen Valley Capital Projects effective 1-Jul-15
- Rate action with rate design changes effective July 1, 2016
- O&M cuts of $132M in FY15/16 to meet the financial metrics

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #45	YOY Rate Incr (%)	-11.19%	23.88%	4.55%	5.15%	4.93%	5.47%
	YOY Revenue ($M)	$ (148)	$ 199	$ 24	$ 69	$ 83	$ 45
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-11.62%	17.65%	-3.50%	0.03%	-0.01%	0.51%
	YOY Revenue ($M)	$ (131)	$ 168	$ (39)	$ 0	$ (0)	$ (1)

Discussions

Since this scenario assumes reduction in O&M, lack of rate increase action will have the following impact:

- $132M O&M cuts in FY15/16 to maintain 1.70x Debt Service Ratio
- Cuts represent 50% of the O&M funded by the base rate (i.e. Infrastructure O&M category on financial plan) which includes mainly Water distribution and operation O&M.
- Cuts are not feasible to implement. It's equivalent to $1.8B of Capital reduction (using $14 Capital spent to $1 revenue requirement ratio), which is 2 times the current proposed Capital budget for FY15/16 of $884M.
- Will have major operational and reliability impacts. The Water System's ability to response to outages and better serve our customers will definitely be impaired.
- Current Water System's O&M expenditures are in line with its peer utilities (median quartile) based on most recent Benchmark Study (Phase I) performed by Corporate Performance Group
- Rate increase in FY16/17 is 24%, which will be a rate shock to the customers.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#46_No Rate Increase for 5 Yrs with No O&M cuts

Assumptions

- Securitization for Conservation, Recycled Water, Water Quality Capital Projects effective July 1, 2015
- No Rate action
- No O&M cuts in FY15/16 and let financial metrics deteriorate

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #46	YOY Rate Incr (%)	-11.19%	1.94%	1.72%	1.82%	-2.94%	-1.73%
	YOY Revenue ($M)	$ (148)	$ (14)	$ (7)	$ 22	$ (16)	$ (33)
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-11.62%	-4.30%	-6.34%	-3.30%	-7.88%	-6.69%
	YOY Revenue ($M)	$ (131)	$ (45)	$ (71)	$ (46)	$ (99)	$ (79)

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Case #46	Debt Service Coverage Ratio	1.11	0.94	0.77	0.68	0.46
	Operating Cash Days	150	150	150	117	54
	Additional Bond Test	1.53	0.97	0.89	0.79	0.73

Discussions

Since this scenario assumes no reduction in O&M, lack of rate increase action will have the following impact:

- Deterioration of Debt Service Ratio from 1.70x to 1.11x for FY15/16 to 0.46x for FY19/20
- Failure of meeting the additonal bond test in FY16/17 (0.97x versus the required 1.25x) and hence cannot issue parity debt. The Department has to issue subordinate debt at much higher interest costs.
- Will be downgraded from AA to A+ or even lower rating due to lack of rate increase for 5 years and results in high interest costs.
- 5-yr average rate decrease of 6.69% or $79M annually

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#47_No Rate Increase for 5 Yr with Securitization with O&M cuts

Assumptions

- Securitization for Conservation, Recycled Water, Water Quality, and Owen Valley Capital Projects effective July 1, 2015
- No Rate action for 5 years
- O&M cuts in FY15/16 to FY19/20 to meet the financial metrics

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #47 O&M		$ 318	$ 287	$ 242	$ 213	$ 213	$ 255
Case #33 O&M		$ 450	$ 461	$ 472	$ 479	$ 489	$ 470
Total	Amount Cut ($M)	$ (132)	$ (174)	$ (230)	$ (266)	$ (277)	$ (216)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #47	YOY Rate Incr (%)	-11.19%	1.94%	1.72%	1.82%	-2.94%	-1.73%
	YOY Revenue ($M)	$ (148)	$ (14)	$ (7)	$ 22	$ (16)	$ (33)
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-11.62%	-4.30%	-6.34%	-3.30%	-7.88%	-6.69%
	YOY Revenue ($M)	$ (131)	$ (45)	$ (71)	$ (46)	$ (99)	$ (79)

Discussions

Since this scenario assumes securitization and O&M cuts, lack of rate increase action for 5 years will have the following impact:

- Additional borrowing of $107M in FY 19/20 to maintain the minimum operating cash of 150 days.
- O&M decrease an average of $216M per year for next 5 years.
- O&M cuts represent 59% ($216M / $272M) of the average Infrastructure O&M (funded by base rate which includes mainly Water distribution and operation O&M) annually.
- Cuts are not feasible and will have major operational and reliability impacts to the Water System.
- Likely to have lay-offs, more failures in the water operations and distribution system and outages, etc.
- 5-yr average rate decrease of 6.69% or $79M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water Case#48_One-notch downgrade in current market condition

Assumptions

- One notch downgrade from AA to AA- rating (+10 bps for fixed, +5 bps for variable)

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
AA- Rating (Case#48)	Fixed	5.45%	5.45%	5.45%	5.45%	5.45%
	Variable	0.64%	1.42%	2.12%	2.12%	2.12%
AA Rating (Case#33)	Fixed	5.35%	5.35%	5.35%	5.35%	5.35%
	Variable	0.59%	1.37%	2.07%	2.07%	2.07%

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year
Case #48	YOY Rate Incr (%)	0.53%	6.12%	8.00%	5.15%	4.96%	4.95%
	YOY Revenue ($M)	$ (16)	$ 30	$ 63	$ 69	$ 83	$ 46
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.09%	-0.12%	-0.05%	0.03%	0.02%	-0.01%
	YOY Revenue ($M)	$ 1	$ (1)	$ (1)	$ 0	$ 0	$ (0)

Case #48 (AA-)	Interest Expense	$ 179	$ 185	$ 193	$ 207	$ 220	$ 197
Case #33 (AA)	Interest Expense	$ 179	$ 186	$ 194	$ 207	$ 221	$ 197
	Variance	$ 0	$ (1)	$ (1)	$ (1)	$ (0)	$ (1)

Discussions

This scenario assumes one-notch downgrade in current market condition. It has the following impact:

- Financial metrics for AA- rating are 135 cash operating days, 1.70x debt service coverage, 68% capitalization.
- Borrowing $28M less in FY 16/17 due to relaxed 135 cash operating days metric.
- Same average 5-year rate increase as in the reference case. No net savings from planning for downgrade.
- Per our financial advisor (PRAG), the planned financial metrics in the reference case are already at the strong AA- even with the additional 15 cash operating days.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water Case#49_One-notch downgrade in worst market condition

Assumptions

- One notch downgrade in high interest market condition (+40 bps for fixed, +25 bps for variable)

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**
AA- Rating (Case#49)	Fixed	5.75%	5.75%	5.75%	5.75%	5.75%
	Variable	0.84%	1.62%	2.32%	2.32%	2.32%
AA Rating (Case#33)	Fixed	5.35%	5.35%	5.35%	5.35%	5.35%
	Variable	0.59%	1.37%	2.07%	2.07%	2.07%

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #49	YOY Rate Incr (%)	0.62%	6.15%	8.07%	5.19%	5.01%	5.01%
	YOY Revenue ($M)	$ (15)	$ 31	$ 64	$ 69	$ 84	$ 47
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.19%	-0.08%	0.02%	0.07%	0.07%	0.05%
	YOY Revenue ($M)	$ 2	$ (1)	$ 0	$ 1	$ 1	$ 1

Case #49 (AA-)	Interest Expense	$ 180	$ 186	$ 194	$ 209	$ 224	$ 199
Case #33 (AA)	Interest Expense	$ 179	$ 186	$ 194	$ 207	$ 221	$ 197
	Variance	$ 1	$ (0)	$ 0	$ 2	$ 3	$ 1

Discussions

This scenario assumes one-notch down grade in the high-interest environment and will have the following impact:

- Higher interest costs of $1M annually for the next five years.
- Borrowing $29M less in FY 16/17 due to relaxed 135 cash operating days metric.
- 5-yr average rate increase of 0.05% or $1M annually.
- Per our financial advisor (PRAG), the planned financial metrics in the reference case are already at the strong AA- even with the additional 15 cash operating days.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#50_No Securitization for 1 Yr with Rate Action

Assumptions

- Delay securitization by 1 year (effective July 1, 2016)

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #50	YOY Rate Incr (%)	4.42%	2.71%	7.85%	5.07%	4.95%	5.00%
	YOY Revenue ($M)	$ 28	$ (7)	$ 62	$ 68	$ 83	$ 47
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	3.99%	-3.53%	-0.20%	-0.05%	0.01%	0.04%
	YOY Revenue ($M)	$ 45	$ (39)	$ (2)	$ (0)	$ 0	$ 1

Case #50	Interest Expense	$ 192	$ 204	$ 211	$ 224	$ 237	$ 214
Case #33	Interest Expense	$ 179	$ 186	$ 194	$ 207	$ 221	$ 197
	Variance	$ 13	$ 18	$ 18	$ 17	$ 16	$ 16

Discussions

Since this scenario assumes no reduction in O&M, no securitization for one year will have the following impact:

- Additional borrowing of $313M in FY 15/16 to maintain the minimum operating cash of 150 days.
- Ratepayers will pay increased interest expense of average $16M annually over the next 5 years.
- Additional rate increase of 3.99% in FY15/16 due to no securitization.
- 5-yr average rate increase of 0.04% or $1M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#51_Normal Conservation and Average Hydrology for 5 Yrs

Assumptions

- Normal conservation with average hydrology for 5 years

		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #51	Sales (MHCF)	239.0	240.1	241.1	242.0	243.5	241.1
	Purchaed Water ($M)	$ 262	$ 225	$ 226	$ 235	$ 212	$ 232
Case #33	Sales (MHCF)	229.9	222.5	217.1	218.0	221.0	221.7
	Purchaed Water ($M)	$ 209	$ 199	$ 189	$ 198	$ 176	$ 194

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #51	YOY Rate Incr (%)	-0.05%	1.86%	5.44%	4.89%	5.00%	3.43%
	YOY Revenue ($M)	$ 23	$ 27	$ 71	$ 68	$ 75	$ 53
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-0.48%	-4.37%	-2.61%	-0.23%	0.06%	-1.53%
	YOY Revenue ($M)	$ 39	$ (5)	$ 7	$ (1)	$ (8)	$ 7

Discussions

Normal conservation and average hydrology will have the following impact:

- Sales are 19 MHCF higher annually over the 5-year period from the normal conservation.
- Purchased water increase on average of $38M annually over the 5-year period due to higher sales and lower conservation than the reference case.
- 5-yr average rate decrease of 1.53%.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#52 (IBIS 11 05 14) ED5 20% Res Only Multi Year Wet

Assumptions

- ED5 Conservation (20% Residential) with Wet Hydrology for 4 years (FY15/16 thru FY 18/19)

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year
Case #52	Cum Rate Incr (%)	-12.27%	-0.49%	9.51%	14.48%	25.35%	5.07%
	Cum Revenue ($M)	$ (160)	$ (64)	$ 16	$ 74	$ 211	$ 42
Reference Case #33	Cum Rate Incr (%)	0.43%	6.70%	15.29%	21.19%	27.18%	5.44%
	Cum Revenue ($M)	$ (17)	$ 15	$ 79	$ 147	$ 230	$ 46
Delta	Cum Rate Incr / (Decr) (%)	-12.70%	-7.19%	-5.78%	-6.72%	-1.83%	-0.37%
	Cum Revenue ($M)	$ (144)	$ (79)	$ (62)	$ (73)	$ (19)	$ (75)

Case #52	Purchased Water ($M)	$ 35	$ 136	$ 159	$ 90	$ 176	$ 119
Case #33	Purchased Water ($M)	$ 209	$ 199	$ 189	$ 198	$ 176	$ 194
	Variance	$ (174)	$ (63)	$ (30)	$ (108)	$ 0	$ (75)

Discussions

ED5 conservation (with 20% reduction goal for Residential only) and wet hydrology for 4 years will have the following impact:

- Purchased Water decrease on average of $75M for 5 years.
- 5-yr average revenue decrease of $4M annually.
- Use Cumulative Rate Increase (%) data for this scenario only since YOY rate increase (%) lacking the compounding effect for this case will show slight increase, which is counter intuitive with the revenue decrease.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#53 (IBIS 11 05 14) ED5 20% Res Only Multi Year Dry

Assumptions

- ED5 Conservation (20% Residential) with Dry Hydrology for 4 years (FY15/16 thru FY 18/19)

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #53	YOY Rate Incr (%)	7.06%	9.41%	7.43%	2.31%	0.51%	5.34%
	YOY Revenue ($M)	$ 58	$ 71	$ 62	$ 36	$ 28	$ 51
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	6.63%	3.17%	-0.62%	-2.81%	-4.43%	0.39%
	YOY Revenue ($M)	$ 75	$ 39	$ (2)	$ (32)	$ (55)	$ 5

Case #53	Purchased Water ($M)	$ 268	$ 328	$ 302	$ 293	$ 176	$ 273
Case #33	Purchased Water ($M)	$ 209	$ 199	$ 189	$ 198	$ 176	$ 194
	Variance	$ 59	$ 129	$ 112	$ 95	$ 0	$ 79

Discussions

ED5 conservation (with 20% reduction goal for Residential only) and dry hydrology for 4 years will have the following impact:

- Additional borrowing of $65M in FY 16/17 to maintain the minimum operating cash of 150 days.
- Purchased Water to increase 5-yr average of $79M per year.
- 5-yr average rate icnrease of 0.4% or $5M annually for the next 5 years.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#54_ED5-Res Reduction by 20% Dry Hydrology for FY1516

Assumptions

- ED5 Conservation (20% Residential) with dry hydrology for FY15/16 only

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #54	YOY Rate Incr (%)	6.59%	1.80%	6.72%	4.83%	4.81%	4.95%
	YOY Revenue ($M)	$ 53	$ (18)	$ 49	$ 65	$ 83	$ 46
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	6.15%	-4.43%	-1.33%	-0.29%	-0.13%	-0.01%
	YOY Revenue ($M)	$ 69	$ (50)	$ (15)	$ (4)	$ 1	$ 0

Case #54	Purchased Water ($M)	$ 301	$ 199	$ 190	$ 198	$ 176	$ 213
Case #33	Purchased Water ($M)	$ 209	$ 199	$ 189	$ 198	$ 176	$ 194
	Variance	$ 92	$ 1	$ 1	$ (0)	$ 0	$ 19

Discussions

ED5 conservation (with 20% reduction goal for Residential only) and dry hydrology for FY15/16 will have the following impact:

- Additional borrowing of $23M in FY15/16 to maintain the minimum operating cash of 150 days.
- Purchased water to increase $92M for FY15/16.
- Rate increase by 6.15% in FY15/16, however offset by 4.4% decrease in FY16/17.
- Average 5-yr rate increase is the same due to the timing of purchased water costs of when they're billed.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#55_ED5-Res Reduction by 20% Dry Hydrology for FY1516_&_FY1617

Assumptions

- ED5 conservation (20% Residential only) with dry hydrology for FY15/16 & FY16/17

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #55	YOY Rate Incr (%)	9.00%	5.66%	2.32%	3.48%	4.54%	5.00%
	YOY Revenue ($M)	$ 80	$ 28	$ (2)	$ 49	$ 80	$ 47
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	8.57%	-0.58%	-5.73%	-1.64%	-0.40%	0.04%
	YOY Revenue ($M)	$ 97	$ (4)	$ (66)	$ (20)	$ (3)	$ 1

Case #55	Purchased Water ($M)	$ 299	$ 324	$ 190	$ 198	$ 176	$ 237
Case #33	Purchased Water ($M)	$ 209	$ 199	$ 189	$ 198	$ 176	$ 194
	Variance	$ 90	$ 125	$ 1	$ (0)	$ 0	$ 43

Discussions

ED5 conservation (with 20% reduction goal for Residential only) and dry hydrology for FY16 and FY17 will have the following impact:

- Purchased Water to increase $90M in FY15/16 and $125M in FY16/17.
- Additional borrowing of $89M in FY16/17 to maintain the minimum operating cash of 150 days.
- Additional rate increase of 8.6% in FY15/16, which is higher than 6.2% shown in case #54 (dry year for FY15/16 only), is due to higher purchased water (12-month look ahead) for FY16/17.
- Average 5-yr rate increase is the same as reference case and 1 dry year only scenario since purchased water costs are pass-thru costs and it's about the timing of these costs being billed.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#56_6% Equity for WACC Return on Investment

Assumptions

- 6% Equity on Weighted Average Cost of Capital

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #56	YOY Rate Incr (%)	14.53%	7.07%	8.31%	4.39%	6.62%	8.18%
	YOY Revenue ($M)	$ 143	$ 47	$ 76	$ 68	$ 120	$ 91
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	14.10%	0.83%	0.25%	-0.73%	1.68%	3.23%
	YOY Revenue ($M)	$ 159	$ 15	$ 13	$ 0	$ 37	$ 45

Case #56	Interest Exp ($M)	$ 179	$ 179	$ 175	$ 172	$ 170	$ 175
Case #33	Interest Exp ($M)	$ 179	$ 186	$ 194	$ 207	$ 221	$ 197
	Variance	$ -	$ (7)	$ (19)	$ (36)	$ (51)	$ (22)

Case #56	Debt ($M)	$ 112	$ 56	$ 36	$ 72	$ 125	$ 80
Case #33	Debt ($M)	$ 112	$ 233	$ 259	$ 416	$ 395	$ 283
	Variance	$ -	$ (176)	$ (222)	$ (344)	$ (270)	$ (203)

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Case #56	Debt Service Coverage (DSC) Ratio	2.41	2.45	2.53	2.71	2.91
	Additional Bond Test	1.55	2.09	2.32	2.53	2.71
	Capitalization Ratio	59%	57%	54%	52%	49%

Discussions

Using WACC methodology (6% equity) to calculate the revenue requirement will result in the following:

- 5-yr average rate increase of 3.2% or $45M annually.
- Interest Expense decreases an average of $22M in 5 years.
- Debt borrowing decrease on average of $203M in FY15/16 to FY19/20 to maintain the minimum operating cash of 150 days.
- Much stronger metrics compared to the planned metrics in the reference case.
- DSR ratio is above 2.4, capitalization ratio is dropping from 59% in FY15/16 to 49% in FY19/20
- Possibly ensures a strong AA rating.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#57 labor cut to FY12/13 level for 5 years starting FY16

Assumptions

- Labor cut to FY12/13 level for 5 years starting in FY15/16

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Infrastructure O&M	Amount ($M)	$ 4	$ 3	$ (6)	$ (12)	$ (15)	$ (5)
Infrastructure CAPEX	Amount ($M)	$ 3	$ 2	$ (4)	$ (8)	$ (10)	$ (3)
Total	Amount ($M)	$ 7	$ 5	$ (10)	$ (20)	$ (25)	$ (9)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #57	YOY Rate Incr (%)	0.78%	6.16%	7.25%	5.16%	4.94%	4.86%
	YOY Revenue ($M)	$ (13)	$ 31	$ 55	$ 69	$ 83	$ 45
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.35%	-0.08%	-0.81%	0.04%	0.00%	-0.10%
	YOY Revenue ($M)	$ 4	$ (1)	$ (9)	$ 0	$ (0)	$ (1)

Case #57	Debt ($M)	$ 112	$ 239	$ 250	$ 398	$ 374	$ 274
Case #33	Debt ($M)	$ 112	$ 233	$ 259	$ 416	$ 395	$ 283
	Variance	$ -	$ 6	$ (9)	$ (18)	$ (21)	$ (8)

Discussions

Cutting labor to FY12/13 actual level will have the following impact:

- Infrastructure Capital decreases an average of $3M per year for next 5 years.
- Infrastructure O&M (which includes mainly Water distribution and operation O&M) decreases an average of $5M per year for next 5 years.
-
- 5-yr average rate decreases of 0.10% or $1M annually.
- Will have some operational impact and meeting infrastructure program goals.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#58 Cut health care costs to FY12/13 level for 5 years starting FY16

Assumptions

- Cut healthcare costs to FY12/13 level starting in FY15/16 and forward:

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Infrastructure O&M	Amount ($M)	$ (9)	$ (11)	$ (17)	$ (22)	$ (24)	$ (17)
Infrastructure CAPEX	Amount ($M)	$ (7)	$ (8)	$ (11)	$ (15)	$ (17)	$ (12)
Total	Amount ($M)	$ (15)	$ (20)	$ (28)	$ (37)	$ (41)	$ (28)

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #58	YOY Rate Incr (%)	-0.31%	5.89%	7.50%	5.22%	5.01%	4.66%
	YOY Revenue ($M)	$ (25)	$ 28	$ 57	$ 69	$ 83	$ 42
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-0.75%	-0.35%	-0.56%	0.10%	0.07%	-0.30%
	YOY Revenue ($M)	$ (8)	$ (4)	$ (7)	$ 0	$ (0)	$ (4)

Case #58	Debt ($M)	$ 112	$ 212	$ 246	$ 393	$ 369	$ 266
Case #33	Debt ($M)	$ 112	$ 233	$ 259	$ 416	$ 395	$ 283
	Variance	$ -	$ (21)	$ (13)	$ (22)	$ (26)	$ (17)

Discussions

Healthcare costs lowered to FY12/13 level will have the following impact:

- Meet and Confer Issue for next MOU negotiation if healthcare benefits are to be changed.
- Cut can only be implemented from Oct. 1, 2017 forward, which is the effective date of next MOU (if any).
- Health care industry trend continues to show higher health care costs in the future.
- Infrastructure Capital decreases an average of $12M per year for next 5 years.
- Infrastructure O&M (which includes mainly Water distribution and operation O&M) decreases an average of $17M per year for next 5 years.
- Decrease in average borrowing of $17M per year for next 5 years.
- 5-yr average rate decrease of 0.30% or $4M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#59 cut pension costs to FY12/13 level for 5 years starting FY16

Assumptions

- Cut Pension costs to FY12/13 level for 5 years staring in FY15/16. Since projected costs are lower than FY12/13 level, this scenario results in addition of pension costs to the plan.

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Infrastructure O&M	Amount ($M)	$ 2	$ 5	$ 7	$ 11	$ 16	$ 8
Infrastructure CAPEX	Amount ($M)	$ 2	$ 4	$ 5	$ 7	$ 11	$ 6
Total	Amount ($M)	$ 4	$ 9	$ 12	$ 17	$ 27	$ 14

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year**
Case #59	YOY Rate Incr (%)	0.65%	6.54%	8.25%	5.11%	4.90%	5.09%
	YOY Revenue ($M)	$ (14)	$ 35	$ 66	$ 69	$ 83	$ 48
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.21%	0.30%	0.19%	-0.01%	-0.04%	0.13%
	YOY Revenue ($M)	$ 2	$ 3	$ 3	$ 0	$ 0	$ 2

Case #59	Debt ($M)	$ 112	$ 241	$ 265	$ 427	$ 417	$ 292
Case #33	Debt ($M)	$ 112	$ 233	$ 259	$ 416	$ 395	$ 283
	Variance	$ -	$ 8	$ 6	$ 11	$ 22	$ 10

Discussions

Increasing pension costs to FY12/13 level will have the following impact:

- Meet and Confer Issue for next MOU negotiation if pension benefits are to be changed.
- Cut can only be implemented from Oct. 1, 2017 forward, which is the effective date of next MOU (if any)
- Changes in pension plan also requires approval of the Retirement Board.
- Current pension costs reflect Tier 2 savings
- Infrastructure O&M (which includes mainly Water distribution and operation O&M) increase an average of $8M per year for FY15/16 to FY19/20.
- Infrastructure Capital increase an average of $6M per year for FY15/16 to FY19/20.
- Increase in average borrowing of $10M per year for next 5 years.
- 5-yr average rate increase of 0.13% or $2M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#60_Cut Capex to 75% of Budget and NO Securitization

Assumptions

- No Securitization for Conservation, Recycled Water, Water Quality, Owen Valley Capital Projects for 5 years
- Cut Capital Expenditure to 75% of budget to meet financial metrics

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Reduction	Amount ($M)	$ (221)	$ (236)	$ (224)	$ (260)	$ (300)	$ (248)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #60	YOY Rate Incr (%)	-1.23%	4.64%	7.90%	3.62%	6.20%	4.23%
	YOY Revenue ($M)	$ (36)	$ 14	$ 60	$ 48	$ 95	$ 36
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-1.66%	-1.60%	-0.15%	-1.50%	1.26%	-0.73%
	YOY Revenue ($M)	$ (19)	$ (18)	$ (4)	$ (20)	$ 12	$ (10)

Case #60	Borrowing ($M)	$ 257	$ 514	$ 450	$ 554	$ 595	$ 474
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (264)	$ (193)	$ (236)	$ (270)	$ (342)	$ (261)

Case #60	Debt Service ($M)	$ 247	$ 282	$ 318	$ 347	$ 377	$ 314
Case #33	Debt Service (including securitization) ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (22)	$ (42)	$ (57)	$ (76)	$ (101)	$ (60)

Discussions

Cutting capital expenditure to 75% of budget and no securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $248M per year.
- Decrease in average borrowing of $261M and debt service (including securitization) of $60M per year for next 5 years.
- 5-yr average rate decrease of 0.73% or $10M annually.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from commercial customers for business losses.
- Generally speaking, reduction in the capital spending in one year will cause increased capital spending in the next year due to reliability issues.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#61_Cut Capex to 75% of Budget with Securitization

Assumptions

- Securitization for Conservation, Recycled Water, Water Quality, Owen Valley Capital Projects effective July 1, 2015
- Cut Capital Expenditure to 75% of budget

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Reduction	Amount ($M)	$ (221)	$ (236)	$ (224)	$ (260)	$ (300)	$ (248)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year**
Case #61	YOY Rate Incr (%)	-0.26%	4.53%	5.93%	3.63%	3.49%	3.46%
	YOY Revenue ($M)	$ (25)	$ 13	$ 39	$ 48	$ 60	$ 27
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-0.70%	-1.71%	-2.12%	-1.49%	-1.45%	-1.50%
	YOY Revenue ($M)	$ (8)	$ (19)	$ (25)	$ (21)	$ (23)	$ (19)

Case #61	DWP Borrowing (including securitization) ($M)	$ 391	$ 398	$ 427	$ 566	$ 639	$ 484
Case #33	DWP Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (130)	$ (309)	$ (259)	$ (258)	$ (297)	$ (251)

Case #61	Debt Service including securitized debt ($M)	$ 261	$ 301	$ 336	$ 369	$ 407	$ 335
Case #33	Debt Service including securitized debt ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (9)	$ (23)	$ (39)	$ (54)	$ (71)	$ (39)

0

Discussions

Cutting capital expenditure to 75% of budget with securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $248M per year.
- Decrease in average borrowing (including securitization) of $251M per year for next 5 years.
- Decrease in average debt service (including securitization) of $39M per year for next 5 years.
- 5-yr average rate decrease of 1.50% or $19M annually.
- Securitization savings between case #60 and #61 (Reduce to 75% capital budget) is roughly in average of 0.8% or or $9M annually over the next 5 years.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from customers.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#62_Cut Capex to 80% of Budget and NO Securitization

Assumptions

- No Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects
- Cut Capital Expenditure to 80% of budget

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Capital Reduction	Amount ($M)	$ (177)	$ (189)	$ (179)	$ (208)	$ (240)	$ (199)

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year
Case #62	YOY Rate Incr (%)	-0.65%	4.57%	8.32%	3.90%	6.28%	4.48%
	YOY Revenue ($M)	$ (29)	$ 13	$ 65	$ 52	$ 97	$ 40
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-1.08%	-1.67%	0.26%	-1.22%	1.33%	-0.47%
	YOY Revenue ($M)	$ (12)	$ (18)	$ 1	$ (16)	$ 14	$ (6)
Case #62	Borrowing ($M)	$ 297	$ 560	$ 491	$ 601	$ 651	$ 520
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (224)	$ (148)	$ (195)	$ (224)	$ (286)	$ (215)
Case #62	Debt Service ($M)	$ 249	$ 286	$ 324	$ 355	$ 389	$ 320
Case #33	Debt Service (including securitization) ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (21)	$ (38)	$ (52)	$ (68)	$ (89)	$ (54)

Discussions

Cutting capital expenditure to 80% of budget and no securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $199M per year.
- Decrease in average borrowing of $215M and debt service (including securitization) of $54M per year for next 5 years.
- 5-yr average rate decrease of 0.47% or $6M annually.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from commercial customers for business losses.
- Generally speaking, reduction in the capital spending in one year will cause increased capital spending in the next year due to reliability issues.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#63_Cut Capex to 80% of Budget with Securitization

Assumptions

- Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects effective July 1, 2015
- Cut Capital Expenditure to 80% of budget starting FY 15/16

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Reduction	Amount ($M)	$ (177)	$ (189)	$ (179)	$ (208)	$ (240)	$ (199)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #63	YOY Rate Incr (%)	-0.12%	4.78%	6.39%	4.05%	3.78%	3.78%
	YOY Revenue ($M)	$ (23)	$ 16	$ 44	$ 53	$ 65	$ 31
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-0.56%	-1.46%	-1.66%	-1.07%	-1.16%	-1.18%
	YOY Revenue ($M)	$ (6)	$ (16)	$ (20)	$ (15)	$ (18)	$ (15)

Case #63	Borrowing (including securitization) ($M)	$ 417	$ 437	$ 503	$ 617	$ 698	$ 534
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (104)	$ (271)	$ (183)	$ (207)	$ (239)	$ (201)

Case #63	Debt Service including securitizatized debt ($M)	$ 263	$ 305	$ 344	$ 379	$ 421	$ 342
Case #33	Debt Service including securitizatized debt ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (7)	$ (19)	$ (32)	$ (43)	$ (57)	$ (32)

Discussions

Cutting capital expenditure to 80% of budget with securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $199M per year.
- Decrease in average borrowing (including securitization) of $201M and debt service (including securitization) of $32M per year for next 5 years.
- 5-yr average rate decrease of 1.18% or $15M annually.
- Securitization savings between case #62 and #63 (Reduce to 80% capital budget) is roughly in average of 0.7% or or $9M annually over the next 5 years.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from commercial customers for business losses.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#64_Cut Capex to 85% of Budget NO Securitization

Assumptions

- No Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects
- Cut Capital Expenditure to 85% of budget

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Reduction	Amount ($M)	$ (133)	$ (141)	$ (134)	$ (156)	$ (180)	$ (149)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year**
Case #64	YOY Rate Incr (%)	0.63%	3.72%	8.69%	4.18%	6.36%	4.72%
	YOY Revenue ($M)	$ (15)	$ 4	$ 69	$ 56	$ 99	$ 43
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.20%	-2.52%	0.63%	-0.94%	1.42%	-0.24%
	YOY Revenue ($M)	$ 2	$ (28)	$ 6	$ (13)	$ 16	$ (3)

Case #64	Borrowing ($M)	$ 329	$ 604	$ 532	$ 648	$ 707	$ 564
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (192)	$ (103)	$ (154)	$ (176)	$ (230)	$ (171)

Case #64	Debt Service ($M)	$ 250	$ 289	$ 329	$ 363	$ 400	$ 326
Case #33	Debt Service (including securitization) ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (20)	$ (35)	$ (46)	$ (60)	$ (79)	$ (48)

Discussions

Cutting capital expenditure to 85% of budget and no securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $149M per year.
- Decrease in average borrowing of $171M and debt service (including securitization) of $48M per year for next 5 years.
- 5-yr average rate decrease of 0.24% or $3M annually.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from commercial customers for business losses.
- Generally speaking, reduction in the capital spending in one year will cause increased capital spending in the next year due to reliability issues.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#65_Cut Capex to 85% of Budget with Securitization

Assumptions

- Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects effective July 1, 2015
- Cut Capital Expenditure to 85% of budget starting FY 15/16

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Reduction	Amount ($M)	$ (133)	$ (141)	$ (134)	$ (156)	$ (180)	$ (149)

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #65	YOY Rate Incr (%)	0.02%	5.15%	6.80%	4.36%	4.05%	4.08%
	YOY Revenue ($M)	$ (21)	$ 20	$ 49	$ 58	$ 69	$ 35
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	-0.41%	-1.09%	-1.25%	-0.76%	-0.89%	-0.88%
	YOY Revenue ($M)	$ (5)	$ (12)	$ (15)	$ (11)	$ (14)	$ (11)

Case #65	Borrowing (including securitization) ($M)	$ 443	$ 504	$ 549	$ 668	$ 757	$ 584
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (78)	$ (203)	$ (137)	$ (156)	$ (179)	$ (151)

Case #65	Debt Service including securitizatized debt ($M)	$ 265	$ 309	$ 352	$ 390	$ 435	$ 350
Case #33	Debt Service including securitizatized debt ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (5)	$ (14)	$ (24)	$ (32)	$ (43)	$ (24)

Discussions

Cutting capital expenditure to 80% of budget with securitization will have the following impact:

- Capital expenditure decreases a 5-yr average of $149M per year.
- Decrease in average borrowing (including securitization) of $151M and debt service (including securitization) of $24M per year for next 5 years.
- 5-yr average rate decrease of 0.88% or $11M annually.
- Securitization savings between case #64 and #65 (Reduce to 85% capital budget) is roughly in average of 0.6% or or $8M annually over the next 5 years.
- Major impact in the planned capital programs, including not meeting the infrastructure program goals and mandates.
- Causes more system failures (i.e. Sunset mainline breakage) and service interruptions, resulting in lawsuits from commercial customers for business losses.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#66_Increase Capex to 105% of Budget NO Securitization

Assumptions

- No Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects
- Increase Capital Expenditure to 105% of budget

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Capital Increase	Amount ($M)	$ 44	$ 47	$ 45	$ 52	$ 60	$ 50

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #66	YOY Rate Incr (%)	5.70%	0.56%	10.21%	5.19%	6.64%	5.66%
	YOY Revenue ($M)	$ 43	$ (32)	$ 88	$ 70	$ 107	$ 55
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	5.27%	-5.68%	2.16%	0.07%	1.70%	0.70%
	YOY Revenue ($M)	$ 60	$ (64)	$ 24	$ 2	$ 24	$ 9

Case #66	Borrowing ($M)	$ 457	$ 783	$ 696	$ 837	$ 934	$ 741
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (64)	$ 75	$ 10	$ 13	$ (3)	$ 6

Case #66	Debt Service ($M)	$ 254	$ 301	$ 351	$ 394	$ 443	$ 349
Case #33	Debt Service (including securitization) ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (16)	$ (23)	$ (25)	$ (29)	$ (35)	$ (25)

Discussions

Increasing capital expenditure to 105% of budget and no securitization will have the following impact:

- Capital expenditure increases a 5-yr average of $50M per year.
- Increase in average borrowing of $6M and debt service Decrease (including securitization) of $25M per year for next 5 years.
- 5-yr average rate increase of 0.7% or $9M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#67_Increase Capex to 105% of Budget with Securitization

Assumptions

- Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects effective July 1, 2015
- Increase Capital Expenditure to 105% of budget and meet financial matrics

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Increase	Amount ($M)	$ 44	$ 47	$ 45	$ 52	$ 60	$ 50

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #67	YOY Rate Incr (%)	0.58%	6.70%	8.36%	5.35%	5.11%	5.22%
	YOY Revenue ($M)	$ (15)	$ 37	$ 67	$ 72	$ 86	$ 49
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.14%	0.47%	0.30%	0.23%	0.17%	0.26%
	YOY Revenue ($M)	$ 2	$ 5	$ 4	$ 3	$ 3	$ 3

Case #67	Borrowing (including securitization) ($M)	$ 547	$ 774	$ 731	$ 876	$ 998	$ 785
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ 26	$ 67	$ 46	$ 52	$ 61	$ 50

Case #67	Debt Service including securitizatized debt ($M)	$ 272	$ 328	$ 383	$ 433	$ 492	$ 382
Case #33	Debt Service including securitizatized debt ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ 2	$ 5	$ 8	$ 11	$ 14	$ 8

Discussions

Increasing capital expenditure to 105% of budget with securitization will have the following impact:

- Capital expenditure increases a 5-yr average of $50M per year.
- Increase in average borrowing of $50M and debt service (including securitization) of $8M annually for next 5 years.
- 5-yr average rate increase of 0.26% or $3M annually.
- Securitization savings between case #66 and #67 (Increase to 105% capital budget) is roughly in average of 0.4% or or $6M annually over the next 5 years.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#68_Increase Capex to 110% of Budget NO Securitization

Assumptions

- No Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects
- Increase Capital Expenditure to 110% of budget

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Capital Increase	Amount ($M)	$ 88	$ 94	$ 90	$ 104	$ 120	$ 99

Results

Water		FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	5-Year Average
Case #68	YOY Rate Incr (%)	6.97%	0.30%	10.03%	5.42%	6.69%	5.88%
	YOY Revenue ($M)	$ 57	$ (36)	$ 87	$ 74	$ 109	$ 58
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	6.54%	-5.94%	1.98%	0.30%	1.75%	0.93%
	YOY Revenue ($M)	$ 74	$ (67)	$ 23	$ 5	$ 26	$ 12

Case #68	Borrowing ($M)	$ 489	$ 822	$ 737	$ 885	$ 992	$ 785
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ (31)	$ 115	$ 51	$ 60	$ 55	$ 50

Case #68	Debt Service ($M)	$ 255	$ 304	$ 356	$ 401	$ 454	$ 354
Case #33	Debt Service (including securitization) ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ (15)	$ (20)	$ (20)	$ (21)	$ (24)	$ (20)

Discussions

Increasing capital expenditure to 110% of budget and no securitization will have the following impact:

- Capital expenditure increases a 5-yr average of $99M per year.
- Increase in average borrowing of $32M annually for next 5 years.
- Decrease in average debt service (including securitization) of $20M per year for next 5 years.
- 5-yr average rate increase of 0.93% or $12M annually.

CITY OF LOS ANGELES
Los Angeles Department of Water and Power
RPA Sensitivity Case Summary

Water FY16 Case#69_Increase Capex to 110% of Budget with Securitization

Assumptions

- Securitization for Local Water Supply, Water Quality, and Owen Valley Capital Projects effective July 1, 2015
- Increase Capital Expenditure to 110% of budget and meet financial matrics

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Capital Increase	Amount ($M)	$ 88	$ 94	$ 90	$ 104	$ 120	$ 99

Results

Water		**FY 15/16**	**FY 16/17**	**FY 17/18**	**FY 18/19**	**FY 19/20**	**5-Year Average**
Case #69	YOY Rate Incr (%)	0.73%	7.06%	8.76%	5.55%	5.37%	5.50%
	YOY Revenue ($M)	$ (13)	$ 41	$ 72	$ 75	$ 91	$ 53
Reference Case #33	YOY Rate Incr (%)	0.43%	6.24%	8.05%	5.12%	4.94%	4.96%
	YOY Revenue ($M)	$ (17)	$ 32	$ 64	$ 68	$ 83	$ 46
Delta	YOY Rate Incr / (Decr) (%)	0.30%	0.83%	0.71%	0.43%	0.43%	0.54%
	YOY Revenue ($M)	$ 3	$ 9	$ 9	$ 7	$ 8	$ 7

Case #67	Borrowing (including securitization) ($M)	$ 573	$ 841	$ 777	$ 929	$ 1,058	$ 836
Case #33	Borrowing (including securitization) ($M)	$ 521	$ 708	$ 686	$ 824	$ 937	$ 735
	Variance	$ 52	$ 134	$ 91	$ 104	$ 122	$ 101

Case #67	Debt Service including securitizatized debt ($M)	$ 273	$ 333	$ 391	$ 444	$ 507	$ 390
Case #33	Debt Service including securitizatized debt ($M)	$ 270	$ 324	$ 375	$ 423	$ 478	$ 374
	Variance	$ 3	$ 9	$ 16	$ 21	$ 29	$ 16

Discussions

Increasing capital expenditure to 110% of budget with securitization will have the following impact:

- Capital expenditure increases a 5-yr average of $99M per year.
- Increase in average borrowing of $101M per year for next 5 years.
- Debt Service increases in average by $16M per year for the next 5 years.
- 5-yr average rate increase of 0.54% or $7M annually.
- Securitization savings between case #68 and #69 (Increase to 110% capital budget) is roughly in average of 0.4% or or $5M annually over the next 5 years.

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Water System Financial Plan Summary
($ in millions)

Water FY16 Case#44 No Rate Increase for 1 Yr with Securitization No O&M Cuts

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	1.2%	18.5%	0.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-12.3%	-3.8%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.4%	-0.8%	-0.3%	-0.5%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	4.2%	0.2%	0.9%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	2.5%	3.2%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					0.0%	0.8%	-0.5%	-0.1%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-4.5%	-3.2%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.7%	-0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.6%	-0.3%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	3.3%	2.5%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-11.2%	24.8%	4.8%	5.1%	4.9%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	1.1%	28.6%	5.4%	5.4%	5.9%	5.9%
3 & 5 Year Average (starting FY16)							6.1%		5.7%	
3 & 5 Year Avg excluding PW (starting FY16)							11.7%		9.3%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	6.7	168.1	-9.5	2.2	7.2	-0.5
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-147.9	-47.1	-12.8	-2.1	-10.6	-1.8
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-39.8	-9.5	-4.2	-5.5	-1.4	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	45.5	-3.6	6.6	8.5	2.8	2.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	100.2	27.7	39.9	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)					0.0	8.0	-6.0	-1.5	-0.4	-0.1
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-52.9	-31.9	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	6.8	-3.7	-1.3	0.6	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	6.4	-3.9	-1.0	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-148.2	207.9	27.8	68.7	83.0	79.7

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	358.4	526.5	517.1	519.2	526.4	526.0
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	263.3	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	30.7	28.3	27.9	18.8	18.7	17.9
d . Water Infrastructure			0.0	0.0	0.0	97.8	115.2	175.8	205.7	284.1
e . Expense Stabilization Adjustment Factor					0.0	-39.3	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	39.8	4.3	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	168.6	171.8	181.0	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	-39.4	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	32.5	71.1	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	27.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-9.8	-11.5	-11.5	-12.0	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**924.2**	**1,100.0**	**1,142.8**	**1,215.6**	**1,231.2**	**1,313.4**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**951.1**	**1,158.2**	**1,229.1**	**1,328.7**	**1,380.0**	**1,516.0**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.25**	**5.19**	**5.31**	**5.48**	**5.62**	**5.74**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.37**	**5.45**	**5.71**	**6.00**	**6.29**	**6.66**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	55.0	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	37.9	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	255.5	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	182.8	191.4	198.9	212.0	225.1	250.2
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**-57.6**	**98.8**	**114.9**	**140.1**	**133.0**	**158.0**
Net Income with Securitization			**90.7**	**106.5**	**-49.4**	**116.4**	**141.1**	**174.5**	**178.2**	**219.6**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	315.8	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	42.6	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					0.0	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	383.5	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**202**	**241**	**252**	**412**	**391**	**519**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**246**	**271**	**294**	**314**	**335**	**360**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**110**	**107**	**105**	**103**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.11**	**1.69**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.34**	**1.90**	**1.74**	**1.71**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.62**	**0.62**	**0.62**	**0.62**	**0.62**
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.53**	**1.01**	**1.58**	**1.63**	**1.72**	**1.70**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)					4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)					10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)			12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *								
a . Base Rates	363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor			-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**								
a. Water Quality	42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**								
a. Water Conservation	14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley			28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**2.08**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max)								
Debt Service Coverage	**1.49**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-7.6%	13.7%	-3.0%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.8%	-1.2%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.3%	-0.4%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	1.7%	-2.0%	0.2%	0.1%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-9.2%	10.2%	0.0%	0.0%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			-1.1%	1.6%	-0.3%	-0.1%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	2.8%	-3.2%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.6%	-0.5%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.4%	-0.1%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-11.6%	18.5%	-3.2%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-12.4%	19.7%	-3.2%	0.0%	0.0%	-0.1%
3 & 5 Year Average (starting FY16)					1.2%	0.0%	0.7%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					1.4%	0.0%	0.8%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-85.9	130.0	-35.3	0.0	0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	8.8	-8.4	-0.4	0.0	-0.2	0.2
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	3.5	-3.2	-0.5	0.1	0.1	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	18.8	-22.9	3.1	0.8	0.2	-0.1
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-103.6	102.1	1.3	0.4	0.1	0.1
Expense Stabilitzation Revenue Incr ($M)			-12.1	17.1	-3.6	-1.0	-0.2	-0.1
Security Factor/HCF Inc %	0.0	0.0	31.9	-31.9	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	6.2	-5.9	-0.2	-0.1	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.9	-0.8	-0.1	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-131.4	176.2	-35.8	0.3	0.0	0.0

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-85.9	44.2	8.9	8.9	9.0	9.0
b . Purchased Water, In-City Pumping	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	3.6	0.4	-0.3	-0.1	-0.1	-0.1
d . Water Infrastructure	0.0	0.0	-105.7	0.0	0.3	0.3	0.3	0.3
e . Expense Stabilization Adjustment Factor	0.0	0.0	33.8	-39.3	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	27.6	4.3	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	17.8	-4.4	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	-39.4	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	-32.7	39.4	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	1.3	-0.4	-0.1	-0.1	-0.1
Total Operating Revenue before Securitization	**0.0**	**0.0**	**-131.0**	**6.5**	**8.4**	**9.0**	**9.1**	**9.2**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-131.0**	**6.5**	**8.4**	**9.0**	**9.1**	**9.2**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**-0.57**	**0.21**	**0.04**	**0.04**	**0.04**	**0.04**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.57**	**0.20**	**0.04**	**0.04**	**0.04**	**0.04**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	-29.4	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	37.9	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	-8.5	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	3.7	5.2	5.0	4.7	4.5	4.2
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**-134.7**	**1.3**	**3.4**	**4.3**	**4.6**	**5.0**
Net Income with Securitization	**0.0**	**0.0**	**-134.7**	**1.3**	**3.4**	**4.3**	**4.6**	**5.0**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	-34.2	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	42.6	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-28.3	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**90**	**8**	**-7**	**-4**	**-4**	**-4**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**3**	**5**	**5**	**5**	**5**	**5**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**0**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**-18**	**-1**	**-1**	**0**	**-1**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**(0.59)**	**(0.01)**	**(0.00)**	**0.00**	**0.00**	**(0.00)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**(0.60)**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**
19. **Addtn'l Bond Test Ratio:** (prev / max)								
Debt Service Coverage	**0.00**	**0.00**	**(0.03)**	**(0.47)**	**(0.00)**	**0.00**	**0.00**	**0.00**

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#45 No Rate Increase for 1 Yr with Securitization with O&M Cuts

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	1.2%	17.6%	0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-12.3%	-3.8%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.4%	-0.8%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	4.2%	0.2%	0.9%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	10.3%	2.4%	3.2%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					0.0%	0.8%	-0.5%	-0.1%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-4.5%	-3.2%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.7%	-0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.6%	-0.3%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	3.3%	2.5%	2.2%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-11.2%	23.9%	4.6%	5.2%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	1.1%	27.7%	5.1%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)							5.7%		5.5%	
3 & 5 Year Avg excluding PW (starting FY16)							11.3%		9.1%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	6.7	159.7	-10.8	2.1	7.0	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-147.9	-47.1	-12.8	-2.1	-10.6	-1.8
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-39.8	-9.5	-4.1	-5.5	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	45.5	-3.6	6.6	8.5	2.8	2.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	100.2	25.6	39.9	50.0	25.6
Expense Stabilitzation Revenue Incr ($M)					0.0	8.0	-6.0	-1.5	-0.4	-0.1
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-52.9	-31.9	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	6.8	-3.7	-1.3	0.6	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	6.4	-3.9	-1.0	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-148.2	199.5	24.5	68.7	82.6	79.5

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	358.4	518.1	507.3	509.5	516.5	516.1
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	263.3	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	30.7	28.3	27.9	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	0.0	97.8	113.0	173.6	203.5	281.5
e . Expense Stabilization Adjustment Factor					0.0	-39.3	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	39.8	4.3	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	168.6	171.8	181.0	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	-39.4	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	32.5	71.1	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	27.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-9.8	-11.5	-11.4	-11.8	-12.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**924.2**	**1,091.6**	**1,131.1**	**1,203.8**	**1,219.3**	**1,301.1**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**951.1**	**1,149.7**	**1,217.3**	**1,317.0**	**1,368.1**	**1,503.7**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.25**	**5.15**	**5.26**	**5.43**	**5.57**	**5.69**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.37**	**5.41**	**5.66**	**5.95**	**6.24**	**6.60**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	55.0	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	37.9	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	123.5	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**318.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	20.0	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	184.8	192.0	205.3	218.7	244.0
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**76.9**	**96.9**	**110.1**	**135.0**	**127.5**	**151.8**
Net Income with Securitization			**90.7**	**106.5**	**85.1**	**114.6**	**136.3**	**169.4**	**172.7**	**213.5**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	315.8	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	42.6	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					0.0	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	383.5	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**197**	**256**	**416**	**395**	**524**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**264**	**287**	**307**	**327**	**352**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**322**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**216**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**150**	**108**	**105**	**104**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.85**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.93**	**1.92**	**1.74**	**1.71**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.60**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.73**	**1.70**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**-132.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)					4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)					10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)			12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *								
a . Base Rates	363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor			-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**								
a. Water Quality	42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**								
a. Water Conservation	14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley			28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**2.08**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-7.6%	12.9%	-3.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.8%	-1.2%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.3%	-0.4%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	1.7%	-2.0%	0.2%	0.1%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-9.2%	10.2%	-0.2%	0.0%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			-1.1%	1.6%	-0.3%	-0.1%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	2.8%	-3.2%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.6%	-0.5%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.4%	-0.1%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-11.6%	17.6%	-3.5%	0.031%	0.0%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-12.4%	18.8%	-3.5%	0.0%	0.0%	0.0%
3 & 5 Year Average (starting FY16)					0.8%	0.0%	0.5%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					1.0%	0.0%	0.6%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-85.9	121.6	-36.6	0.0	0.0	0.0
PW Revenue Incr ($M)	0.0	0.0	8.8	-8.4	-0.4	0.0	-0.2	0.2
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	3.5	-3.2	-0.4	0.1	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	18.8	-22.9	3.1	0.8	0.2	-0.1
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-103.6	102.1	-0.8	0.4	-0.1	-0.3
Expense Stabilitzation Revenue Incr ($M)			-12.1	17.1	-3.6	-1.0	-0.2	-0.1
Security Factor/HCF Inc %	0.0	0.0	31.9	-31.9	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	6.2	-5.9	-0.2	-0.1	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.9	-0.8	-0.1	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-131.4	167.7	-39.1	0.2	-0.3	-0.2

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-85.9	35.8	-0.9	-0.9	-0.9	-0.9
b . Purchased Water, In-City Pumping	0.0	0.0	9.5	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	3.6	0.4	-0.2	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	-105.7	0.0	-1.9	-1.9	-1.9	-2.2
e . Expense Stabilization Adjustment Factor	0.0	0.0	33.8	-39.3	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	27.6	4.3	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	17.8	-4.4	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	-39.4	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	-32.7	39.4	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	1.3	-0.4	0.0	0.0	0.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**-131.0**	**-1.9**	**-3.3**	**-2.7**	**-2.8**	**-3.1**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-131.0**	**-1.9**	**-3.3**	**-2.7**	**-2.8**	**-3.1**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**-0.57**	**0.17**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.57**	**0.16**	**-0.01**	**-0.01**	**-0.01**	**-0.01**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	-29.4	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	37.9	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	-140.5	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**-132.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	-1.2	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-1.5	-2.0	-2.0	-2.0	-1.9
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**-0.2**	**-0.5**	**-1.4**	**-0.7**	**-0.8**	**-1.2**
Net Income with Securitization	**0.0**	**0.0**	**-0.2**	**-0.5**	**-1.4**	**-0.7**	**-0.8**	**-1.2**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	-34.2	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	42.6	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-28.3	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	19.9	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-35**	**-2**	**1**	**1**	**1**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-1**	**-2**	**-2**	**-2**	**-2**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**43**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**0.00**	**0.00**	**0.00**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**(0.00)**	**0.15**	**0.00**	**0.00**	**0.00**	**0.00**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#46 No Rate Increase for 5 Yrs with No O&M cuts

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	1.2%	0.6%	0.2%	0.8%	-4.9%	33.4%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-12.3%	-2.7%	-0.7%	-0.6%	-1.2%	-1.2%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.4%	-0.4%	-0.4%	-0.5%	-0.2%	-0.5%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	4.2%	-0.2%	-0.3%	-0.4%	-0.4%	3.8%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%
Expense Stabilitzation Revenue/HCF Inc %					0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-4.5%	0.8%	0.4%	0.2%	0.1%	-4.6%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.7%	0.7%	-0.5%	-0.2%	0.2%	-0.3%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.6%	-0.2%	0.0%	-0.1%	0.1%	-0.2%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	3.3%	3.1%	2.7%	3.3%	5.5%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-11.2%	1.9%	1.7%	1.8%	-2.9%	56.7%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	1.1%	4.7%	2.4%	2.5%	-1.8%	57.9%
3 & 5 Year Average (starting FY16)							-2.5%		-1.7%	
3 & 5 Year Avg excluding PW (starting FY16)							2.7%		1.8%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	6.7	-5.5	-6.8	9.0	-45.1	329.9
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-147.9	-36.2	-12.7	-5.3	-8.5	-11.8
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-39.8	-5.3	-4.7	-4.7	-1.6	-4.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	45.5	-7.6	-6.7	-3.4	-2.4	37.6
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	203.7
Expense Stabilitzation Revenue Incr ($M)					0.0	0.0	0.0	0.0	0.0	0.9
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-52.9	6.9	2.8	1.8	1.8	-45.3
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	6.8	5.3	-6.2	-1.6	2.8	-2.9
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	6.4	-2.6	-1.1	-0.6	1.3	-1.9
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-148.2	-13.7	-7.3	22.1	-16.1	559.3

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	358.4	352.9	346.1	355.1	310.0	639.9
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	263.3	253.9	245.6	256.0	233.7	225.3
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	30.7	32.0	32.5	23.0	22.9	19.1
d . Water Infrastructure			0.0	0.0	0.0	0.0	0.0	0.0	0.0	230.1
e . Expense Stabilization Adjustment Factor					0.0	0.0	0.0	0.0	0.0	-49.9
f . Water Security	51.4	79.4	56.4	59.7	39.8	40.8	43.2	44.2	44.9	0.3
g . Water Quality	160.5	168.6	151.2	137.0	168.6	168.0	163.4	160.7	155.3	192.1
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	32.5	33.1	33.8	38.9	40.9	83.6
j . Low Income Subsidy	22.5	23.7	27.8	29.5	27.8	27.8	27.8	27.8	27.8	27.4
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-9.8	-9.3	-9.0	-8.9	-8.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**924.2**	**916.3**	**900.7**	**914.8**	**845.0**	**1,378.3**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**951.1**	**974.4**	**987.0**	**1,027.9**	**993.8**	**1,581.0**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.25**	**4.19**	**4.13**	**4.09**	**3.80**	**6.09**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.37**	**4.45**	**4.53**	**4.61**	**4.47**	**7.01**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	55.0	58.0	61.0	64.4	64.8	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	37.9	38.9	41.1	42.1	42.8	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	255.5	256.4	259.8	269.0	276.6	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	182.8	200.4	222.0	249.8	280.1	317.4
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**-57.6**	**-94.0**	**-150.3**	**-198.6**	**-308.3**	**155.7**
Net Income with Securitization			**90.7**	**106.5**	**-49.4**	**-76.3**	**-124.1**	**-164.2**	**-263.0**	**217.3**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	315.8	310.1	229.3	213.2	177.9	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	42.6	52.3	25.7	9.6	5.0	0.0
e. Owens Valley					0.0	0.0	0.0	0.0	0.0	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	383.5	435.7	494.4	657.0	705.2	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**202**	**460**	**528**	**688**	**725**	**719**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**246**	**277**	**314**	**349**	**386**	**427**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**223**	**101**	**283**
15 . **Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**117**	**54**	**150**
16 . **Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**110**	**106**	**103**	**78**	**34**	**93**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.11**	**0.94**	**0.77**	**0.68**	**0.46**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.34**	**1.00**	**0.75**	**0.61**	**0.45**	**1.62**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.65**	**0.67**	**0.71**	**0.75**	**0.75**
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.53**	**0.97**	**0.89**	**0.79**	**0.73**	**0.57**

** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014*

Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Case#33

-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
		1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
				4.9%		5.0%	
				10.4%		8.5%	

-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
		12.1	-9.1	-2.3	-0.5	-0.2	0.0
-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

Forecast							
2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
235.1	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
	0.0	105.7	97.8	114.9	175.5	205.4	283.7
		-33.8	0.0	0.0	0.0	0.0	0.0
79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
1,141.8	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
1,141.8	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
4.55	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
4.55	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
418.4	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
152.4	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
	106.5	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
		28.3	30.8	66.3	62.1	68.4	65.1
328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
669.5	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
509	**436**	**112**	**233**	**259**	**416**	**395**	**523**
0	**0**	**409**	**475**	**427**	**409**	**542**	**820**
203	**220**	**243**	**266**	**289**	**309**	**329**	**355**
0	**0**	**27**	**58**	**86**	**113**	**149**	**203**
336	**460**	**321**	**279**	**279**	**286**	**281**	**283**
159	**227**	**174**	**150**	**150**	**150**	**150**	**150**
126	**175**	**128**	**108**	**105**	**104**	**101**	**99**
2.08	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
1.65	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
0.60	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
1.49	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

0.0%	0.0%	-7.6%	-4.1%	-3.1%	0.8%	-4.9%	33.4%
0.0%	0.0%	0.8%	-0.1%	-0.1%	-0.4%	-0.1%	-1.0%
0.0%	0.0%	0.3%	0.1%	-0.1%	0.0%	-0.1%	-0.4%
0.0%	0.0%	1.7%	-2.4%	-1.0%	-1.0%	-0.4%	3.6%
0.0%	0.0%	-9.2%	-0.1%	-2.5%	-3.1%	-3.6%	18.7%
		-1.1%	0.8%	0.2%	0.0%	0.0%	0.1%
0.0%	0.0%	2.8%	0.8%	0.4%	0.2%	0.1%	-4.6%
0.0%	0.0%	0.6%	0.4%	-0.5%	-0.2%	0.3%	-0.3%
0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.1%	-0.2%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
0.0%	0.0%	0.0%	0.4%	0.5%	0.5%	0.8%	1.6%
0.0%	0.0%	-11.6%	-4.3%	-6.3%	-3.3%	-7.9%	50.8%
0.0%	0.0%	-12.4%	-4.2%	-6.2%	-2.9%	-7.7%	51.9%
				-7.4%	0.0%	-6.7%	0.0%
				-7.6%	0.0%	-6.7%	0.0%

0.0	0.0	-85.9	-43.6	-32.7	6.9	-52.2	330.3
0.0	0.0	8.8	2.6	-0.2	-3.2	1.8	-9.8
0.0	0.0	3.5	1.0	-1.0	0.9	-0.1	-4.0
0.0	0.0	18.8	-26.9	-10.2	-11.1	-4.9	34.7
0.0	0.0	-103.6	1.9	-26.5	-39.4	-50.1	177.8
		-12.1	9.1	2.3	0.5	0.2	0.9
0.0	0.0	31.9	6.9	2.8	1.8	1.8	-45.3
0.0	0.0	6.2	3.1	-5.2	-2.3	3.1	-3.2
0.0	0.0	0.9	0.5	-0.2	-0.5	1.3	-1.9
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	-131.4	-45.5	-70.9	-46.3	-99.0	479.6

Forecast							
2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
0.0	0.0	-85.9	-129.4	-162.1	-155.2	-207.4	122.9
0.0	0.0	9.5	9.5	9.3	9.8	8.8	2.4
0.0	0.0	3.6	4.1	4.4	4.1	4.1	1.1
0.0	0.0	-105.7	-97.8	-114.9	-175.5	-205.4	-53.6
0.0	0.0	33.8	0.0	0.0	0.0	0.0	-49.9
0.0	0.0	27.6	40.8	43.2	44.2	44.9	0.3
0.0	0.0	17.8	-8.2	-17.7	-28.5	-33.9	-0.3
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	-32.7	1.4	1.4	5.8	7.8	46.8
0.0	0.0	1.0	1.0	1.1	1.1	1.1	0.7
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	1.3	1.8	2.5	2.9	3.9
0.0	**0.0**	**-131.0**	**-177.2**	**-233.7**	**-291.8**	**-377.0**	**74.2**
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	**0.0**	**-131.0**	**-177.2**	**-233.7**	**-291.8**	**-377.0**	**74.2**
0.00	**0.00**	**-0.57**	**-0.79**	**-1.14**	**-1.35**	**-1.78**	**0.39**
0.00	**0.00**	**-0.57**	**-0.79**	**-1.14**	**-1.35**	**-1.78**	**0.39**
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	-29.4	-30.3	-31.8	-32.9	-33.4	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	37.9	38.9	41.1	42.1	42.8	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	-8.5	-8.6	-9.3	-9.1	-9.4	0.0
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	**-134.7**	**-191.4**	**-261.7**	**-334.4**	**-436.6**	**2.7**
0.0	**0.0**	**-134.7**	**-191.4**	**-261.7**	**-334.4**	**-436.6**	**2.7**
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	-34.2	-45.4	-21.3	-5.1	-1.7	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	42.6	52.3	25.7	9.6	5.0	0.0
0.0	0.0	-28.3	-30.8	-66.3	-62.1	-68.4	0.0
0.0	0.0	19.9	23.9	62.0	57.6	65.2	0.0
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
0	**0**	**90**	**228**	**269**	**272**	**330**	**196**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	**0**	**3**	**12**	**25**	**40**	**57**	**73**
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0	**0**	**-44**	**0**	**0**	**-62**	**-180**	**0**
0	**0**	**-24**	**0**	**0**	**-33**	**-96**	**0**
0	**0**	**-18**	**-1**	**-3**	**-26**	**-67**	**-6**
0.00	**0.00**	**(0.59)**	**(0.76)**	**(0.93)**	**(1.09)**	**(1.29)**	**(0.15)**
0.00	**0.00**	**(0.60)**	**(0.76)**	**(0.98)**	**(1.09)**	**(1.34)**	**(0.09)**
0.00	**0.00**	**0.02**	**0.04**	**0.07**	**0.11**	**0.15**	**0.14**
0.00	**0.00**	**(0.03)**	**(0.51)**	**(0.69)**	**(0.85)**	**(0.99)**	**(1.13)**

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#47 No Rate Increase for 5 Yr with Securitization with O&M cuts

	O&M and Capex per - IBIS 11/05/14									
Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	1.2%	0.6%	0.2%	0.8%	-4.9%	21.9%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-12.3%	-2.7%	-0.7%	-0.6%	-1.2%	-1.2%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.4%	-0.4%	-0.4%	-0.5%	-0.2%	-0.5%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	4.2%	-0.2%	-0.3%	-0.4%	-0.4%	3.8%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.6%
Expense Stabilitzation Revenue/HCF Inc %					0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-4.5%	0.8%	0.4%	0.2%	0.1%	-4.6%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.7%	0.7%	-0.5%	-0.2%	0.2%	-0.3%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.6%	-0.2%	0.0%	-0.1%	0.1%	-0.2%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	3.3%	3.1%	2.7%	3.3%	5.5%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-11.2%	1.9%	1.7%	1.8%	-2.9%	45.2%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	1.1%	4.7%	2.4%	2.5%	-1.8%	46.4%
3 & 5 Year Average (starting FY16)							-2.5%		-1.7%	
3 & 5 Year Avg excluding PW (starting FY16)							2.7%		1.8%	

Case#33										
-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%			
17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%			
0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%			
0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%			
0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%			
		1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%			
-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%			
0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%			
-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%			
-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%			
15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%			
-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%			
				4.9%		5.0%				
				10.4%		8.5%				

0.0%	0.0%	-7.6%	-4.1%	-3.1%	0.8%	-4.9%	21.9%			
0.0%	0.0%	0.8%	-0.1%	-0.1%	-0.4%	-0.1%	-1.0%			
0.0%	0.0%	0.3%	0.1%	-0.1%	0.0%	-0.1%	-0.4%			
0.0%	0.0%	1.7%	-2.4%	-1.0%	-1.0%	-0.4%	3.6%			
0.0%	0.0%	-9.2%	-0.1%	-2.5%	-3.1%	-3.6%	18.7%			
		-1.1%	0.8%	0.2%	0.0%	0.0%	0.1%			
0.0%	0.0%	2.8%	0.8%	0.4%	0.2%	0.1%	-4.6%			
0.0%	0.0%	0.6%	0.4%	-0.5%	-0.2%	0.3%	-0.3%			
0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.1%	-0.2%			
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
0.0%	0.0%	0.0%	0.4%	0.5%	0.5%	0.8%	1.6%			
0.0%	0.0%	-11.6%	-4.3%	-6.3%	-3.3%	-7.9%	39.3%			
0.0%	0.0%	-12.4%	-4.2%	-6.2%	-2.9%	-7.7%	40.4%			
				-7.4%	0.0%	-6.7%	0.0%			
				-7.6%	0.0%	-6.7%	0.0%			

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	6.7	-5.5	-6.8	9.0	-45.1	216.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-147.9	-36.2	-12.7	-5.3	-8.5	-11.8
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-39.8	-5.3	-4.7	-4.7	-1.6	-4.5
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	45.5	-7.6	-6.7	-3.4	-2.4	37.6
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	203.7
Expense Stabilitzation Revenue Incr ($M)					0.0	0.0	0.0	0.0	0.0	0.9
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-52.9	6.9	2.8	1.8	1.8	-45.3
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	6.8	5.3	-6.2	-1.6	2.8	-2.9
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	6.4	-2.6	-1.1	-0.6	1.3	-1.9
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-148.2	-13.7	-7.3	22.1	-16.1	445.6

-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4			
163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0			
5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7			
5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8			
0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9			
		12.1	-9.1	-2.3	-0.5	-0.2	0.0			
-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0			
0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3			
-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0			
-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9			
131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7			

0.0	0.0	-85.9	-43.6	-32.7	6.9	-52.2	216.4			
0.0	0.0	8.8	2.6	-0.2	-3.2	1.8	-9.8			
0.0	0.0	3.5	1.0	-1.0	0.9	-0.1	-3.8			
0.0	0.0	18.8	-26.9	-10.2	-11.1	-4.9	34.7			
0.0	0.0	-103.6	1.9	-26.5	-39.4	-50.1	177.8			
		-12.1	9.1	2.3	0.5	0.2	0.9			
0.0	0.0	31.9	6.9	2.8	1.8	1.8	-45.3			
0.0	0.0	6.2	3.1	-5.2	-2.3	3.1	-3.2			
0.0	0.0	0.9	0.5	-0.2	-0.5	1.3	-1.9			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	-131.4	-45.5	-70.9	-46.3	-99.0	365.9			

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	358.4	352.9	346.1	355.1	310.0	525.9
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	263.3	253.9	245.6	256.0	233.7	225.3
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	30.7	32.0	32.5	23.0	22.9	19.1
d . Water Infrastructure			0.0	0.0	0.0	0.0	0.0	0.0	0.0	230.1
e . Expense Stabilization Adjustment Factor					0.0	0.0	0.0	0.0	0.0	-49.9
f . Water Security	51.4	79.4	56.4	59.7	39.8	40.8	43.2	44.2	44.9	0.3
g . Water Quality	160.5	168.6	151.2	137.0	168.6	168.0	163.4	160.7	155.3	192.1
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	32.5	33.1	33.8	38.9	40.9	83.6
j . Low Income Subsidy	22.5	23.7	27.8	29.5	27.8	27.8	27.8	27.8	27.8	27.4
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-9.8	-9.3	-9.0	-8.9	-8.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**924.2**	**916.3**	**900.7**	**914.8**	**845.0**	**1,264.4**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**951.1**	**974.4**	**987.0**	**1,027.9**	**993.8**	**1,467.1**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.25**	**4.19**	**4.13**	**4.09**	**3.80**	**5.58**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.37**	**4.45**	**4.53**	**4.61**	**4.47**	**6.50**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	55.0	58.0	61.0	64.4	64.8	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	37.9	38.9	41.1	42.1	42.8	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	123.5	82.4	29.8	3.0	0.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**318.0**	**287.0**	**242.3**	**213.1**	**212.5**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	20.0	21.7	21.7	21.1	20.8	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	183.0	189.2	202.7	220.7	254.0
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**76.9**	**95.3**	**109.4**	**111.0**	**24.2**	**105.2**
Net Income with Securitization			**90.7**	**106.5**	**85.1**	**113.0**	**135.6**	**145.3**	**69.4**	**166.8**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	315.8	310.1	229.3	213.2	177.9	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	42.6	52.3	25.7	9.6	5.0	0.0
e. Owens Valley					0.0	0.0	0.0	0.0	0.0	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	383.5	435.7	494.4	657.0	705.2	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**155**	**245**	**425**	**502**	**686**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**263**	**284**	**305**	**328**	**360**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**322**	**207**	**185**	**176**	**167**	**283**
15 . **Days of Operating Cash**	**225**	**159**	**150**	**227**	**216**	**150**	**150**	**150**	**150**	**150**
16 . **Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**150**	**99**	**92**	**88**	**83**	**98**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.70**	**1.42**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.69**	**1.62**	**1.41**	**1.60**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.62**	**0.63**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.50**	**1.59**	**1.64**	**1.63**	**1.38**

Forecast									
2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21		
235.1	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*		
363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0		
365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9		
66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0		
	0.0	105.7	97.8	114.9	175.5	205.4	283.7		
		-33.8	0.0	0.0	0.0	0.0	0.0		
79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0		
168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8		
23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7		
2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9		
44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0		
-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3		
1,141.8	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**		
0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7		
1,141.8	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**		
4.55	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**		
4.55	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**		
339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2		
42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4		
9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8		
9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3		
35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4		
33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0		
48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4		
239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5		
418.4	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**		
123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9		
12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1		
32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3		
156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9		
28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1		
152.4	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**		
	106.5	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**		
14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0		
245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2		
37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8		
43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0		
		28.3	30.8	66.3	62.1	68.4	65.1		
328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3		
669.5	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**		
509	**436**	**112**	**233**	**259**	**416**	**395**	**523**		
0	**0**	**409**	**475**	**427**	**409**	**542**	**820**		
203	**220**	**243**	**266**	**289**	**309**	**329**	**355**		
0	**0**	**27**	**58**	**86**	**113**	**149**	**203**		
336	**460**	**321**	**279**	**279**	**286**	**281**	**283**		
159	**227**	**174**	**150**	**150**	**150**	**150**	**150**		
126	**175**	**128**	**108**	**105**	**104**	**101**	**99**		
2.08	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**		
1.65	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**		
0.60	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**		
1.49	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**		

Forecast									
2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21		
0.0	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*		
0.0	0.0	-85.9	-129.4	-162.1	-155.2	-207.4	9.0		
0.0	0.0	9.5	9.5	9.3	9.8	8.8	2.4		
0.0	0.0	3.6	4.1	4.4	4.1	4.1	1.1		
0.0	0.0	-105.7	-97.8	-114.9	-175.5	-205.4	-53.6		
0.0	0.0	33.8	0.0	0.0	0.0	0.0	-49.9		
0.0	0.0	27.6	40.8	43.2	44.2	44.9	0.3		
0.0	0.0	17.8	-8.2	-17.7	-28.5	-33.9	-0.3		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	-32.7	1.4	1.4	5.8	7.8	46.8		
0.0	0.0	1.0	1.0	1.1	1.1	1.1	0.7		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	1.3	1.8	2.5	2.9	3.9		
0.0	**0.0**	**-131.0**	**-177.2**	**-233.7**	**-291.8**	**-377.0**	**-39.7**		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	**0.0**	**-131.0**	**-177.2**	**-233.7**	**-291.8**	**-377.0**	**-39.7**		
0.00	**0.00**	**-0.57**	**-0.79**	**-1.14**	**-1.35**	**-1.78**	**-0.12**		
0.00	**0.00**	**-0.57**	**-0.79**	**-1.14**	**-1.35**	**-1.78**	**-0.12**		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	-29.4	-30.3	-31.8	-32.9	-33.4	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	37.9	38.9	41.1	42.1	42.8	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	-140.5	-182.6	-239.3	-275.1	-286.0	0.0		
0.0	**0.0**	**-132.0**	**-174.0**	**-230.0**	**-266.0**	**-276.6**	**0.0**		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	-1.2	-2.1	-3.1	-3.5	-3.7	0.0		
0.0	0.0	0.0	-3.2	-4.7	-4.5	0.0	8.1		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	**0.0**	**-0.2**	**-2.1**	**-2.0**	**-24.8**	**-104.1**	**-47.8**		
0.0	**0.0**	**-0.2**	**-2.1**	**-2.0**	**-24.8**	**-104.1**	**-47.8**		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	-34.2	-45.4	-21.3	-5.1	-1.7	0.0		
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
0.0	0.0	42.6	52.3	25.7	9.6	5.0	0.0		
0.0	0.0	-28.3	-30.8	-66.3	-62.1	-68.4	0.0		
0.0	0.0	19.9	23.9	62.0	57.6	65.2	0.0		
0.0	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**		
0	**0**	**0**	**-78**	**-13**	**9**	**107**	**163**		
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**		
0	**0**	**0**	**-2**	**-5**	**-5**	**-1**	**6**		
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**		
0	**0**	**1**	**-72**	**-95**	**-109**	**-114**	**0**		
0	**0**	**43**	**0**	**0**	**0**	**0**	**0**		
0	**0**	**22**	**-9**	**-13**	**-16**	**-18**	**-1**		
0.00	**0.00**	**(0.00)**	**(0.00)**	**0.00**	**(0.07)**	**(0.33)**	**(0.15)**		
0.00	**0.00**	**(0.00)**	**(0.00)**	**(0.05)**	**(0.08)**	**(0.38)**	**(0.11)**		
0.00	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**0.01**	**0.02**		
0.00	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**	**(0.09)**	**(0.32)**		

** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014*

Infrastructure O&M Increase			**0.0**	**0.0**	**0.0**	**-132.0**	**-174.0**	**-230.0**	**-266.0**	**-276.6**	**0.0**
Infrastructure Capex Increase			**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Water System Financial Plan Summary
($ in millions)

Case#48 One-notch downgrade in current market condition

O&M and Capex per - IBIS 11/05/14

	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.9%	4.7%	3.4%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.4%	3.2%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.5%	6.1%	8.0%	5.1%	5.0%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.6%	8.8%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)							4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.3%		8.5%	

	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	93.6	36.8	26.6	2.1	7.0	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.7	2.6
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	25.1	39.7	50.2	26.0
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-15.7	30.4	63.0	68.7	83.1	79.7
					141.0	69.2	75.4	70.9	93.5	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	445.3	482.1	508.7	510.8	517.9	517.4
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	113.6	174.3	204.6	282.9
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,056.3**	**1,093.3**	**1,133.6**	**1,205.9**	**1,221.7**	**1,303.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,083.2**	**1,151.4**	**1,219.8**	**1,319.1**	**1,370.4**	**1,506.5**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.83**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.94**	**5.24**	**5.66**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.2	20.6	22.9	23.8	23.8	23.6	23.4
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.3	185.4	192.9	206.6	220.4	246.2
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.2**	**77.4**	**97.3**	**110.7**	**134.9**	**127.2**	**151.5**
Net Income with Securitization			**90.7**	**106.2**	**85.6**	**114.9**	**136.9**	**169.3**	**172.5**	**213.1**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**205**	**259**	**416**	**396**	**524**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**265**	**288**	**309**	**329**	**355**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**459**	**321**	**251**	**251**	**257**	**253**	**255**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**174**	**135**	**135**	**135**	**135**	**135**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**128**	**97**	**95**	**93**	**91**	**89**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.77**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.04**	**1.94**	**1.76**	**1.74**	**1.70**	**1.78**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.69**
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

***** *FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014*

Case#33

	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Base Revenue/HCF Inc %	0.0%	0.0%	0.1%	-0.1%	0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
3 & 5 Year Average (starting FY16)					0.0%	0.0%	0.0%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.0%	0.0%	0.0%	0.0%

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Base Revenue Incr ($M)	0.0	0.0	1.0	-1.3	0.7	0.0	0.0	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	-0.2
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	-1.4	0.3	0.1	0.2
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	1.0	-1.3	-0.6	0.3	0.2	-0.1

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	1.0	-0.2	0.5	0.5	0.4	0.4
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	-1.3	-1.1	-0.8	-0.8
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**1.1**	**-0.2**	**-0.8**	**-0.6**	**-0.4**	**-0.3**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**1.1**	**-0.2**	**-0.8**	**-0.6**	**-0.4**	**-0.3**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	-0.3	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9
8 . **Interest Expense(Net)**	0.0	0.0	0.2	-0.9	-1.0	-0.7	-0.2	0.3
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**-0.3**	**0.3**	**-0.2**	**-0.7**	**-0.9**	**-1.1**	**-1.5**
Net Income with Securitization	**0.0**	**-0.3**	**0.3**	**-0.2**	**-0.7**	**-0.9**	**-1.1**	**-1.5**
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-28**	**1**	**0**	**1**	**1**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-1**	**-1**	**-1**	**0**	**0**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**0**	**-28**	**-28**	**-29**	**-28**	**-28**
15 .**Days of Operating Cash**	**0**	**0**	**0**	**-15**	**-15**	**-15**	**-15**	**-15**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**0**	**-11**	**-10**	**-10**	**-10**	**-10**
17a **Debt Service Coverage Ratio**	**0.00**	**(0.00)**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**(0.00)**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Debt Service Coverage**	**(0.00)**	**(0.00)**	**(0.00)**	**0.01**	**0.00**	**(0.00)**	**(0.00)**	**(0.01)**

Water System Financial Plan Summary
($ in millions)

Case#49 One-notch downgrade in worst market condition

O&M and Capex per - IBIS 11/05/14

	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	9.0%	4.7%	3.4%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.2%	3.7%	2.0%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.6%	6.2%	8.1%	5.2%	5.0%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.7%	8.8%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)							4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.4%		8.5%	
Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	94.7	37.2	27.1	2.1	7.1	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.3	-3.8	-5.5	-1.6	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.7	7.7	2.5	2.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	25.5	40.3	51.1	26.9
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-14.7	30.9	63.9	69.4	84.1	80.6
					142.0	69.6	76.4	71.5	94.4	
	Actual	**Actual**	**Approved**	**Current**	**Forecast**					
	2012-13	**2013-14**	**2014-15**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	446.4	483.6	510.7	512.8	520.0	519.5
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	114.0	175.3	206.4	285.7
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.3	189.3	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.5	-11.9	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,057.4**	**1,094.8**	**1,136.0**	**1,208.9**	**1,225.6**	**1,308.7**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,084.3**	**1,152.9**	**1,222.2**	**1,322.0**	**1,374.4**	**1,511.4**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.83**	**4.99**	**5.28**	**5.45**	**5.60**	**5.72**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.25**	**5.68**	**5.97**	**6.27**	**6.64**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.2	20.6	22.9	23.8	23.8	23.6	23.4
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.9	186.2	194.3	208.9	223.8	251.0
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.2**	**77.9**	**97.9**	**111.7**	**135.6**	**127.8**	**151.6**
Net Income with Securitization			**90.7**	**106.2**	**86.0**	**115.6**	**137.9**	**170.0**	**173.0**	**213.3**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**204**	**258**	**415**	**396**	**524**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**244**	**266**	**289**	**311**	**333**	**359**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**459**	**322**	**251**	**251**	**257**	**253**	**255**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**174**	**135**	**135**	**135**	**135**	**135**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**128**	**97**	**95**	**93**	**91**	**89**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.77**	**1.74**	**1.83**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.04**	**1.93**	**1.76**	**1.74**	**1.70**	**1.78**	**1.70**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.62**	**1.71**	**1.68**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Case#33

	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	
Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7
	Forecast								
	2013-14		**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**	**2020-21**
1 . ***Sales (Million HCF)***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio: Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Base Revenue/HCF Inc %	0.0%	0.0%	0.2%	-0.1%	0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.1%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.2%	-0.1%	0.0%	0.1%	0.1%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.2%	-0.1%	0.0%	0.1%	0.1%	0.0%
3 & 5 Year Average (starting FY16)					0.0%	0.0%	0.1%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.0%	0.0%	0.1%	0.0%
Base Revenue Incr ($M)	0.0	0.0	2.1	-0.9	1.2	0.0	0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.1
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	-0.9	0.8	1.1	1.0
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	2.1	-0.9	0.3	1.0	1.1	0.9
	Forecast							
	2013-14	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2018-20**	**2018-21**
1 . ***Sales (Million HCF)***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	2.1	1.2	2.5	2.5	2.6	2.6
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	-0.9	-0.2	1.0	2.0
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**2.2**	**1.3**	**1.6**	**2.4**	**3.6**	**4.6**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**2.2**	**1.3**	**1.6**	**2.4**	**3.6**	**4.6**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.02**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.02**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	-0.3	-0.6	-0.8	-0.9	-0.9	-0.9	-0.9
8 . **Interest Expense(Net)**	0.0	0.0	0.8	0.0	0.4	1.6	3.2	5.0
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**-0.3**	**0.7**	**0.5**	**0.3**	**-0.2**	**-0.5**	**-1.4**
Net Income with Securitization	**0.0**	**-0.3**	**0.7**	**0.5**	**0.3**	**-0.2**	**-0.5**	**-1.4**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-29**	**0**	**-1**	**1**	**1**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**1**	**0**	**0**	**2**	**3**	**5**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**0**	**-28**	**-28**	**-29**	**-28**	**-28**
15 .**Days of Operating Cash**	**0**	**0**	**0**	**-15**	**-15**	**-15**	**-15**	**-15**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**0**	**-11**	**-11**	**-11**	**-10**	**-10**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**(0.00)**	**0.00**	**(0.00)**	**0.00**	**(0.01)**	**(0.01)**	**(0.01)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.01)**	**(0.01)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio: Debt Service Coverage**	**(0.00)**	**(0.00)**	**(0.00)**	**0.01**	**0.00**	**(0.01)**	**(0.01)**	**(0.02)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#50 No Securitization for 1 Yr with Rate Action

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-1.1%	15.4%	3.4%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.6%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	0.7%	-4.0%	-0.5%	-0.5%	-0.3%	0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	13.5%	-8.1%	0.6%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.6%	2.6%	3.1%	3.7%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	1.0%	-0.5%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	2.7%	2.5%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	4.4%	2.7%	7.9%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	17.5%	5.3%	8.4%	5.3%	6.0%	6.1%
3 & 5 Year Average (starting FY16)							5.0%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.4%		8.5%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-18.8	165.4	26.5	2.2	7.2	-0.5
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	7.0	-48.6	-6.1	-6.2	-3.1	1.1
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	149.7	-101.1	3.1	7.7	3.0	2.6
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	3.7	26.7	39.5	51.1	25.8
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	10.7	-7.0	-1.0	0.7	-0.1	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	28.3	-7.3	61.6	68.1	83.3	81.2
					185.0	31.5	74.1	70.2	93.6	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	332.9	498.3	524.8	527.0	534.2	533.7
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	77.5	33.7	33.1	23.8	24.6	23.8
d . Water Infrastructure			0.0	0.0	105.7	103.4	120.8	181.4	212.4	290.7
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	274.5	178.3	183.0	191.2	191.5	194.8
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	75.2	32.7	33.4	34.1	34.2	37.9
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.8	-11.4	-11.8	-12.2	-12.6
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,127.8**	**1,123.3**	**1,164.4**	**1,236.7**	**1,254.8**	**1,336.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	31.3	59.4	86.2	121.9	175.8
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,127.8**	**1,154.5**	**1,223.8**	**1,322.9**	**1,376.6**	**1,512.6**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.13**	**5.13**	**5.41**	**5.58**	**5.72**	**5.85**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.13**	**5.27**	**5.69**	**5.98**	**6.27**	**6.64**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	192.0	204.0	211.5	224.2	236.8	261.2
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	22.1	30.5	38.7	49.5	65.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**136.8**	**109.4**	**123.9**	**148.9**	**144.8**	**170.3**
Net Income with Securitization			**90.7**	**106.5**	**136.8**	**118.9**	**142.0**	**175.2**	**181.8**	**223.8**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**425**	**257**	**245**	**406**	**384**	**510**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**253**	**283**	**307**	**326**	**349**	**374**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**31**	**59**	**86**	**122**	**176**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**109**	**106**	**103**	**102**	**99**	**97**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.94**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.16**	**1.77**	**1.74**	**1.71**	**1.77**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.62**	**0.61**	**0.61**	**0.61**	**0.62**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.46**	**1.59**	**1.55**	**1.60**	**1.70**	**1.68**
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-9.9%	10.7%	0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	4.4%	-3.5%	-0.2%	0.0%	-0.1%	0.1%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	10.9%	-10.3%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.1%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.9%	-0.8%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-0.2%	-0.1%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	4.0%	-3.5%	-0.2%	0.0%	0.0%	0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	4.0%	-3.6%	-0.2%	0.0%	0.0%	0.1%
3 & 5 Year Average (starting FY16)					0.1%	0.0%	0.0%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.1%	0.0%	0.0%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-111.4	127.4	0.6	0.1	0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	50.3	-42.3	-2.4	-0.5	-1.5	1.7
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	123.0	-120.5	-0.5	0.0	0.5	-0.2
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	5.6	0.2	0.1	1.0	-0.1
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	10.1	-9.2	0.1	0.0	0.2	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	45.1	-39.0	-2.0	-0.3	0.3	1.4

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	-111.4	16.0	16.6	16.6	16.8	16.8
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	50.4	5.8	4.9	4.9	5.8	5.8
d . Water Infrastructure	0.0	0.0	0.0	5.7	5.9	5.9	6.9	7.0
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	123.6	2.1	2.0	2.0	2.3	2.3
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	10.0	1.0	1.0	1.0	1.2	1.2
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.7	-0.3	-0.3	-0.3	-0.3
Total Operating Revenue before Securitization	**0.0**	**0.0**	**72.5**	**29.7**	**30.0**	**30.1**	**32.7**	**32.6**
l . Securitization Revenue	0.0	0.0	-26.9	-26.9	-26.9	-26.9	-26.9	-26.9
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**45.6**	**2.9**	**3.1**	**3.2**	**5.8**	**5.7**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.31**	**0.15**	**0.14**	**0.14**	**0.14**	**0.15**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.20**	**0.03**	**0.02**	**0.02**	**0.02**	**0.02**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	12.9	17.8	17.5	16.9	16.2	15.3
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-8.2	-8.2	-8.2	-8.2	-8.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**59.6**	**12.0**	**12.5**	**13.2**	**16.5**	**17.3**
Net Income with Securitization	**0.0**	**0.0**	**51.5**	**3.8**	**4.3**	**5.0**	**8.3**	**9.1**
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**313**	**25**	**-13**	**-10**	**-11**	**-13**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**10**	**18**	**18**	**17**	**19**	**19**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-27**	**-27**	**-27**	**-27**	**-27**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-19**	**-2**	**-2**	**-2**	**-2**	**-2**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.24**	**(0.00)**	**0.00**	**(0.00)**	**(0.00)**	**(0.01)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.23**	**0.01**	**0.00**	**0.00**	**(0.01)**	**0.00**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
19. **Debt Service Coverage**	**0.00**	**0.00**	**(0.09)**	**0.12**	**(0.03)**	**(0.03)**	**(0.03)**	**(0.01)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#51 Normal Conservation and Average Hydrology for 5 Yrs

O&M and Capex per - IBIS 11/05/14

Case#33

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	7.2%	3.2%	2.0%	0.0%	0.0%	0.0%	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.6%	-1.6%	-1.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-10.4%	-4.2%	-0.8%	-0.3%	-1.0%	0.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%	0.0%	0.0%	2.7%	-1.6%	-0.3%	0.0%	0.1%	0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.8%	-0.5%	-0.3%	-0.5%	-0.1%	-0.1%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	1.9%	1.7%	0.3%	0.5%	0.0%	0.2%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%	0.0%	0.0%	-0.7%	-0.5%	-0.3%	-0.1%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	8.7%	-0.1%	2.3%	3.0%	3.6%	1.8%	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%	0.0%	0.0%	-0.5%	-0.2%	-0.3%	-0.1%	-0.1%	-0.1%
Expense Stabilitzation Revenue/HCF Inc %					1.0%	-0.8%	-0.2%	0.0%	0.0%	0.0%				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.0%	0.2%	-0.1%	0.0%	-0.1%	0.0%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.4%	-0.3%	-0.1%	0.0%	0.0%	0.0%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.3%	2.6%	2.3%	2.1%	2.6%	3.8%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%	0.0%	0.0%	-0.1%	-0.3%	-0.3%	-0.1%	0.0%	-0.1%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-0.05%	1.9%	5.4%	4.9%	5.0%	5.8%	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%	0.0%	0.0%	-0.5%	-4.4%	-2.6%	-0.2%	0.1%	-0.1%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	10.3%	6.1%	6.3%	5.1%	6.0%	5.8%	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%	0.0%	0.0%	-3.2%	-2.8%	-2.3%	-0.2%	0.0%	-0.2%
3 & 5 Year Average (starting FY16)							2.4%		3.4%							4.9%		5.0%						-2.5%	0.0%	-1.5%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)							7.6%		6.8%							10.4%		8.5%						-2.8%	0.0%	-1.7%	0.0%

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	91.9	39.6	26.1	2.1	3.0	0.6	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4	0.0	0.0	-0.7	1.5	0.3	0.0	-4.1	1.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-113.0	-48.3	-8.8	-2.1	-11.5	0.3	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0	0.0	0.0	43.7	-9.6	3.7	0.0	-1.1	2.4
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.6	-6.0	-3.6	-5.7	-1.5	-0.8	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7	0.0	0.0	-0.3	0.3	0.0	0.0	0.0	-0.1
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	25.2	20.8	4.9	7.2	1.6	2.8	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8	0.0	0.0	-1.6	1.4	1.4	-0.5	-1.0	0.0
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	102.4	-0.8	27.8	39.3	48.9	26.1	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9	0.0	0.0	-1.2	1.1	1.3	-0.1	-1.2	0.2
Expense Stabilitzation Revenue Incr ($M)					12.0	-9.0	-2.3	-0.6	-0.2	0.0				12.1	-9.1	-2.3	-0.5	-0.2	0.0			-0.1	0.1	0.1	-0.1	0.0	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.3	2.4	-0.8	0.7	-0.5	0.3	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3	0.0	0.0	-0.3	0.2	0.2	0.0	-0.2	0.0
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.3	-2.9	-0.7	-0.1	-0.1	0.0	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0	0.0	0.0	-0.2	0.2	0.2	0.0	-0.1	0.1
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	22.6	27.0	70.7	67.7	75.3	83.2	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7	0.0	0.0	39.4	-4.7	7.1	-0.8	-7.7	3.4
					135.6	75.3	79.5	69.8	86.8																		

	Actual	Actual	Approved	Current	Forecast						Forecast									Forecast							
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*239.0*	*240.1*	*241.1*	*242.0*	*243.5*	*243.7*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*	*0.0*	*0.0*	*9.1*	*17.6*	*23.9*	*24.0*	*22.5*	*22.9*
2 . **Revenue:** *																											
a . Base Rates	394.1	363.5	353.9	351.7	443.6	483.1	509.2	511.3	514.3	514.8	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0	0.0	0.0	-0.7	0.8	1.0	1.0	-3.1	-2.1
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	307.4	270.8	273.1	283.5	261.3	261.8	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9	0.0	0.0	53.6	26.5	36.7	37.3	36.3	38.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	115.2	175.8	205.7	284.1		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0				-33.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.5	-11.4	-11.9	-12.3	-12.7	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3	0.0	0.0	0.0	-0.4	-0.3	-0.4	-0.4	-0.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,108.1**	**1,120.4**	**1,172.1**	**1,244.7**	**1,255.1**	**1,340.9**	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**	**0.0**	**0.0**	**52.9**	**26.9**	**37.7**	**38.1**	**33.1**	**36.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,135.0**	**1,178.5**	**1,258.3**	**1,357.8**	**1,403.9**	**1,543.6**	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**	**0.0**	**0.0**	**52.9**	**26.9**	**37.7**	**38.1**	**33.1**	**36.8**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.80**	**4.76**	**4.92**	**5.07**	**5.20**	**5.32**	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**	**0.00**	**0.00**	**-0.02**	**-0.22**	**-0.35**	**-0.37**	**-0.38**	**-0.39**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.91**	**5.01**	**5.28**	**5.54**	**5.81**	**6.15**	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**	**0.00**	**0.00**	**-0.02**	**-0.24**	**-0.39**	**-0.42**	**-0.44**	**-0.47**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	262.5	224.9	225.8	234.9	211.6	210.7	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2	0.0	0.0	53.2	26.1	36.4	36.9	36.0	38.5
4 . **Operation & Maintenance Expenses**																											
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.7	24.1	25.2	25.2	25.0	24.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3	0.0	0.0	0.5	0.3	0.5	0.5	0.5	0.5
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	187.1	195.0	208.2	221.7	247.2	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9	0.0	0.0	0.0	0.8	1.1	1.0	1.0	1.3
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**97.6**	**112.2**	**136.5**	**124.8**	**150.6**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**	**0.0**	**0.0**	**0.2**	**0.2**	**0.7**	**0.7**	**-3.5**	**-2.4**
Net Income with Securitization			**90.7**	**106.5**	**85.5**	**115.3**	**138.4**	**170.9**	**170.1**	**212.2**		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**	**0.0**	**0.0**	**0.2**	**0.2**	**0.7**	**0.7**	**-3.5**	**-2.4**
11 . **Capital Expenditures:**																											
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1				28.3	30.8	66.3	62.1	68.4	65.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**253**	**259**	**413**	**398**	**527**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**	**0**	**0**	**0**	**20**	**0**	**-3**	**3**	**4**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**266**	**290**	**310**	**330**	**356**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**304**	**289**	**294**	**301**	**295**	**299**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**	**0**	**0**	**-17**	**11**	**15**	**15**	**15**	**16**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**152**	**150**	**150**	**150**	**150**	**150**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**	**0**	**0**	**-21**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**114**	**109**	**107**	**105**	**103**	**101**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**	**0**	**0**	**-14**	**1**	**2**	**2**	**2**	**2**
Financial Ratios																											
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.74**	**1.83**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.01)**	**(0.01)**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.88**	**1.79**	**1.75**	**1.71**	**1.77**	**1.70**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**	**0.00**	**0.00**	**(0.06)**	**0.03**	**0.01**	**0.01**	**(0.01)**	**(0.01)**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**	**0.60**	**0.61**	**0.61**	**0.61**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
19. **Addtn'l Bond Test Ratio:** (prev / max)																											
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.47**	**1.58**	**1.63**	**1.72**	**1.69**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**0.00**	**(0.00)**	**(0.01)**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

DRAFT CONFIDENTIAL

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#52 (IBIS 11 05 14) ED5 20% Res Only Multi Year Wet

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	9.1%	4.9%	3.8%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-26.1%	3.8%	0.7%	-1.1%	3.2%	0.9%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.5%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.2%	2.5%	3.3%	3.8%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.9%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	3.3%	2.8%	2.3%	2.7%	4.0%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-12.3%	13.4%	10.1%	4.5%	9.5%	7.0%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.8%	9.6%	9.3%	5.7%	6.3%	6.1%
3 & 5 Year Average (starting FY16)							3.7%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.9%		8.9%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	95.7	32.5	29.1	2.0	7.9	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-303.5	31.7	3.6	-12.7	42.4	11.4
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.7	19.4	3.5	7.7	2.7	2.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.8	23.8	39.5	50.2	25.1
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	-0.1
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-160.5	96.7	80.1	57.7	137.0	92.1
					143.0	65.0	76.5	70.4	94.6	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.0*	*217.9*	*221.2*	*220.8*
2 . **Revenue: ***										
a . Base Rates	394.1	363.5	353.9	351.7	447.4	479.9	509.0	511.0	518.9	518.5
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	78.6	180.7	205.8	137.5	225.1	222.8
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	112.3	172.8	202.8	280.6
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-9.6	-10.3	-10.8	-11.1	-12.1
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**883.2**	**1,028.8**	**1,102.8**	**1,096.5**	**1,221.9**	**1,302.7**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**910.1**	**1,086.9**	**1,189.0**	**1,209.6**	**1,370.6**	**1,505.3**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.20**	**4.63**	**4.99**	**5.11**	**5.49**	**5.67**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.31**	**4.89**	**5.38**	**5.63**	**6.16**	**6.59**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	35.5	135.8	159.4	90.0	176.0	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	19.7	23.0	24.3	23.2	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	184.2	193.2	204.2	219.5	245.9
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**96.8**	**110.1**	**135.3**	**128.9**	**151.6**
Net Income with Securitization			**90.7**	**106.5**	**85.5**	**114.5**	**136.4**	**169.7**	**174.1**	**213.3**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**183**	**305**	**345**	**462**	**530**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**264**	**288**	**307**	**328**	**354**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**364**	**253**	**267**	**241**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**265**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**179**	**105**	**104**	**98**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.76**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.06**	**1.71**	**1.62**	**1.83**	**1.73**	**1.69**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.49**	**1.57**	**1.65**	**1.72**	**1.70**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	0.1
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	80.3

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue: ***									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.5
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.7**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,507.4**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.6**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**215.2**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**522**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	0.3%	0.1%	0.6%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	-13.0%	6.5%	1.3%	-0.9%	4.2%	1.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.1%	0.2%	0.2%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.4%	0.2%	0.1%	0.1%	0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-12.7%	7.2%	2.0%	-0.6%	4.6%	1.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.3%	0.7%	0.7%	0.3%	0.3%	0.1%
3 & 5 Year Average (starting FY16)					-1.2%	0.0%	0.1%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.6%	0.0%	0.5%	0.0%

Base Revenue Incr ($M)	0.0	0.0	3.1	-5.6	3.3	-0.2	0.9	-0.5
PW Revenue Incr ($M)	0.0	0.0	-146.8	70.5	16.1	-10.6	52.8	13.4
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	-0.3
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.1	-2.7	0.0	0.2	-0.8
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-143.7	65.0	16.5	-10.7	54.1	11.8

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*-0.1*	*-0.2*	*0.2*	*0.0*
2 . **Revenue: ***								
a . Base Rates	0.0	0.0	3.1	-2.5	0.8	0.7	1.5	1.0
b . Purchased Water, In-City Pumping	0.0	0.0	-175.2	-63.7	-30.6	-108.7	0.2	-0.1
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	-2.6	-2.6	-2.6	-3.1
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	1.4	0.8	0.6	0.7	0.2
Total Operating Revenue before Securitization	**0.0**	**0.0**	**-172.0**	**-64.7**	**-31.6**	**-110.1**	**-0.2**	**-2.0**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-172.0**	**-64.7**	**-31.6**	**-110.1**	**-0.2**	**-2.0**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**-0.62**	**-0.35**	**-0.28**	**-0.33**	**-0.09**	**-0.03**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.62**	**-0.35**	**-0.28**	**-0.33**	**-0.09**	**-0.03**
3 . **Purchased Water Expenses**	0.0	0.0	-173.8	-62.9	-30.0	-108.0	0.4	-0.1
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	-1.6	-0.8	-0.4	-1.4	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-2.0	-0.7	-3.0	-1.2	0.0
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.2**	**-0.6**	**-1.3**	**-0.5**	**0.6**	**-2.0**
Net Income with Securitization	**0.0**	**0.0**	**0.2**	**-0.6**	**-1.3**	**-0.5**	**0.6**	**-2.0**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-49**	**46**	**-71**	**67**	**8**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-2**	**-1**	**-2**	**-2**	**-1**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**43**	**-26**	**-12**	**-44**	**0**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**91**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**51**	**-3**	**-1**	**-5**	**0**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.01**	**(0.00)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.13**	**(0.06)**	**(0.11)**	**0.13**	**(0.05)**	**(0.02)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**0.00**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**0.01**	**(0.01)**	**0.02**	**(0.01)**	**(0.00)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#53 (IBIS 11 05 14) ED5 20% Res Only Multi Year Dry

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.7%	4.7%	3.2%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-6.4%	0.8%	-0.6%	-2.6%	-5.1%	-1.2%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.4%	-0.3%	-0.4%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.1%	0.6%	0.5%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.3%	2.9%	3.4%	1.8%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.7%	2.4%	2.0%	2.4%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	7.1%	9.4%	7.4%	2.3%	0.5%	4.7%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.5%	8.6%	8.1%	4.9%	5.6%	5.9%
3 & 5 Year Average (starting FY16)							8.0%		5.3%	
3 & 5 Year Avg excluding PW (starting FY16)							10.0%		8.1%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	91.5	40.7	28.3	2.0	7.9	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-80.8	-2.2	-16.7	-34.2	-66.5	-16.9
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.9	-5.5	-1.5	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.7	19.4	3.5	7.7	2.7	2.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.8	26.6	39.4	50.3	25.3
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	-0.1
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	58.0	71.1	61.6	36.3	28.3	63.8
					138.8	73.3	78.4	70.5	94.7	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.0*	*217.9*	*221.2*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	443.2	483.9	512.2	514.2	522.1	521.7
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	313.2	374.8	349.6	341.7	225.5	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	115.2	175.8	205.7	283.7
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.8	-12.2	-12.6	-12.7	-12.6
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,113.6**	**1,224.8**	**1,250.7**	**1,305.0**	**1,226.8**	**1,308.6**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,140.5**	**1,282.9**	**1,337.0**	**1,418.1**	**1,375.6**	**1,511.3**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.15**	**5.50**	**5.79**	**5.81**	**5.69**	**5.74**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.26**	**5.76**	**6.19**	**6.33**	**6.36**	**6.66**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	268.1	328.1	301.5	292.7	176.0	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.8	25.3	26.2	25.9	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	188.9	197.3	210.8	221.5	245.5
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**98.2**	**113.8**	**137.3**	**131.8**	**157.9**
Net Income with Securitization			**90.7**	**106.5**	**85.5**	**115.9**	**140.0**	**171.6**	**177.0**	**219.5**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**298**	**254**	**423**	**328**	**512**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**268**	**292**	**313**	**331**	**355**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**330**	**332**	**325**	**325**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**164**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**123**	**113**	**110**	**107**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.77**	**1.76**	**1.85**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.01**	**1.69**	**1.72**	**1.64**	**1.86**	**1.74**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**	**0.60**	**0.61**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.46**	**1.57**	**1.63**	**1.74**	**1.71**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	0.1
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	80.3

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.5
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.7**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,507.4**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.6**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**215.2**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**522**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-0.1%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	6.7%	3.5%	-0.1%	-2.4%	-4.1%	-1.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	-0.1%	-0.1%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.3%	-0.2%	-0.1%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	6.6%	3.2%	-0.6%	-2.8%	-4.4%	-1.2%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.1%	-0.3%	-0.6%	-0.4%	-0.4%	-0.1%
3 & 5 Year Average (starting FY16)					3.1%	0.0%	0.4%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.3%	0.0%	-0.4%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-1.1	2.6	2.5	-0.2	0.9	-0.5
PW Revenue Incr ($M)	0.0	0.0	75.9	36.6	-4.3	-32.1	-56.1	-14.9
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.1	-0.2	0.1	0.0	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	-0.3
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.1	0.2	0.0	0.2	-0.6
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	74.8	39.4	-2.0	-32.1	-54.7	-16.5

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*-0.1*	*-0.2*	*0.2*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-1.1	1.5	4.0	3.8	4.7	4.2
b . Purchased Water, In-City Pumping	0.0	0.0	59.5	130.4	113.2	95.4	0.6	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.0
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.7	-1.1	-1.1	-0.8	-0.3
Total Operating Revenue before Securitization	**0.0**	**0.0**	**58.4**	**131.2**	**116.3**	**98.4**	**4.8**	**3.9**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**58.4**	**131.2**	**116.3**	**98.4**	**4.8**	**3.9**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.33**	**0.52**	**0.52**	**0.37**	**0.11**	**0.04**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.33**	**0.51**	**0.52**	**0.37**	**0.11**	**0.04**
3 . **Purchased Water Expenses**	0.0	0.0	58.8	129.3	112.1	94.6	0.4	-0.1
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.5	1.5	1.5	1.3	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	2.7	3.3	3.6	0.9	-0.4
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.2**	**0.8**	**2.4**	**1.5**	**3.5**	**4.3**
Net Income with Securitization	**0.0**	**0.0**	**0.2**	**0.8**	**2.4**	**1.5**	**3.5**	**4.3**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**65**	**-4**	**8**	**-67**	**-10**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**2**	**3**	**3**	**2**	**0**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**9**	**53**	**46**	**39**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-9**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-4**	**5**	**4**	**4**	**0**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**(0.00)**	**0.01**	**0.01**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.07**	**(0.07)**	**(0.02)**	**(0.07)**	**0.07**	**0.02**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**(0.02)**	**(0.01)**	**(0.00)**	**0.01**	**0.01**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#54 ED5-Res Reduction by 20% Dry Hydrology for FY1516

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.8%	4.5%	3.2%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-7.0%	-6.7%	-1.6%	-0.5%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.4%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.1%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.2%	2.4%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.8%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	6.6%	1.8%	6.7%	4.8%	4.8%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.6%	8.5%	8.4%	5.4%	5.9%	6.0%
3 & 5 Year Average (starting FY16)							5.0%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.2%		8.3%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	92.6	38.6	25.5	2.0	7.9	-1.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-87.2	-90.3	-25.6	-5.8	-10.9	-2.5
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.9	-5.5	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.7	19.4	3.5	7.7	2.7	2.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-0.6	25.5	39.4	50.1	25.6
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	-0.1
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	52.6	-17.9	48.8	64.7	83.4	78.0
					139.9	72.4	74.4	70.5	94.4	

Case#33

-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%	
17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%	
0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%	
0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%	
0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%	
			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%	
-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%	
-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%	
-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%	
15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%	
-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%	
					4.9%		5.0%		
					10.4%		8.5%		

-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4	
163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0	
5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7	
5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8	
0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9	
			12.1	-9.1	-2.3	-0.5	-0.2	0.0	
-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0	
0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3	
-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0	
-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9	
131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7	

0.0	0.0	0.0	0.5	-0.4	-0.2	0.8	-0.5			
0.0	0.0	69.5	-51.5	-13.1	-3.7	-0.6	-0.5			
0.0	0.0	0.0	0.1	-0.2	0.1	0.0	0.0			
0.0	0.0	0.0	0.0	-0.1	0.0	0.2	-0.3			
0.0	0.0	0.0	1.3	-1.0	0.0	0.0	-0.3			
		0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
0.0	0.0	69.4	-49.6	-14.8	-3.7	0.5	-1.7			

	Actual 2012-13	Actual 2013-14	Approved 2014-15	Current 2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.0***	***217.9***	***221.2***	***220.8***
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	444.3	482.8	508.3	510.3	518.1	517.1
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	346.0	245.3	237.1	246.1	225.3	222.8
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	99.0	115.3	175.8	205.6	283.8
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.8	-11.3	-11.5	-11.9	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,147.4**	**1,095.5**	**1,135.4**	**1,206.6**	**1,223.4**	**1,304.3**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,174.3**	**1,153.7**	**1,221.6**	**1,319.8**	**1,372.1**	**1,507.0**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.12**	**5.07**	**5.30**	**5.45**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.24**	**5.33**	**5.69**	**5.97**	**6.26**	**6.62**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	300.8	199.5	190.1	197.9	176.0	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	22.1	23.8	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	180.1	186.8	194.1	207.2	220.5	245.8
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.7**	**98.1**	**111.6**	**136.1**	**129.4**	**153.4**
Net Income with Securitization			**90.7**	**106.5**	**85.8**	**115.8**	**137.8**	**170.4**	**174.6**	**215.1**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**135**	**216**	**253**	**414**	**393**	**522**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**244**	**266**	**289**	**309**	**329**	**354**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**315**	**279**	**280**	**286**	**281**	**283**
15 . **Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 . **Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**114**	**108**	**105**	**104**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.85**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.83**	**1.83**	**1.75**	**1.71**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.73**	**1.70**

	Forecast 2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Sales (Million HCF)	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
Revenue: *									
Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
Purchased Water Expenses	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
Operation & Maintenance Expenses									
Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
Depreciation (including Amortization of Regulatory Assets)	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
Property Taxes	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
Other Income/Expense (Net)	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
Interest Expense(Net)	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
Contribution in Aid of Construction	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
Net Income without Securitization	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
Capital Expenditures:									
Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
DWP Borrowing	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
Borrowing for Securitization	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
Debt Service	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
Debt Service for Securitization	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
Cash on hand	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
Days of Operating Cash	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
Days of Operating Cash with Debt Service	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
Debt Service Coverage Ratio	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
Debt Service Coverage Ratio (Cash)	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
Capitalization Ratio	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
Addtn'l Bond Test Ratio: (prev / max)									
Debt Service Coverage	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**

	Forecast 2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Sales (Million HCF)	***0.0***	***0.0***	***0.0***	***0.0***	***-0.1***	***-0.2***	***0.2***	***0.0***
Revenue: *								
Base Rates	0.0	0.0	0.0	0.5	0.1	-0.1	0.7	0.2
Purchased Water, In-City Pumping	0.0	0.0	92.2	1.0	0.7	-0.1	0.4	-0.1
Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Infrastructure	0.0	0.0	0.0	1.2	0.4	0.4	0.2	0.1
Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.7	-0.2	-0.1	0.0	0.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**92.2**	**2.0**	**1.0**	**0.1**	**1.3**	**0.2**
Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**92.2**	**2.0**	**1.0**	**0.1**	**1.3**	**0.2**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.30**	**0.09**	**0.03**	**0.01**	**0.00**	**0.00**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.30**	**0.09**	**0.03**	**0.01**	**0.00**	**0.00**
Purchased Water Expenses	0.0	0.0	91.5	0.8	0.7	-0.2	0.4	-0.1
Operation & Maintenance Expenses								
Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Depreciation (including Amortization of Regulatory Assets)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Property Taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Income/Expense (Net)	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Interest Expense(Net)	0.0	0.0	1.0	0.6	0.1	0.0	-0.1	-0.2
Contribution in Aid of Construction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Income without Securitization	**0.0**	**0.0**	**0.5**	**0.7**	**0.2**	**0.3**	**1.0**	**0.4**
Net Income with Securitization	**0.0**	**0.0**	**0.5**	**0.7**	**0.2**	**0.3**	**1.0**	**0.4**
Capital Expenditures:								
Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
DWP Borrowing	**0**	**0**	**23**	**-16**	**-5**	**-2**	**-2**	**-1**
Borrowing for Securitization	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Debt Service	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**
Debt Service for Securitization	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Cash on hand	**0**	**0**	**-6**	**0**	**0**	**0**	**0**	**0**
Days of Operating Cash	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
Days of Operating Cash with Debt Service	**0**	**0**	**-14**	**0**	**0**	**0**	**0**	**0**
Financial Ratios								
Debt Service Coverage Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Debt Service Coverage Ratio (Cash)	**0.00**	**0.00**	**(0.10)**	**0.07**	**0.01**	**0.01**	**0.01**	**0.00**
Capitalization Ratio	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
Addtn'l Bond Test Ratio: (prev / max)								
Debt Service Coverage	**0.00**	**0.00**	**(0.01)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014*

Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#55 ED5-Res Reduction by 20% Dry Hydrology for FY1516 & FY1617

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.6%	4.8%	3.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-4.4%	-3.0%	-5.8%	-1.6%	-1.4%	-0.2%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.4%	-0.3%	-0.4%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.1%	0.6%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.4%	2.9%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.7%	2.4%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	9.0%	5.7%	2.3%	3.5%	4.5%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.4%	8.6%	8.1%	5.1%	5.9%	6.0%
3 & 5 Year Average (starting FY16)							5.7%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)							10.0%		8.2%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	90.9	43.0	26.8	2.0	7.9	-1.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-58.3	-48.1	-79.0	-18.9	-14.4	-3.3
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.9	-5.5	-1.5	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.7	19.4	3.5	7.7	2.7	2.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.8	26.6	36.5	50.3	25.7
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	-0.1
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	79.9	27.6	-2.2	48.8	80.2	77.2
					138.1	75.7	76.8	67.6	94.7	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.0*	*217.9*	*221.2*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	442.6	485.6	512.4	514.4	522.3	521.3
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	344.7	370.5	237.3	246.1	225.3	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	28.0	28.1	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	115.2	172.8	202.8	281.2
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-12.1	-12.0	-11.7	-11.9	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,144.4**	**1,222.0**	**1,138.8**	**1,207.5**	**1,224.6**	**1,305.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,171.3**	**1,280.2**	**1,225.1**	**1,320.7**	**1,373.4**	**1,508.5**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.24**	**5.40**	**5.40**	**5.48**	**5.59**	**5.71**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.36**	**5.66**	**5.79**	**6.00**	**6.27**	**6.63**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	299.3	324.0	190.1	197.9	176.0	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	22.1	25.2	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	189.9	195.4	207.3	220.4	245.5
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.1**	**98.5**	**113.8**	**136.9**	**130.7**	**155.2**
Net Income with Securitization			**90.7**	**106.5**	**85.3**	**116.2**	**140.0**	**171.3**	**175.9**	**216.8**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**322**	**177**	**407**	**392**	**520**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**268**	**291**	**310**	**329**	**355**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**319**	**330**	**280**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**152**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**116**	**112**	**105**	**104**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.76**	**1.85**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.97**	**1.62**	**1.82**	**1.73**	**1.80**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.45**	**1.59**	**1.64**	**1.73**	**1.71**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	8.7%	-0.3%	-5.2%	-1.3%	-0.3%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	-0.2%	-0.1%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.3%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	-0.2%	-0.2%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	8.6%	-0.6%	-5.7%	-1.6%	-0.4%	-0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.1%	-0.3%	-0.5%	-0.3%	-0.1%	0.0%
3 & 5 Year Average (starting FY16)					0.8%	0.0%	0.0%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.3%	0.0%	-0.3%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-1.7	5.0	0.9	-0.2	0.9	-0.5
PW Revenue Incr ($M)	0.0	0.0	98.4	-9.3	-66.6	-16.7	-4.1	-1.3
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.1	-0.2	0.1	0.0	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	-0.1	0.0	0.2	-0.3
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.1	0.2	-2.9	0.2	-0.2
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	96.7	-4.1	-65.8	-19.7	-2.7	-2.5

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*-0.1*	*-0.2*	*0.2*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-1.7	3.3	4.2	4.0	4.9	4.3
b . Purchased Water, In-City Pumping	0.0	0.0	90.9	126.2	0.9	-0.1	0.4	-0.1
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	0.3	-2.7	-2.7	-2.5
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-1.0	-0.9	-0.3	-0.1	0.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**89.2**	**128.5**	**4.5**	**1.0**	**2.5**	**1.7**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**89.2**	**128.5**	**4.5**	**1.0**	**2.5**	**1.7**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.42**	**0.42**	**0.13**	**0.04**	**0.02**	**0.01**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.42**	**0.42**	**0.13**	**0.04**	**0.01**	**0.01**
3 . **Purchased Water Expenses**	0.0	0.0	90.0	125.2	0.7	-0.2	0.4	-0.1
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.8	1.5	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	3.7	1.4	0.0	-0.2	-0.4
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.0**	**1.1**	**2.4**	**1.1**	**2.4**	**2.2**
Net Income with Securitization	**0.0**	**0.0**	**0.0**	**1.1**	**2.4**	**1.1**	**2.4**	**2.2**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**89**	**-82**	**-9**	**-3**	**-3**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**1**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**-2**	**51**	**0**	**0**	**0**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**-21**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**-12**	**5**	**0**	**0**	**0**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.03**	**(0.14)**	**0.08**	**0.02**	**0.01**	**0.00**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**(0.02)**	**0.01**	**0.01**	**0.00**	**0.01**

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#56 6% Equity for WACC Return on Investment

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	22.9%	5.8%	4.9%	0.7%	3.2%	1.6%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.3%	-0.5%	-0.2%	-0.9%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.4%	-0.3%	-0.4%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.0%	0.6%	0.5%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	1.5%	2.0%	2.3%	0.8%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.6%	2.3%	1.9%	2.3%	3.4%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	14.5%	7.1%	8.3%	4.4%	6.6%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	27.6%	9.4%	8.8%	4.6%	7.5%	6.0%
3 & 5 Year Average (starting FY16)							10.0%		8.2%	
3 & 5 Year Avg excluding PW (starting FY16)							15.3%		11.6%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	252.2	53.4	48.5	12.4	58.1	25.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.6	-6.7	-4.1	-5.7	-1.8	-0.9
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	17.1	29.2	36.5	13.3
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	142.6	46.6	76.4	68.5	120.2	92.4
					299.3	85.4	88.9	70.6	130.5	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	603.9	657.3	705.8	718.2	776.3	801.3
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	26.9	27.1	17.7	17.5	16.4
d . Water Infrastructure			0.0	0.0	105.7	97.8	105.5	155.6	172.2	237.9
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-12.7	-12.8	-13.3	-13.7	-14.6
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,214.9**	**1,265.9**	**1,319.7**	**1,391.4**	**1,444.6**	**1,538.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,241.8**	**1,324.1**	**1,405.9**	**1,504.5**	**1,593.3**	**1,741.5**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.51**	**5.77**	**6.13**	**6.30**	**6.59**	**6.77**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.63**	**6.03**	**6.53**	**6.82**	**7.27**	**7.69**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	179.0	175.4	171.7	169.7	179.4
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**236.8**	**277.1**	**315.3**	**356.2**	**401.7**	**454.3**
Net Income with Securitization			**90.7**	**106.5**	**245.0**	**294.8**	**341.5**	**390.5**	**446.9**	**515.9**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**56**	**36**	**72**	**125**	**221**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**260**	**273**	**277**	**281**	**290**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**465**	**424**	**404**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**251**	**228**	**217**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**185**	**165**	**155**	**107**	**106**	**106**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**2.41**	**2.45**	**2.53**	**2.71**	**2.91**	**3.14**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.64**	**2.52**	**2.58**	**2.63**	**2.96**	**2.99**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.59**	**0.57**	**0.54**	**0.52**	**0.49**	**0.47**
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**2.09**	**2.32**	**2.53**	**2.71**	**2.87**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max)									
Debt Service Coverage	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	14.1%	1.0%	1.6%	0.7%	3.2%	1.6%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.1%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	-0.3%	-0.1%	-0.1%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-1.0%	-1.1%	-1.3%	-1.1%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	-0.4%	-0.3%	-0.3%	-0.3%	-0.5%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	14.1%	0.8%	0.3%	-0.7%	1.7%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	14.1%	0.5%	0.2%	-0.8%	1.5%	0.0%
3 & 5 Year Average (starting FY16)					5.1%	0.0%	3.2%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					4.9%	0.0%	3.1%	0.0%

Base Revenue Incr ($M)	0.0	0.0	159.7	15.3	22.6	10.3	51.0	25.5
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	-0.3	-0.4	-0.4	0.0	-0.2	-0.2
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	-9.4	-10.3	-13.5	-12.6
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	159.3	14.9	12.8	0.0	37.2	12.6

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	159.7	175.0	197.6	207.9	258.9	284.3
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	-1.0	-1.1	-1.2	-1.3	-1.6
d . Water Infrastructure	0.0	0.0	0.0	0.0	-9.4	-19.9	-33.2	-45.8
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-1.6	-1.7	-1.9	-1.9	-2.2
Total Operating Revenue before Securitization	**0.0**	**0.0**	**159.6**	**172.4**	**185.3**	**184.9**	**222.5**	**234.7**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**159.6**	**172.4**	**185.3**	**184.9**	**222.5**	**234.7**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.69**	**0.79**	**0.86**	**0.86**	**1.01**	**1.07**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.69**	**0.78**	**0.86**	**0.86**	**1.01**	**1.07**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-7.3	-18.6	-35.5	-50.9	-66.6
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**159.6**	**179.6**	**203.9**	**220.4**	**273.4**	**301.2**
Net Income with Securitization	**0.0**	**0.0**	**159.6**	**179.6**	**203.9**	**220.4**	**273.4**	**301.2**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital Expenditures	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-176**	**-222**	**-344**	**-270**	**-302**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-6**	**-16**	**-32**	**-48**	**-65**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**143**	**145**	**125**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**77**	**78**	**67**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**57**	**57**	**50**	**3**	**5**	**7**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.71**	**0.75**	**0.83**	**0.93**	**1.16**	**1.30**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.71**	**0.76**	**0.84**	**0.93**	**1.18**	**1.28**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.01)**	**(0.03)**	**(0.06)**	**(0.09)**	**(0.11)**	**(0.14)**
19. **Addtn'l Bond Test Ratio:** (prev / max)								
Debt Service Coverage	**0.00**	**0.00**	**0.00**	**0.62**	**0.74**	**0.90**	**0.99**	**1.18**

DRAFT CONFIDENTIAL

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#57 labor cut to FY12/13 level for 5 years starting FY16

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	9.1%	4.7%	2.5%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.6%	3.2%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.2%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.8%	6.2%	7.2%	5.2%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.9%	8.8%	7.8%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)							4.7%		4.9%	
3 & 5 Year Avg excluding PW (starting FY16)							10.2%		8.4%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	96.5	37.3	16.6	2.1	6.9	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	26.7	39.6	50.0	25.9
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-12.9	31.0	54.6	68.6	82.6	79.8
					143.8	69.8	67.0	70.7	93.0	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	448.2	485.6	502.2	504.3	511.1	510.7
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	105.7	97.8	115.2	175.8	205.7	284.1
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.8	-12.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,059.2**	**1,096.7**	**1,128.6**	**1,200.9**	**1,216.2**	**1,298.3**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,086.1**	**1,154.8**	**1,214.8**	**1,314.0**	**1,364.9**	**1,501.0**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.84**	**5.00**	**5.24**	**5.41**	**5.55**	**5.67**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.26**	**5.64**	**5.93**	**6.23**	**6.59**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	267.8	267.9	263.1	265.8	271.4	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**453.8**	**463.8**	**466.3**	**466.7**	**474.5**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.6	205.6	227.2	252.7
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.8	24.7	24.5	24.3	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	186.5	193.9	206.4	218.6	244.1
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**97.5**	**111.5**	**143.1**	**138.8**	**149.2**
Net Income with Securitization			**90.7**	**106.5**	**85.4**	**115.2**	**137.7**	**177.5**	**184.1**	**210.8**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	366.4	413.7	428.5	591.4	630.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**887.2**	**944.9**	**891.9**	**1,030.5**	**1,191.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**239**	**250**	**398**	**374**	**533**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**328**	**353**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**318**	**280**	**277**	**281**	**275**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**171**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**126**	**108**	**105**	**103**	**101**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.80**	**1.79**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.94**	**1.76**	**1.74**	**1.73**	**1.82**	**1.70**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.60**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.47**	**1.58**	**1.64**	**1.75**	**1.73**
*** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**3.8**	**2.8**	**-6.0**	**-12.3**	**-14.6**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**2.8**	**2.0**	**-4.0**	**-8.1**	**-10.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	0.3%	-0.1%	-0.8%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.3%	-0.1%	-0.8%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.3%	-0.1%	-0.8%	0.0%	0.0%	0.0%
3 & 5 Year Average (starting FY16)					-0.2%	0.0%	-0.1%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.2%	0.0%	-0.1%	0.0%

Base Revenue Incr ($M)	0.0	0.0	3.9	-0.7	-9.2	0.0	-0.2	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.2	0.2	-0.1	0.1
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	3.9	-0.7	-9.0	0.1	-0.3	0.1

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	3.9	3.2	-6.0	-6.1	-6.3	-6.3
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Total Operating Revenue before Securitization	**0.0**	**0.0**	**3.9**	**3.1**	**-5.8**	**-5.7**	**-5.9**	**-5.8**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**3.9**	**3.1**	**-5.8**	**-5.7**	**-5.9**	**-5.8**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.02**	**0.02**	**-0.03**	**-0.03**	**-0.03**	**-0.03**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.02**	**0.01**	**-0.03**	**-0.03**	**-0.03**	**-0.03**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	3.8	2.8	-6.0	-12.3	-14.6	0.0
Total O & M Expenses	**0.0**	**0.0**	**3.8**	**2.8**	**-6.0**	**-12.3**	**-14.6**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.1	0.0	-0.1	-0.2
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	-0.1	-0.2	-0.2	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	0.2	0.0	-0.9	-2.0	-1.8
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**7.3**	**10.5**	**-3.8**
Net Income with Securitization	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**7.3**	**10.5**	**-3.8**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	2.8	2.0	-4.0	-8.1	-10.0	0.0
Capital Expenditures	**0.0**	**0.0**	**2.8**	**2.0**	**-4.0**	**-8.1**	**-10.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**6**	**-9**	**-18**	**-21**	**10**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**0**	**0**	**-1**	**-2**	**-2**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**-3**	**1**	**-2**	**-5**	**-6**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-3**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-2**	**0**	**0**	**-1**	**-1**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.04**	**(0.01)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.03**	**0.04**	**(0.01)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.01**	**0.03**	**0.03**

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Water System Financial Plan Summary

($ in millions)

Water FY16 Case#58 Cut health care costs to FY12/13 level for 5 years starting FY16

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.0%	4.4%	2.8%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.2%	3.7%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.2%	2.6%	4.0%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-0.3%	5.9%	7.5%	5.2%	5.0%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	12.8%	8.6%	8.1%	5.5%	6.1%	6.1%
3 & 5 Year Average (starting FY16)							4.4%		4.7%	
3 & 5 Year Avg excluding PW (starting FY16)							9.8%		8.2%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	84.1	33.9	20.2	2.1	6.8	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.8	-5.5	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	25.3	39.5	50.0	25.6
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-25.2	27.7	56.7	68.6	82.6	79.5
					131.5	66.4	69.1	70.7	93.0	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	435.8	469.8	489.9	492.0	498.8	498.4
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	28.0	28.2	19.0	18.9	18.1
d . Water Infrastructure			0.0	0.0	105.7	97.8	113.8	174.4	204.3	282.4
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.0	-11.0	-11.2	-11.7	-12.1
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,046.8**	**1,081.1**	**1,115.2**	**1,187.4**	**1,202.6**	**1,284.5**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,073.7**	**1,139.2**	**1,201.4**	**1,300.5**	**1,351.4**	**1,487.2**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.78**	**4.93**	**5.18**	**5.35**	**5.49**	**5.61**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.90**	**5.19**	**5.58**	**5.87**	**6.16**	**6.53**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	255.3	253.6	252.2	255.9	261.9	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**441.4**	**449.5**	**455.5**	**456.8**	**465.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.3	186.3	205.2	226.6	252.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.2	23.6	24.5	24.4	24.2	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	185.4	192.3	204.5	216.5	242.6
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**97.3**	**110.7**	**141.7**	**137.4**	**137.7**
Net Income with Securitization			**90.7**	**106.5**	**85.5**	**114.9**	**136.9**	**176.1**	**182.6**	**199.3**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	357.0	403.4	421.1	584.7	623.1	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**877.8**	**934.6**	**884.5**	**1,023.9**	**1,184.9**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**212**	**246**	**393**	**369**	**549**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**265**	**288**	**307**	**326**	**351**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**329**	**274**	**272**	**277**	**271**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**180**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**132**	**107**	**105**	**103**	**100**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.80**	**1.79**	**1.81**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.94**	**1.76**	**1.74**	**1.73**	**1.82**	**1.67**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.60**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.59**	**1.64**	**1.76**	**1.73**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**-8.7**	**-11.5**	**-16.8**	**-22.2**	**-24.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**-6.6**	**-8.3**	**-11.4**	**-14.7**	**-16.9**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-0.7%	-0.4%	-0.5%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	-0.1%	0.1%	0.1%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-0.7%	-0.4%	-0.6%	0.1%	0.1%	0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.7%	-0.3%	-0.5%	0.1%	0.1%	0.1%
3 & 5 Year Average (starting FY16)					-0.6%	0.0%	-0.3%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.5%	0.0%	-0.3%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-8.4	-4.2	-5.7	-0.1	-0.3	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.1	-0.1	0.1	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	-1.1	0.1	-0.1	-0.3
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-8.4	-4.1	-6.9	0.1	-0.3	-0.3

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-8.4	-12.6	-18.3	-18.4	-18.6	-18.6
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
d . Water Infrastructure	0.0	0.0	0.0	0.0	-1.1	-1.1	-1.1	-1.3
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2
Total Operating Revenue before Securitization	**0.0**	**0.0**	**-8.4**	**-12.5**	**-19.2**	**-19.2**	**-19.4**	**-19.6**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-8.4**	**-12.5**	**-19.2**	**-19.2**	**-19.4**	**-19.6**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**-0.04**	**-0.05**	**-0.09**	**-0.09**	**-0.09**	**-0.09**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.04**	**-0.06**	**-0.09**	**-0.09**	**-0.09**	**-0.09**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	-8.7	-11.5	-16.8	-22.2	-24.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**-8.7**	**-11.5**	**-16.8**	**-22.2**	**-24.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.7	-0.9
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	-0.1	-0.1	-0.2	-0.3	-0.3	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-0.9	-1.7	-2.7	-4.1	-3.3
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.2**	**-0.2**	**-0.7**	**5.9**	**9.1**	**-15.3**
Net Income with Securitization	**0.0**	**0.0**	**0.2**	**-0.2**	**-0.7**	**5.9**	**9.1**	**-15.3**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	-6.6	-8.3	-11.4	-14.7	-16.9	0.0
Capital Expenditures	**0.0**	**0.0**	**-6.6**	**-8.3**	**-11.4**	**-14.7**	**-16.9**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-21**	**-13**	**-22**	**-26**	**26**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-1**	**-2**	**-3**	**-4**	**-4**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**8**	**-5**	**-7**	**-9**	**-10**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**4**	**0**	**-1**	**-1**	**-1**	**0**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.04**	**(0.04)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.02**	**0.04**	**(0.04)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.00)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.03**	**0.03**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#59 cut pension costs to FY12/13 level for 5 years starting FY16

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	9.0%	5.1%	3.5%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.6%	6.5%	8.2%	5.1%	4.9%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.8%	9.2%	8.8%	5.4%	5.9%	6.0%
3 & 5 Year Average (starting FY16)							5.1%		5.1%	
3 & 5 Year Avg excluding PW (starting FY16)							10.6%		8.6%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	95.0	41.5	28.3	2.2	7.2	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.3	-3.8	-5.6	-1.5	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	103.6	-1.9	26.7	39.6	50.0	25.9
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-14.4	35.1	66.1	68.7	83.0	79.7
					142.3	73.9	78.6	70.9	93.3	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	446.7	488.1	516.4	518.6	525.8	525.4
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.9	28.1	18.8	18.7	17.9
d . Water Infrastructure			0.0	0.0	105.7	97.8	115.2	175.8	205.7	284.1
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.5	-11.9	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,057.6**	**1,099.3**	**1,142.8**	**1,215.0**	**1,230.6**	**1,312.7**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,084.5**	**1,157.4**	**1,229.1**	**1,328.1**	**1,379.4**	**1,515.4**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.83**	**5.01**	**5.31**	**5.48**	**5.62**	**5.74**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.27**	**5.71**	**6.00**	**6.29**	**6.66**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	266.2	270.5	276.5	288.6	301.6	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**452.3**	**466.4**	**479.7**	**489.6**	**504.8**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.1	168.4	186.6	205.8	227.6	253.3
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.8	24.8	24.8	24.7	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	186.6	194.6	208.5	222.9	247.9
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**77.3**	**97.5**	**111.7**	**132.4**	**118.9**	**159.2**
Net Income with Securitization			**90.7**	**106.5**	**85.5**	**115.2**	**138.0**	**166.8**	**164.1**	**220.8**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	365.4	415.7	437.5	606.4	651.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**886.2**	**946.9**	**900.9**	**1,045.5**	**1,212.8**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**241**	**265**	**427**	**417**	**510**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**266**	**290**	**311**	**332**	**357**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**320**	**281**	**282**	**290**	**287**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**172**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**127**	**108**	**106**	**104**	**102**	**99**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.76**	**1.72**	**1.86**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.94**	**1.76**	**1.74**	**1.69**	**1.75**	**1.72**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.47**	**1.58**	**1.63**	**1.70**	**1.67**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**2.3**	**5.4**	**7.4**	**10.5**	**15.6**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**1.7**	**3.9**	**5.0**	**6.9**	**11.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
Debt Service Coverage	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%
3 & 5 Year Average (starting FY16)					0.2%	0.0%	0.1%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.2%	0.0%	0.1%	0.0%

Base Revenue Incr ($M)	0.0	0.0	2.4	3.4	2.4	0.0	0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.0	-0.1	0.1	0.0	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.2	0.2	-0.1	0.1
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	2.4	3.4	2.5	0.3	0.0	-0.1

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	2.4	5.8	8.2	8.3	8.4	8.4
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
d . Water Infrastructure	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Total Operating Revenue before Securitization	**0.0**	**0.0**	**2.4**	**5.8**	**8.4**	**8.4**	**8.5**	**8.6**
l . Securitization Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**2.4**	**5.8**	**8.4**	**8.4**	**8.5**	**8.6**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.01**	**0.03**	**0.04**	**0.04**	**0.04**	**0.04**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.01**	**0.03**	**0.04**	**0.04**	**0.04**	**0.04**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	2.3	5.4	7.4	10.5	15.6	0.0
Total O & M Expenses	**0.0**	**0.0**	**2.3**	**5.4**	**7.4**	**10.5**	**15.6**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	0.3	0.7	1.2	2.3	2.0
9 . **Contribution in Aid of Construction**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**0.2**	**0.1**	**0.3**	**-3.3**	**-9.4**	**6.1**
Net Income with Securitization	**0.0**	**0.0**	**0.2**	**0.1**	**0.3**	**-3.3**	**-9.4**	**6.1**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Infrastructure	0.0	0.0	1.7	3.9	5.0	6.9	11.0	0.0
Capital Expenditures	**0.0**	**0.0**	**1.7**	**3.9**	**5.0**	**6.9**	**11.0**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**8**	**6**	**11**	**22**	**-13**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**0**	**1**	**1**	**2**	**2**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
14 . **Cash on hand**	**0**	**0**	**-2**	**2**	**3**	**4**	**6**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-2**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-1**	**0**	**0**	**0**	**1**	**0**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.03)**	**0.01**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.01)**	**(0.03)**	**0.01**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Debt Service Coverage	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.00)**	**(0.02)**	**(0.03)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#60 Cut Capex to 75% of Budget and NO Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-0.4%	5.2%	6.4%	0.6%	0.0%	9.8%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-0.4%	0.0%	0.2%	0.8%	2.7%	-6.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	10.7%	2.1%	-0.5%	-0.2%	1.5%	-6.9%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	6.9%	0.4%	2.0%	2.5%	2.9%	1.5%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.8%	0.6%	0.5%	0.3%	0.2%	-1.3%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-1.2%	4.6%	7.9%	3.6%	6.2%	0.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	11.9%	7.3%	8.5%	3.9%	7.3%	1.1%
3 & 5 Year Average (starting FY16)							3.8%		4.2%	
3 & 5 Year Avg excluding PW (starting FY16)							9.2%		7.8%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-11.1	45.1	61.6	9.0	6.3	129.5
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-5.5	-2.3	0.9	10.0	34.7	-80.5
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	119.0	14.4	-11.6	-1.6	22.8	-91.9
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	77.7	2.1	20.0	29.7	38.0	19.6
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	8.2	5.5	4.7	3.9	3.6	-17.4
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-35.6	13.9	60.0	48.3	94.9	11.1

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue: ***										
a . Base Rates	394.1	363.5	353.9	351.7	340.6	385.7	447.4	456.4	462.7	592.3
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	64.9	70.2	74.6	72.3	117.8	42.7
d . Water Infrastructure			0.0	0.0	79.3	76.9	89.9	135.4	158.4	217.3
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	243.6	270.9	250.6	251.8	243.3	198.8
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	72.7	40.5	51.4	52.8	56.1	43.6
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.2	-11.3	-11.9	-12.4	-13.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,063.1**	**1,121.6**	**1,183.3**	**1,247.6**	**1,296.0**	**1,349.9**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	53.9
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,063.1**	**1,121.6**	**1,183.3**	**1,247.6**	**1,296.0**	**1,403.9**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.86**	**5.08**	**5.48**	**5.68**	**6.03**	**5.84**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.86**	**5.08**	**5.48**	**5.68**	**6.03**	**6.09**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	155.8	164.5	178.5	192.5	208.7	230.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	185.1	205.6	224.7	246.0	269.3	297.7
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	28.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**80.3**	**110.0**	**137.6**	**151.2**	**172.1**	**170.0**
Net Income with Securitization			**90.7**	**106.5**	**80.3**	**110.0**	**137.6**	**151.2**	**172.1**	**186.4**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	28.2	29.0	29.1	29.7	30.2	41.0
b. Water Quality	204.6	245.2	200.2	195.1	262.5	266.7	188.0	163.8	134.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	78.8	79.7	80.7	89.4	205.1	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					21.2	23.1	49.7	46.6	51.3	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	272.7	308.8	324.3	449.6	480.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**663.3**	**707.2**	**671.9**	**779.0**	**901.4**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**257**	**514**	**450**	**554**	**595**	**544**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**247**	**282**	**318**	**347**	**377**	**410**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**110**	**106**	**102**	**100**	**97**	**94**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.70**	**1.72**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.93**	**1.73**	**1.72**	**1.67**	**1.83**	**1.55**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.63**	**0.63**	**0.64**	**0.65**	**0.65**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.51**	**1.36**	**1.44**	**1.49**	**1.49**	**1.53**
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-9.2%	0.4%	3.1%	0.6%	0.0%	9.8%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	3.3%	0.5%	0.5%	1.3%	2.8%	-6.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	8.2%	-0.1%	-1.2%	-0.8%	1.5%	-7.1%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-2.3%	0.3%	-0.5%	-0.7%	-0.7%	-0.4%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.7%	0.3%	0.5%	0.3%	0.3%	-1.3%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-2.9%	-2.6%	-2.1%	-2.6%	0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-1.7%	-1.6%	-0.1%	-1.5%	1.3%	-4.9%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-1.7%	-1.6%	-0.1%	-1.5%	1.3%	-4.9%
3 & 5 Year Average (starting FY16)					-1.1%	0.0%	-0.7%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-1.1%	0.0%	-0.7%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-103.7	7.0	35.8	6.9	-0.7	130.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	37.8	4.0	4.5	15.6	36.2	-79.9
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	92.2	-4.9	-15.2	-9.3	20.2	-94.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-25.9	4.0	-6.4	-9.7	-12.0	-6.3
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	7.6	3.3	5.7	3.2	3.9	-17.7
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	-31.3	-28.1	-26.9	-35.6	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-18.8	-17.8	-3.6	-20.2	11.9	-68.6

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	-103.7	-96.6	-60.8	-53.9	-54.7	75.3
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	37.8	42.2	46.4	53.4	99.0	24.7
d . Water Infrastructure	0.0	0.0	-26.4	-20.9	-25.0	-40.1	-47.0	-66.4
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	92.7	94.7	69.6	62.6	54.1	6.3
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	7.5	8.8	19.0	19.7	23.1	6.9
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.1	-0.2	-0.5	-0.5	-1.0
Total Operating Revenue before Securitization	**0.0**	**0.0**	**7.9**	**28.1**	**48.9**	**41.1**	**73.9**	**45.8**
l . Securitization Revenue	0.0	0.0	-26.9	-58.1	-86.2	-113.1	-148.8	-148.8
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-19.0**	**-30.0**	**-37.3**	**-72.1**	**-74.8**	**-103.0**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.04**	**0.10**	**0.21**	**0.24**	**0.45**	**0.14**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.08**	**-0.16**	**-0.19**	**-0.28**	**-0.22**	**-0.53**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-1.3	-3.9	-8.0	-13.1	-18.6	-22.9
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	6.0	19.4	30.7	38.8	48.7	51.7
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-17.7	-26.2	-34.4	-45.2	-45.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**3.1**	**12.6**	**26.2**	**15.4**	**43.8**	**16.9**
Net Income with Securitization	**0.0**	**0.0**	**-5.0**	**-5.1**	**0.0**	**-19.0**	**-1.4**	**-28.3**
a. Water Conservation	0.0	0.0	-9.4	-9.7	-9.7	-9.9	-10.1	0.0
b. Water Quality	0.0	0.0	-87.5	-88.9	-62.7	-54.6	-44.9	0.0
c. Water Reclamation	0.0	0.0	-26.3	-26.6	-26.9	-29.8	-68.4	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-7.1	-7.7	-16.6	-15.5	-17.1	0.0
f. Infrastructure	0.0	0.0	-90.9	-102.9	-108.1	-149.9	-160.0	0.0
Capital Expenditures	**0.0**	**0.0**	**-221.1**	**-235.7**	**-224.0**	**-259.7**	**-300.5**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**145**	**282**	**191**	**138**	**200**	**21**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**-475**	**-427**	**-409**	**-542**	**0**
13a . **Debt Service**	**0**	**0**	**5**	**17**	**29**	**37**	**48**	**56**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-58**	**-86**	**-113**	**-149**	**-149**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-18**	**-2**	**-3**	**-4**	**-5**	**-5**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**(0.00)**	**(0.08)**	**(0.03)**	**(0.14)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**(0.00)**	**(0.03)**	**(0.01)**	**(0.03)**	**0.04**	**(0.16)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.02**	**0.03**	**0.03**	**0.04**	**0.04**
19. **Debt Service Coverage**	**0.00**	**0.00**	**(0.04)**	**(0.11)**	**(0.14)**	**(0.14)**	**(0.23)**	**(0.17)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#61 Cut Capex to 75% of Budget with Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	11.1%	3.8%	3.1%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.3%	0.6%	0.6%	-0.1%	0.3%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	6.9%	0.1%	1.3%	2.2%	2.9%	1.4%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	1.6%	2.1%	1.9%	1.6%	2.0%	4.2%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-0.3%	4.5%	5.9%	3.6%	3.5%	5.7%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	12.9%	7.2%	6.5%	3.9%	4.6%	5.8%
3 & 5 Year Average (starting FY16)							3.4%		3.5%	
3 & 5 Year Avg excluding PW (starting FY16)							8.9%		7.0%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	119.2	26.7	22.9	2.2	7.1	-0.5
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.4	-3.8	-5.5	-1.4	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	20.3	2.9	7.5	1.6	3.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	77.7	-1.4	12.7	26.1	37.4	17.4
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	18.3	22.5	20.5	19.7	26.4	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-24.7	12.9	38.5	47.9	60.2	71.7
					132.0	51.7	51.0	50.0	70.6	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	470.9	497.5	520.4	522.6	529.7	529.3
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.8	28.1	18.8	18.7	17.9
d . Water Infrastructure			0.0	0.0	79.3	73.3	79.1	120.9	143.4	200.1
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.0	-11.2	-11.5	-11.8
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.4**	**1,084.1**	**1,110.8**	**1,164.5**	**1,172.7**	**1,233.3**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	18.3	40.8	61.3	81.0	107.4	161.3
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,073.7**	**1,124.9**	**1,172.1**	**1,245.4**	**1,280.0**	**1,394.6**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.82**	**4.94**	**5.15**	**5.25**	**5.34**	**5.42**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.90**	**5.13**	**5.43**	**5.63**	**5.82**	**6.15**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	155.8	164.5	178.5	192.5	208.7	230.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	179.0	178.6	184.0	189.1	213.7
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	18.3	25.3	31.8	38.1	46.4	62.8
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**78.6**	**99.1**	**111.1**	**130.0**	**128.9**	**137.3**
Net Income with Securitization			**90.7**	**106.5**	**84.3**	**111.8**	**130.4**	**155.5**	**162.9**	**187.6**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	28.2	29.0	29.1	29.7	30.2	41.0
b. Water Quality	204.6	245.2	200.2	195.1	262.5	266.7	188.0	163.8	134.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	78.8	79.7	80.7	89.4	205.1	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					21.2	23.1	49.7	46.6	51.3	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	272.7	308.8	324.3	449.6	480.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**663.3**	**707.2**	**671.9**	**779.0**	**901.4**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**56**	**116**	**267**	**238**	**549**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**278**	**342**	**311**	**299**	**401**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**260**	**275**	**288**	**300**	**321**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**18**	**41**	**61**	**81**	**107**	**161**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**417**	**308**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**225**	**166**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**166**	**120**	**107**	**106**	**104**	**102**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.76**	**1.76**	**1.82**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.94**	**1.76**	**1.73**	**1.69**	**1.78**	**1.70**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.59**	**0.58**	**0.58**	**0.59**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.52**	**1.63**	**1.68**	**1.76**	**1.70**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***235.1***	***241.6***	***234.3***	***229.9***	***222.5***	***217.1***	***218.0***	***221.0***	***220.8***
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	2.4%	-0.9%	-0.2%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.1%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-2.3%	0.0%	-1.2%	-1.0%	-0.7%	-0.5%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-0.8%	-0.8%	-0.7%	-0.5%	-0.6%	0.3%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-0.7%	-1.7%	-2.1%	-1.5%	-1.5%	-0.2%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.7%	-1.7%	-2.1%	-1.5%	-1.4%	-0.2%
3 & 5 Year Average (starting FY16)					-1.5%	0.0%	-1.5%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-1.5%	0.0%	-1.5%	0.0%

Base Revenue Incr ($M)	0.0	0.0	26.6	-11.4	-3.0	0.1	0.0	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	-0.1	-0.1	0.1	0.1	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.9	-0.7	-0.2	-0.9	0.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-25.9	0.5	-13.7	-13.3	-12.7	-8.5
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-8.6	-8.7	-7.6	-7.2	-9.2	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-7.9	-18.8	-25.1	-20.6	-22.7	-8.1

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***	***0.0***
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	26.6	15.2	12.2	12.3	12.3	12.3
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.1	-0.1
d . Water Infrastructure	0.0	0.0	-26.4	-24.4	-35.8	-54.5	-62.0	-83.6
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.5
Total Operating Revenue before Securitization	**0.0**	**0.0**	**0.2**	**-9.4**	**-23.6**	**-42.1**	**-49.4**	**-70.9**
l . Securitization Revenue	0.0	0.0	-8.6	-17.3	-24.9	-32.2	-41.4	-41.4
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-8.4**	**-26.7**	**-48.5**	**-74.2**	**-90.8**	**-112.3**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.00**	**-0.04**	**-0.12**	**-0.19**	**-0.24**	**-0.28**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.03**	**-0.12**	**-0.24**	**-0.33**	**-0.43**	**-0.47**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-1.3	-3.9	-8.0	-13.1	-18.6	-22.9
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-7.3	-15.3	-23.2	-31.5	-32.3
9 . **Contribution in Aid of Construction**	0.0	0.0	-2.5	-5.0	-7.0	-8.8	-11.3	-11.3
10 . **Net Income without Securitization**	**0.0**	**0.0**	**1.4**	**1.7**	**-0.3**	**-5.8**	**0.6**	**-15.7**
Net Income with Securitization	**0.0**	**0.0**	**-1.0**	**-3.3**	**-7.3**	**-14.6**	**-10.7**	**-27.0**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	-9.4	-9.7	-9.7	-9.9	-10.1	0.0
b. Water Quality	0.0	0.0	-87.5	-88.9	-62.7	-54.6	-44.9	0.0
c. Water Reclamation	0.0	0.0	-26.3	-26.6	-26.9	-29.8	-68.4	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-7.1	-7.7	-16.6	-15.5	-17.1	0.0
f. Infrastructure	0.0	0.0	-90.9	-102.9	-108.1	-149.9	-160.0	0.0
Capital Expenditures	**0.0**	**0.0**	**-221.1**	**-235.7**	**-224.0**	**-259.7**	**-300.5**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-176**	**-143**	**-149**	**-157**	**26**
12b . **Borrowing for Securitization**	**0**	**0**	**-130**	**-133**	**-116**	**-110**	**-140**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-6**	**-14**	**-22**	**-30**	**-34**
13b . **Debt Service for Securitization**	**0**	**0**	**-9**	**-17**	**-25**	**-32**	**-41**	**-41**
14 . **Cash on hand**	**0**	**0**	**96**	**29**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**52**	**16**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**38**	**12**	**2**	**2**	**3**	**3**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**(0.01)**	**0.01**	**(0.03)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.01)**	**(0.00)**	**(0.01)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.02)**	**(0.02)**	**(0.03)**	**(0.02)**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**0.04**	**0.05**	**0.04**	**0.04**	**0.00**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#62 Cut Capex to 80% of Budget and NO Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-1.1%	4.9%	6.7%	0.7%	0.0%	10.3%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-0.1%	0.1%	0.3%	0.9%	2.7%	-6.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	11.3%	2.1%	-0.5%	-0.3%	1.4%	-6.9%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	7.3%	0.5%	2.1%	2.6%	3.1%	1.6%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.8%	0.7%	0.6%	0.3%	0.2%	-1.3%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-0.6%	4.6%	8.3%	3.9%	6.3%	1.3%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	12.5%	7.3%	8.9%	4.2%	7.3%	1.5%
3 & 5 Year Average (starting FY16)							4.1%		4.5%	
3 & 5 Year Avg excluding PW (starting FY16)							9.5%		8.0%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-18.8	42.6	65.1	10.4	6.3	138.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-3.0	-1.4	1.3	10.9	35.3	-82.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	125.2	14.4	-12.5	-2.2	21.8	-93.6
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	82.9	2.9	21.4	31.6	40.7	20.9
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	8.7	5.8	5.2	4.1	3.3	-17.7
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-29.0	13.3	64.8	52.0	97.0	16.6

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	332.9	375.4	440.5	450.9	457.2	595.2
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	67.4	73.5	78.2	76.4	125.0	45.1
d . Water Infrastructure			0.0	0.0	84.6	82.6	96.6	145.0	169.7	232.5
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	249.7	277.5	255.7	256.5	247.6	200.1
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	73.2	41.2	52.7	54.2	57.8	44.2
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.2	-11.4	-12.0	-12.5	-13.5
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,069.8**	**1,127.7**	**1,193.2**	**1,261.9**	**1,314.8**	**1,372.2**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	53.9
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,069.8**	**1,127.7**	**1,193.2**	**1,261.9**	**1,314.8**	**1,426.1**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.88**	**5.11**	**5.53**	**5.75**	**6.11**	**5.94**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.88**	**5.11**	**5.53**	**5.75**	**6.11**	**6.19**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	156.1	165.3	180.1	195.1	212.4	234.6
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	186.7	209.6	230.9	254.6	280.7	309.4
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	28.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**85.1**	**111.3**	**139.7**	**154.2**	**175.8**	**175.9**
Net Income with Securitization			**90.7**	**106.5**	**85.1**	**111.3**	**139.7**	**154.2**	**175.8**	**192.3**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	30.0	30.9	31.0	31.6	32.2	41.0
b. Water Quality	204.6	245.2	200.2	195.1	280.0	284.4	200.5	174.7	143.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	84.0	85.0	86.1	95.3	218.8	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					22.6	24.6	53.1	49.7	54.8	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	290.9	329.4	346.0	479.5	512.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**707.6**	**754.4**	**716.7**	**830.9**	**961.5**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**297**	**560**	**491**	**601**	**651**	**535**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**249**	**286**	**324**	**355**	**389**	**423**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**110**	**106**	**102**	**99**	**96**	**93**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.72**	**1.70**	**1.70**	**1.70**	**1.72**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.95**	**1.73**	**1.73**	**1.67**	**1.82**	**1.55**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.63**	**0.64**	**0.64**	**0.65**	**0.65**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.50**	**1.36**	**1.42**	**1.47**	**1.47**	**1.52**
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-9.9%	0.1%	3.4%	0.7%	0.0%	10.3%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	3.6%	0.6%	0.5%	1.3%	2.8%	-6.1%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	8.7%	-0.1%	-1.2%	-0.8%	1.4%	-7.1%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-1.8%	0.4%	-0.4%	-0.6%	-0.6%	-0.3%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.7%	0.4%	0.6%	0.3%	0.3%	-1.3%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-2.9%	-2.6%	-2.1%	-2.6%	0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-1.1%	-1.7%	0.3%	-1.2%	1.3%	-4.5%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-1.1%	-1.6%	0.3%	-1.2%	1.4%	-4.5%
3 & 5 Year Average (starting FY16)					-0.8%	0.0%	-0.5%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.8%	0.0%	-0.5%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-111.4	4.5	39.2	8.2	-0.8	138.5
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	40.3	4.9	5.0	16.6	36.9	-82.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	98.5	-5.0	-16.1	-9.9	19.3	-96.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-20.7	4.8	-5.1	-7.8	-9.3	-5.0
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	8.1	3.6	6.3	3.4	3.7	-18.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	-31.3	-28.1	-26.9	-35.6	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-12.2	-18.5	1.2	-16.4	14.0	-63.1

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-111.4	-106.9	-67.7	-59.4	-60.2	78.2
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	40.3	45.6	50.1	57.5	106.3	27.1
d . Water Infrastructure	0.0	0.0	-21.1	-15.1	-18.3	-30.5	-35.7	-51.2
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	98.9	101.3	74.7	67.3	58.4	7.7
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	8.0	9.5	20.4	21.1	24.7	7.5
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.1	-0.3	-0.6	-0.7	-1.2
Total Operating Revenue before Securitization	**0.0**	**0.0**	**14.6**	**34.2**	**58.8**	**55.4**	**92.8**	**68.0**
l . Securitization Revenue	0.0	0.0	-26.9	-58.1	-86.2	-113.1	-148.8	-148.8
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-12.3**	**-24.0**	**-27.5**	**-57.8**	**-56.0**	**-80.7**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.06**	**0.13**	**0.26**	**0.31**	**0.53**	**0.24**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.05**	**-0.14**	**-0.14**	**-0.21**	**-0.14**	**-0.43**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-1.0	-3.1	-6.4	-10.5	-14.8	-18.3
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	7.6	23.3	36.9	47.4	60.1	63.5
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-17.7	-26.2	-34.4	-45.2	-45.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**8.0**	**13.9**	**28.3**	**18.4**	**47.5**	**22.8**
Net Income with Securitization	**0.0**	**0.0**	**-0.2**	**-3.8**	**2.0**	**-15.9**	**2.3**	**-22.4**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	-7.5	-7.7	-7.8	-7.9	-8.1	0.0
b. Water Quality	0.0	0.0	-70.0	-71.1	-50.1	-43.7	-35.9	0.0
c. Water Reclamation	0.0	0.0	-21.0	-21.3	-21.5	-23.8	-54.7	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-5.7	-6.2	-13.3	-12.4	-13.7	0.0
f. Infrastructure	0.0	0.0	-72.7	-82.4	-86.5	-119.9	-128.0	0.0
Capital Expenditures	**0.0**	**0.0**	**-176.9**	**-188.6**	**-179.2**	**-207.7**	**-240.4**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**185**	**327**	**232**	**185**	**256**	**12**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**-475**	**-427**	**-409**	**-542**	**0**
13a . **Debt Service**	**0**	**0**	**6**	**20**	**35**	**46**	**59**	**68**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-58**	**-86**	**-113**	**-149**	**-149**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-18**	**-2**	**-4**	**-5**	**-6**	**-6**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.02**	**0.00**	**(0.00)**	**(0.08)**	**(0.03)**	**(0.14)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.02**	**(0.03)**	**(0.01)**	**(0.03)**	**0.03**	**(0.16)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.02**	**0.03**	**0.04**	**0.05**	**0.04**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**(0.05)**	**(0.12)**	**(0.16)**	**(0.16)**	**(0.25)**	**(0.17)**

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Water System Financial Plan Summary
($ in millions)

Water FY16 Case#63 Cut Capex to 80% of Budget with Securitization

O&M and Capex per - IBIS 11/05/14

	Actual 2012-13	Actual 2013-14	Approved 2014-15	Current 2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	10.7%	3.9%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.3%	0.6%	0.6%	-0.1%	0.3%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	7.3%	0.1%	1.5%	2.5%	3.0%	1.5%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	1.8%	2.3%	2.1%	1.7%	2.1%	4.1%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	-0.1%	4.8%	6.4%	4.1%	3.8%	5.7%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.0%	7.5%	7.0%	4.3%	4.9%	5.9%
3 & 5 Year Average (starting FY16)							3.7%		3.8%	
3 & 5 Year Avg excluding PW (starting FY16)							9.1%		7.3%	

	Actual 2012-13	Actual 2013-14	Approved 2014-15	Current 2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	113.9	27.7	25.1	2.2	7.2	-0.5
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.4	-3.7	-5.6	-1.4	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	20.3	2.9	7.5	1.6	3.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	82.9	-1.5	14.3	30.3	39.9	19.2
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	20.0	24.3	22.0	21.1	28.2	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-23.1	15.6	43.8	53.3	64.7	73.5
					133.6	54.4	56.3	55.5	75.0	

	Actual 2012-13	Actual 2013-14	Approved 2014-15	Current 2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	465.6	493.3	518.3	520.5	527.7	527.2
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.8	28.1	18.8	18.7	17.9
d . Water Infrastructure			0.0	0.0	84.6	78.2	85.0	132.2	156.1	217.2
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.0	-11.2	-11.5	-11.9
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.4**	**1,084.8**	**1,114.7**	**1,173.6**	**1,183.3**	**1,248.3**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	20.0	44.3	66.3	87.4	115.7	169.6
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,075.4**	**1,129.1**	**1,181.0**	**1,261.0**	**1,298.9**	**1,417.8**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.82**	**4.95**	**5.17**	**5.29**	**5.39**	**5.48**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.91**	**5.14**	**5.47**	**5.70**	**5.91**	**6.25**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	156.1	165.3	180.1	195.1	212.4	234.6
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	179.5	181.4	188.7	195.4	220.0
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	18.8	26.3	33.2	39.8	48.7	65.1
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**78.3**	**98.5**	**110.6**	**131.8**	**129.6**	**141.4**
Net Income with Securitization			**90.7**	**106.5**	**84.5**	**112.2**	**131.2**	**159.2**	**165.8**	**193.9**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	30.0	30.9	31.0	31.6	32.2	41.0
b. Water Quality	204.6	245.2	200.2	195.1	280.0	284.4	200.5	174.7	143.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	84.0	85.0	86.1	95.3	218.8	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					22.6	24.6	53.1	49.7	54.8	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	290.9	329.4	346.0	479.5	512.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**707.6**	**754.4**	**716.7**	**830.9**	**961.5**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**68**	**168**	**296**	**268**	**543**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**304**	**369**	**334**	**321**	**429**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**260**	**277**	**292**	**305**	**327**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**20**	**44**	**66**	**87**	**116**	**170**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**398**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**215**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**158**	**108**	**107**	**106**	**104**	**102**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.77**	**1.76**	**1.83**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.94**	**1.76**	**1.73**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.59**	**0.59**	**0.59**	**0.59**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.52**	**1.61**	**1.67**	**1.76**	**1.70**
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

*** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014**

Case#33

	2013-14		2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

	2013-14		2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	2013-14		2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

	2013-14	2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Base Revenue/HCF Inc %	0.0%	0.0%	1.9%	-0.9%	0.0%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.1%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-1.8%	0.0%	-1.1%	-0.6%	-0.6%	-0.4%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-0.6%	-0.6%	-0.5%	-0.4%	-0.4%	0.2%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-0.6%	-1.5%	-1.7%	-1.1%	-1.2%	-0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.6%	-1.4%	-1.6%	-1.1%	-1.1%	-0.1%
3 & 5 Year Average (starting FY16)					-1.2%	0.0%	-1.2%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-1.2%	0.0%	-1.2%	0.0%

	2013-14	2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
Base Revenue Incr ($M)	0.0	0.0	21.3	-10.4	-0.8	0.0	0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.9	-0.7	-0.2	-0.9	0.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-20.7	0.4	-12.2	-9.1	-10.2	-6.7
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-6.9	-7.0	-6.1	-5.8	-7.4	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-6.3	-16.1	-19.8	-15.1	-18.3	-6.2

	2013-14	2014-15	Forecast 2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	21.3	10.9	10.1	10.2	10.3	10.3
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
d . Water Infrastructure	0.0	0.0	-21.1	-19.6	-29.9	-43.3	-49.3	-66.5
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4
Total Operating Revenue before Securitization	**0.0**	**0.0**	**0.2**	**-8.8**	**-19.7**	**-33.0**	**-38.8**	**-55.9**
l . Securitization Revenue	0.0	0.0	-6.9	-13.8	-19.9	-25.7	-33.1	-33.1
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**-6.7**	**-22.6**	**-39.7**	**-58.7**	**-71.9**	**-89.0**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.00**	**-0.03**	**-0.10**	**-0.15**	**-0.19**	**-0.22**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**-0.03**	**-0.10**	**-0.19**	**-0.26**	**-0.34**	**-0.37**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-1.0	-3.1	-6.4	-10.5	-14.8	-18.3
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-6.8	-12.5	-18.6	-25.2	-25.9
9 . **Contribution in Aid of Construction**	0.0	0.0	-2.0	-4.0	-5.6	-7.1	-9.0	-9.0
10 . **Net Income without Securitization**	**0.0**	**0.0**	**1.2**	**1.1**	**-0.8**	**-3.9**	**1.3**	**-11.7**
Net Income with Securitization	**0.0**	**0.0**	**-0.8**	**-2.9**	**-6.4**	**-11.0**	**-7.7**	**-20.7**
a. Water Conservation	0.0	0.0	-7.5	-7.7	-7.8	-7.9	-8.1	0.0
b. Water Quality	0.0	0.0	-70.0	-71.1	-50.1	-43.7	-35.9	0.0
c. Water Reclamation	0.0	0.0	-21.0	-21.3	-21.5	-23.8	-54.7	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-5.7	-6.2	-13.3	-12.4	-13.7	0.0
f. Infrastructure	0.0	0.0	-72.7	-82.4	-86.5	-119.9	-128.0	0.0
Capital Expenditures	**0.0**	**0.0**	**-176.9**	**-188.6**	**-179.2**	**-207.7**	**-240.4**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**-164**	**-90**	**-120**	**-127**	**20**
12b . **Borrowing for Securitization**	**0**	**0**	**-104**	**-106**	**-93**	**-88**	**-112**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**-5**	**-12**	**-17**	**-24**	**-28**
13b . **Debt Service for Securitization**	**0**	**0**	**-7**	**-14**	**-20**	**-26**	**-33**	**-33**
14 . **Cash on hand**	**0**	**0**	**77**	**0**	**0**	**0**	**0**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**41**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**31**	**1**	**1**	**2**	**2**	**3**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**(0.01)**	**0.01**	**(0.02)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.01)**	**0.00**	**(0.00)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.01)**	**(0.02)**	**(0.02)**	**(0.02)**
19. **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**0.04**	**0.03**	**0.03**	**0.04**	**0.01**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#64 Cut Capex to 85% of Budget NO Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-1.1%	3.9%	6.9%	0.8%	0.0%	10.7%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	0.1%	0.1%	0.3%	1.0%	2.7%	-6.2%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	11.8%	2.1%	-0.6%	-0.3%	1.3%	-7.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	7.8%	0.5%	2.2%	2.7%	3.2%	1.6%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.9%	0.7%	0.6%	0.3%	0.2%	-1.3%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.6%	3.7%	8.7%	4.2%	6.4%	1.6%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.7%	6.4%	9.3%	4.4%	7.4%	1.8%
3 & 5 Year Average (starting FY16)							4.3%		4.7%	
3 & 5 Year Avg excluding PW (starting FY16)							9.8%		8.2%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-18.8	32.5	68.6	11.3	6.2	146.0
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-0.5	-1.0	1.5	12.1	36.0	-85.0
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	131.3	14.4	-13.5	-2.6	20.7	-95.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	88.1	3.1	22.7	33.7	43.3	22.1
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	9.3	6.0	5.6	4.2	3.4	-18.4
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-14.6	4.1	69.3	55.9	99.1	21.3

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	332.9	365.4	434.0	445.3	451.5	597.6
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	69.9	76.4	81.5	80.1	131.8	46.9
d . Water Infrastructure			0.0	0.0	89.8	87.9	102.7	154.2	180.5	247.2
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	255.9	284.1	260.8	261.1	251.8	201.4
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	73.7	41.9	54.0	55.5	59.4	44.7
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.4	-11.4	-12.1	-12.7	-13.7
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,084.3**	**1,132.9**	**1,202.4**	**1,275.2**	**1,332.4**	**1,392.7**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	53.9
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,084.3**	**1,132.9**	**1,202.4**	**1,275.2**	**1,332.4**	**1,446.6**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.13**	**5.58**	**5.81**	**6.18**	**6.04**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.13**	**5.58**	**5.81**	**6.18**	**6.28**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	156.3	166.1	181.7	197.7	216.2	239.2
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	188.0	213.1	236.7	262.9	291.9	320.9
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	28.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**98.0**	**112.2**	**141.4**	**156.6**	**178.5**	**180.3**
Net Income with Securitization			**90.7**	**106.5**	**98.0**	**112.2**	**141.4**	**156.6**	**178.5**	**196.7**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	31.9	32.8	33.0	33.6	34.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	297.5	302.2	213.1	185.6	152.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	89.3	90.3	91.5	101.3	232.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					24.0	26.2	56.4	52.8	58.2	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	309.1	350.0	367.6	509.5	544.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**751.8**	**801.5**	**761.5**	**882.8**	**1,021.5**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**329**	**604**	**532**	**648**	**707**	**529**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**250**	**289**	**329**	**363**	**400**	**436**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**280**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**110**	**105**	**101**	**99**	**94**	**92**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.78**	**1.70**	**1.70**	**1.70**	**1.72**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.00**	**1.73**	**1.73**	**1.68**	**1.80**	**1.56**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.63**	**0.64**	**0.65**	**0.66**	**0.66**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.49**	**1.38**	**1.41**	**1.46**	**1.46**	**1.52**

****FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Case#33

Base Revenue/HCF Inc %	-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)					4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)					10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)			12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor			-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley			28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-9.9%	-0.8%	3.7%	0.8%	0.0%	10.7%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	3.8%	0.6%	0.6%	1.4%	2.8%	-6.2%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	9.2%	-0.1%	-1.3%	-0.9%	1.3%	-7.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-1.4%	0.4%	-0.3%	-0.4%	-0.4%	-0.3%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.8%	0.4%	0.6%	0.3%	0.3%	-1.4%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-2.9%	-2.6%	-2.1%	-2.6%	0.0%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.2%	-2.5%	0.6%	-0.9%	1.4%	-4.2%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.2%	-2.5%	0.6%	-0.9%	1.4%	-4.2%
3 & 5 Year Average (starting FY16)					-0.6%	0.0%	-0.2%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.6%	0.0%	-0.2%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-111.4	-5.5	42.7	9.2	-0.9	146.5
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	42.8	5.3	5.2	17.7	37.5	-84.3
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	104.6	-5.0	-17.1	-10.3	18.2	-98.2
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-15.5	5.0	-3.8	-5.8	-6.7	-3.7
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	8.6	3.8	6.7	3.5	3.7	-18.7
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	-31.3	-28.1	-26.9	-35.6	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	2.2	-27.6	5.7	-12.6	16.2	-58.5

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	-111.4	-116.9	-74.2	-65.0	-65.9	80.6
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	42.8	48.5	53.3	61.2	113.0	28.9
d . Water Infrastructure	0.0	0.0	-15.9	-9.9	-12.2	-21.3	-25.0	-36.5
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	105.1	107.9	79.7	71.9	62.6	8.9
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	8.5	10.1	21.7	22.4	26.3	7.9
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.3	-0.3	-0.7	-0.8	-1.3
Total Operating Revenue before Securitization	**0.0**	**0.0**	**29.1**	**39.4**	**68.0**	**68.6**	**110.3**	**88.5**
l . Securitization Revenue	0.0	0.0	-26.9	-58.1	-86.2	-113.1	-148.8	-148.8
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**2.2**	**-18.7**	**-18.3**	**-44.5**	**-38.5**	**-60.2**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.13**	**0.15**	**0.31**	**0.37**	**0.60**	**0.34**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.01**	**-0.11**	**-0.09**	**-0.15**	**-0.07**	**-0.34**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-0.8	-2.3	-4.8	-7.9	-11.1	-13.7
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	8.9	26.9	42.7	55.6	71.2	75.0
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-17.7	-26.2	-34.4	-45.2	-45.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**20.9**	**14.8**	**30.0**	**20.8**	**50.2**	**27.3**
Net Income with Securitization	**0.0**	**0.0**	**12.7**	**-2.9**	**3.8**	**-13.6**	**5.0**	**-17.9**
a. Water Conservation	0.0	0.0	-5.6	-5.8	-5.8	-5.9	-6.0	0.0
b. Water Quality	0.0	0.0	-52.5	-53.3	-37.6	-32.8	-26.9	0.0
c. Water Reclamation	0.0	0.0	-15.8	-15.9	-16.1	-17.9	-41.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-4.2	-4.6	-9.9	-9.3	-10.3	0.0
f. Infrastructure	0.0	0.0	-54.5	-61.8	-64.9	-89.9	-96.0	0.0
Capital Expenditures	**0.0**	**0.0**	**-132.7**	**-141.4**	**-134.4**	**-155.8**	**-180.3**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**217**	**372**	**273**	**232**	**312**	**6**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**-475**	**-427**	**-409**	**-542**	**0**
13a . **Debt Service**	**0**	**0**	**7**	**23**	**40**	**53**	**70**	**81**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-58**	**-86**	**-113**	**-149**	**-149**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**-1**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-18**	**-3**	**-4**	**-5**	**-7**	**-7**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.08**	**(0.00)**	**(0.00)**	**(0.08)**	**(0.03)**	**(0.14)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.07**	**(0.03)**	**(0.01)**	**(0.03)**	**0.02**	**(0.15)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.03**	**0.04**	**0.04**	**0.05**	**0.05**
19. **Debt Service Coverage**	**0.00**	**0.00**	**(0.06)**	**(0.09)**	**(0.17)**	**(0.17)**	**(0.27)**	**(0.18)**

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#65 Cut Capex to 85% of Budget with Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	10.2%	4.1%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.1%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	-0.1%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.3%	0.6%	0.6%	-0.1%	0.3%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	7.8%	0.1%	1.7%	2.7%	3.2%	1.6%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	1.9%	2.4%	2.2%	1.8%	2.3%	4.1%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.0%	5.2%	6.8%	4.4%	4.0%	5.8%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.1%	7.8%	7.4%	4.6%	5.1%	5.9%
3 & 5 Year Average (starting FY16)							4.0%		4.1%	
3 & 5 Year Avg excluding PW (starting FY16)							9.4%		7.6%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	108.6	30.3	25.2	2.2	7.1	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.4	-3.7	-5.6	-1.5	-0.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	20.3	2.9	7.5	1.6	3.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	88.1	-1.7	17.4	33.0	42.4	21.0
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	21.7	26.0	23.5	22.5	30.1	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-21.4	19.7	48.7	57.6	68.9	75.3
					135.3	58.5	61.1	59.7	79.2	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	237.1	235.1	241.6	234.3	229.9	222.5	217.1	218.0	221.0	220.8
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	460.3	490.5	515.8	518.0	525.1	524.6
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	27.8	28.1	18.9	18.7	18.0
d . Water Infrastructure			0.0	0.0	89.8	83.1	92.5	143.3	168.8	234.4
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.0	-11.3	-11.6	-12.0
Total Operating Revenue before Securitization	1,042.2	1,141.8	1,145.5	1,130.0	1,055.4	1,087.0	1,119.6	1,182.2	1,193.3	1,262.7
l . Securitization Revenue		0.0	0.0	0.0	21.7	47.8	71.3	93.8	123.9	177.9
Total Operating Revenue Include Securitization	1,042.2	1,141.8	1,145.5	1,130.0	1,077.1	1,134.7	1,190.9	1,276.0	1,317.2	1,440.6
System Average Rate before Securitization($/HCF)	3.95	4.55	4.92	4.92	4.82	4.96	5.19	5.33	5.44	5.54
System Average Rate include Securitization ($/HCF)	3.95	4.55	4.92	4.92	4.92	5.17	5.52	5.76	6.00	6.34
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	379.5	418.4	422.1	425.5	450.0	461.0	472.3	479.1	489.1	498.8
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	156.3	166.1	181.7	197.7	216.2	239.2
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	181.2	184.6	193.3	201.6	226.4
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	19.3	27.3	34.5	41.6	50.9	67.3
10 . **Net Income without Securitization**	151.6	152.4	90.7	106.5	78.0	98.3	110.8	133.2	129.6	144.8
Net Income with Securitization			90.7	106.5	84.7	113.0	132.8	162.3	168.0	199.6
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	31.9	32.8	33.0	33.6	34.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	297.5	302.2	213.1	185.6	152.7	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	89.3	90.3	91.5	101.3	232.5	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					24.0	26.2	56.4	52.8	58.2	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	309.1	350.0	367.6	509.5	544.0	755.3
Capital Expenditures	482.5	669.5	722.0	725.4	751.8	801.5	761.5	882.8	1,021.5	1,588.4
12a . **DWP Borrowing**	352	509	368	436	112	109	191	326	300	538
12b . **Borrowing for Securitization**		0	0	0	331	395	358	343	457	820
13a . **Debt Service**	192	203	217	220	243	262	280	296	311	334
13b . **Debt Service for Securitization**		0	0	0	22	48	71	94	124	178
14 . **Cash on hand**	415	336	321	460	379	279	279	286	281	283
15 .**Days of Operating Cash**	225	159	150	227	205	150	150	150	150	150
16 .**Days of Operating Cash with Debt Service**	175	126	117	175	151	108	106	105	103	101
Financial Ratios										
17a **Debt Service Coverage Ratio**	2.19	2.08	1.83	1.94	1.70	1.70	1.70	1.77	1.76	1.83
17b **Debt Service Coverage Ratio (Cash)**	1.53	1.65	2.08	2.05	1.94	1.76	1.73	1.70	1.79	1.71
18 **Capitalization Ratio**	0.58	0.60	0.60	0.61	0.61	0.60	0.59	0.59	0.59	0.60
19. **Addtn'l Bond Test Ratio:** (prev / max)										
Debt Service Coverage	1.19	1.49	1.75	1.55	1.55	1.51	1.60	1.66	1.75	1.70
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014*

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	235.1	241.6	234.3	229.9	222.5	217.1	218.0	221.0	220.8
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	1,141.8	1,145.5	1,130.0	1,055.2	1,093.5	1,134.4	1,206.6	1,222.1	1,304.1
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	1,141.8	1,145.5	1,130.0	1,082.1	1,151.7	1,220.6	1,319.7	1,370.8	1,506.8
System Average Rate before Securitization($/HCF)	4.55	4.92	4.92	4.82	4.98	5.27	5.44	5.58	5.70
System Average Rate include Securitization ($/HCF)	4.55	4.92	4.92	4.94	5.25	5.67	5.96	6.25	6.62
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	418.4	422.1	425.5	450.0	461.0	472.3	479.1	489.1	498.8
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	152.4	90.7	106.5	77.1	97.4	111.4	135.8	128.3	153.0
Net Income with Securitization		90.7	106.5	85.3	115.1	137.6	170.2	173.5	214.7
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	669.5	722.0	725.4	884.4	943.0	895.8	1,038.6	1,201.8	1,588.4
12a . **DWP Borrowing**	509	368	436	112	233	259	416	395	523
12b . **Borrowing for Securitization**	0	0	0	409	475	427	409	542	820
13a . **Debt Service**	203	217	220	243	266	289	309	329	355
13b . **Debt Service for Securitization**	0	0	0	27	58	86	113	149	203
14 . **Cash on hand**	336	321	460	321	279	279	286	281	283
15 .**Days of Operating Cash**	159	150	227	174	150	150	150	150	150
16 .**Days of Operating Cash with Debt Service**	126	117	175	128	108	105	104	101	99
Financial Ratios									
17a **Debt Service Coverage Ratio**	2.08	1.83	1.94	1.70	1.70	1.70	1.78	1.75	1.84
17b **Debt Service Coverage Ratio (Cash)**	1.65	2.08	2.05	1.93	1.76	1.74	1.70	1.79	1.71
18 **Capitalization Ratio**	0.60	0.60	0.61	0.61	0.60	0.60	0.60	0.61	0.61
19. **Addtn'l Bond Test Ratio:** (prev / max)									
Debt Service Coverage	1.49	1.75	1.55	1.55	1.48	1.58	1.63	1.72	1.70
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	1.4%	-0.6%	0.0%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	-0.1%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	-1.4%	0.0%	-0.8%	-0.4%	-0.4%	-0.3%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-0.5%	-0.5%	-0.4%	-0.3%	-0.3%	0.2%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	-0.4%	-1.1%	-1.2%	-0.8%	-0.9%	-0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	-0.4%	-1.1%	-1.2%	-0.8%	-0.9%	-0.1%
3 & 5 Year Average (starting FY16)					-0.9%	0.0%	-0.9%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					-0.9%	0.0%	-0.9%	0.0%

Base Revenue Incr ($M)	0.0	0.0	16.0	-7.8	-0.6	0.0	0.0	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	-0.1	0.0	0.1	0.0	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.9	-0.7	-0.2	-0.9	0.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	-15.5	0.2	-9.1	-6.5	-7.6	-4.9
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-5.1	-5.2	-4.6	-4.3	-5.5	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	-4.6	-12.0	-14.9	-10.9	-14.1	-4.5

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	16.0	8.2	7.6	7.6	7.7	7.6
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	-15.9	-14.7	-22.4	-32.1	-36.6	-49.4
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.3
Total Operating Revenue before Securitization	0.0	0.0	0.1	-6.6	-14.8	-24.4	-28.8	-41.4
l . Securitization Revenue	0.0	0.0	-5.1	-10.4	-15.0	-19.3	-24.8	-24.8
Total Operating Revenue Include Securitization	0.0	0.0	-5.0	-17.0	-29.8	-43.7	-53.6	-66.3
System Average Rate before Securitization($/HCF)	0.00	0.00	0.00	-0.02	-0.08	-0.11	-0.14	-0.16
System Average Rate include Securitization ($/HCF)	0.00	0.00	-0.02	-0.07	-0.15	-0.19	-0.26	-0.28
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	-0.8	-2.3	-4.8	-7.9	-11.1	-13.7
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	-5.1	-9.4	-14.0	-19.0	-19.5
9 . **Contribution in Aid of Construction**	0.0	0.0	-1.5	-3.0	-4.2	-5.3	-6.8	-6.8
10 . **Net Income without Securitization**	0.0	0.0	0.9	0.8	-0.6	-2.6	1.3	-8.2
Net Income with Securitization	0.0	0.0	-0.6	-2.1	-4.8	-7.9	-5.5	-15.0
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	-5.6	-5.8	-5.8	-5.9	-6.0	0.0
b. Water Quality	0.0	0.0	-52.5	-53.3	-37.6	-32.8	-26.9	0.0
c. Water Reclamation	0.0	0.0	-15.8	-15.9	-16.1	-17.9	-41.0	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	-4.2	-4.6	-9.9	-9.3	-10.3	0.0
f. Infrastructure	0.0	0.0	-54.5	-61.8	-64.9	-89.9	-96.0	0.0
Capital Expenditures	0.0	0.0	-132.7	-141.4	-134.4	-155.8	-180.3	0.0
12a . **DWP Borrowing**	0	0	0	-124	-68	-90	-95	15
12b . **Borrowing for Securitization**	0	0	-78	-80	-70	-66	-84	0
13a . **Debt Service**	0	0	0	-4	-9	-13	-18	-21
13b . **Debt Service for Securitization**	0	0	-5	-10	-15	-19	-25	-25
14 . **Cash on hand**	0	0	58	0	0	0	0	0
15 .**Days of Operating Cash**	0	0	31	0	0	0	0	0
16 .**Days of Operating Cash with Debt Service**	0	0	23	0	1	1	2	2
Financial Ratios								
17a **Debt Service Coverage Ratio**	0.00	0.00	0.00	(0.00)	0.00	(0.00)	0.01	(0.01)
17b **Debt Service Coverage Ratio (Cash)**	0.00	0.00	0.00	0.00	(0.01)	(0.00)	0.00	(0.00)
18 **Capitalization Ratio**	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
19. **Addtn'l Bond Test Ratio:** (prev / max)								
Debt Service Coverage	0.00	0.00	0.00	0.03	0.02	0.03	0.03	0.01

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#66 Increase Capex to 105% of Budget NO Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-1.1%	0.4%	8.0%	1.1%	0.0%	12.6%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.5%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	1.0%	0.3%	0.5%	1.3%	2.8%	-6.6%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	14.0%	2.0%	-0.9%	-0.5%	1.0%	-7.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.6%	0.6%	2.7%	3.3%	3.8%	1.9%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	1.1%	0.7%	0.7%	0.4%	0.2%	-1.4%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	5.7%	0.6%	10.2%	5.2%	6.6%	3.0%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	18.8%	3.1%	10.8%	5.4%	7.7%	3.1%
3 & 5 Year Average (starting FY16)							5.5%		5.7%	
3 & 5 Year Avg excluding PW (starting FY16)							10.9%		9.2%	

Case#33

Base Revenue/HCF Inc %	-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)					4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)					10.4%		8.5%	

Base Revenue/HCF Inc %	0.0%	0.0%	-9.9%	-4.4%	4.7%	1.1%	0.0%	12.6%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	4.7%	0.7%	0.7%	1.7%	2.9%	-6.5%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	11.4%	-0.2%	-1.5%	-1.0%	1.0%	-7.4%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.5%	0.5%	0.2%	0.1%	0.2%	0.0%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.9%	0.4%	0.8%	0.3%	0.2%	-1.5%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-2.9%	-2.6%	-2.1%	-2.6%	-0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	5.3%	-5.7%	2.2%	0.1%	1.7%	-2.8%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	5.3%	-5.8%	2.2%	0.1%	1.7%	-2.8%
3 & 5 Year Average (starting FY16)					0.6%	0.0%	0.7%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.5%	0.0%	0.7%	0.0%

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-18.8	-6.4	82.4	15.2	5.9	178.9
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	9.5	0.3	3.0	16.1	38.5	-93.6
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	156.0	14.0	-17.0	-4.9	16.7	-102.3
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	108.8	4.0	28.0	41.6	53.5	27.4
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	11.3	6.9	7.1	5.1	2.9	-20.4
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	42.8	-32.3	87.8	70.4	107.1	41.8

Base Revenue Incr ($M)	-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)			12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

Base Revenue Incr ($M)	0.0	0.0	-111.4	-44.5	56.5	13.1	-1.1	179.3
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	52.8	6.6	6.6	21.8	40.0	-92.9
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	129.2	-5.4	-20.5	-12.5	14.1	-105.1
Water Infrastructure Factor/HCF Inc %	0.0	0.0	5.2	5.8	1.5	2.1	3.5	1.5
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	10.7	4.7	8.2	4.4	3.3	-20.7
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	-31.3	-28.1	-26.9	-35.6	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	59.6	-64.0	24.3	2.0	24.1	-37.9

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	332.9	326.5	408.9	424.0	430.0	608.9
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	80.0	87.7	94.1	94.5	158.5	53.9
d . Water Infrastructure			0.0	0.0	111.0	108.6	126.9	190.5	223.0	305.5
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	280.6	310.3	280.9	279.7	268.5	206.4
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	75.7	44.2	59.1	60.8	65.6	46.6
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.9	-11.6	-12.5	-13.2	-14.3
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,142.2**	**1,154.0**	**1,239.0**	**1,328.0**	**1,402.4**	**1,475.4**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	53.9
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,142.2**	**1,154.0**	**1,239.0**	**1,328.0**	**1,402.4**	**1,529.3**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.20**	**5.23**	**5.76**	**6.06**	**6.46**	**6.41**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.20**	**5.23**	**5.76**	**6.06**	**6.46**	**6.66**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.4	169.2	188.1	208.2	231.0	257.5
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	193.3	227.4	259.9	295.9	336.5	366.9
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	28.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**149.7**	**116.0**	**148.5**	**166.0**	**189.1**	**198.7**
Net Income with Securitization			**90.7**	**106.5**	**149.7**	**116.0**	**148.5**	**166.0**	**189.1**	**215.1**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	39.4	40.5	40.7	41.5	42.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	367.5	373.3	263.2	229.3	188.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	110.3	111.6	113.0	125.1	287.2	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					29.7	32.3	69.6	65.2	71.9	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	381.8	432.3	454.1	629.4	672.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**928.7**	**990.1**	**940.6**	**1,090.5**	**1,261.9**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**457**	**783**	**696**	**837**	**934**	**499**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**254**	**301**	**351**	**394**	**443**	**485**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**280**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**109**	**104**	**99**	**96**	**91**	**88**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.99**	**1.70**	**1.70**	**1.70**	**1.71**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.21**	**1.73**	**1.73**	**1.68**	**1.76**	**1.57**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.64**	**0.65**	**0.67**	**0.68**	**0.68**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.46**	**1.48**	**1.36**	**1.40**	**1.40**	**1.49**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *								
a . Base Rates	363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor			-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**								
a. Water Quality	42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**								
a. Water Conservation	14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley			28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**2.08**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-111.4	-155.9	-99.3	-86.3	-87.4	91.9
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	52.9	59.7	65.9	75.6	139.7	35.9
d . Water Infrastructure	0.0	0.0	5.3	10.8	12.0	15.0	17.6	21.7
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	129.8	134.1	99.8	90.5	79.3	13.9
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	10.5	12.5	26.8	27.7	32.5	9.8
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-0.9	-0.5	-1.1	-1.3	-1.9
Total Operating Revenue before Securitization	**0.0**	**0.0**	**87.0**	**60.4**	**104.6**	**121.5**	**180.3**	**171.3**
l . Securitization Revenue	0.0	0.0	-26.9	-58.1	-86.2	-113.1	-148.8	-148.8
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**60.1**	**2.3**	**18.3**	**8.4**	**31.5**	**22.5**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.38**	**0.25**	**0.49**	**0.62**	**0.88**	**0.71**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.26**	**-0.02**	**0.09**	**0.10**	**0.21**	**0.04**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.3	0.8	1.6	2.6	3.7	4.6
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	14.2	41.1	65.9	88.7	115.9	121.0
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-17.7	-26.2	-34.4	-45.2	-45.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**72.5**	**18.5**	**37.1**	**30.2**	**60.7**	**45.7**
Net Income with Securitization	**0.0**	**0.0**	**64.4**	**0.8**	**10.9**	**-4.2**	**15.5**	**0.5**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	1.9	1.9	1.9	2.0	2.0	0.0
b. Water Quality	0.0	0.0	17.5	17.8	12.5	10.9	9.0	0.0
c. Water Reclamation	0.0	0.0	5.3	5.3	5.4	6.0	13.7	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	1.4	1.5	3.3	3.1	3.4	0.0
f. Infrastructure	0.0	0.0	18.2	20.6	21.6	30.0	32.0	0.0
Capital Expenditures	**0.0**	**0.0**	**44.2**	**47.1**	**44.8**	**51.9**	**60.1**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**345**	**550**	**437**	**421**	**539**	**-24**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**-475**	**-427**	**-409**	**-542**	**0**
13a . **Debt Service**	**0**	**0**	**11**	**36**	**62**	**84**	**114**	**130**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-58**	**-86**	**-113**	**-149**	**-149**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-19**	**-4**	**-6**	**-8**	**-10**	**-11**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.29**	**(0.00)**	**(0.00)**	**(0.08)**	**(0.05)**	**(0.15)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.28**	**(0.03)**	**(0.00)**	**(0.02)**	**(0.02)**	**(0.14)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.04**	**0.05**	**0.06**	**0.07**	**0.07**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**(0.10)**	**0.00**	**(0.22)**	**(0.23)**	**(0.33)**	**(0.21)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#67 Increase Capex to 105% of Budget with Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	8.3%	5.0%	3.4%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.4%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.3%	0.6%	0.5%	-0.1%	0.3%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	9.6%	0.1%	2.7%	3.3%	3.8%	2.0%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.5%	3.1%	2.7%	2.2%	2.7%	3.9%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.6%	6.7%	8.4%	5.4%	5.1%	5.9%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.7%	9.4%	8.9%	5.6%	6.1%	6.1%
3 & 5 Year Average (starting FY16)							5.2%		5.2%	
3 & 5 Year Avg excluding PW (starting FY16)							10.7%		8.7%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	87.3	40.5	27.5	2.1	7.0	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.9	-5.4	-1.7	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	20.3	2.9	7.5	1.6	3.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	108.8	-2.0	28.0	41.5	52.5	27.3
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	28.6	33.0	29.6	28.3	37.5	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-15.2	36.9	67.4	71.9	86.1	81.7
					141.5	75.7	79.9	74.0	96.5	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	439.0	479.5	507.0	509.1	516.2	515.7
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	28.0	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	111.0	102.6	120.9	184.5	216.0	298.3
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.5	-11.9	-12.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.3**	**1,095.7**	**1,139.2**	**1,214.4**	**1,231.3**	**1,317.4**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	28.6	61.6	91.2	119.6	157.0	211.0
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,083.9**	**1,157.3**	**1,230.4**	**1,333.9**	**1,388.4**	**1,528.4**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.82**	**5.00**	**5.30**	**5.47**	**5.62**	**5.75**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.94**	**5.28**	**5.72**	**6.02**	**6.33**	**6.71**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.4	169.2	188.1	208.2	231.0	257.5
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	187.9	197.0	211.8	226.9	252.5
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	21.2	31.2	40.1	48.7	60.0	76.4
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**76.9**	**97.1**	**111.6**	**136.4**	**127.5**	**155.2**
Net Income with Securitization			**90.7**	**106.5**	**85.6**	**115.8**	**139.2**	**172.5**	**175.0**	**219.1**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	39.4	40.5	40.7	41.5	42.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	367.5	373.3	263.2	229.3	188.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	110.3	111.6	113.0	125.1	287.2	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					29.7	32.3	69.6	65.2	71.9	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	381.8	432.3	454.1	629.4	672.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**928.7**	**990.1**	**940.6**	**1,090.5**	**1,261.9**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**273**	**281**	**446**	**428**	**519**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**435**	**502**	**450**	**430**	**570**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**267**	**292**	**314**	**335**	**362**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**29**	**62**	**91**	**120**	**157**	**211**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**302**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**163**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**120**	**108**	**105**	**103**	**101**	**98**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.93**	**1.77**	**1.74**	**1.71**	**1.78**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**	**0.60**	**0.61**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.47**	**1.57**	**1.62**	**1.71**	**1.70**
Infrastructure O&M Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . *Sales (Million HCF)*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Infrastructure Capex Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Base Revenue/HCF Inc %	0.0%	0.0%	-0.5%	0.2%	0.1%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.1%	-0.1%	0.0%	-0.1%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.5%	0.0%	0.1%	0.1%	0.1%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.2%	0.2%	0.1%	0.1%	0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.1%	0.5%	0.3%	0.2%	0.2%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.1%	0.5%	0.3%	0.2%	0.2%
3 & 5 Year Average (starting FY16)					0.3%	0.0%	0.3%
3 & 5 Year Avg excluding PW (starting FY16)					0.3%	0.0%	0.3%

Base Revenue Incr ($M)	0.0	0.0	-5.3	2.5	1.6	0.0	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.1	-0.2	0.2	-0.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.9	-0.7	-0.2	-0.9
Water Infrastructure Factor/HCF Inc %	0.0	0.0	5.2	-0.1	1.6	2.0	2.4
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	1.7	1.7	1.5	1.4	1.8
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	1.6	5.2	3.9	3.5	3.2

	Forecast						
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20
1 . *Sales (Million HCF)*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
a . Base Rates	0.0	0.0	-5.3	-2.8	-1.2	-1.2	-1.2
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	5.3	4.9	6.0	9.1	10.6
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Total Operating Revenue before Securitization	**0.0**	**0.0**	**0.0**	**2.1**	**4.8**	**7.8**	**9.2**
l . Securitization Revenue	0.0	0.0	1.7	3.5	5.0	6.4	8.3
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**1.7**	**5.6**	**9.8**	**14.2**	**17.5**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.00**	**0.02**	**0.03**	**0.03**	**0.04**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.01**	**0.03**	**0.05**	**0.06**	**0.08**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.3	0.8	1.6	2.6	3.7
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	1.6	3.1	4.6	6.3
9 . **Contribution in Aid of Construction**	0.0	0.0	0.5	1.0	1.4	1.8	2.3
10 . **Net Income without Securitization**	**0.0**	**0.0**	**-0.2**	**-0.3**	**0.2**	**0.6**	**-0.8**
Net Income with Securitization	**0.0**	**0.0**	**0.3**	**0.7**	**1.6**	**2.4**	**1.5**
a. Water Conservation	0.0	0.0	1.9	1.9	1.9	2.0	2.0
b. Water Quality	0.0	0.0	17.5	17.8	12.5	10.9	9.0
c. Water Reclamation	0.0	0.0	5.3	5.3	5.4	6.0	13.7
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	1.4	1.5	3.3	3.1	3.4
f. Infrastructure	0.0	0.0	18.2	20.6	21.6	30.0	32.0
Capital Expenditures	**0.0**	**0.0**	**44.2**	**47.1**	**44.8**	**51.9**	**60.1**
12a . **DWP Borrowing**	**0**	**0**	**0**	**40**	**22**	**30**	**33**
12b . **Borrowing for Securitization**	**0**	**0**	**26**	**27**	**23**	**22**	**28**
13a . **Debt Service**	**0**	**0**	**0**	**1**	**3**	**4**	**6**
13b . **Debt Service for Securitization**	**0**	**0**	**2**	**3**	**5**	**6**	**8**
14 . **Cash on hand**	**0**	**0**	**-19**	**0**	**0**	**0**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**-10**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**-8**	**0**	**0**	**0**	**-1**
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.00)**	**0.00**	**(0.00)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**(0.01)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.00**	**0.00**	**0.00**
19. **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**(0.01)**	**(0.01)**	**(0.01)**	**(0.01)**

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#68 Increase Capex to 110% of Budget NO Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	-1.1%	0.0%	7.7%	1.1%	0.0%	13.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.5%	-0.6%	-0.2%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	1.2%	0.3%	0.5%	1.3%	2.8%	-6.6%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	14.6%	2.0%	-0.9%	-0.5%	0.8%	-7.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	10.1%	0.7%	2.8%	3.4%	4.0%	2.0%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.7%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	1.1%	0.7%	0.8%	0.4%	0.2%	-1.5%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	7.0%	0.3%	10.0%	5.4%	6.7%	3.4%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	20.1%	2.8%	10.6%	5.7%	7.7%	3.5%
3 & 5 Year Average (starting FY16)							5.8%		5.9%	
3 & 5 Year Avg excluding PW (starting FY16)							11.2%		9.4%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	-18.8	-10.5	79.9	16.1	5.7	187.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	12.1	0.5	3.2	17.3	39.1	-95.8
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	162.1	13.9	-17.7	-5.4	15.4	-103.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	114.0	4.1	29.4	43.4	56.2	28.7
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	11.8	7.2	7.5	5.2	3.0	-21.1
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	57.1	-35.7	86.6	73.9	108.9	47.3

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue: ***										
a . Base Rates	394.1	363.5	353.9	351.7	332.9	322.3	402.2	418.2	424.0	611.3
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	82.5	90.5	97.2	98.1	165.1	55.6
d . Water Infrastructure			0.0	0.0	116.3	113.7	132.9	199.5	233.6	320.0
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	286.8	316.9	285.9	284.4	272.7	207.6
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	76.2	44.8	60.4	62.1	67.1	47.1
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-12.1	-11.7	-12.6	-13.3	-14.4
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,156.7**	**1,164.8**	**1,247.7**	**1,340.8**	**1,419.3**	**1,495.8**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	0.0	0.0	0.0	0.0	0.0	53.9
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,156.7**	**1,164.8**	**1,247.7**	**1,340.8**	**1,419.3**	**1,549.7**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.26**	**5.27**	**5.80**	**6.12**	**6.53**	**6.50**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**5.26**	**5.27**	**5.80**	**6.12**	**6.53**	**6.75**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.6	169.9	189.7	210.8	234.7	262.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	194.7	230.7	265.4	303.9	347.4	378.2
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	12.6	12.6	12.5	12.5	12.5	28.9
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**162.6**	**122.7**	**150.1**	**168.1**	**191.3**	**203.2**
Net Income with Securitization			**90.7**	**106.5**	**162.6**	**122.7**	**150.1**	**168.1**	**191.3**	**219.6**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	41.3	42.5	42.7	43.5	44.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	384.9	391.1	275.7	240.2	197.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	115.5	116.9	118.4	131.1	300.8	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					31.1	33.9	72.9	68.3	75.3	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	400.0	452.9	475.7	659.4	704.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**972.9**	**1,037.3**	**985.4**	**1,142.5**	**1,322.0**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**489**	**822**	**737**	**885**	**992**	**491**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**255**	**304**	**356**	**401**	**454**	**497**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**278**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**225**	**159**	**150**	**227**	**150**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**109**	**104**	**98**	**95**	**90**	**87**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**2.04**	**1.72**	**1.70**	**1.70**	**1.70**	**1.70**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**2.26**	**1.75**	**1.74**	**1.68**	**1.76**	**1.57**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.62**	**0.64**	**0.66**	**0.67**	**0.69**	**0.68**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.45**	**1.50**	**1.36**	**1.39**	**1.38**	**1.49**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %			1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)					4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)					10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)			12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue: ***								
a . Base Rates	363.5	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor			-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**								
a. Water Quality	42.9	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**								
a. Water Conservation	14.7	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley			28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 **.Days of Operating Cash**	**159**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 **.Days of Operating Cash with Debt Service**	**126**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**2.08**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-9.9%	-4.8%	4.4%	1.1%	0.0%	13.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	4.9%	0.8%	0.7%	1.8%	2.9%	-6.6%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	12.0%	-0.2%	-1.6%	-1.1%	0.9%	-7.4%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.9%	0.5%	0.3%	0.2%	0.3%	0.1%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	1.0%	0.4%	0.8%	0.3%	0.2%	-1.5%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	-2.4%	-2.9%	-2.6%	-2.1%	-2.6%	-0.2%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	6.5%	-5.9%	2.0%	0.3%	1.8%	-2.5%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	6.5%	-6.1%	2.0%	0.3%	1.7%	-2.5%
3 & 5 Year Average (starting FY16)					0.9%	0.0%	0.9%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.8%	0.0%	0.9%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-111.4	-48.6	54.0	13.9	-1.3	187.8
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	55.4	6.8	6.9	22.9	40.7	-95.1
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	135.3	-5.4	-21.3	-13.0	12.8	-106.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	10.3	6.0	2.9	4.0	6.1	2.8
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	11.2	5.0	8.6	4.5	3.3	-21.4
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	-26.9	-31.3	-28.1	-26.9	-35.6	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	73.9	-67.5	23.0	5.5	25.9	-32.5

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue: ***								
a . Base Rates	0.0	0.0	-111.4	-160.0	-106.0	-92.1	-93.4	94.4
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	55.4	62.5	69.0	79.2	146.3	37.6
d . Water Infrastructure	0.0	0.0	10.6	16.0	18.0	24.1	28.2	36.3
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	136.0	140.7	104.9	95.2	83.5	15.1
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	11.0	13.1	28.0	29.0	34.0	10.3
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	-1.0	-0.6	-1.2	-1.5	-2.1
Total Operating Revenue before Securitization	**0.0**	**0.0**	**101.5**	**71.3**	**113.3**	**134.2**	**197.2**	**191.6**
l . Securitization Revenue	0.0	0.0	-26.9	-58.1	-86.2	-113.1	-148.8	-148.8
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**74.6**	**13.1**	**27.0**	**21.1**	**48.4**	**42.9**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.44**	**0.29**	**0.53**	**0.68**	**0.95**	**0.80**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.32**	**0.03**	**0.14**	**0.16**	**0.28**	**0.13**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.5	1.5	3.2	5.2	7.4	9.2
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	15.5	44.5	71.4	96.6	126.8	132.3
9 . **Contribution in Aid of Construction**	0.0	0.0	-8.2	-17.7	-26.2	-34.4	-45.2	-45.2
10 . **Net Income without Securitization**	**0.0**	**0.0**	**85.4**	**25.3**	**38.6**	**32.3**	**63.0**	**50.2**
Net Income with Securitization	**0.0**	**0.0**	**77.3**	**7.6**	**12.4**	**-2.0**	**17.8**	**5.0**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	3.8	3.9	3.9	4.0	4.0	0.0
b. Water Quality	0.0	0.0	35.0	35.6	25.1	21.8	18.0	0.0
c. Water Reclamation	0.0	0.0	10.5	10.6	10.8	11.9	27.3	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	2.8	3.1	6.6	6.2	6.8	0.0
f. Infrastructure	0.0	0.0	36.4	41.2	43.2	59.9	64.0	0.0
Capital Expenditures	**0.0**	**0.0**	**88.4**	**94.3**	**89.6**	**103.9**	**120.2**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**377**	**590**	**478**	**469**	**597**	**-32**
12b . **Borrowing for Securitization**	**0**	**0**	**-409**	**-475**	**-427**	**-409**	**-542**	**0**
13a . **Debt Service**	**0**	**0**	**12**	**39**	**67**	**92**	**125**	**142**
13b . **Debt Service for Securitization**	**0**	**0**	**-27**	**-58**	**-86**	**-113**	**-149**	**-149**
14 . **Cash on hand**	**0**	**0**	**-44**	**0**	**0**	**0**	**1**	**0**
15 **.Days of Operating Cash**	**0**	**0**	**-24**	**0**	**0**	**0**	**0**	**0**
16 **.Days of Operating Cash with Debt Service**	**0**	**0**	**-19**	**-4**	**-7**	**-9**	**-11**	**-12**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.34**	**0.02**	**(0.00)**	**(0.08)**	**(0.05)**	**(0.15)**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**0.33**	**(0.01)**	**(0.00)**	**(0.02)**	**(0.03)**	**(0.14)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**0.01**	**0.04**	**0.05**	**0.07**	**0.08**	**0.07**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**(0.11)**	**0.03**	**(0.22)**	**(0.24)**	**(0.34)**	**(0.21)**

Water System Financial Plan Summary

($ in millions)

Water FY16 Case#69 Increase Capex to 110% of Budget with Securitization

O&M and Capex per - IBIS 11/05/14

Base Revenue/HCF Inc %	-0.8%	-2.9%	-2.6%	-1.0%	7.9%	5.2%	3.5%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	6.0%	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.5%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-2.0%	-3.6%	2.6%	2.3%	0.6%	0.5%	-0.1%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	10.1%	0.1%	2.8%	3.4%	3.9%	2.0%
Expense Stabilitzation Revenue/HCF Inc %					1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.7%	3.2%	2.8%	2.3%	2.8%	3.8%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	6.4%	8.1%	0.7%	7.1%	8.8%	5.6%	5.4%	6.0%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-1.3%	-0.3%	13.8%	9.7%	9.3%	5.8%	6.4%	6.1%
3 & 5 Year Average (starting FY16)							5.5%		5.5%	
3 & 5 Year Avg excluding PW (starting FY16)							11.0%		9.0%	

Base Revenue Incr ($M)	12.2	-30.5	-16.2	-11.9	82.2	42.9	29.4	2.1	6.9	-0.4
PW Revenue Incr ($M)	57.8	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	28.2	16.6	-43.3	-6.2	-3.8	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-16.6	-38.6	26.8	20.3	2.9	7.5	1.6	3.4
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	0.0	114.0	-2.1	29.5	43.4	55.0	28.7
Expense Stabilitzation Revenue Incr ($M)					12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-16.0	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.9	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-8.6	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	30.3	34.8	31.2	29.8	39.3	53.9
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	109.1	82.7	-13.4	40.9	72.4	75.0	90.5	83.1
					143.3	79.7	84.9	77.2	100.9	

	Actual	Actual	Approved	Current	Forecast					
	2012-13	2013-14	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*237.1*	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *										
a . Base Rates	394.1	363.5	353.9	351.7	433.9	476.8	506.2	508.3	515.2	514.8
b . Purchased Water, In-City Pumping	317.1	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	56.3	66.5	112.5	134.4	27.1	28.0	28.2	18.9	18.8	18.0
d . Water Infrastructure			0.0	0.0	116.3	107.5	126.7	193.3	226.3	312.6
e . Expense Stabilization Adjustment Factor					-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	51.4	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	160.5	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	30.1	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	22.5	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	13.5	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.6	-12.0	-12.5
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.4**	**1,097.8**	**1,144.1**	**1,222.3**	**1,240.6**	**1,330.6**
l . Securitization Revenue		**0.0**	**0.0**	**0.0**	30.3	65.1	96.2	126.0	165.3	219.2
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,145.5**	**1,130.0**	**1,085.7**	**1,162.9**	**1,240.4**	**1,348.3**	**1,405.9**	**1,549.9**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.82**	**5.01**	**5.32**	**5.51**	**5.67**	**5.80**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.92**	**4.92**	**4.95**	**5.30**	**5.77**	**6.09**	**6.41**	**6.80**
3 . **Purchased Water Expenses**	280.4	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**										
a. Water Quality	41.2	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	3.7	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	11.2	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	31.8	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	232.5	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**379.5**	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.3	146.8	157.6	169.9	189.7	210.8	234.7	262.0
6 . **Property Taxes**	12.6	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	27.8	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	150.0	156.0	168.6	169.8	179.1	189.6	200.1	216.5	233.3	259.0
9 . **Contribution in Aid of Construction**	16.7	28.3	12.6	12.6	21.7	32.2	41.5	50.4	62.2	78.6
10 . **Net Income without Securitization**	**151.6**	**152.4**	**90.7**	**106.5**	**76.8**	**96.9**	**111.8**	**137.0**	**126.8**	**157.3**
Net Income with Securitization			**90.7**	**106.5**	**86.0**	**116.5**	**140.8**	**175.0**	**176.5**	**223.4**
11 . **Capital Expenditures:**										
a. Water Conservation	2.6	14.7	21.1	20.5	41.3	42.5	42.7	43.5	44.3	41.0
b. Water Quality	204.6	245.2	200.2	195.1	384.9	391.1	275.7	240.2	197.6	447.2
c. Water Reclamation	37.0	37.3	62.8	76.1	115.5	116.9	118.4	131.1	300.8	279.8
d. Water Security	15.8	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley					31.1	33.9	72.9	68.3	75.3	65.1
f. Infrastructure	222.5	328.9	418.3	414.7	400.0	452.9	475.7	659.4	704.0	755.3
Capital Expenditures	**482.5**	**669.5**	**722.0**	**725.4**	**972.9**	**1,037.3**	**985.4**	**1,142.5**	**1,322.0**	**1,588.4**
12a . **DWP Borrowing**	**352**	**509**	**368**	**436**	**112**	**313**	**304**	**476**	**460**	**515**
12b . **Borrowing for Securitization**		**0**	**0**	**0**	**461**	**528**	**474**	**452**	**598**	**820**
13a . **Debt Service**	**192**	**203**	**217**	**220**	**243**	**268**	**295**	**318**	**341**	**369**
13b . **Debt Service for Securitization**		**0**	**0**	**0**	**30**	**65**	**96**	**126**	**165**	**219**
14 . **Cash on hand**	**415**	**336**	**321**	**460**	**283**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**225**	**159**	**150**	**227**	**153**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**175**	**126**	**117**	**175**	**113**	**107**	**105**	**103**	**100**	**98**
Financial Ratios										
17a **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.74**	**1.85**
17b **Debt Service Coverage Ratio (Cash)**	**1.53**	**1.65**	**2.08**	**2.05**	**1.93**	**1.77**	**1.74**	**1.71**	**1.78**	**1.71**
18 **Capitalization Ratio**	**0.58**	**0.60**	**0.60**	**0.61**	**0.61**	**0.61**	**0.61**	**0.61**	**0.62**	**0.62**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.19**	**1.49**	**1.75**	**1.55**	**1.55**	**1.46**	**1.56**	**1.61**	**1.70**	**1.69**
**** FY13-14 reflects actual through (5-6), and FY14-15 - reflects actual Revenue through September 2014***										
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Case#33

Base Revenue/HCF Inc %	-2.9%	-2.6%	-1.0%	8.8%	4.8%	3.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	17.8%	7.7%	8.3%	-13.1%	-2.7%	-0.6%	-0.3%	-1.0%	-0.1%
Conservation & Reclaimed Water/HCF Inc %	0.7%	2.3%	1.6%	-3.7%	-0.5%	-0.3%	-0.5%	-0.1%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.7%	-2.0%	-3.6%	2.6%	2.2%	0.7%	0.6%	0.0%	0.2%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	9.2%	0.1%	2.5%	3.1%	3.6%	1.9%
Expense Stabilitzation Revenue/HCF Inc %				1.1%	-0.8%	-0.2%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-0.1%	2.6%	4.0%	-7.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.1%	-1.9%	-1.6%	0.1%	0.3%	0.0%	0.0%	-0.1%	0.0%
Low Income Subsidy/HCF Inc %	-0.2%	0.3%	0.3%	0.5%	-0.2%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	2.4%	2.9%	2.6%	2.1%	2.6%	3.9%
Total Billed Revenue/HCF Inc %	15.1%	6.4%	8.1%	0.4%	6.2%	8.1%	5.1%	4.9%	5.9%
Total Billed Revenue/HCF Inc % excl PW	-2.8%	-1.3%	-0.3%	13.5%	8.9%	8.6%	5.4%	6.0%	6.0%
3 & 5 Year Average (starting FY16)						4.9%		5.0%	
3 & 5 Year Avg excluding PW (starting FY16)						10.4%		8.5%	

Base Revenue Incr ($M)	-30.5	-16.2	-11.9	92.6	38.1	25.8	2.1	7.1	-0.4
PW Revenue Incr ($M)	163.9	98.5	87.8	-156.7	-38.8	-12.5	-2.1	-10.4	-2.0
Conservation & Reclaimed Water Incr ($M)	5.7	28.2	16.6	-43.3	-6.3	-3.7	-5.7	-1.5	-0.7
Water Quality Factor (WQIA)/HCF Inc %	5.3	-16.6	-38.6	26.8	19.4	3.6	7.7	2.5	2.8
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	103.6	-1.9	26.5	39.4	50.1	25.9
Expense Stabilitzation Revenue Incr ($M)				12.1	-9.1	-2.3	-0.5	-0.2	0.0
Security Factor/HCF Inc %	-1.1	30.4	42.5	-84.8	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.5	-19.6	-17.0	0.6	2.2	-1.1	0.7	-0.3	0.3
Low Income Subsidy Incr ($M)	-1.8	4.3	3.3	5.5	-3.1	-0.9	-0.1	0.1	0.0
Water Revenue Incr ($M)	-10.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	0.0	26.9	31.3	28.1	26.9	35.6	53.9
Base + Pass Thru Revenue Billed Incr ($M)	131.8	109.1	82.7	-16.8	31.7	63.6	68.4	82.9	79.7

	Forecast								
	2013-14		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	*235.1*	*241.6*	*234.3*	*229.9*	*222.5*	*217.1*	*218.0*	*221.0*	*220.8*
2 . **Revenue:** *									
a . Base Rates	363.5	353.9	351.7	444.3	482.4	508.2	510.3	517.4	517.0
b . Purchased Water, In-City Pumping	365.6	401.8	386.9	253.8	244.4	236.4	246.2	224.9	222.9
c . Conservation & Reclaimed Wtr.	66.5	112.5	134.4	27.1	27.9	28.2	18.9	18.8	18.0
d . Water Infrastructure		0.0	0.0	105.7	97.8	114.9	175.5	205.4	283.7
e . Expense Stabilization Adjustment Factor				-33.8	0.0	0.0	0.0	0.0	0.0
f . Water Security	79.4	56.4	59.7	12.2	0.0	0.0	0.0	0.0	0.0
g . Water Quality	168.6	151.2	137.0	150.9	176.2	181.1	189.2	189.2	192.5
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	43.2	33.8	36.6	65.3	31.7	32.4	33.1	33.1	36.8
j . Low Income Subsidy	23.7	27.8	29.5	26.8	26.8	26.7	26.7	26.7	26.7
k . Water Rights Revenue	2.7	8.8	5.6	9.9	12.7	12.9	13.2	13.5	13.9
l . Other Operating Revenue	44.7	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-16.3	-5.4	-16.0	-11.5	-11.1	-11.1	-11.4	-11.9	-12.3
Total Operating Revenue before Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,055.2**	**1,093.5**	**1,134.4**	**1,206.6**	**1,222.1**	**1,304.1**
l . Securitization Revenue	0.0	0.0	0.0	26.9	58.1	86.2	113.1	148.8	202.7
Total Operating Revenue Include Securitization	**1,141.8**	**1,145.5**	**1,130.0**	**1,082.1**	**1,151.7**	**1,220.6**	**1,319.7**	**1,370.8**	**1,506.8**
System Average Rate before Securitization($/HCF)	**4.55**	**4.92**	**4.92**	**4.82**	**4.98**	**5.27**	**5.44**	**5.58**	**5.70**
System Average Rate include Securitization ($/HCF)	**4.55**	**4.92**	**4.92**	**4.94**	**5.25**	**5.67**	**5.96**	**6.25**	**6.62**
3 . **Purchased Water Expenses**	339.4	343.9	298.0	209.3	198.7	189.4	198.0	175.7	172.2
4 . **Operation & Maintenance Expenses**									
a. Water Quality	42.9	54.4	53.6	84.4	88.2	92.8	97.3	98.2	101.4
b. Water Reclamation	9.3	9.3	9.2	7.8	8.7	8.7	9.1	8.8	7.8
c. Water Conservation	9.7	13.9	16.5	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	35.7	38.9	39.3	41.4	43.1	44.6	45.8	47.0	48.4
e. Water Security	33.5	34.3	33.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	48.2	32.2	32.3	31.0	34.1	34.9	35.9	36.2	36.4
g. Infrastructure	239.0	239.2	240.8	264.0	265.1	269.1	278.1	286.0	291.5
Total O & M Expenses	**418.4**	**422.1**	**425.5**	**450.0**	**461.0**	**472.3**	**479.1**	**489.1**	**498.8**
5 . **Depreciation (including Amortization of Regulatory Assets)**	123.3	136.3	146.8	157.1	168.4	186.5	205.6	227.3	252.9
6 . **Property Taxes**	12.6	14.3	14.3	16.4	18.1	18.1	18.1	18.1	18.1
7 . **Other Income/Expense (Net)**	32.1	17.8	18.4	21.3	23.7	24.7	24.7	24.5	24.3
8 . **Interest Expense(Net)**	156.0	168.6	169.8	179.1	186.2	194.0	207.2	220.6	245.9
9 . **Contribution in Aid of Construction**	28.3	12.6	12.6	20.7	30.2	38.7	46.9	57.7	74.1
10 . **Net Income without Securitization**	**152.4**	**90.7**	**106.5**	**77.1**	**97.4**	**111.4**	**135.8**	**128.3**	**153.0**
Net Income with Securitization		**90.7**	**106.5**	**85.3**	**115.1**	**137.6**	**170.2**	**173.5**	**214.7**
11 . **Capital Expenditures:**									
a. Water Conservation	14.7	21.1	20.5	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	245.2	200.2	195.1	350.0	355.6	250.7	218.3	179.6	447.2
c. Water Reclamation	37.3	62.8	76.1	105.0	106.3	107.6	119.2	273.5	279.8
d. Water Security	43.3	19.5	18.9	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				28.3	30.8	66.3	62.1	68.4	65.1
f. Infrastructure	328.9	418.3	414.7	363.6	411.8	432.5	599.4	640.0	755.3
Capital Expenditures	**669.5**	**722.0**	**725.4**	**884.4**	**943.0**	**895.8**	**1,038.6**	**1,201.8**	**1,588.4**
12a . **DWP Borrowing**	**509**	**368**	**436**	**112**	**233**	**259**	**416**	**395**	**523**
12b . **Borrowing for Securitization**	**0**	**0**	**0**	**409**	**475**	**427**	**409**	**542**	**820**
13a . **Debt Service**	**203**	**217**	**220**	**243**	**266**	**289**	**309**	**329**	**355**
13b . **Debt Service for Securitization**	**0**	**0**	**0**	**27**	**58**	**86**	**113**	**149**	**203**
14 . **Cash on hand**	**336**	**321**	**460**	**321**	**279**	**279**	**286**	**281**	**283**
15 .**Days of Operating Cash**	**159**	**150**	**227**	**174**	**150**	**150**	**150**	**150**	**150**
16 .**Days of Operating Cash with Debt Service**	**126**	**117**	**175**	**128**	**108**	**105**	**104**	**101**	**99**
Financial Ratios									
17a **Debt Service Coverage Ratio**	**2.08**	**1.83**	**1.94**	**1.70**	**1.70**	**1.70**	**1.78**	**1.75**	**1.84**
17b **Debt Service Coverage Ratio (Cash)**	**1.65**	**2.08**	**2.05**	**1.93**	**1.76**	**1.74**	**1.70**	**1.79**	**1.71**
18 **Capitalization Ratio**	**0.60**	**0.60**	**0.61**	**0.61**	**0.60**	**0.60**	**0.60**	**0.61**	**0.61**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**1.49**	**1.75**	**1.55**	**1.55**	**1.48**	**1.58**	**1.63**	**1.72**	**1.70**
Infrastructure O&M Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Base Revenue/HCF Inc %	0.0%	0.0%	-0.9%	0.4%	0.3%	0.0%	0.0%	0.0%
Purchased Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Conservation & Reclaimed Water/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	0.0%	0.0%	0.0%	0.1%	-0.1%	0.0%	-0.1%	0.0%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.9%	0.0%	0.3%	0.3%	0.3%	0.2%
Expense Stabilitzation Revenue/HCF Inc %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Low Income Subsidy/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.3%	0.3%	0.3%	0.2%	0.2%	-0.1%
Total Billed Revenue/HCF Inc %	0.0%	0.0%	0.3%	0.8%	0.7%	0.4%	0.4%	0.1%
Total Billed Revenue/HCF Inc % excl PW	0.0%	0.0%	0.3%	0.8%	0.7%	0.4%	0.4%	0.1%
3 & 5 Year Average (starting FY16)					0.6%	0.0%	0.5%	0.0%
3 & 5 Year Avg excluding PW (starting FY16)					0.6%	0.0%	0.5%	0.0%

Base Revenue Incr ($M)	0.0	0.0	-10.4	4.9	3.5	0.0	-0.1	0.0
PW Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Conservation & Reclaimed Water Incr ($M)	0.0	0.0	0.0	0.1	-0.1	0.0	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	0.0	0.0	0.0	0.9	-0.7	-0.2	-0.9	0.5
Water Infrastructure Factor/HCF Inc %	0.0	0.0	10.3	-0.2	3.0	3.9	4.9	2.8
Expense Stabilitzation Revenue Incr ($M)			0.0	0.0	0.0	0.0	0.0	0.0
Security Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Low Income Subsidy Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Water Revenue Incr ($M)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securitization Revenue Incr ($M)	0.0	0.0	3.4	3.5	3.0	2.9	3.7	0.0
Base + Pass Thru Revenue Billed Incr ($M)	0.0	0.0	3.4	9.2	8.8	6.6	7.6	3.3

	Forecast							
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2018-20	2018-21
1 . ***Sales (Million HCF)***	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
2 . **Revenue:** *								
a . Base Rates	0.0	0.0	-10.4	-5.5	-2.0	-2.0	-2.2	-2.2
b . Purchased Water, In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c . Conservation & Reclaimed Wtr.	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0
d . Water Infrastructure	0.0	0.0	10.6	9.8	11.8	17.9	20.8	28.8
e . Expense Stabilization Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f . Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
h . Base Revenue Target Adjustment Factor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
j . Low Income Subsidy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
k . Water Rights Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
l . Other Operating Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
m . Allowance for Uncollectible Accounts	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2
Total Operating Revenue before Securitization	**0.0**	**0.0**	**0.2**	**4.3**	**9.8**	**15.7**	**18.5**	**26.5**
l . Securitization Revenue	0.0	0.0	3.4	6.9	10.0	12.9	16.6	16.6
Total Operating Revenue Include Securitization	**0.0**	**0.0**	**3.6**	**11.2**	**19.7**	**28.6**	**35.1**	**43.1**
System Average Rate before Securitization($/HCF)	**0.00**	**0.00**	**0.00**	**0.03**	**0.05**	**0.07**	**0.09**	**0.10**
System Average Rate include Securitization ($/HCF)	**0.00**	**0.00**	**0.01**	**0.06**	**0.10**	**0.13**	**0.16**	**0.18**
3 . **Purchased Water Expenses**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 . **Operation & Maintenance Expenses**								
a. Water Quality	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
b. Water Reclamation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c. Water Conservation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
d. In-City Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
g. Infrastructure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total O & M Expenses	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
5 . **Depreciation (including Amortization of Regulatory Assets)**	0.0	0.0	0.5	1.5	3.2	5.2	7.4	9.2
6 . **Property Taxes**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7 . **Other Income/Expense (Net)**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8 . **Interest Expense(Net)**	0.0	0.0	0.0	3.3	6.2	9.2	12.6	13.1
9 . **Contribution in Aid of Construction**	0.0	0.0	1.0	2.0	2.8	3.5	4.5	4.5
10 . **Net Income without Securitization**	**0.0**	**0.0**	**-0.3**	**-0.6**	**0.4**	**1.3**	**-1.5**	**4.3**
Net Income with Securitization	**0.0**	**0.0**	**0.7**	**1.4**	**3.2**	**4.8**	**3.0**	**8.8**
11 . **Capital Expenditures:**								
a. Water Conservation	0.0	0.0	3.8	3.9	3.9	4.0	4.0	0.0
b. Water Quality	0.0	0.0	35.0	35.6	25.1	21.8	18.0	0.0
c. Water Reclamation	0.0	0.0	10.5	10.6	10.8	11.9	27.3	0.0
d. Water Security	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley	0.0	0.0	2.8	3.1	6.6	6.2	6.8	0.0
f. Infrastructure	0.0	0.0	36.4	41.2	43.2	59.9	64.0	0.0
Capital Expenditures	**0.0**	**0.0**	**88.4**	**94.3**	**89.6**	**103.9**	**120.2**	**0.0**
12a . **DWP Borrowing**	**0**	**0**	**0**	**81**	**45**	**60**	**65**	**-8**
12b . **Borrowing for Securitization**	**0**	**0**	**52**	**53**	**46**	**44**	**56**	**0**
13a . **Debt Service**	**0**	**0**	**0**	**3**	**6**	**9**	**12**	**14**
13b . **Debt Service for Securitization**	**0**	**0**	**3**	**7**	**10**	**13**	**17**	**17**
14 . **Cash on hand**	**0**	**0**	**-38**	**0**	**0**	**0**	**0**	**0**
15 .**Days of Operating Cash**	**0**	**0**	**-21**	**0**	**0**	**0**	**0**	**0**
16 .**Days of Operating Cash with Debt Service**	**0**	**0**	**-15**	**0**	**-1**	**-1**	**-1**	**-1**
Financial Ratios								
17a **Debt Service Coverage Ratio**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**(0.01)**	**0.00**
17b **Debt Service Coverage Ratio (Cash)**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.01**	**0.00**	**(0.01)**	**(0.00)**
18 **Capitalization Ratio**	**0.00**	**0.00**	**(0.00)**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**
19. **Addtn'l Bond Test Ratio:** (prev / max) **Debt Service Coverage**	**0.00**	**0.00**	**0.00**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.02)**	**(0.01)**

LOS ANGELES DEPARTMENT OF WATER & POWER

2014 Water Service Cost of Service Study

July 2015

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CONTENTS

1 EXECUTIVE SUMMARY

1.1 Introduction

On October 2, 2012, the Los Angeles City Council approved the Los Angeles Department of Water and Power's (LADWP or the Department) Incremental Electric Rate Ordinance No. 182273 to provide incremental rate adjustments for fiscal years (FY) 2012-13 and 2013-14. In its action to approve LADWP's power rates, the Council, along with other recommendations, requested that LADWP "conduct a new formal cost of service study (COSS) 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 cost of service study for its Water System rates to evaluate its water service cost structure and ensure that its rates are appropriate for each customer class.[1]

The City of Los Angeles has a long history of implementing water rates that address water efficiency and sustainability. The Mayor's Blue Ribbon Committee (BRC) established precedent for LADWP's rate setting approach in 1992; several of the BRC's objectives and principles for water rates in the City of Los Angeles are still applicable today.

Objectives of Rate Setting

- Rates should be equitable across customer classes;
- Rates should maximize the efficient allocation of resources;
- Rates should be simple and understandable; and
- Rates must generate adequate revenue. .

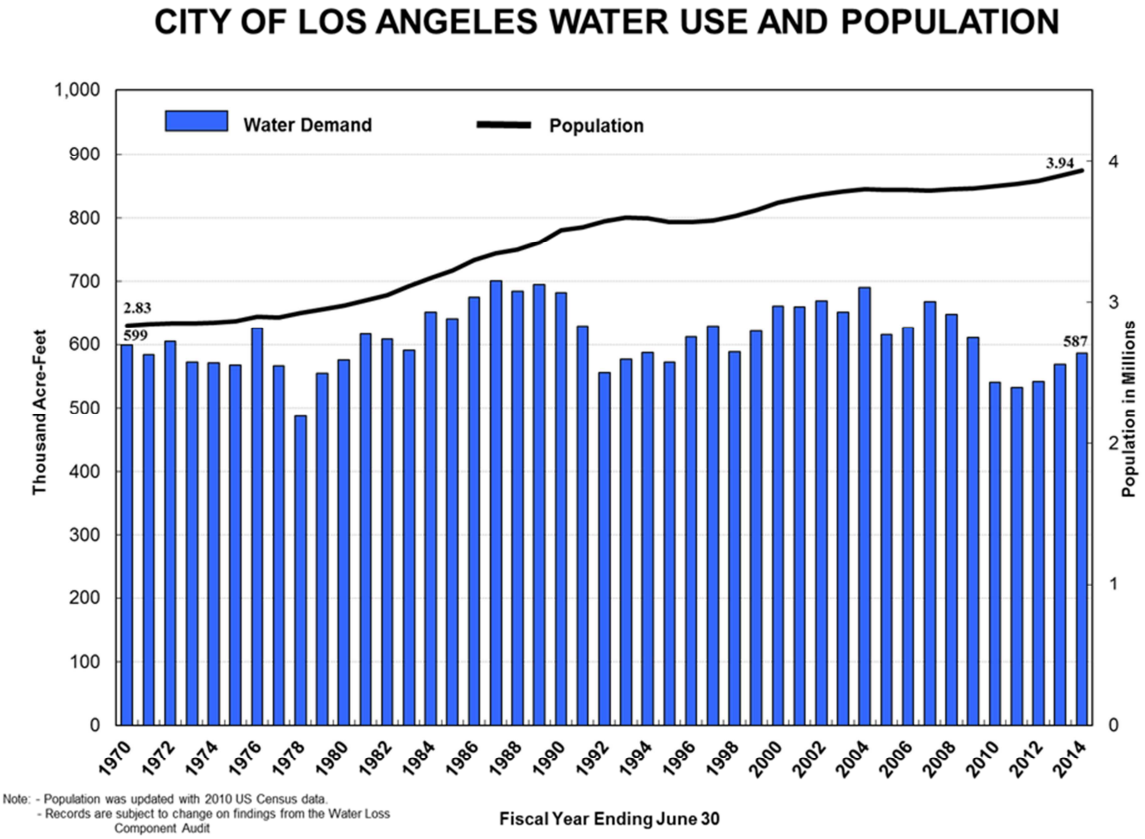
Principles of Rate Setting

- Marginal cost should be the basis of the rate structure in order to maximize efficient water use;
- Customers should not be penalized for conserving water; and
- The water rate structure should ensure that necessary investments to improve and equalize water quality throughout Los Angeles are made.

Rates based on marginal forward-looking costs were central to achieving the water rate reforms recommended by the BRC and have fundamentally contributed to water demand management in Los Angeles during periods of water scarcity, other supply uncertainties, and supply and demand imbalances. Recently, conservation has been stressed even further, as California is currently experiencing a significant drought. In early October 2014, in response to these conditions, the Mayor of Los Angeles issued an executive directive on water conservation to reduce Los Angeles' potable water use by 20% per capita by the end of 2017. A marginal cost based rate structure will help continue LADWP's conservation success. As shown in Figure 1 below, since 1970, water usage by LADWP customers has been virtually unchanged despite a 10% growth in population in the region. LADWP looks to continue this success story.

[1] Even in the absence of the Council's Motion, periodic cost of service studies are a common industry practice.

Figure 1: Historical LADWP Water Usage



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
- Provide legally defensible foundation for cost based rates.

1.2 Marginal Cost Study Approach

LADWP has chosen to use a marginal cost approach to determine the cost of providing service to the major customer classes and to guide the development of rates. Marginal costs reflect the change in cost incurred to serve a small increment in demand for services. Marginal costs therefore measure the additional costs of providing the next unit of service, whether that is the next unit of water or the additional burden that adding an additional HCF (hundred cubic feet) of demand places on the water system. Marginal costs are calculated for small changes in each cost driver by dividing the change in total cost by

the change in the cost driver. For instance, a marginal cost is calculated for a change in distribution O&M cost from a small change in water usage.

The marginal cost approach is an accepted methodology for utility cost of service studies in the United States and globally. For over twenty years, the California Public Utilities Commission (CPUC) has relied on marginal cost principles to guide rate setting. The CPUC Water Action Plan (adopted in 2005 and updated in 2010) decoupled sales from revenues, instituted tiered rate structures, and updated the water conservation funding rule - all features of the LADWP rate structure dating back to the early 1990's that are grounded in marginal cost principles. Historically, marginal cost approaches have precedent established by the Public Utility Regulatory Policy Act (PURPA) and have been used by both publicly owned utilities (POUs) and investor owned utilities (IOUs). The current LADWP cost of service study follows a marginal cost framework and marginal cost techniques.

1.3 Marginal Cost Study Methodology

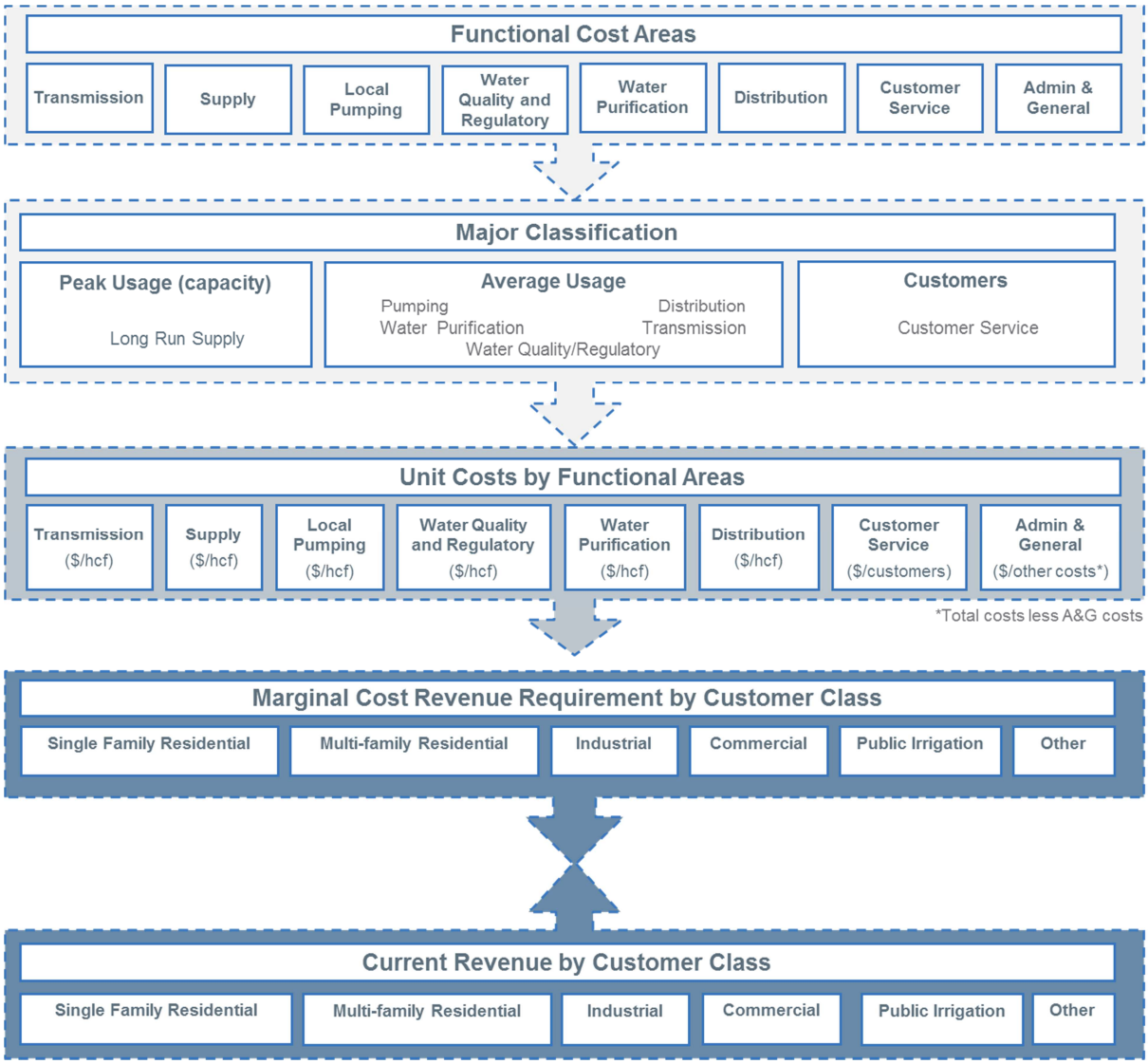
Prior to the commencement of the marginal cost study, the appropriate test year has to be established for the analysis. For the LADWP study, FY 2012-13, the most recent year deemed to have reliable information at the time of the study, was selected.

The marginal cost of service study comprises three general steps:

- Functionalization of service costs;
- Development of unit marginal costs for cost drivers; and
- Determination of marginal cost revenue requirements by customer class.

This methodology is outlined in Figure 2 below.

Figure 2: Marginal Cost of Service Study Methodology



The marginal cost of service study methodology (as applied to LADWP's water service) is comprised of the following major steps:

1.3.1 Functionalization

1. Establish the test year.
2. Identify all functional cost components associated with providing water service (transmission, supply, local pumping, water quality and regulatory, water purification, distribution, customer service, administration & general).
3. On a bottom-up basis, determine the annual marginal related costs associated with providing water service for each functional component.

1.3.2 Determination of Unit Marginal Costs

4. Determine the appropriate cost causation factor for calculating a unit marginal cost for each functional component; for example:

a. Coincident Peak (peak HCF);

b. Water usage (HCF);

c. Number of Customers (customers); or

d. Proportionate to other costs.

5. Develop a unit marginal cost for each functional category component by dividing the marginal costs calculated for each functional component in Step 3 by the corresponding cost causation factor from Step 4.
6. Identify all major customer classes for water service[2]:
   - Single-Dwelling Unit Residential Customers (Schedule A)
   - Multi-Dwelling Unit Residential Customers (Schedule B)
   - Commercial (Schedule C)
   - Industrial (Schedule C)
   - Other (Schedule C Governmental and Temporary Construction)[3]
   - Public Irrigation (Schedule F - Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports)
7. From Step 4, determine the customer class-specific cost causation factors:
   - Proportionate capacity levels (Coincident Peak) for each customer class;
   - Water consumption volume (HCF) for each customer class;
   - Number of customers in each class; or
   - Proportionate to other costs

1.3.3 Determination of Unit Marginal Cost Revenue Requirements

8. Calculate the marginal cost revenue requirement for each customer class by distributing the functionalized costs to customer classes. This is accomplished by multiplying the unit marginal cost for each functional component in Step 5 by the corresponding customer class–specific cost causation factor in Step 7.
9. Determine the aggregate marginal cost revenue requirement for each customer class by summing the functional component revenue requirements from Step 8.
10. Compare the marginal cost revenue requirement percentage (compared to the aggregate) and the current (FY 2012-13)[4] revenue percentage for each customer class to determine whether the current revenue distribution across customer classes is in proportion to the marginal costs.

The results will be used to develop rates and rate structures to collect customer class revenues appropriate for each class.

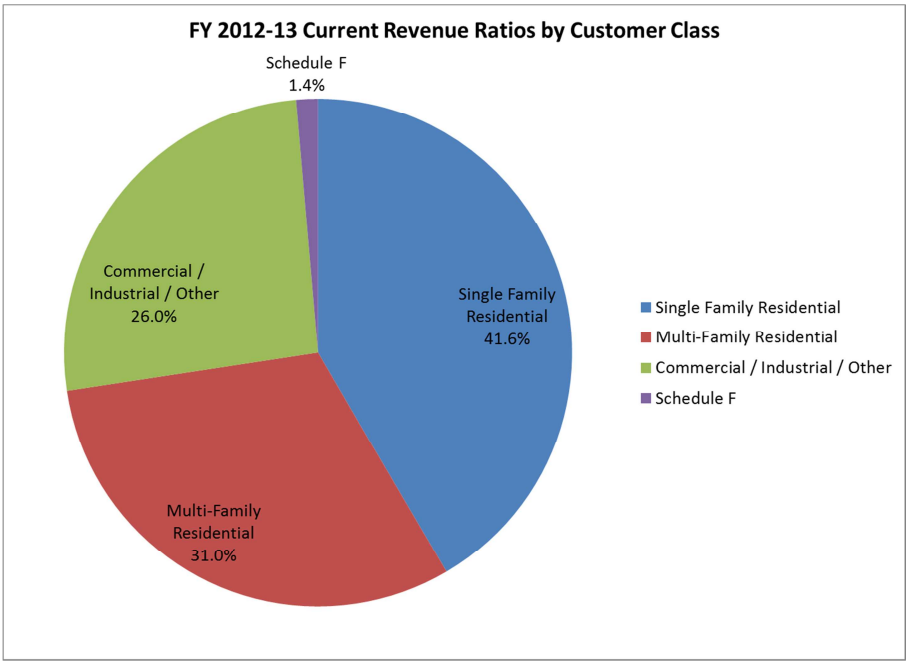
The current (FY 2012-13) allocation of water service revenues to customer classes is displayed in Figure 3.

[2] Due to the relatively small amount of usage, Reclaimed Water Service (Schedule D) and Private Fire (Schedule E) were excluded.

[3] Commercial, Industrial, Non-Irrigation Government and Temporary Construction customers are treated as one customer class.

[4] FY 2012-13 was the most recent year for which reliable data were available at the time of the study.

Figure 3: FY 2012-13 Current Revenue Ratios by Customer Class



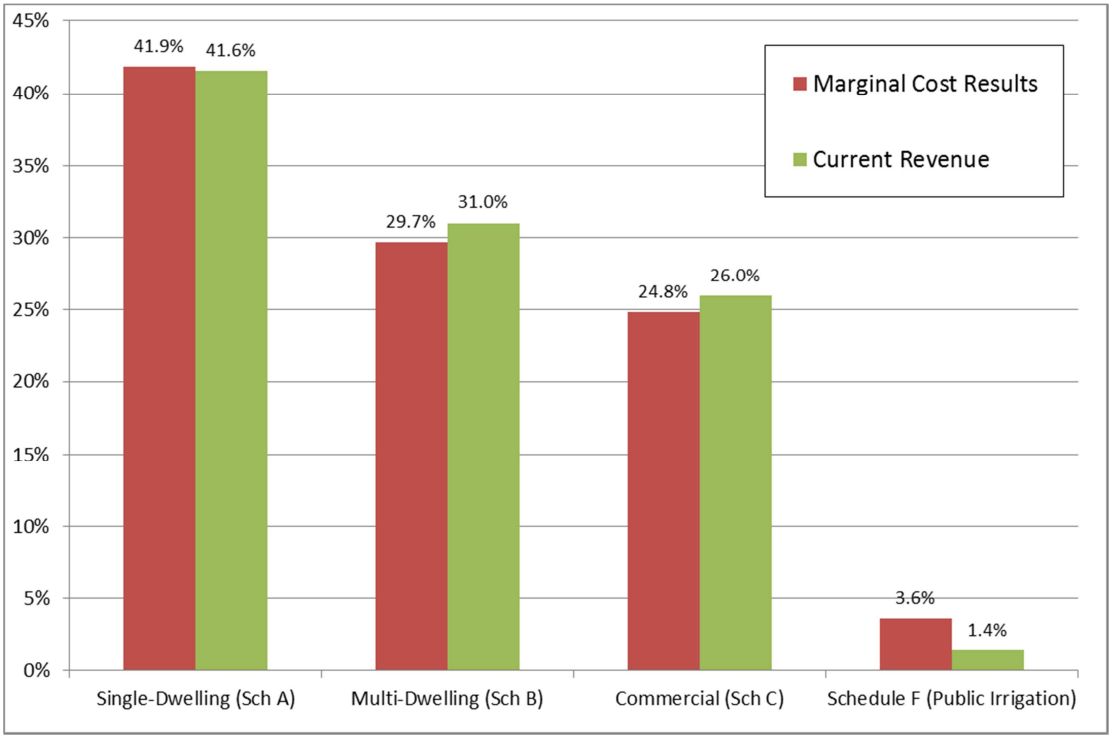
1.4 Summary of LADWP Marginal Cost Study Results

Figure 4 and Figure 5 below provide the comparisons between the marginal cost revenue requirement and the current revenue percentages (for the FY 2012-13 test year) for each customer class.

Figure 4: Comparison of Marginal Cost Revenue Requirement and Current Revenues

	Single-Dwelling Unit Residential (Sch A)	Multi-Dwelling Unit Residential (Sch B)	Commercial/ Industrial/ Other (Sch C)	Public Irrigation (Sch F)	Total
Total Marginal Cost Revenue Requirement (FY 2012-13)	$745,433,344	$527,775,075	$442,156,766	$63,986,765	$1,779,351,949
Percent of Total	41.9%	29.7%	24.8%	3.6%	100.0%
Current Revenue	$385,439,493	$287,958,501	$241,187,291	$12,825,922	$927,411,208
Percent of Total	41.6%	31.0%	26.0%	1.4%	100.0%

Figure 5: Comparison of Marginal Cost Revenue Requirement and Current Revenue Ratios



Results of the LADWP marginal cost of service study indicate that allocating the revenue requirement based on marginal costs results in Single Dwelling Unit Residential (Schedule A) customers being responsible for 41.9% of the revenue requirement, which is slightly higher than the current revenue level of 41.6%. Conversely, the allocated marginal costs for the Commercial/Industrial/Other customer class would result in a slightly lower revenue requirement of 24.8% instead of the current revenue level of 26.0% for this customer class. For Schedule F, customer class revenue requirement is 3.6% compared to the current revenue level of 1.4%.

As an added step to consider allocation of costs among customer classes in relation to cost of service, the Department conducted a draft embedded cost of service analysis[5] based on the Base-Extra Capacity methodology outlined in American Water Works Association's (AWWA) *M1 Manual, Principles of Water Rates, Fees and Charges*. The embedded cost[6] of service analysis confirms the marginal cost of service study in that the results are in the same direction – the revenue requirement percentages of both methodologies are either both above or both under current revenue requirement percentages of each customer class.

The percentages for each customer class as calculated from the marginal cost of service study will be used to guide allocation of the total revenue requirement to customer classes through the rate design. Rates for each major class of customers will be designed to recover approximately the portion of the revenue requirement assigned to each class based on the cost of service study results, consistent with legal considerations.

[5] Data based on Financial Case #33.

[6] Embedded Cost is also referred to as Average Embedded Cost.

2 MARGINAL COST OF STUDY APPROACH & METHODOLOGY

2.1 Introduction

On October 2, 2012, the Los Angeles City Council approved the Los Angeles Department of Water and Power's (LADWP) Incremental Electric Rate Ordinance No. 182273 to provide incremental rate adjustments for fiscal years (FY) 2012-13 and 2013-14. In its action to approve LADWP's power rates, the Council, along with other recommendations, requested that LADWP "conduct a new formal cost of service study (COSS) 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 cost of service study for its Water System rates to evaluate its water service cost structure and ensure that its rates are appropriate for each customer class. [7]

The City of Los Angeles has a long history of implementing water rates that address water efficiency and sustainability. The Mayor's Blue Ribbon Committee (BRC) established precedent for LADWP's rate setting approach in 1992; several of the BRC's objectives and principles for water rates in the City of Los Angeles are still applicable today.

Objectives of Rate Setting

- Rates should be equitable across customer classes;
- Rates should maximize the efficient allocation of resources;
- Rates should be simple and understandable; and
- Rates must generate adequate revenue. .

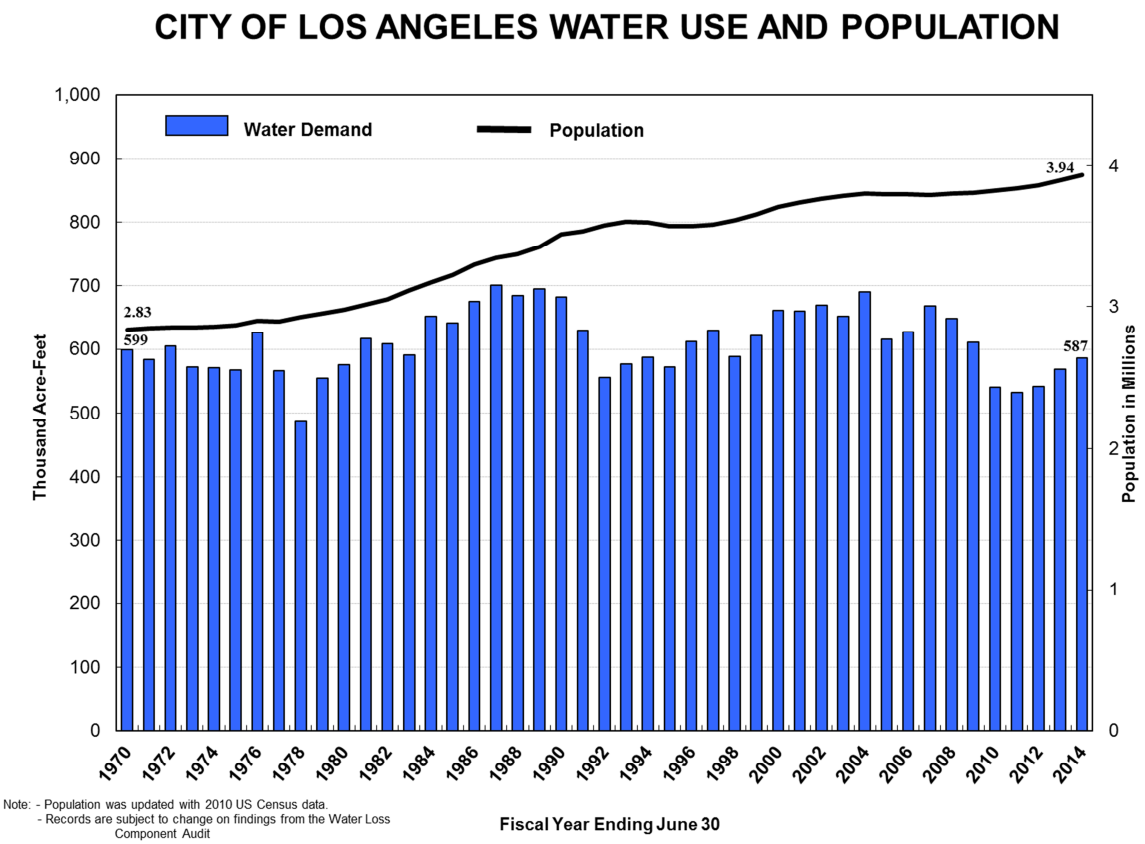
Principles of Rate Setting

- Marginal cost should be the basis of the rate structure in order to maximize efficient water use;
- Customers should not be penalized for conserving water; and
- The water rate structure should ensure that necessary investments to improve and equalize water quality throughout Los Angeles are made.

Rates based on marginal forward-looking costs were central to achieving the water rate reforms recommended by the BRC and have fundamentally contributed to water demand management in Los Angeles during periods of water scarcity, other supply uncertainties, and supply and demand imbalances. Recently, conservation has been stressed even further, as California is currently experiencing a significant drought. In early October 2014, in response to these conditions, the Mayor of Los Angeles issued an executive directive on water conservation to reduce Los Angeles' potable water use by 20% per capita by the end of 2017. A marginal cost based rate structure will help continue LADWP's conservation success. As shown in Figure 6 below, since 1970, water usage by LADWP customers has been virtually unchanged despite a 10% growth in population in the region. LADWP looks to continue this success story.

[7] Even in the absence of the Council's Motion, periodic cost of service studies are a common industry practice.

Figure 6: Historical LADWP Water Usage and Population by Fiscal Year



2.2 Marginal Cost of Service Study Approach

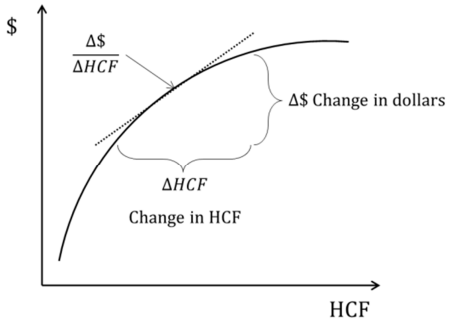
Traditional utility ratemaking is founded upon a cost-causation principle, in that rates for providing utility services should reflect the costs of providing that service. Cost of service studies also use cost-causation principles in allocating the costs of providing services to individual customer classes. A marginal cost of service study is comprised of three key steps:

- *Functionalize* costs according to whether they are supply, transmission, distribution, customer, or general in nature;
- *Classify* costs as to whether they are driven by long run supply costs (demand or capacity), commodity costs, customer related, or proportionate to other costs; and
- *Distribute* costs to specific customer classes (e.g., single-dwelling unit residential, multi-dwelling unit residential, etc.).

In simple economic terms, marginal costs measure the additional costs incurred to provide the next unit of service. A marginal cost of service study is forward-looking and answers the question: *How much will it cost the utility to provide an additional unit of service by customer class?* The study assesses the incremental costs of an additional HCF of water, or to serve an additional customer.

Incremental costs may result from factors such as additional overall water use, peak seasonal capacity, or water treatment needs. Such incremental services may also trigger the need for new supply, distribution, or treatment facilities, each of which may have its own incremental cost. Figure 7 provides a graphical depiction of the incremental cost concept.

Figure 7: Depiction of incremental costs with incremental increase in HCF



While the approach to completing a marginal cost of service study is forward looking and incremental in nature, historical accounting information may be used to inform the understanding of future costs. However, since a marginal cost of service study uses a bottom-up approach in deriving functional costs, the marginal cost revenue requirement(s) derived may be different from the current revenue requirement(s).

Conducting a marginal cost of service study is relevant and appropriate for a utility dealing with a changing cost structure because the resulting rates should provide appropriate forward-looking price signals and encourage more efficient use of system resources. Thus, marginal cost of service studies are recommended by the Blue Ribbon Committee and CPUC. LADWP has successfully used an efficiency oriented water rate structure over the last two decades to manage water demand and system costs. LADWP has therefore selected the marginal cost approach for its current cost of service study to allocate costs to customer classes for establishing rates.

A marginal cost of service approach has the following benefits:

- Is based on an established framework formulated by NERA Economic Consulting, a nationally recognized expert in the field;
- Follows an accepted methodology amongst IOUs in California;
- Aligns with marginal cost principles, which the CPUC has used for 20 years;
- Recognizes incremental costs of water supply, consistent with trends in the water industry that have been shifting toward increasing block rates;
- Tracks cost changes associated with changing technologies and regulatory requirements of the dynamic and highly capital-intensive water industry; for these, future costs may be more representative of present conditions than historical costs;
- Encourages more efficient utilization of both the water system and water resources; and
- Is consistent with legal considerations.

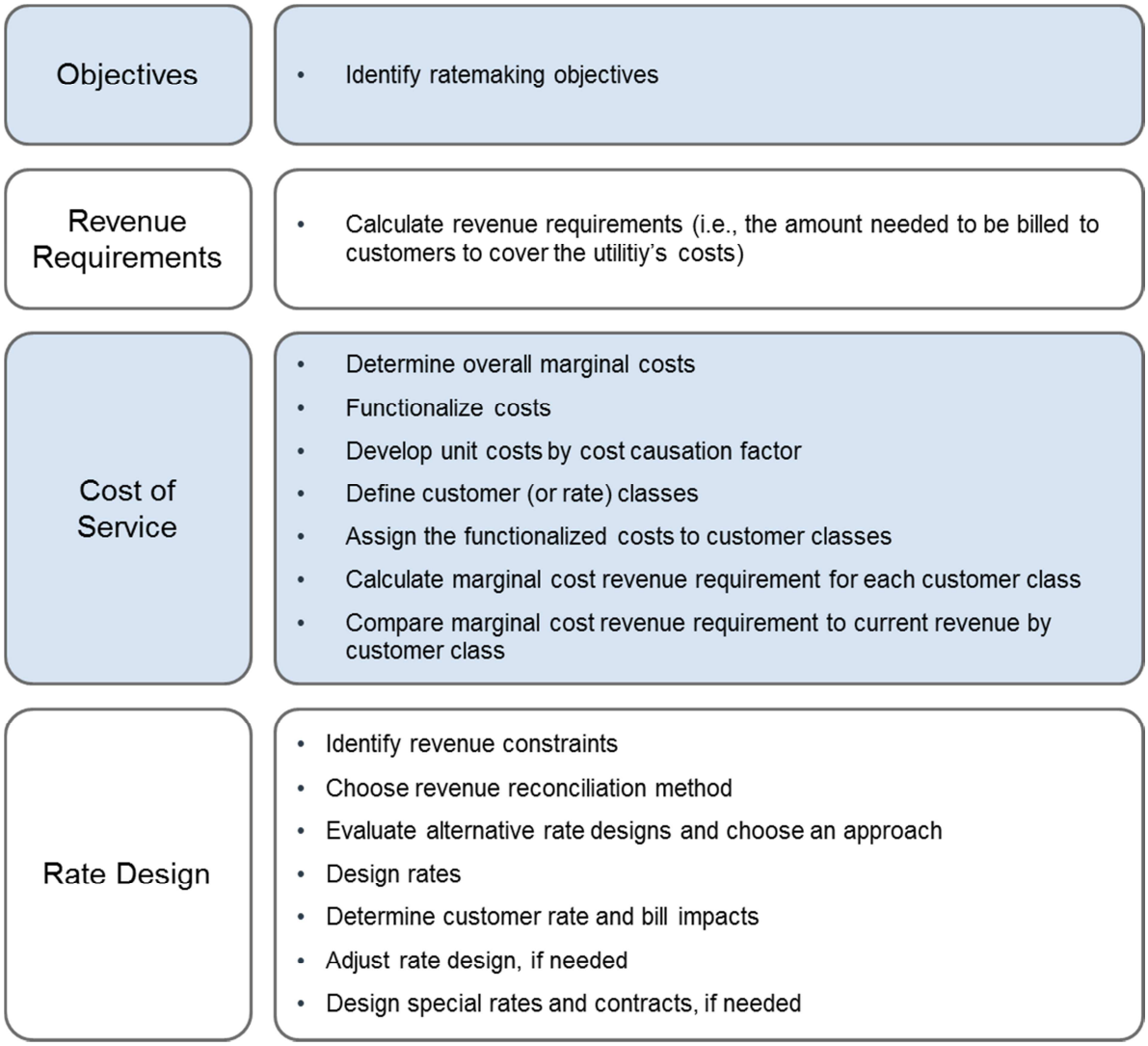
It should be noted that the marginal cost of service approach involves a detailed analysis of projected utility costs and deals with greater uncertainty. Specifically,

- Marginal cost of service study requires projections of future costs for water or additional capacity, not simply the use of historical costs already recorded in the books of the utility;
- Capital-related, consumption-related, and customer-related costs have to be estimated in a careful manner to account for the variability of capital expenditures from year to year; and
- Shifting costs to peak periods or higher blocks of consumption may affect revenue stability as water demand changes. If the higher billing rates for higher blocks serve their intended purpose, they reduce demand during peak periods and from high use customers. Revenue recovery needs to be addressed through the design and level of the rate structure.

2.3 Marginal Cost of Service Study and the Rate Design Process

A marginal cost of service study is an established method that sets the starting point for utilities to develop rates and rate structures which produce revenue sufficient to recover the costs associated with the provision of water service. Therefore, the marginal cost of service study is an important aspect of the overall rate making process as outlined in Figure 8 below.

Figure 8: Typical Rate Making Process



2.4 Water System Overview

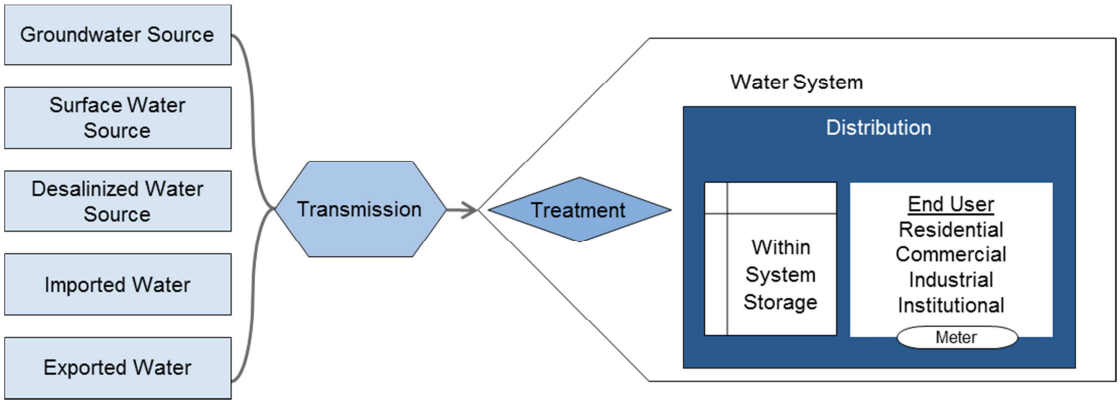
Water utilities are to provide safe, potable water to a variety of customers that include commercial, industrial, and residential classes. The water supply system in general is composed of the following major functional components:

- Supply;
- Transmission/Conveyance;
- Treatment/Water Quality; and
- Distribution.

Supporting these functional components of the water system is the Administration and General function.

Figure 9 provides an illustration of a sample water supply system.

Figure 9: Illustration of Sample Water Supply System



Water enters the system from various sources on the left - potentially including groundwater, surface water, and other sources. The water utility withdraws the water at its source, conveys the water (transmission), treats, stores, and distributes the water to its customers.

The water is delivered to the different end users - residential, commercial, industrial, and other types of customers. Consumption of the delivered water is measured by a water meter that provides the basis for determining a customer's water bill.

This picture of a water system provides the different utility functional components related to obtaining, transmitting, and delivering water. Examination of the costs and benefits of the different functions necessitated by water consumption lies at the heart of efficiency analysis. In fact, the movement toward "Full Cost" pricing[8] by water utilities requires that costing be broken out by functional component.

2.5 Marginal Cost Study Methodology

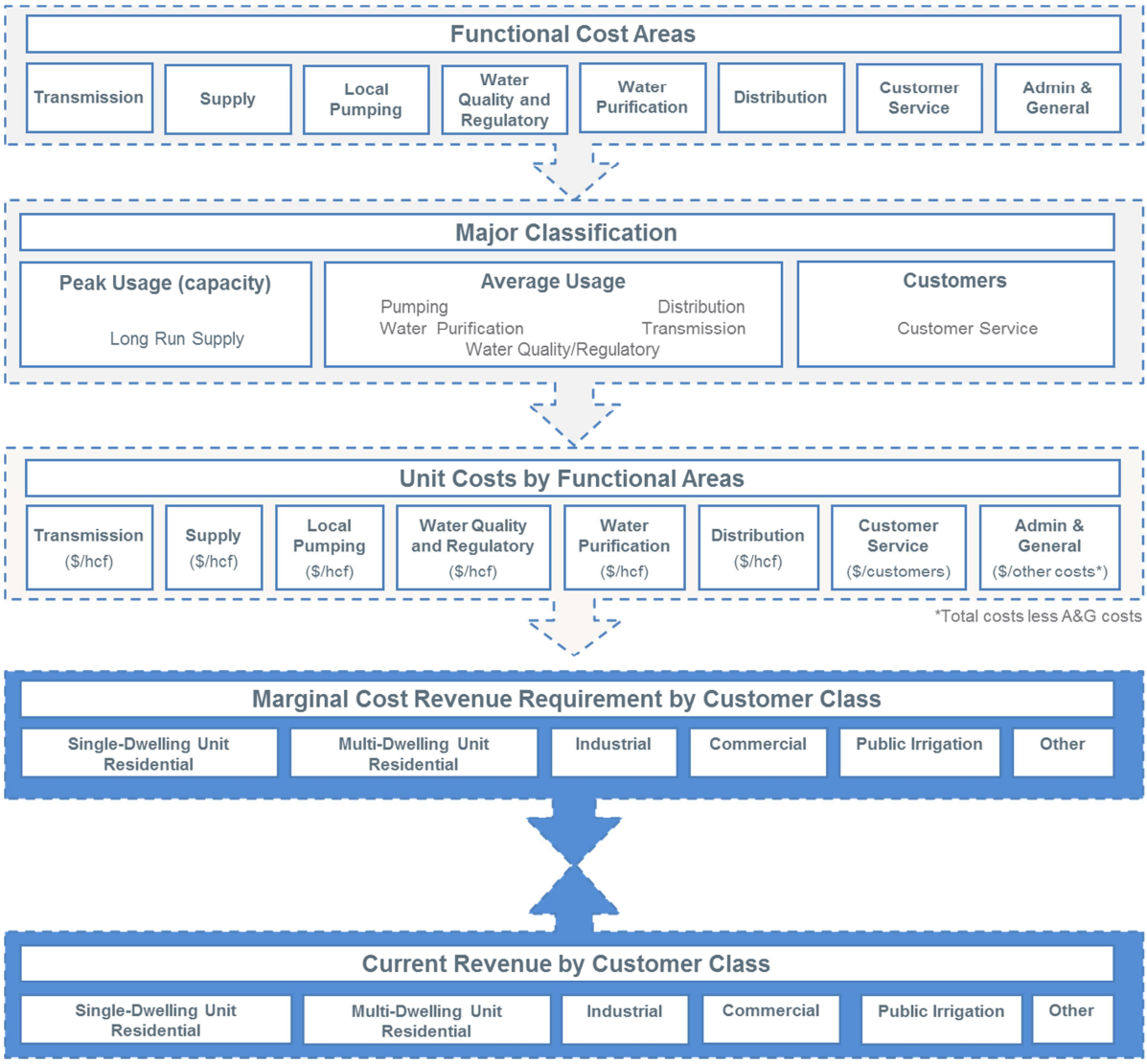
The marginal cost of service study comprises three general steps:

- Functionalization of service costs;
- Development of unit marginal costs/ cost drivers for cost causation factors; and
- Determination of marginal cost revenue requirements by customer class.

The following graphic Figure 10 summarizes these three general steps.

[8] For additional information on costing concepts behind "Full Cost" see *Full Cost Accounting: Practical Guidance on Converting to FCA*, Government Finance Officers Association under Cooperative Agreement with US EPA, February 2000, http://www.epa.gov/epaoswer/non-hw/muncpl/fullcost/natdocs.htm.

Figure 10: Marginal Cost of Service Study Methodology



2.5.1 Functionalization

The first step in the cost of service study is to determine the test year. For this study, FY 2012 – 13, the most recent year deemed to have reliable data at the time of the study, was chosen (refer to Section 3.1 for more detail).

Next, the various functions performed by LADWP in the provision of water services were determined. These functional cost components have been identified as the following (more detailed information can be found in sections 3.3.1 through 3.3.8):

- Transmission - Los Angeles Aqueduct system and supporting facilities plant costs;
- Supply - the supply of water including plant, O&M, purchased water, and an adder for the incremental costs of the Bay Delta Fix[9] and Cap and Trade[10];

[9] The Bay Delta Conservation Plan adder comes from the anticipated multi-billion dollar project expected in the California Bay Delta area that is comprised of conveyance tunnels and bioremediation measures to save habitats of local species. This capital project will increase prices for MWD purchases. Refer to Section 3.3.2.3 for further discussion.

- Water Quality and Regulatory - the capital costs of water quality and treatment;
- Local Pumping - O&M cost of pumping local water such as energy costs;
- Water Purification - O&M cost of water treatment;
- Distribution -- O&M and plant costs for delivery of water to customers including storage;
- Customer Service - customer service, meter reading, and billing costs; and
- Administrative and General - the cost of administrative functions such as human resources, finance and accounting, information technology, etc.

The marginal cost of service study focuses on developing marginal cost based revenue requirements for each functional component and its sub-components. The objective of this exercise is to determine the costs associated with producing an incremental unit of water, adding an HCF/Period of demand, or serving an additional customer. Then, on a bottom-up basis, the annual marginal related costs associated with providing water service for each functional component are determined.

2.5.2 Development of Unit Marginal Costs/Cost Drivers

The second general step, "cost driver classification" (Bonbright, 1961), is the process of selecting units (e.g., average usage, peak usage, number of customers) to allocate costs within functional components. Based on cost causation factors, unit marginal costs (e.g., $/HCF) are derived for each functional component.

The LADWP Water System incurs costs based on the following cost causation factors:

- **Seasonal Peak Consumption Related Costs**

  These costs are incurred as a result of maximum seasonal water consumption requirements and are allocated among the customer classes on the basis of seasonal peak consumption volume (peak HCF).

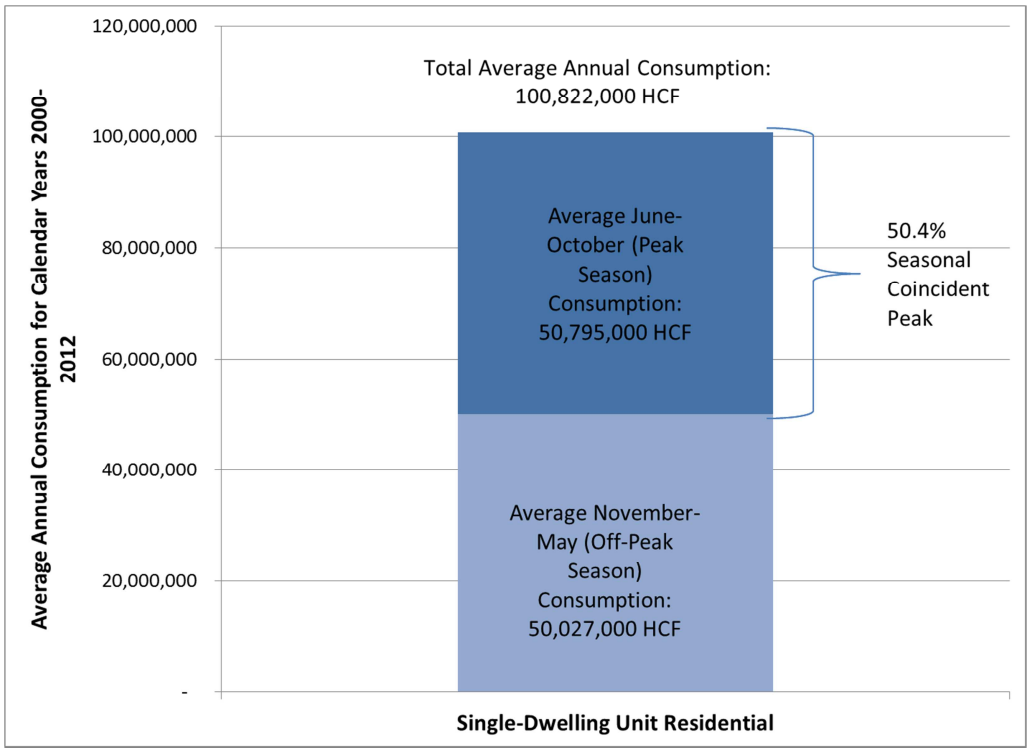
  For the marginal cost study, measuring system demand is not merely a summation of individual customer class maximum demands because the maximum demands for individual customer classes do not necessarily occur at the same time period. For example, daily usage may peak for residential customers on days when the weather is very hot and dry; for commercial and industrial customers, daily usage may peak based on demands in the marketplace. For the overall system, capacity requirements depend on peak seasonal demand which is not necessarily coincident although usually correlated with seasonal climate. Therefore, each customer class's capacity requirements at its peak determines its contribution to System Coincident Peak Demand (CP).

  System Coincident Peak Demand denotes the contributions of each customer class coincident with the system demand for peak capacity. This measurement is used to allocate marginal purchased water supply costs to customer classes. This allocation is based on the theory that marginal water supply costs are driven by periods of peak demands on the system.

  There are several variations of the Coincident Peak Demand method that could be applied to water system capacity analysis, including daily demand (MGD or thousand gallons per day), monthly acre-feet (AF), or seasonal AF peaks. For the LADWP marginal cost study, the Seasonal Coincident Peak method is used to calculate the demand during the peak season (June – October) for the long run marginal supply source (refer to Figure 11 for a sample depiction of Single-Dwelling Unit Residential Seasonal Coincident Peak).

[10] Cap and Trade refers to the regulation of emissions from electricity production. Electricity production is a significant portion of costs for the transportation of future water purchases. Refer to Section 3.3.2.3 for further discussion.

Figure 11: Depiction of Single-Dwelling Unit Residential Seasonal Coincident Peak



- **Water Consumption (Volume) Related Costs**

  Some costs, such as water supply O&M, water distribution, pumping costs, treatment operating costs, and certain other O&M expenses, are directly related to the quantity of water consumed. These costs are allocated among the customer classes on the basis of water consumption volume which the system must supply to serve the customers. In other terms, these are variable commodity costs (pumping costs, treatment O&M, and other costs related to the quantity of water consumption).

- **Customer Related Costs**

  These costs reflect the marginal costs of customer connections to the distribution system and various customer services and are allocated on the basis of the number of customers in each class.

- **Administrative and General (A&G) Costs**

  These costs typically cannot be allocated to customer classes based on direct cost causative allocation factors. Instead, A&G costs are allocated in direct proportion to total costs, an indirect cost causative allocation approach.

Figure 12 shows a summary of cost causation factors and marginal cost units for each functional cost component/sub-component.

Figure 12: Cost Causation Factor Criteria and Marginal Cost Units

Functional Cost Component	Cost Causation Factor	Marginal Cost Units
Transmission (Capital)	Consumption volume by customer class	$/HCF/annual
Supply (O&M)	Consumption volume by customer class	$/HCF/annual
Supply (Plant)	Consumption volume by customer class	$/HCF/annual
Supply, Adder for BDCP Delta Fix, Cap and Trade	Consumption volume by customer class	$/HCF/annual
Supply, Purchased Water / Long Run Supply	Seasonal coincident peak by customer class	$/peak HCF/annual
Local Pumping	Consumption volume by customer class	$/HCF/annual
Water Quality and Regulatory Capital	Consumption volume by customer class	$/HCF/annual
Water Purification	Consumption volume by customer class	$/HCF/annual
Distribution Storage (Plant)	Consumption volume by customer class	$/HCF/annual
Distribution Storage (O&M)	Consumption volume by customer class	$/HCF/annual
Distribution (Plant)	Consumption volume by customer class	$/HCF/annual
Distribution (O&M)	Consumption volume by customer class	$/HCF/annual
Customer Service, Billing	Number of Customers	$/HCF/annual
A&G and General Plant Adder	Percent of (Proportionate to) All Other Costs	$/HCF/annual

These cost causation factors form the basis for the determination of marginal unit costs for each functional component (and sub-component). Based on appropriate allocation criteria, the cost causation factors are also utilized for the allocation of unit marginal costs to customer classes.

2.5.3 Customer Class Marginal Cost Allocation

LADWP serves the following major customer classes:

- Single-Dwelling Unit Residential Customers (Schedule A);
- Multi-Dwelling Unit Residential Customers (Schedule B);
- Commercial (Schedule C);
- Industrial (Schedule C);
- Other (Schedule C Governmental and Temporary Construction)[11]; and
- Public Irrigation (Schedule F - Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports).

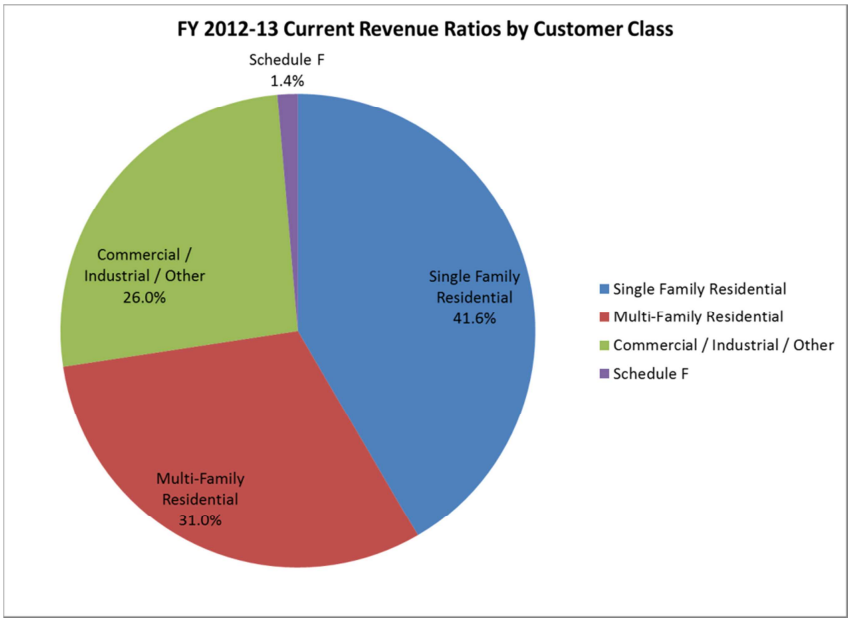
In the third general step, the marginal costs for each functional component are allocated to customer classes based on the unit marginal cost of the functional component/sub-component and the customer class cost causation factor. For example, transmission costs are allocated to customer classes by multiplying the test year usage for each customer class by the transmission functional unit cost. Total marginal costs for each class are then determined based upon the aggregation of the functional cost components.

[11] Commercial, Industrial, Non-Irrigation Government and Temporary Construction customers are treated as one customer class in the LADWP marginal cost study.

Then, marginal cost revenue percentages (as a percentage of the aggregate) are calculated and compared to the current (FY 2012-13) revenue percentages for each customer class to determine whether the revenue distribution across customer classes is in proportion to the marginal costs. The percentages for each customer class as calculated from the marginal cost of service study will be used to guide allocation of the total revenue requirement to customer classes through the rate design. Rates for each major class of customers will be designed to recover approximately the portion of the revenue requirement assigned to each class based on the cost of service study results, consistent with legal considerations.

The current (FY 2012-13) allocation of water service revenues to customer classes is displayed in Figure 13.

Figure 13: FY 2012-13 Current Revenue Ratios by Customer Class



3 MARGINAL COST UNIT CALCULATIONS

This section describes the assumptions and data sources used to select data and arrive at the calculation of unit marginal costs. It also details the unit marginal cost calculations for each functional component.

3.1 Marginal Cost of Service Study Assumptions

The estimation of marginal costs involves a detailed analysis of projected costs for the components of various services provided by utility companies, and it is typically quite sensitive to certain parameters and assumptions, depending on the type of cost being estimated. The key assumptions for this LADWP cost study are listed in Figure 14 and Figure 15 below.

Figure 14: General Marginal Cost of Service Study Model Assumptions

General Assumption	Notes
5.25% Nominal Discount Rate[12]	This nominal discount rate was calculated based on the weighted average of interest rates of traditional borrowing (5.35%) and securitized debt (5.1%) consistent with LADWP's financial plan.
FY 2012-13 data	The most recent year with reliable data was determined to be FY 2012-13.
5.2% System Loss	This number is based on the most recent LADWP System Loss Study (September 2013)

[12] The nominal interest rate represents the cost of capital to the utility.

Figure 15: LADWP Marginal Cost of Service Study Sources of Data and Assumptions for Functional Components

Functional Cost	Key Assumptions
Supply Plant Transmission Plant	• LADWP capital budget 10-year levelized cost o 5.25% nominal discount rate
Incremental Supply / Long Run Supply Cost	• Based on long term marginal cost of water supplies (such as recycled water, desalinized water, or other)
Supply: Bay Delta Conservation Plan (BDCP) - cost increments in future purchased water costs	• Based on the projected cost of BDCP and Cap and Trade compliance in future purchased water
Water Quality & Regulatory Plant	• LADWP capital budget 10-year levelized cost o 5.25% nominal discount rate
Distribution Storage Plant Distribution Plant	• LADWP capital budget 10-year levelized cost o 5.25% nominal discount rate
Supply O&M, Distribution O&M, Distribution Storage O&M Water Purification O&M Local Pumping	• Functionalized General Ledger expenses
Customer Service, Billing	• From billing system (Customer Information System)
Administrative and General	• Pertain to expenses related to the general operation of Water System • Administrative & General Adder derived from FY 2012-13 General Ledger • General Plant Adder– includes expenses related to depreciation, property taxes, and debt servicing costs, prorated based on the ratio of general plant to total plant

3.2 Data Sources

Capital (Plant) Costs

The most recent Ten-Year Capital Improvement Plan (CIP) was used for the calculation of capital/plant costs. The costs were then levelized. The levelized cost is the annual payment over ten years equal to the present value of the capital costs over ten years. Though a 48-year Asset Management plan was available, it was determined that the 10-year CIP had more recent and accurate cost information.

Operating and Maintenance Costs (General Ledger)

A detailed analysis of General Ledger data was conducted to determine the functional cost components for the operating and maintenance costs. The source of the data is the LADWP General Ledger, which includes a range of accounts that delineate expenses and revenues. Data were provided by LADWP with the identifier PRIMACKVAL which contains the 3-digit Account Number and an additional 4 digits (Sub Account, Analysis Code, and Class Code). The time period for the data utilized is FY 2012-13 (July 1, 2012 to June 30, 2013) the most recent accounting period for which reliable data was available at the time the marginal cost of service study was completed. The data was extracted from the General Ledger system.

All Operating Expenses in Account Numbers in the 800s and 900s were included except for several accounts in these ranges that pertain to Reclaimed Water Credits (transfer payments) or amortization. These excluded accounts represent approximately 2 percent of Operating Expenses.

Figure 16 provides the results of the analysis. The amounts in column "FY 2012-13 Allocated Costs" are based on General Ledger data.

Figure 16: LADWP General Ledger Data

Function	PRIMA Account No.	FY 2012-13 Allocated Costs
Source of Supply	801, 803, 811, 812, 814, 817, 821	$70,888,394
Pumping Station	826, 835, 836, 837	$26,366,705
Purification	840, 841, 842, 843, 845, 846, 847	$45,134,506
Unused	872	$2,487
Distribution Storage	856, 858, 868, 869, 872, 874	$20,808,747
Distribution	857, 860, 861, 862, 868, 869, 871, 872, 873, 875, 876, 877, 879	$96,497,648
Customer	890, 891, 896, 897, 900, 901, 903, 904, 905	$77,715,691
Administrative and General	910, 916, 917, 919, 920, 921, 923, 938, 944, 946	$69,256,739
Purchased Water	804	$280,946,123
Total		**$687,617,041**

Consumption Data (Allocation Volumes)

Figure 17 below provides a summary of the allocation volumes utilized for the marginal cost of service study and the corresponding customer class percentages. If marginal costs are allocated to customer classes based on expected water consumption, then the row labeled "Consumption in HCF (FY 2012-13)" would be used to multiply the respective $/HCF unit marginal cost. For coincident peak allocation, the row labeled "Coincident Peak in HCF" would be used because it is calculated using the seasonal load factor, which is a thirteen-year average based on historical consumption data (2000-2012).

Figure 17: LADWP Consumption Data[13]

Expected Capacity Utilization	Single Family Residential (Schedule A)	Multi-Family Residential (Schedule B)	Commercial / Industrial / Other[14] (Schedule C)	Schedule F
Consumption in HCF (FY 2012-13)	95,080,125	73,383,205	61,270,652	8,339,259
Load Factor	50.4%	43.7%	45.9%	61.5%
Coincident Peak in HCF	47,876,123	32,040,629	28,131,000	5,097,954

The water demands (i.e., consumption levels) to be used for the allocation of transmission, supply, distribution and other functional costs are the demands at the point of delivery to the customer. Consequently, an estimate of system losses in demand is not performed.

[13] Due to the relatively small amount of usage, Reclaimed Water Service (Schedule D) and Private Fire Service (Schedule E) were excluded.

[14] Commercial, Industrial, Non-Irrigation Government and Temporary Construction customers are one customer class.

At the onset of this cost study, LADWP determined to change the summer season from June through October to June through September. The October month usage pattern is straddled between the summer and winter seasons, so this season change will not result in a material impact to this cost study.

3.3 Calculation of Unit Marginal Costs by Functional Component

This section describes how marginal costs are calculated for each of the various functional components - transmission, supply, water quality and regulatory, water purification, local pumping, distribution storage and distribution, customer service and billing, and administrative and general (A&G).

3.3.1 Transmission Unit Marginal Costs

For the LADWP marginal cost study, transmission marginal costs were comprised of plant costs for a single category – the Los Angeles Aqueduct (LAA) (other transmission costs are wrapped into purchased water costs).

These are costs associated with replacements of and capital improvements to the LAA. The marginal costs of the LAA are estimated based on levelized costs from the LADWP Ten-Year Capital Budget (October 2014 version). Since the LAA is existing infrastructure, the capital costs include capital investment for replacements and improvements needed to reliably transmit water. Two categories in the LADWP Ten-Year Capital Budget were used[15]:

Figure 18: LADWP Transmission Capital

Functional Item	Description
22140	LA AQUEDUCT SYS-A&B NORTH
22130	LA AQUEDUCT SYS-A&B SOUTH

In addition, Water System Organization facilities costs (FI 28201) are included here. One-half of the LAA plant costs were attributed to Transmission and one-half to Supply based on cost analysis of LADWP's standard practice.

The 10-year levelized capital cost per year for transmission was $18,745,345. Dividing by the 10 year average customer demand load of 231,127,966 HCF gives a transmission unit cost of $0.08 per HCF.

3.3.2 Supply Marginal Costs

Supply costs are those costs associated with procuring new sources of water and providing water from current sources, including water supply projects for maintaining groundwater supplies, increasing recycled water supplies, and performing environmental restoration activities in the Eastern Sierra. There are four functional sub-components of water supply costs:

- Supply (O&M),
- Supply (Plant),
- Adder for the BDCP Delta Fix and Cap and Trade, and
- Incremental Supply / Long Run Marginal Supply.

The calculations of marginal costs for each sub-component of supply are discussed in this section.

[15] "The Los Angeles Aqueduct Additions and Betterments (A&B) North and Los Angeles Aqueduct A&B South refer to capital projects for the Los Angeles Aqueduct and related structures (such as reservoirs, corrosion protection systems, etc.) owned by the Water System. A large portion of work on the 100-year-old original Los Angeles Aqueduct in the Southern District is dedicated to the rehabilitation of large diameter steel pipelines and covered concrete conduits. A large portion of work on the Northern District of the original Los Angeles Aqueduct is dedicated to the replacement of the concrete sidewall lining, fencing, and joint sealing." (Water System Ten-Year Capital Improvement Program for the Fiscal Years 2010-2019, Undated, LADWP).

3.3.2.1 Supply (O&M) Costs

The supply operations and maintenance marginal costs were estimated based on the General Ledger data described above for FY 2012-13. Supply O&M includes labor, materials, tools, engineering, and other related expenses. Supply functional sub-components include all sources of supply - impounding dams, reservoirs, spreading grounds domestic wells, and canals and conduits.

The O&M costs for supply in FY 2012-13 were $70,888,394. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a supply O&M unit cost of $0.31 per HCF.

3.3.2.2 Supply (Plant) Costs

The marginal costs of Supply (Plant) were estimated based on levelized costs from the LADWP Ten Year Capital Budget. The elements of the capital plan identified as "supply" are shown in Figure 19.

Figure 19: LADWP Supply Capital

Functional Item	Description
22150	E. SIERRA ENVNMTL CAPITAL
28183	ENERGY CNSRVTN-WTR FUNDED
24315	GROUNDWATER MGMT
22402	OWENS VALLEY DUST MITIGAT
21146	OWENS LAKE MASTER PROJECT
22160	RESOURCE DEVELOPMENT
22403	SUPPLMNTL DUST CNTRL DEVT
28204	WATER CONSRVTN-WTR FUNDED
24318	WATERSHED-STRMWTR CAPTURE

In addition, as noted above in Section 3.3.1, half of the LAA plant costs were attributed to Supply.

The 10-year levelized capital costs per year for supply were $186,532,421. Dividing by the 10 year average customer demand load of 231,127,966 HCF gives a supply unit cost of $0.81 per HCF.

3.3.2.3 Adder for the Bay Delta Conservation Plan (BDCP) Delta Fix and Cap and Trade Marginal Costs

The Sacramento-San Joaquin Delta is currently a major source of LADWP's water supply;; however, there is increasing pressure on the water supply from this source. To alleviate the stress on the Bay Delta habitats, stakeholders, such as the California State government, National Oceanic Atmospheric Administration (NOAA), Fisheries, and US Secretary of the Interior, proposed the Bay Delta Conservation Plan (BDCP). This plan includes construction of a conveyance that would divert water under the Bay Delta area to avoid pumping through the Delta, as well as a component for eco-restoration.

The BDCP will affect LADWP because it will increase the cost of purchased water significantly, as the Metropolitan Water District (MWD) would be responsible for about 25% of the state and federal contractor's share. These costs would then be passed through to LADWP (and other MWD customers) through higher prices of purchased water each year.

The BDCP represents an incremental supply cost not incorporated into historical accounting costs, but is a known environmental cost that will likely be incorporated into future purchased water costs.

MWD's current annual estimated cost for the proposed BDCP conveyance is approximately $418 million. Estimated MWD sales are about 1.7 MAF, which would result in additional unit cost of supply of $246/AF. LADWP's average annual share of the BDCP cost is estimated to be about $62 million, over 45 years. LADWP's average annual water sales are 550,000 AF, or 240 million HCF, which would result in an increase of $0.27/HCF in delivered water to LADWP customers. A rough estimate of the potential BDCP cost to the typical LADWP single family residential customer is about $3.24 per year (assuming 12

HCF/month usage). The majority of MWD's BDCP costs are expected to be collected through MWD's water sales to LADWP and other agencies.[16]

For Cap and Trade purposes, MWD is still a covered entity under the California Air Resources Board (CARB) regulations due to their purchase and import of non-hydro generated supplemental energy into California to power their Colorado River Aqueduct (CRA) pumps. 2013 was the start of CARB's compliance period, but LADWP has not yet been notified by MWD how the auction market to cover these emissions will operate; an update from MWD is expected in the coming months. A 2011 MWD presentation estimated the Cap and Trade Program will cost between $5 million and $10 million in the first year of the program. These assumptions have been used for LADWP's planning purposes, and will result in an increase in $.014/HCF to cover the cost of Cap and Trade.

The total adder for the BDCP plan and Cap and Trade was $0.29 per HCF delivered.

3.3.2.4 Incremental Supply / Long-Run Marginal Supply Costs

To estimate the long-run marginal supply costs, the incremental marginal supply source during peak season was identified. Figure 20 below, based on data from the 2010 Urban Water Management Plan (UWMP), shows the estimated costs of various supply sources. In keeping with the determination of the Blue Ribbon Committee and two decades of practice at LADWP, recycled water was used as the marginal source of water supply in establishing a marginal supply cost. LADWP has evaluated the cost of seawater desalination, which would increase the long run marginal supply cost, as it is a more expensive alternative at this time. Incremental recycled water supplies are currently projected to cost up to $1,500/AF, or $3.63 per HCF delivered[17].

Figure 20: Unit Costs of Water Supply[18]

Water Source	Average Unit Cost / AF
Los Angeles Aqueduct	$563
Groundwater	$215
Metropolitan Water District	$527-$869
Conservation	$75-$900
Recycled Water	$600-$1,500
Water Transfer	$440-$540
Stormwater Capture:	
• Centralized Stormwater Capture	$60-$300
• Distributed Stormwater Capture	
• Urban Runoff Plants	$4,044
• Rain Barrels	$278-$2,778
• Cisterns	$2,426
• Rain Gardens	$149-$1,781
• Neighborhood Recharge	$3,351
Seawater Desalination	$2,136[19]

3.3.3 Local Pumping Marginal Costs

Local Pumping Station O&M expenses were estimated based on the FY 2012-13 General Ledger.

[16] It is currently uncertain whether any collection of the BDCP costs through property taxes will be possible.

[17] The unit cost of desalinized water would increase the $/HCF cost from $3.63/HCF (recycled water unit cost) to $4.84/HCF

[18] Based on 2010 Urban Water Management Plan.

[19] Based on average range of cost estimates from San Diego County Water Authority description of Poseidon Desalination Project at http://www.sdcwa.org/seawater-desalination.

O&M costs for local pumping in FY 2012-13 were $26,366,705. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a local pumping unit cost of $0.11 per HCF.

3.3.4 Water Quality and Regulatory Marginal Costs

Water Quality and Regulatory capital costs were estimated based on levelized costs from the LADWP Ten Year Capital Budget related to water quality and regulatory compliance. The elements of the capital plan in Figure 21 were identified as Water Quality and Regulatory.

Figure 21: Water Quality Capital

Functional Item	Description
24130	CHLOR STATION INSTALLATNS
24316	GRNDWTR REMEDTN & CLEANUP
29130	WQIP RESV IMPRVTS
23222	WQIP TRUNKLINE IMPRVEMNTS
24310	WTR TREATMENT IMPRVTS

In addition, following normal LADWP practice, one-half of functional item 28857, “Other WSO CAP Projects” costs was included in the water quality capital, based on cost analysis of LADWP’s standard practice.

The 10-year levelized capital costs per year for water quality and regulatory items were $322,625,935. Dividing by the 10 year average customer demand load of 231,127,966 HCF gives a water quality unit cost of $1.40 per HCF.

3.3.5 Water Purification (O&M) Marginal Costs

Water Purification O&M expenses were estimated based on the FY 2012-13 General Ledger.

The O&M costs for supply in FY 2012-13 were $45,134,506. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a supply O&M unit cost of $0.19 per HCF.

3.3.6 Distribution Marginal Costs

There are four functional sub-components of Distribution costs:

- Distribution Storage Plant,
- Distribution Storage O&M,
- Distribution Plant, and
- Distribution O&M.

The term Distribution Storage refers to storage within the LADWP system, as distinct from regional and state-wide storage infrastructure.

3.3.6.1 Distribution Storage (Plant)

The costs of Distribution Storage (Plant) were estimated with levelized costs from the LADWP Ten Year Capital Budget related to distribution storage.

The 10-year levelized capital costs per year for distribution storage were $41,125,382. Dividing by the 10 year average customer demand load of 231,127,966 HCF gives a distribution storage unit cost of $0.18 per HCF.

3.3.6.2 Distribution Storage O&M

Distribution Storage O&M expenses were estimated based on the FY 2012-13 General Ledger.

The O&M costs for distribution storage in FY2012-13 were $20,808,747. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a distribution O&M unit cost of $0.09 per HCF.

3.3.6.3 Distribution (Plant)

The costs of Distribution (Plant) were estimated based on levelized costs from the LADWP Ten Year Capital Budget related to distribution.

The 10-year levelized capital costs per year for distribution costs were $268,295,656. Dividing by the 10 year average customer demand load of 231,127,966 HCF gives a distribution plant unit cost of $1.16 per HCF.

3.3.6.4 Distribution O&M

Distribution O&M expenses were estimated based on the FY 2012-13 General Ledger.

The O&M costs for distribution in FY 2012-13 were $96,497,648. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a distribution O&M unit cost of $0.42 per HCF.

3.3.7 Customer Service and Billing Marginal Costs

Customer service and billing expenses were estimated from the FY 2012-13 General Ledger.

The O&M costs for customer service and billing expenses in FY 2012-13 were $77,715,691. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a customer service and billing O&M unit cost of $0.34 per HCF.

3.3.8 Administrative & General Expenses and the General Plant Adder

Lastly, A&G costs are associated with system support activities such as finance and accounting, human resources, insurance, information technology, legal and administrative. A&G Expenses were estimated from FY 2012-13 General Ledger.

The General Plant Adder pertains to the depreciation, property tax and debt servicing costs associated with the general operation of the water system. It was calculated in total for LADWP (and then allocated to customer classes) based on a proration where General Plant expenses (includes Depreciation, Property Taxes and Interest) are divided by Total Plant Expenses (refer to Figure 22 for the specific calculation). General Plant refers to investments that support general administrative activities and includes assets such as office buildings and information technology.

A&G expenses and the General Plant Adder are allocated based upon the proportion of all other costs allocated to the individual customer classes. This allocation to customer classes is made after all other class allocations have been made.

Figure 22: Calculation of General Plant Adder

Category	Amount
General Plant	$ 577,469,138
Total utility plant at original cost	$ 6,789,342,400
Ratio	8.51%
Depreciation	$ 112,677,417
Property Taxes	$ 12,557,382
Debt Servicing	$ 151,602,239
Total Depreciation, Property Taxes, Debt Servicing	$ 276,837,038
Adder (Ratio*Total Depreciation, Property Taxes, Debt Servicing)	$ 23,546,440

The O&M costs for the administrative and general category from the general ledger in FY 2012-13 was $69,256,739. The adder calculated in Figure 22 was $23,546,440. Therefore, total A&G costs were $92,803,180. Dividing by the FY 2012-13 customer demand load of 231,582,513 HCF gives a total A&G O&M unit cost of $0.40 per HCF.

3.4 Summary of Unit Marginal Costs

Figure 23 provides a summary of unit marginal costs by functional component.

Figure 23: Marginal Unit Costs by Functional Component/Sub-Component

Marginal Unit Cost By Function	Unit Marginal Cost	Units	Source
Transmission			
LAA Annual Cost (Plant)	$0.08	$/hcf/annual	Capital 10 Year Budget
Supply			
Supply (O&M)	$0.31	$/hcf/annual	FY2012-13 GL Allocated Cost
Supply (Plant)	$0.81	$/hcf/annual	Capital 10 Year Budget
Incremental Supply / Long Run Marginal Supply Cost	$3.63	$/peak hcf/annual	MC Recycled Water
Adder for BDCP Delta Fix, Cap and Trade	$0.29	$/hcf/annual	Both BDCPDeltaFix and Cap and Trade
Local Pumping	$0.11	$/hcf/annual	FY2012-13 GL Allocated Cost
Water Quality & Regulatory			
Water Quality & Regulatory Capital	$1.40	$/hcf/annual	Capital Improvement Program
Water Purification (O&M)	$0.19	$/hcf/annual	FY2012-13 GL Allocated Cost
Distribution			
Distribution Storage Plant	$0.18	$/hcf/annual	Capital 10 Year Budget
Distribution Storage O&M	$0.09	$/hcf/annual	FY2012-13 GL Allocated Cost
Distribution Plant	$1.16	$/hcf/annual	Capital 10 Year Budget
Distribution O&M	$0.42	$/hcf/annual	FY2012-13 GL Allocated Cost
Customer Service, Billing	$0.34	$/hcf/annual	FY2012-13 GL Allocated Cost
A&G	$0.40	$/hcf/annual	FY2012-13 GL Allocated Cost
Total Marginal Cost	**$9.40**[20]	**$/hcf/annual**	

[20] If the cost for the "Incremental Supply / Long Run Marginal Supply" functional component is based on the $/HCF cost of desalinized water, the total marginal cost would increase to $10.61/HCF (Incremental Supply / Long Run Marginal Supply Costs would increase from $3.63/HCF to $4.84/HCF).

4 CALCULATION OF MARGINAL COST REVENUE REQUIREMENTS

By multiplying the unit marginal cost for each functional component by the corresponding cost causation factor, marginal cost revenue requirements are calculated by functional category for each customer class. Figure 24 below provides a list of key cost causation factors by customer class.

Figure 24: LADWP Cost Causation Factors[21]

Expected Capacity Utilization	Single-Dwelling Unit Residential (Schedule A)	Multi-Dwelling Unit Residential (Schedule B)	Commercial / Industrial / Other[22] (Schedule C)	Schedule F
Consumption in HCF (FY 2012-13)	95,080,125	73,383,205	61,270,652	8,339,259
Load Factor	50.4%	43.7%	45.9%	61.5%
Coincident Peak in HCF	47,876,123	32,040,629	28,131,000	5,097,954
Customers	513,380	138,544	81,699	1,641

The summation of the marginal cost revenue requirements for all the individual functional components and/ or sub-components comprises the aggregate marginal cost revenue requirement for each customer class. The marginal cost revenue requirement determination by customer class is summarized by the following equations:

- Customer Class MC Revenue Requirement for Functional Component = Unit MC for Functional Component * Cost Causation Factor (for specific customer class)
- Total Customer Class MC Revenue Requirement = Sum of all MC Revenue Requirements for all Functional Components.

The marginal cost revenue requirement by a particular functional component for a specific class of customer is the unit marginal cost for that component times the cost causation factor for the customer class.

Figure 25 below summarizes the functional cost components and the corresponding allocation methodology used in the LADWP marginal cost study.

[21] Due to the relatively small amount of usage, Reclaimed Water Service (Schedule D) and Private Fire Service (Schedule E) were excluded.

[22] Commercial, Industrial, Non-Irrigation Government and Temporary Construction customers are one customer class. Load factor was calculated based on the sum of total coincident peak for all Schedule C customers divided by the sum of total test year consumption for all Schedule C consumption.

Figure 25: Allocation Criteria

Functional Cost Component	Allocation Criteria
Transmission (Capital)	Consumption volume by customer class
Supply (O&M)	Consumption volume by customer class
Supply (Plant)	Consumption volume by customer class
Supply, Adder for BDCP Delta Fix, Cap and Trade	Consumption volume by customer class
Supply, Purchased Water	Seasonal coincident peak by customer class
Local Pumping	Consumption volume by customer class
Water Quality and Regulatory Capital	Consumption volume by customer class
Water Purification	Consumption volume by customer class
Distribution Storage (Plant)	Consumption volume by customer class
Distribution Storage (O&M)	Consumption volume by customer class
Distribution (Plant)	Consumption volume by customer class
Distribution (O&M)	Consumption volume by customer class
Customer Service, Billing	Number of Customers
A&G and General Plant Adder	Percent of (Proportionate to) All Other Costs

By multiplying unit marginal costs (summarized in Figure 23) by the appropriate cost causation factors (summarized in Figure 24), marginal cost revenue requirements for functional components/sub-components for each customer class are calculated. A summary of these revenue requirements is shown in Figure 26.[23]

Figure 26: Summary of Marginal Cost Revenue Requirement by Functional Component and Customer Class

	Single Family Residential	Multi-Family Residential	Commercial / Industrial / Other	Sch .F	Total
Transmission					
Transmission	$7,711,354	$5,951,652	$4,969,279	$676,345	$19,308,630
Supply					
Supply (O&M)	$29,104,431	$22,462,912	$18,755,208	$2,552,683	$72,875,233
Supply (Plant)	$76,734,650	$59,224,097	$49,448,631	$6,730,220	$192,137,598
Adder for BDCP Delta Fix, Cap n Trade	$27,309,483	$21,077,563	$17,598,523	$2,395,252	$68,380,821
Purchased Water/Long Run Marginal Supply Cost	$173,905,783	$116,384,752	$102,183,371	$18,517,869	$410,991,774
Local Pumping					
Local Pumping ($/HCF)	$10,825,298	$8,355,006	$6,975,938	$949,462	$27,105,704
Water Quality & Regulatory					
Water Quality & Regulatory Capital	$132,720,028	$102,433,827	$85,526,209	$11,640,568	$332,320,633
Water Purification (O&M)	$18,530,736	$14,302,093	$11,941,405	$1,625,288	$46,399,523
Distribution					
Distribution Storage Plant	$16,917,926	$13,057,320	$10,902,093	$1,483,832	$42,361,172
Distribution Storage O&M	$8,543,384	$6,593,816	$5,505,448	$749,321	$21,391,969
Distribution Plant	$110,369,946	$85,183,948	$71,123,577	$9,680,294	$276,357,765
Distribution O&M	$39,618,745	$30,577,899	$25,530,744	$3,474,869	$99,202,256
Customer Service and A&G					
Customer Service, Billing ($/Customer/Year)	$54,263,052	$14,643,760	$8,635,385	$173,494	$77,715,691
A&G and General Plant Adder ($/Other Costs/Year)	$38,878,528	$27,526,429	$23,060,954	$3,337,269	$92,803,180
Total MC Revenue	$745,433,344	$527,775,075	$442,156,766	$63,986,765	$1,779,351,949
Percent of Total	41.9%	29.7%	24.8%	3.6%	100.0%

[23] During initial review of the cost of service study by the Ratepayer Advocate, it was discovered that usage for "purpose of enterprise," which is water used by the Water System for operation of the system, was included in Commercial/Industrial/Other rate class consumption as opposed to being treated as part of water losses. However, since removal of this consumption had an immaterial impact on the cost of service study results, the study was not restated. Appendix C provides a summary of the marginal cost revenue requirement by functional component and customer class with the removal of purpose of enterprise water.

5 COST OF SERVICE RESULTS AND IMPLICATIONS

The total marginal cost revenue requirements for each customer class are compared to the actual level of revenue for the test year (FY 2012-13) from each customer class. Specifically, the percentages of marginal cost revenue requirements and current revenues attributed to each customer class are calculated and compared. Figure 27 provides a summary of the components of the marginal cost revenue requirement calculation that includes cost drivers, functional component unit costs, and the current revenue requirement comparison.

Figure 27: Summary of Marginal Cost of Service Study by Customer Class

	Unit Cost	Single-Dwelling Unit	Multi-Dwelling Unit	Commercial / Industrial / Other	Schedule F	Total
Expected Capacity Utilization						
Test Year Consumption in HCF		95,080,125	73,383,205	61,270,652	8,339,259	238,073,241
Load Factor		50.4%	43.7%	45.9%	61.5%	
CP (Coincident Peak) in HCF		47,876,123	32,040,629	28,131,000	5,097,954	
No Loss Adjustment to Metered Sales		0.0%	0.0%	0.0%	0.0%	
Annual Demand Load in HCF		95,080,125	73,383,205	61,270,652	8,339,259	238,073,241
Seasonal Coincident Peak Load in HCF		47,876,123	32,040,629	28,131,000	5,097,954	113,145,707
MC Functional Cost Area						
Transmission						
Annual Demand Load in HCF		95,080,125	73,383,205	61,270,652	8,339,259	
Transmission, $s	$0.08	$7,711,354	$5,951,652	4,969,279	$676,345	$19,308,630
Supply						
Annual Demand Load in HCF		95,080,125	73,383,205	61,270,652	8,339,259	
Supply (O&M)	$0.31	$29,104,431	$22,462,912	$18,755,208	$2,552,683	$72,875,233
Supply (Plant)	$0.81	$76,734,650	$59,224,097	$49,448,631	$6,730,220	$192,137,598
Adder for BDCP Delta Fix, Cap n Trade	$0.29	$27,309,483	$21,077,563	$17,598,523	$2,395,252	$68,380,821
Seasonal Coincident Peak Load in HCF		47,876,123	32,040,629	28,131,000	5,097,954	113,145,707
Purchased Water/Long Run Marginal Supply Cost	$3.63	$173,905,783	$116,384,752	$102,183,371	$18,517,869	$410,991,774
Local Pumping						
Annual Demand Load in HCF		95,080,125	73,383,205	61,270,652	8,339,259	
Local Pumping ($/HCF)	$0.11	$10,825,298	$8,355,006	$6,975,938	$949,462	$27,105,704
Water Quality & Regulatory						
Water Quality & Regulatory Capital	$1.40	$132,720,028	$102,433,827	$85,526,209	$11,640,568	$332,320,633
Water Purification (O&M)	$0.19	$18,530,736	$14,302,093	$11,941,405	$1,625,288	$46,399,523
Distribution						
Distribution Storage Plant	$0.18	$16,917,926	$13,057,320	$10,902,093	$1,483,832	$42,361,172
Distribution Storage O&M	$0.09	$8,543,384	$6,593,816	$5,505,448	$749,321	$21,391,969
Distribution Plant	$1.16	$110,369,946	$85,183,948	$71,123,577	$9,680,294	$276,357,765
Distribution O&M	$0.42	$39,618,745	$30,577,899	$25,530,744	$3,474,869	$99,202,256
Total Cost without Cust/A&G		$652,291,764	$485,604,886	$410,460,426	$60,476,002	$1,608,833,078
Customer Service and A&G						
Customers		513,380	138,544	81,699	1,641	735,264
Customer Service, Billing ($/Customer/Year)	$105.70	$54,263,052	$14,643,760	$8,635,385	$173,494	$77,715,691
Sum Other Costs		$706,554,816	$500,248,646	$419,095,811	$60,649,496	$1,686,548,770
A&G and General Plant Adder ($/Other Costs/Year)	5.50%	$38,878,528	$27,526,429	$23,060,954	$3,337,269	$92,803,180
Total MC Revenue		**$745,433,344**	**$527,775,075**	**$442,156,766**	**$63,986,765**	**$1,779,351,949**
Percent of Total		41.9%	29.7%	24.8%	3.6%	100.0%
Current Revenue		**$385,439,493**	**$287,958,501**	**$241,187,291**	**$12,825,922**	**$927,411,208**
Percent of Total		41.6%	31.0%	26.0%	1.4%	100.0%

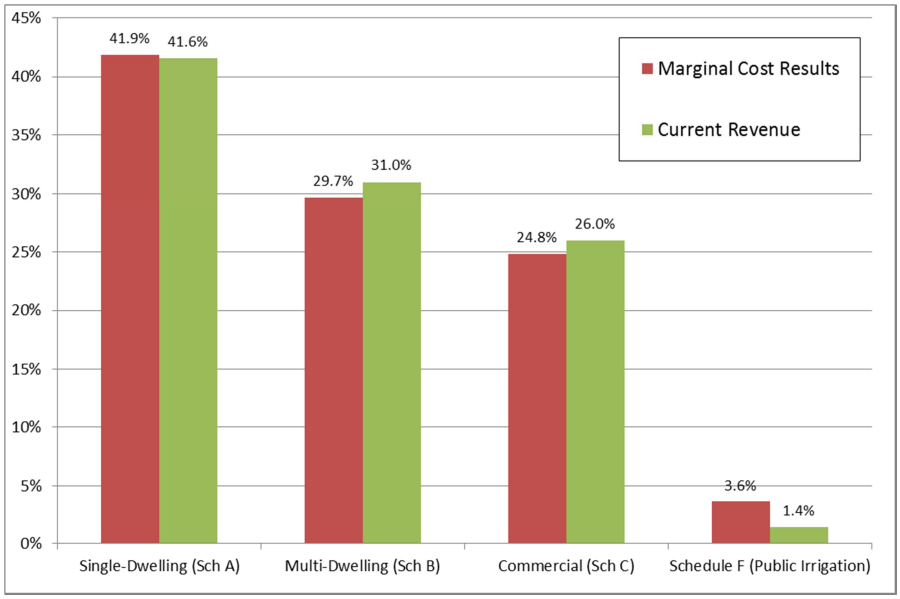
Figure 28 provides a summary of the marginal cost revenue requirement and current revenues by customer class.

Figure 28: Summary of Marginal Cost Revenue Requirement Percentage and Current Revenue Percentage by Customer Class

	Single-Dwelling Unit Residential (Schedule A)	Multi-Dwelling Unit Residential (Schedule B)	Commercial/ Industrial/ Other (Schedule C)	Public Irrigation (Schedule F)	Total
Total Marginal Cost Revenue Requirement (FY 2012-13)	$745,433,344	$527,775,075	$442,156,766	$63,986,765	$1,779,351,949
Percent of Total	41.9%	29.7%	24.8%	3.6%	100.0%
Current Revenue	$385,439,493	$287,958,501	$241,187,291	$12,825,922	$927,411,208
Percent of Total	41.6%	31.0%	26.0%	1.4%	100.0%

Results of the LADWP cost of service study indicate that Single-Dwelling Unit Residential (Schedule A) customers are responsible for 41.9% of the marginal cost based revenue requirement, which is slightly higher than the current revenue level of 41.6%. Conversely, the marginal cost revenue requirement for the Commercial/Industrial/Other customer class would result in a slightly lower revenue requirement of 24.8% compared to the current revenue level of 26.0%. The Schedule F, Public Irrigation, customer class marginal cost revenue requirement percentage is 3.6% compared to the current revenue level of 1.4%. A comparison of the marginal cost revenue requirement and current revenue percentages is shown graphically in Figure 29.

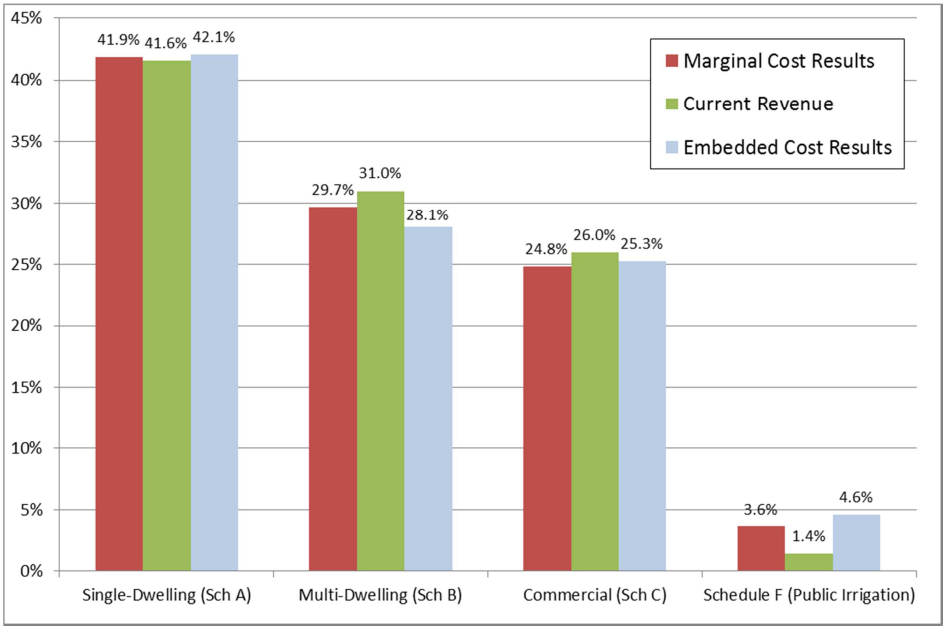
Figure 29: Comparison of Marginal Cost and Current Cost Revenue Requirement Percentages by Class



As an added step to consider allocation of costs among customer classes in relation to cost of service, the Department conducted a draft embedded cost[24] of service analysis based on the Base-Extra Capacity methodology outlined in American Water Works Association's (AWWA) *M1 Manual, Principles of Water Rates, Fees and Charges*. Unlike the forward-looking marginal cost of service study, a cost of service analysis using the Base-Extra Capacity methodology generally relies on current costs. For LADWP, embedded costs were represented by the revenue requirements outlined in the Department's financial plan[25]. The results of the embedded cost analysis based on the financial plan were then verified by a separate draft embedded cost analysis using the Department's fiscal year 2012-13 results as discussed in Appendix B.

There were several adjustments made to the Base-Extra Capacity method for LADWP's embedded cost analysis to accommodate the sources of data that were available and more accurately reflect the Department's current situation. More information about these modifications and the results of the embedded analysis can be found in Appendix B. A comparison of the marginal cost results and draft embedded cost analysis is shown in Figure 30. The embedded cost of service analysis confirm the marginal cost of service study in that the results are directionally the same – the revenue requirement percentages of both methodologies are either both above or both under current revenue requirement percentages of each customer class.

Figure 30: Comparison of Marginal Cost, Embedded Cost and Current Revenue Requirement Percentages by Customer Class



The percentages for each customer class as calculated from the marginal cost of service study will be used to guide allocation of the total revenue requirement to customer classes through the rate design. Rates for each major class of customers will be designed to recover approximately the portion of the revenue requirement assigned to each class based on the cost of service study results, consistent with legal considerations.

[24] Embedded Cost is also referred to as Average Embedded Cost.

[25] Data based on Financial Case #33.

APPENDIX A.

GLOSSARY OF TERMS

Cost Drivers: Fundamental aspects of customer demand for services that directly cause LADWP to incur costs.

Customer Class Cost-of-Service Study: The process of determining the cost of providing water service to each of the defined customer classifications. This includes the functionalization and allocation of water system revenue requirements by distribution of costs by customer classification based on the annual usage, peak demands, and customer-related costs for which each customer class is responsible.

Embedded Cost: Costs associated with funding and operating current capacity; also known as accounting costs.

Functional Cost Component: Costs related to a particular operational function of a utility for which annual operation and maintenance expenses and utility plant investment records are maintained. Functional cost components include those activities related to source of supply, pumping, treatment, transmission and distribution mains, distribution storage, customer meters and services, customer accounting, billing and collections, and general and administrative-related activities.

Marginal Cost: The change in cost incurred to serve a small increment in demand for services. Marginal costs measure the additional cost of providing the next unit of service, whether that is the next unit of water or the additional burden that adding an additional hundred cubic feet of demand places on the water system.

Marginal Cost Revenue Requirement: Revenues that would result if all the aspects of water service were priced to reflect the marginal costs of providing such service.

Non-Coincident Peak Demand: The individual customer's peak demand measured irrespective of the time of system peak and irrespective of the peak demand of any other customer or group of customers.

Present Value: Also known as present discounted value and is a future amount of money that has been discounted to reflect its current value, as if it existed today. The present value is always less than or equal to the future value because money has earning potential, a characteristic referred to as the time value of money.

Revenue Allocation: The process of assigning revenue requirement to rate groups or customer classes.

Revenue Requirement: The total annual operation and maintenance expense and capital-related costs incurred in meeting various aspects of providing water utility service.

Unit Cost: The cost of producing a unit of a product or service. An example would be the cost of treating a thousand gallons of potable water for use by the water utility's customers.

APPENDIX B.

EMBEDDED COST OF SERVICE ANALYSIS

Introduction

As an added step to consider allocation of costs among customer classes, the Department conducted an embedded cost of service analysis using a modified method based on the Base-Extra Capacity methodology outlined in American Water Works Association (AWWA) M1 Manual, Principles of Water Rates, Fees and Charges.

Since rates will be set for five years using the cost study results as guidance, data for the embedded cost of service analysis was taken from the five year financial plan[26]. Given the planned increase of capital resources for infrastructure projects and the expected changes in consumption due to the Mayor's directive to reduce consumption by 20%, this forward-looking approach was selected. A longer term (i.e., 5 year) rate plan will allow LADWP more flexibility in developing longer-term vendor contracts, which should reduce the lag in spending (once the contracts are in place). The embedded cost of service analysis was then compared to an embedded analysis using purely historical data. The results using both approaches were directionally consistent with the marginal cost of service study.

Method

In general, for the embedded cost of service analysis, the AWWA M-1's Base-Extra Capacity Method was followed. However, several adjustments were made to more accurately reflect LADWP's current environment, plans and programs.

Unlike the forward-looking marginal cost of service study, embedded cost of service analysis generally relies on current costs, in this case represented by the revenue requirements outlined in the Department's financial plan underlying this rate action. In general, the M1 Manual approach uses a sample test year with current costs. However, for the LADWP embedded cost of service analysis, future costs were used, because LADWP has prepared a firm five-year financial plan with significantly different levels and types of investment than in recent years. Capital infrastructure investments (all costs excluding customer service and administrative and general costs) are projected to increase by approximately 2.5 times, and will increase in proportion to customer-related costs in future years. In addition, given the Mayor's directive for a 20% usage reduction by the end of 2017, historical consumption patterns may not apply for future rate recovery.

Differences between historical and forward-looking spending and consumption data suggest basing the analysis on the costs reflected in the financial plan in lieu of pure historical costs, as these planned costs more accurately reflect spending levels for appropriate rate recovery mechanisms. Given these assumptions, the following adjustments to the process outline in the AWWA M1 Manual were made.

- Expenditures and revenue requirements are based on the averages from LADWP's financial plan for the next five years (FYs 2016-20).[27]

[26] Data based on Financial Case #33.

[27] The next five years is relevant as the revenue requirements and cost of service study will support the rates to be charged to customers during that period.

- Capital costs are established based on LADWP's 10-Year levelized CIP. (The cost of capital[28] used in the levelization calculation is based on LADWP's current financial planning assumptions derived from the utility's research and supported by input from Public Resources Advisory Group.)

- For residential customer classes (Schedules A and B), projected number of accounts was based on the increase in either single family or multi-family homes. For Commercial/ Industrial/ Government classes (Schedule C), projected number of accounts was based on the increase in number of employees in those industries. These projections were based upon demographic and socioeconomic information in the 2010 Urban Water Management Plan. For Schedules D and F (recycled water and irrigation), projected usage was based on the financial plan.

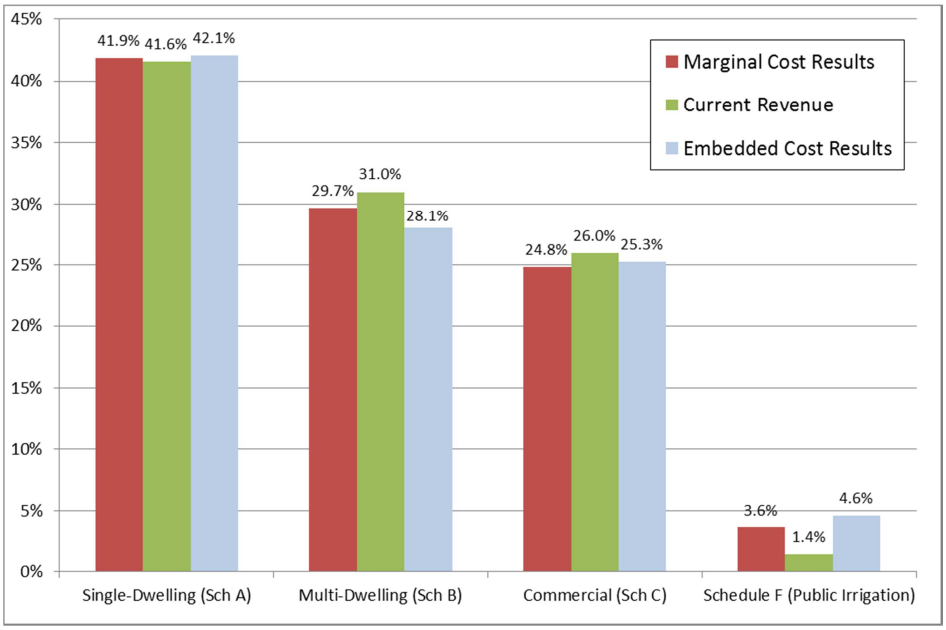
- At the completion of the analysis, recycled water and private fire costs were excluded to ensure consistency with the marginal cost of service study (service for recycled water users, Schedule D, is generally provided under separate contracts, and comparative studies are being used to verify private fire meter costs).

These adjustments to the pure application of the Base-Extra Capacity Method help provide an allocation of costs for the rate planning period that reflects the unique conditions at LADWP.

Results

As shown in Figure 31, the embedded cost of service analysis confirms the marginal cost of service study in that the results are in the same direction – the revenue requirement percentages from both methodologies are either both above or both under current revenue requirement percentages of each customer class.

Figure 31: Comparison of Marginal Cost of Service Study Results (Percent of Revenue Requirement) and Embedded Cost of Service Analysis



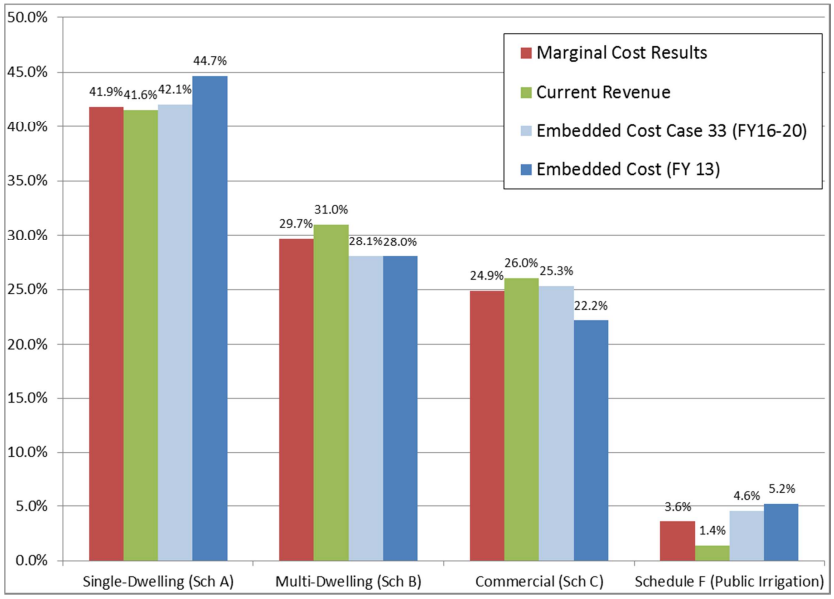
Historical vs. Forward-Looking Costs

As discussed above, forward looking costs were developed to reflect future allocation of costs among customer classes. However, a separate version of the embedded cost model based on purely historical

[28] This is also referred to as the nominal discount rate.

FY 2012-13 accounting data was developed to compare the results of the forward-looking approach. The results of the embedded cost of service analysis using both methodologies are directionally consistent with the marginal cost of service study results. In most cases the difference between any of the cost of service percentages and the current revenue percentages is less than 10% regardless of the cost of service methodology employed. Figure 32 provides a comparison of all the cost of service results and the current revenue percentages.

Figure 32: Marginal Cost of Service Study Results Compared to Historical and Forward-looking Embedded Cost of Service Analysis



As shown in Figure 33, the proportion of functional cost allocations for several major functional categories is significantly different for the future rate period. The reduction in the Billing and Customer Service Meters category has an especially large impact, as these costs are allocated based on the number of customers as opposed to some form of usage.

Figure 33: Capital Cost Differences Between Historical FY 2012-13 and Forward-Looking FY 2016-20 (millions)

	Trans-mission	Supply	Recycled Supply	WQ	Distribution Storage	Distribution	Billing / Cust Service Meters	A&G	Total
FY 2013 Actual	$7.9	$77.8	$16.1	$207.0	$10.5	$75.8	$43.3	$48.4	$486.9
	1.6%	16.0%	3.3%	42.5%	2.2%	15.6%	8.9%	9.9%	100.0%
FY 16-20 Budget	$18.8	$186.5	$99.2	$322.6	$43.9	$286.3	$52.7	$53.5	$1,063.6
	1.8%	17.5%	9.3%	30.3%	4.1%	26.9%	5.0%	5.0%	100.0%

In addition, as shown in Figure 34, due largely to the Mayor's conservation directive, customer class usage is projected to shift in the future;; in particular, conservation is expected to occur in Schedules A, B and F.

Figure 34: Sales Differences Between FY 2012-13 and FY 2016-20

Sales (million HCF)	FY 2013 Actual	FY 2013 Actual	FY 16-20 (average)	FY 16-20 (average)
Residential (Sch A)	86.87	36.7%	69.88	31.5%
Residential Low Income	8.21	3.5%	13.36	6.0%
Multi-Dwelling (Sch B)	73.38	31.0%	68.62	31.0%
Commercial (Sch C)	58.19	24.6%	61.49	27.7%
Schedule D (Recycled Water)	2.01	0.8%	2.31	1.0%
Schedule F (Public Irrigation)	8.34	3.5%	6.05	2.7%
Total	**237.0**	**100.0%**	**221.71**	**100.0%**

This analysis indicates that LADWP's changing spending plans and the changing environment in which the utility operates supports the use of a projected test period for the embedded cost of service analysis.

APPENDIX C.

RESTATED COST OF SERVICE STUDY RESULTS REMOVING PURPOSE OF ENTERPRISE (POE)

During initial review of the cost of service study by the Ratepayer Advocate, it was discovered that usage for "purpose of enterprise," which is water used by the Water System for operation of the system, was included in Commercial/Industrial/Other rate class consumption as opposed to being treated as part of water losses. However, since removal of this consumption had an immaterial impact on the cost of service study results, the study was not restated. Figure 35 provides a summary of the marginal cost revenue requirement by functional component and customer class with the removal of purpose of enterprise water.

Figure 35: Summary of Marginal Cost of Service Study Results without Purpose of Enterprise (POE) Water

	Unit Cost	Single-Dwelling Unit	Multi-Dwelling Unit	Commercial / Industrial / Other	Sch .F	Total
Expected Capacity Utilization						
Test Year Consumption in HCF		95,080,125	73,383,205	58,192,069	8,339,259	234,994,658
Load Factor		50.4%	43.7%	45.7%	61.5%	
CP (Coincident Peak) in HCF		47,876,123	32,040,629	26,579,762	4,967,017	
No Loss Adjustment to Metered Sales		0.0%	0.0%	0.0%	0.0%	
Annual Demand Load in HCF		95,080,125	73,383,205	58,192,069	8,339,259	234,994,658
Seasonal Coincident Peak Load in HCF		47,876,123	32,040,629	26,579,762	4,967,017	111,463,532
MC Functional Cost Area						
Transmission						
Annual Demand Load in HCF		95,080,125	73,383,205	58,192,069	8,339,259	
Transmission MC	$ 0.08	$7,711,354	$5,951,652	$4,719,594	$676,345	$19,058,945
Supply						
Annual Demand Load in HCF		95,080,125	73,383,205	58,192,069	8,339,259	
Supply (O&M)	$ 0.31	$29,104,431	$22,462,912	$17,812,840	$2,552,683	$71,932,866
Supply (Plant)	$ 0.81	$76,734,650	$59,224,097	$46,964,053	$6,730,220	$189,653,020
Adder for BDCP Delta Fix, Cap n Trade	$ 0.29	$27,309,483	$21,077,563	$16,714,274	$2,395,252	$67,496,572
Seasonal Coincident Peak Load in HCF		47,876,123	32,040,629	26,579,762	4,967,017	$111,463,532
Purchased Water/Long Run Marginal Supply Cost	$ 3.63	$173,905,783	$116,384,752	$96,548,637	$18,042,251	$404,881,422
Local Pumping						
Annual Demand Load in HCF		95,080,125	73,383,205	58,192,069	8,339,259	
Local Pumping ($/HCF)	$ 0.11	$10,825,298	$8,355,006	$6,625,427	$949,462	$26,755,193
Water Quality & Regulatory						
Water Quality & Regulatory Capital	$ 1.40	$132,720,028	$102,433,827	$81,228,890	$11,640,568	$328,023,314
Water Purification (O&M)	$ 0.19	$18,530,736	$14,302,093	$11,341,402	$1,625,288	$45,799,520
Distribution						
Distribution Storage Plant	$ 0.18	$16,917,926	$13,057,320	$10,354,311	$1,483,832	$41,813,390
Distribution Storage O&M	$ 0.09	$8,543,384	$6,593,816	$5,228,823	$749,321	$21,115,344
Distribution Plant	$ 1.16	$110,369,946	$85,183,948	$67,549,927	$9,680,294	$272,784,115
Distribution O&M	$ 0.42	$39,618,745	$30,577,899	$24,247,935	$3,474,869	$97,919,448
Total Cost without Cust/A&G		$652,291,764	$485,604,886	$389,336,115	$60,000,385	$1,587,233,149
Customer Service and A&G						
Customers		513,380	138,544	81,474	1,641	735,039
Customer Service, Billing ($/Customer/Year)	$ 105.73	$ 54,279,662	$ 14,648,243	$8,614,239	$ 173,547	77,715,691
Sum Other Costs		$ 706,571,426	$ 500,253,128	$397,950,354	$ 60,173,932	1,664,948,840
A&G and General Plant Adder ($/Other Costs/Year)	5.57%	$ 39,383,838	$ 27,883,788	$22,181,497	$ 3,354,056	92,803,180
Total MC Revenue		**$745,955,264**	**$528,136,917**	**$420,131,851**	**$63,527,988**	**$1,757,752,020**
Percent of Total		42.4%	30.0%	23.9%	3.6%	100.0%
Current Revenue		**$385,439,493**	**$287,958,501**	**$241,187,291**	**$12,825,922**	**$927,411,208**
Percent of Total		41.6%	31.0%	26.0%	1.4%	100.0%

LOS ANGELES DEPARTMENT OF WATER AND POWER

WATER SYSTEM RATE ACTION REPORT

Chapter 5: Water Rate Design

July 2015

CONTENTS

FIGURES

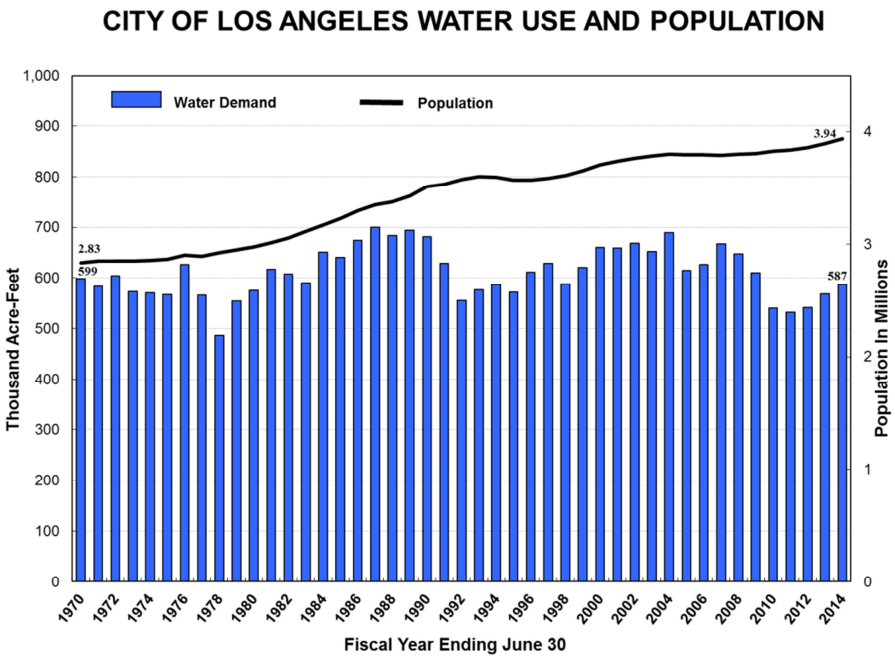
WATER RATE DESIGN

5.1 SUMMARY

This Chapter will discuss the Department's proposed water service rate design objectives, applicable trends in the industry, changes to the Department's overall rate structure and specific rate design and rates for each major customer class.

Given the current drought situation in Southern California, a primary objective of LADWP's rate structure and rates is to provide price signals that afford customers incentives to conserve. On October 14, 2014 the Mayor announced Executive Directive No. 5 to reduce Los Angeles water consumption by 20% on a per capita basis by the end of 2017. LADWP customers have historically responded well to calls for conservation; as shown in Figure 1, since 1970, water usage by LADWP customers has been virtually unchanged despite an approximate 25% growth in population in the region.

Figure 1: Historical LADWP Water Use[1]



[1] Population was updated with 2010 US Census data. Usage records are subject to change based on findings from the Water Loss Component Audit.

The proposed rates help promote water conservation as envisioned by the Mayor's goal for an additional 20% per capita reduction in consumption, comply with all legal principles, achieve recovery of costs (without over-recovery) and minimize the bill impacts for customers (especially low usage customers).

The Department's proposed rates are designed to recover the revenue requirement that reflects the rate drivers and budgeted program amounts outlined in Chapter 3, Rate Drivers. Consistent with the revenue requirement, the proposed rates are developed based on Financial Plan Case No. 33. Subsequent to completing the revenue requirement, in response to the San Juan Capistrano decision discussed below, LADWP modified its approach to recovery of water supply costs by creating a new Water Supply Cost Adjustment (WSCA) factor to replace the existing Water Procurement Adjustment (WPA) factor.[2] Separately identifying the costs for the WSCA for rate design purposes required minor modifications to the classification of revenue from the original Financial Plan Case No. 33 revenue requirement. However, since the impact of the new WSCA on the revenue requirement is immaterial, LADWP has not restated the revenue requirement at this time. If subsequent to review by the Ratepayer Advocate and the public outreach process, other changes that have a more material impact on the revenue requirement and rates are necessary, LADWP will make the appropriate updates to the financial plan, revenue requirement and rates at that time. The development of the WSCA is discussed in section 5.4.7 of this chapter.

5.1.1 Recent Industry Approach to Rate Setting

In 2006, The California Supreme Court held that Proposition 218, which introduced Articles XIII C and XIII D into the California Constitution, applies to domestic water service. Since then, several appellate courts have provided additional guidance as to the application of Proposition 218 to water rates. Most recently, in Capistrano Taxpayers Association v. City of San Juan Capistrano, the Fourth Appellate District of the California Court of Appeals suggested that usage of water supply costs was one appropriate approach for setting rate tiers that are consistent with Proposition 218's requirements. The Department has considered these appellate decisions and the differential costs of providing water in establishing the proposed rates.

Though LADWP had developed proposed rates prior to the San Juan Capistrano decision, LADWP determined that guidance might call for a revised method that aligns costs to rates at a more granular level. This chapter includes an explanation of how these proposed rates align to the costs of sources of supply so that rates for higher tiers reflect more expensive sources of water.

For reference, Appendix A provides the original rates and rate design developed prior to the San Juan Capistrano decision. In terms of total rates and system average increases, the two approaches are similar. One of the main differences is the irregularity in the overall trend of the new rates from year to year. Whereas the original proposed rates had a smoothly increasing

[2] Financial Plan Case No. 33 reflects the WPA approach historically followed by LADWP.

trend over the rate period, the new proposed rates are more closely tied to the cost of water supply projects and the level of sources of water supply that fluctuate from year to year.

LADWP believes that both sets of developed rates 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. (Sections 5.2.3 and 5.2.4 provide additional information on the BRC and UCLA Study).

5.1.2 Cost of Service Alignment

The proposed rates also consider guidance that limits water utility rates to the Department's revenue requirement and suggests that revenue from each customer class should not exceed the cost of service for that specific customer class. As discussed in Chapter 4, LADWP has completed a new cost of service study to determine the percentage of revenue requirement allocated to each major customer class. The results indicate that the proportions of total cost of service recovered from each customer class are reasonable since they are within 10% of the current revenue proportions, with the exception of Schedule F. The proposed rate design includes a transition plan to better align costs and revenues for Schedule F over the next five years. (Refer to Section 5.10 for additional information about proposed rate changes for Schedule F.)

5.1.3 Industry Challenges

Currently, water utilities in California are dealing with multiple challenges including, but not limited to:

- Drought;
- Aging infrastructure; and
- Compliance with regulatory mandates.

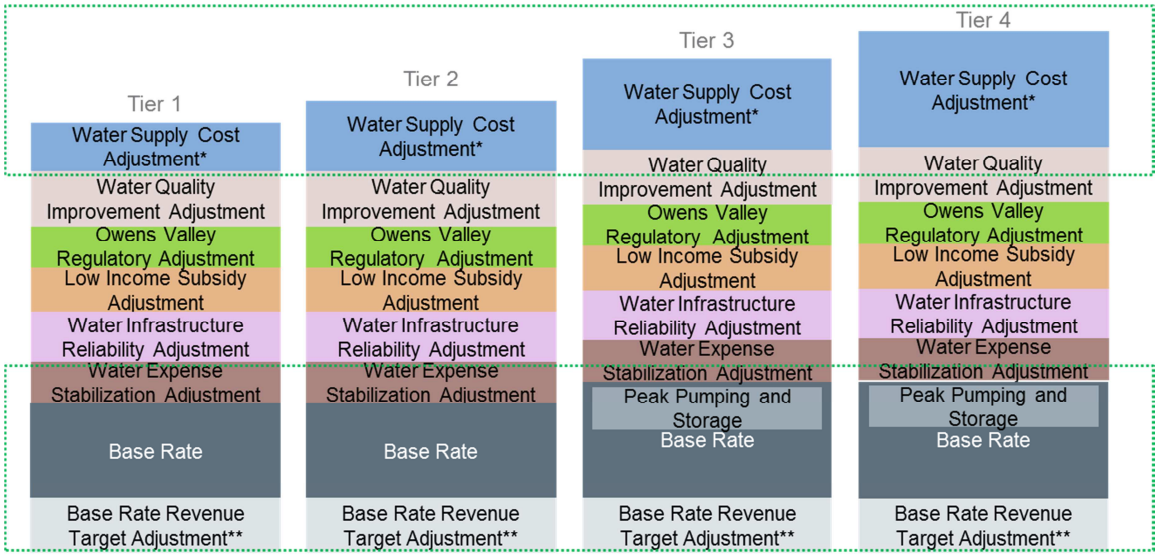
These items have a significant impact on a water utility's ability to maintain and enhance service reliability while maintaining reasonable rates. In order to overcome these challenges, in general, water utilities in California and elsewhere are carefully developing rate structures and employing a number of tools, including, but not limited to:

- Aligning supply costs directly to rates and tier differentials;
- Increased number of tiers;
- Tighter water budget allotments;
- Infrastructure factors; and
- Increased rates.

5.1.4 Proposed Rate Structure

To collect adequate revenue to fund the revenue requirements outlined in Chapter 3 of this report in a balanced manner, while ensuring conservation objectives are met, the Department is proposing several changes to both the rates and overall rate structure. The current rate structure was developed prior to the current drought situation and did not include adequate mechanisms to fund the large investments required to improve the reliability of the water delivery infrastructure and to develop local water supplies. These proposed changes are designed to make the rate structure consistent across all tiers and major customer classes while providing LADWP more certainty that revenue collected will cover its costs. Figure 2 outlines the proposed overall rate structure for Single-Dwelling Unit Residential customers and shows the proposed four tiers. The components of the proposed rate structure for Multi-Dwelling Unit Residential and Commercial, Industrial, Governmental and Temporary Construction customers are the same, but will continue to have two tiers.

Figure 2: Proposed Single-Dwelling Unit Residential Customer LADWP 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 factor is consolidated with the Water Quality factor (or base rates depending on the cost component).

Within each customer class the main differentiating amounts among tier rates is proposed to be the Water Supply Cost Adjustment (WSCA) factor and the peak pumping and storage component of base rates, which reflect the increasing costs of supply associated with higher levels of usage.

Historically, LADWP's rates have been structured to provide incentives for conservation through a combination of water budget allotments, tiered rates, and a completely volumetric rate design that ties customers' bills directly to the level of consumption. Actual customer rates are a combination of base rates to recover the costs of general operations and administration and adjustment factors structured to recover specific program costs such as water quality. The proposed rates maintain these general characteristics and ensure the Department collects its revenue requirement while further protecting customers from over-collection of costs.

5.1.5 Water Budget Approach

Water budget allotments determine the amount of water provided to customers within each tier. Conservation is enhanced by reducing the allotment available at lower tiered rates. Since water usage increases in the summer months, allotments are also increased this time of year to minimize the financial burden on customers. In addition, given the wide variety of Single-Dwelling Unit Residential customers due to factors such as lot size and temperature zone, additional allowances are made to develop reasonable water budgets for this class of customers. LADWP proposes to make minor adjustments to recognize the need for additional conservation and start simplifying the rate design. The major elements used to establish current water budget allotments and LADWP's proposed changes for each major customer class are outlined in Figure 3 at the end of Section 5.1.7 below.

5.1.6 Changes to Adjustment Factors

The proposed rate structure will continue to include both base rates and adjustment factors designed to align program costs and rates/revenues. Several changes are proposed to the adjustment factors to increase the alignment of costs and revenues. LADWP proposes that all customer classes pay the same amount for each adjustment factor, except a new Base Rate Revenue Target Adjustment (BRRTA) factor and a new Water Supply Cost Adjustment (WSCA) factor. Revenues from customer classes will continue to be proportional to costs due to the application of volumetric rates.

Water Supply Cost Adjustment

The Water Supply Cost Adjustment (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 using percentages of water supply. It is designed based on the economic premise of cost causation that customers who cause costs must pay for these costs.

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 are calculated based on LADWP's cost to provide the specific water supply, divided by the forecasted hydrologic supply (in HCF) of the specific source. These costs are calculated and adjusted on a semi-annual basis reflecting the appropriate year's costs.

Water Security Adjustment

In FY 2014-15, LADWP recovered $59.7 million from the Water Security Adjustment. However, approximately 80% of these costs are associated with water quality programs. Therefore, LADWP proposes to eliminate the security factor and incorporate these costs into the existing Water Quality Improvement Adjustment (WQIA) factor with any remaining costs included in base rates. This change will help simplify the rate structure while better matching cost recovery with rates.

Water Infrastructure Reliability Adjustment (WIRA)

LADWP proposes to establish a new Water Infrastructure Reliability factor to 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 factor will align 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.

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 5% of average annual capital expenditures, to help stabilize rates in the event of unforeseen events impacting water service delivery.

Base Rate Revenue Target Adjustment (BRRTA)

The Department will set annual base rate revenue targets and track the over or under-recovery[3] for each major customer class. The BRRTA factor will be designed to collect additional revenue or credit over-collected revenue based on the consumption of the specific customer class in accordance with Proposition 218's requirement to align customer class costs and revenue. The BRRTA is designed by customer class to ensure base rates for each major customer class fully recover their associated costs for each customer class by decoupling usage from revenue.

5.1.7 Decoupling

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

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

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, through an adjustment in rates- either as a reduced or added charge to customers.

To help alleviate the risk associated with revenue variation in a fair manner, LADWP proposes to implement a symmetrical decoupling mechanism for all major customer classes using the BRRTA factor.

Figure 3 provides a summary of the major elements of the Department's proposed rate design.

Figure 3: Summary of Rate Design Changes

	Current Approach	Proposed Approach
Number of Tiers	Two tiers for all major customer classes	• Single-Dwelling Unit Residential: Four • Multi-Dwelling Unit Residential: Two • Commercial, Industrial, Governmental and Temporary Construction: Two
Water Budget Allotments – Single-Dwelling Unit Residential	• Lot size (Five groups) • Temperature zone (Three zones) • Time of year (Summer: June-Oct.) • Family size • Each factor used to establish tier 1 allotment	• Lot size (Five groups with allotments for top two groups set the same) – to set tier 2 and 3 allotments • Temperature zone (Three zones) – to set tier 2 and 3 allotments • Time of year (Summer: June-Sept.) – to set tier 2 and 3 allotments) • Set tier 1 allotment at eight HCF per customer in lieu of household size adjustments
Water Budget Allotments – Multi-Dwelling Units Residential	• Past usage level • Time of year (Summer: June-Oct.)	• Past usage level (followed by annual reductions to incentivize conservation) • Time of year (Summer: June-Sept.)
Water Budget Allotments – Commercial, Industrial, Governmental and Temporary Construction	• Past usage level • Time of year (Summer: June-Oct.)	• Winter - recent winter usage level • Summer – prior year winter usage plus five percent • Time of year (Summer: June-Sept.)
Base Rates	• Cover costs of general operations, support services, infrastructure maintenance and new investments • Amount varies by tier and customer class	• Cover costs of general operations, support services, infrastructure maintenance and new investments not covered by the WIRA factor • Amount varies by tier and customer class; Schedule A tiers 3 and 4 and Schedule B and C tier 2 will include an additional peak pumping and storage component

	Current Approach	Proposed Approach
Adjustment Factors	• Water Procurement (WPA) • Water Quality Improvement (WQIA) • Owens Valley Regulatory (OVRA) • Low Income Subsidy (LISA) • Water Security (WSA) • Water Revenue (WRA) – recovers base rate revenue under-collection up to a cap (no return of over-collection)	• Water Supply Cost (WSCA) – replaces WPA to include all water supply costs and align available water supply amounts with tier usage, starting with the least expensive source of supply and lowest use tier • Water Quality Improvement (WQIA) – adjusted to also include most of the prior WSA • Owens Valley Regulatory (OVRA) – adjusted to include capital expenditures and remove the rate stabilization account target • Low Income Subsidy (LISA) – no change • Water Security (WSA) – eliminated; programs incorporated into WQIA or base rates • Water Infrastructure Reliability (WIRA) – new adjustment factor for capital investment in system infrastructure improvements to provide flexibility to plan longer term projects without risk of funding uncertainty while ensuring customers pay only actual programs' costs • Water Expense Stabilization (WESA) – new adjustment to reflect expense stabilization account previously embedded in OVRA to provide a cash cushion beyond the 150 days of cash on hand metric requirement to mitigate risk of major natural disasters or unexpected shocks to the system • Base Rate Revenue Target (BRRTA) – replaces WRA with a symmetrical adjustment to account for over and under-target recovery by major customer class
Adjustment Factor Caps	Differing caps for each adjustment factor or group of adjustment factors	• Eliminate all caps except LISA • LISA cap adjusted from $0.015 per HCF per quarter to $0.030 per HCF semi-annually
Application of Adjustment Factors to Tiers	• Inconsistent for tiers 1 and 2 – WQIA and WPA embedded in base for tier 2 resulting in disproportionate impact on tier 1 as purchased water component of WPA increased in recent years	All adjustment factors apply consistently to all tiers and customer classes (except as noted below for the WSCA and BRRTA)
Changes to Adjustment Factors	Quarterly: WPA, WQIA, WSA, OVRA, LISA Annually: WRA	To reduce rate volatility and administrative burdens of more frequent changes, LADWP proposes the following changes in adjustment frequency: • Semi-annually: WSCA, WQIA, OVRA, LISA, WESA • Annually: WIRA (July); BRRTA (January)[4]

[4] The BRRTA will be calculated based on the actual audited results of the prior fiscal year which should be available by January.

	Current Approach	Proposed Approach
Tier Rate Differential	• OVRA, LISA, WSA and WPA applied equally to tiers 1 and 2 • WQIA and WPA embedded in base rate for tier 2	• WSCA varies by tier to reflect increasing cost of water supply for higher levels of usage • Schedule A tiers 3 and 4 and Schedule B and C tier 2 base rates include cost of peak pumping and storage • BRRTA calculated based on specific over/under-collection for each major customer class
Volumetric Rates	Rates are volumetric for all customers	Rates are volumetric for all customers
Seasonal Pricing	Seasonal pricing for following customer classes: • Single-Dwelling Unit Residential – tiers 1 and 2 • Multi-Dwelling Unit Residential– tier 2 • Commercial, Industrial, Governmental and Temporary Construction-tier 2 • Publicly-Sponsored Irrigation – tier 2	• Temperature zone component of Schedule A budget allotments has an inherent seasonality impact • Eliminate seasonal pricing; water budget allotments for Schedule C will have seasonal component to increase lower tier allotment in summer
5% Adder	Adjustment factor adder for financial stability	Eliminate adder from ordinance.
Minimum Charge[5]	Minimum charge of $5.00 per month may be applied per service to accounts which have no recorded consumption for a period of more than two months.	Eliminate minimum charge to maintain fully volumetric rate structure
Shortage Year Rates and Allotments	Shortage year rates and allotment in place since July 2009	Eliminate shortage year rates; new permanent allotment structure is based on shortage year levels
Recycled Water (Schedule D)[6]	• Separate customer class. • Contract arrangement with rates based on approximately 80% of the in-City potable base rate. • A wastewater treatment surcharge can be included as long as the resulting rate does not exceed the in-City potable base rate.	No change
Private Fire (Schedule E)	• Service availability charge rates based on connection size • Changes typically based on system average	Service availability charge rates increase annually based on projected inflation (as measured by the GDP Price Index)[7]
Public Irrigation (Schedule F)	Separate usage based rates, which have been determined to be under cost by the new cost of service study (see Chapter 4)	Increase rates annually on a steady basis over five years to bring rates and costs into alignment

[5] The minimum charge has not been implemented by LADWP.

[6] LADWP is proposing to change the name of Schedule D to Recycled Water Service

[7] Source: Table 2-1, "GDP Price Index": https://www.cbo.gov/sites/default/files/cbofiles/attachments/49892-Outlook2015.pdf

5.1.8 Proposed Rates[8]

Residential and Commercial Customers (Schedules A, B and C)

Figure 4, Figure 5 and Figure 6 show the Department's proposed rates for the five-year rate action by major customer class. The rates for each class are contained in separate schedules.

Figure 4: Proposed Single-Dwelling Unit Residential Rates (Schedule A)

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$ 4.96	$ 4.45	$ 4.61	$ 4.92	$ 5.18	$ 5.32
Tier 2	$ 5.90	$ 5.41	$ 5.78	$ 6.29	$ 6.67	$ 7.32
Tier 3		$ 6.31	$ 6.59	$ 7.47	$ 8.37	$ 8.11
Tier 4		$ 7.91	$ 8.29	$ 8.77	$ 9.01	$ 9.97

Figure 5: Proposed Multi-Dwelling Unit Residential Rates (Schedule B)

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.97	$4.45	$4.61	$4.923	$5.18	$5.32
Tier 2	$5.90	$7.82	$7.48	$7.65	$8.03	$8.68

Figure 6: Proposed Commercial, Industrial, Governmental and Temporary Construction Customer Rates (Schedule C)

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.06	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.90	$6.86	$7.23	$7.74	$8.11	$8.77

Recycled Water (Schedule D)

Over time, as facilities to deliver Recycled Water Service (Schedule D) become more widely available, several levels of standard service may be established; however, for now, LADWP proposes to continue its current contract approach.

[8] All proposed rates are developed based on Financial Plan Case Number 33 as modified by Financial Plan Case Number 77a and to include the new WSCA.

Private Fire (Schedule E)

Figure 7 provides LADWP's proposed service availability charges for Private Fire service. The commodity charges will be the same as Schedule C rates.

Figure 7: Proposed LADWP Private Fire (Schedule E) Service Availability Charges

Size	Current	FY 2015-16 (Proposed)	FY 2016-17 (Proposed)	FY 2017-18 (Proposed)	FY 2018-19 (Proposed)	FY 2019-20 (Proposed)
≤1-in	$ 3.10	$ 3.15	$ 3.20	$ 3.26	$ 3.33	$ 3.39
1.5-in	$ 11.00	$ 11.18	$ 11.35	$ 11.57	$ 11.80	$ 12.04
2-in	$ 15.63	$ 15.88	$ 16.13	$ 16.44	$ 16.77	$ 17.10
3-in	$ 38.49	$ 39.11	$ 39.73	$ 40.49	$ 41.30	$ 42.12
4-in	$ 61.35	$ 62.33	$ 63.33	$ 64.53	$ 65.82	$ 67.14
6-in	$ 108.48	$ 110.22	$ 111.98	$ 114.11	$ 116.39	$ 118.72
8-in	$ 212.39	$ 215.79	$ 219.24	$ 223.41	$ 227.87	$ 232.43
10-in	$ 255.79	$ 259.88	$ 264.04	$ 269.06	$ 274.44	$ 279.93
12-in	$ 328.87	$ 334.13	$ 339.48	$ 345.93	$ 352.85	$ 359.90
14-in	$ 511.58	$ 519.77	$ 528.08	$ 538.12	$ 548.88	$ 559.85
16-in	$ 612.07	$ 621.86	$ 631.81	$ 643.82	$ 656.69	$ 669.83
20-in	$ 821.03	$ 834.17	$ 847.51	$ 863.62	$ 880.89	$ 898.51

Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports (Schedule F)

Figure 8 provides the proposed rates for Schedule F that are designed to align revenues and cost of service by the end of the five-year rate period. In the fifth year Schedule F rates will be the same as Schedule C rates.

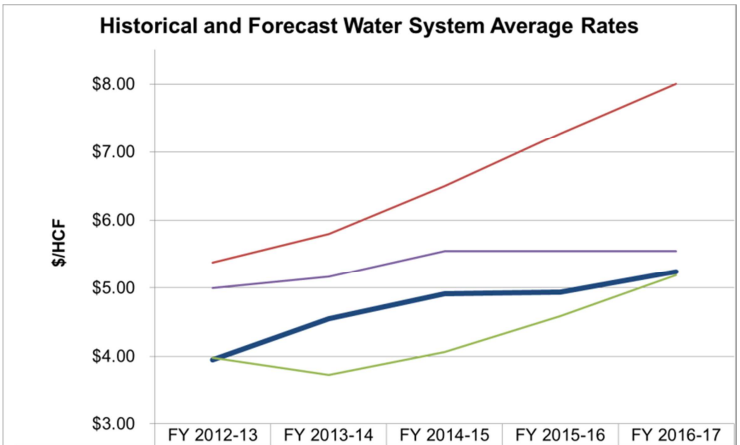
Figure 8: Proposed Schedule F Rate Transition

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$1.37	$1.97	$2.65	$3.48	$4.40	$5.32
Tier 2	$5.90	$6.81	$7.18	$7.71	$8.11	$8.77

Peer Utility Rate Comparisons

Water utility rates have been increasing throughout California. As shown in Figure 9, other major city water utilities in California have already increased rates and/or have announced future rate increases; however, LADWP's proposed system average rates will continue to be less than those of the other large cities in the State.

Figure 9: Historical and Forecast Water Utility System Average Rates[9]



	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
LADWP	$3.95	$4.55	$4.92	$4.94	$5.25
San Francisco	$5.38	$5.80	$6.50	$7.28	$8.00
Santa Monica	$3.98	$3.73	$4.06	$4.59	$5.19
San Diego	$5.00	$5.17	$5.55	$5.55	$5.55

As discussed further in Section 5.5.5, the Department's residential rates currently compare favorably to other major California water utilities – a trend that is expected to continue after implementation of the proposed rates.

5.2 RATE DESIGN OBJECTIVES

LADWP's proposed rate design is influenced by a variety of factors, especially the importance of additional conservation in light of the unprecedented drought facing California and the need to comply with several legal requirements. These considerations headline the following objectives the Department has established to guide its rate design:

- Minimize individual bill impacts for low usage customers;
- Continue to promote water conservation as envisioned by the Mayor's goal for a 20% per capita reduction in consumption by 2017;

[9] Rates are computed on an annual system-wide basis for all customer classes.

- Comply with all guiding legal principles;
- Recover costs in consideration of the new water cost of service study;
- Align water supply costs to sources of supply;
- Retain water-budget rate structure and marginal-cost based conservation principles;
- Achieve full recovery of costs (without over-recovery) in a cost causative manner;
- Implement symmetrical decoupling mechanism for base rate revenue;
- Help facilitate economic development;
- Simplify where possible;
- Make bills easier to understand; and
- Consider implications for customer care and billing system (CC&B).

The objectives have evolved over the years and remain fundamentally consistent with the recommendations of the Mayor's Blue Ribbon Commission (BRC) report issued in the early 1990s. The objectives and aspects of the proposed rate design are also supported by recent UCLA California Center for Sustainable Communities research. The BRC report and UCLA report are discussed later in this section.

5.2.1 Legal Considerations

Several legal considerations provide guidance for setting water rates.

Los Angeles City Charter

The Board of Water and Power Commissioners (Board) is currently obligated under Charter Section 609(c)[10] and the Master Resolution to establish rates for water service (Water Rates) and collect charges in an amount which, together with other available funds, will be sufficient to service the Department's Water System indebtedness and pay the necessary expenses of operating and maintaining the Water System. This obligation under the Charter and the Master Resolution is known as the rate covenant. Necessary expenses include meeting regulatory mandates, investing in infrastructure for better reliability, and accelerating the availability of local water supply sources.

[10] For full text see: http://www.amlegal.com/nxt/gateway.dll?f=jumplink$jumplink_x=Advanced$jumplink_vpc=first$jumplink_xsl=querylink.xsl$jumplink_sel=title;path;content-type;home-title;item-bookmark$jumplink_d=california(laac)$jumplink_q=[field%20folio-destination-name:%27Ch609.%27]$jumplink_md=target-id=JD_Ch609

Water Rates are subject to the approval of the City Council by ordinance (a rate ordinance). The Charter provides that such rates will, except as otherwise authorized by the Charter, be of uniform operation for customers of similar circumstances throughout the City, taking into consideration, among other things, the nature of the uses, the quantity supplied and the value of the service. Changes in technology, changes in quality standards, availability and cost of water, loss of large customers, increased or decreased development, increases of the debt service on the bonds and other debt obligations of the Department, increases in the cost of operation and/or other expenses are some conditions that could require increases in rates or charges in order to comply with the Department's rate covenant.

California Constitution Article X, Section 2

Section 2 of Article X requires "that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."

Proposition 218 (California Constitution Articles XIII C and D)[11]

Proposition 218 was adopted by California voters in November 1996 to add provisions to the California Constitution governing the adoption of taxes, assessments and property-related fees by local governmental agencies. For property-related fees, which include water and sewer fees, Proposition 218 established procedural requirements that must be followed prior to imposing or increasing fees, as well as substantive requirements that apply to the determination of the fee amount and the use of fee revenues. The substantive requirements include:

"A fee or charge shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

> "(1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service."
>
> "(2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed."
>
> "(3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel."
>
> "(4) No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of a service are not permitted. Standby charges, whether

[11] The complete text for Proposition 218 can be found at: http://vote96.sos.ca.gov/bp/218text.htm

> characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with Section 4 [procedures and requirements for proposed assessments]."
>
> "(5) No fee or charge may be imposed for general governmental services . . . where the service is available to the public at large in substantially the same manner as it is to property owners. . . . In any legal action contesting the validity of a fee or charge, the burden shall be on the agency to demonstrate compliance with this article." (Art. XIII D, section 6(b)).

The interpretation of Proposition 218 has evolved over time. In 2006, the California Supreme Court held that fees for domestic water service through an existing connection are property-related fees subject to Proposition 218 (Bighorn-Desert View Water Agency v. Verjil).

In 2011, the Second Appellate District of the California Court of Appeal concluded that, "California Constitution, article X, section 2 is not at odds with article XIII D so long as, for example, conservation is attained in a manner that 'shall not exceed the proportional cost of the service attributable to the parcel.'" (City of Palmdale v. Palmdale Water Dist.).

In 2013, the Sixth Appellate District of the California Court of Appeal noted a fee for which the question of proportionality "is not measured on an individual basis. Rather, it is measured collectively considering all rate payers." That court held, "Given that Proposition 218 prescribes no particular method for apportioning a fee or charge other than the amount shall not exceed the proportional cost of the service attributable to the parcel, defendant's method of grouping similar users together for the same augmentation rate and charging the users according to usage is a reasonable way to apportion the cost of service. That there may be other methods favored by plaintiffs does not render defendant's method unconstitutional. Proposition 218 does not require a more finely calibrated apportion." (Griffith v. Pajaro Valley Water Management Agency).

In 2015, the Fourth Appellate District of the California Court of Appeal stated that there is nothing "in Proposition 218 that prevents water agencies from passing on the incrementally higher costs of expensive water to incrementally higher users." (Capistrano Taxpayers Association v. City of San Juan Capistrano).

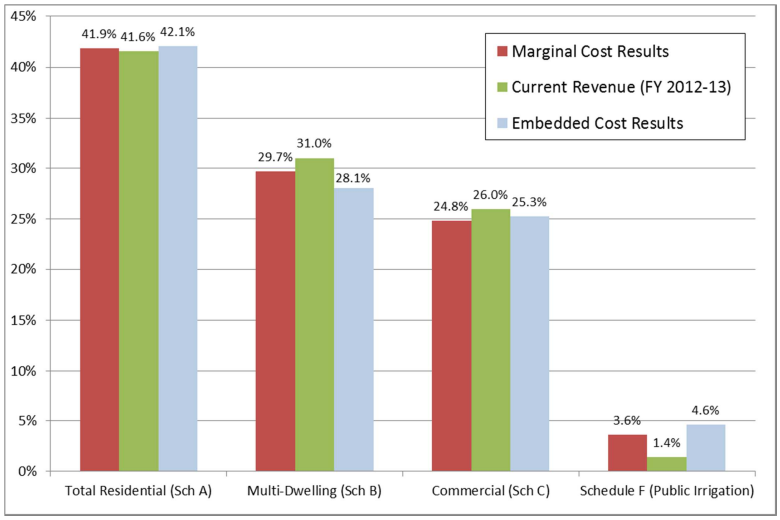
Based on this guidance, LADWP has elected to set its rates by customer class. Further, the pricing of its tiers factors in the differential costs of providing water.

5.2.2 Allocation of Costs to Customer Classes

One of the major objectives of the proposed rate design is to ensure revenue from each customer class is relatively proportionate to the cost of providing service to that class. The Charter requires LADWP to establish rates that are of "uniform operation for customers of similar circumstances." Other legal guidance indicates that rates can be set to produce revenue from each major customer class proportionately to the costs of service for that customer class. In

addition, to meet financial obligations, LADWP also must ensure rates fully recover costs without over-recovery. The results of LADWP's recent marginal cost of service study as shown in Figure 10 indicate that the proportions of the total cost of service and current revenue for each major customer class are fairly close, with the exception of Schedule F. This relationship is reinforced by similar results from an embedded cost of service analysis.

Figure 10: Cost of Service Study Results



The variances between the cost of service and revenue proportions are less than 10% for all major customer classes with the exception of Schedule F, as shown in Figure 11.

Figure 11: Variance Between Customer Class Revenue (FY 12-13) and Cost of Service

Customer Class	Marginal Cost Study	Embedded Cost Analysis
Schedule A	0.66%	1.08%
Schedule B	-4.28%	-9.47%
Schedule C	-4.44%	-2.71%
Schedule F	156.80%	227.80%

Given typical annual variances in costs and revenues, a 10% variance is reasonable; therefore, for Schedules A, B, and C, no further reallocation of costs/revenues is necessary. However, as discussed in more detail in Section 5.10, reallocation of cost recovery to Schedule F customers will be required over time.

5.2.3 Blue Ribbon Commission

To meet its rate design objectives, LADWP has been guided by long-standing philosophies that have resulted in Los Angeles being a leader in conservation and innovative rate design as well as setting industry trends in California and across the United States. One of the long-term guide posts for the Department's rate design philosophy is the Mayor's Blue Ribbon Committee on Water Rates (BRC) Report from 1992. The BRC Report was the result of an extensive effort to develop a rate structure that was tailored to the unique needs of the Los Angeles area in terms of geography, the need for signals to conserve in light of limited water supplies and other factors. LADWP's current water budget approach stemmed from the BRC recommendations. This report addressed issues related to the structure and level of the Department's rates as well as operational, financial stability and economic implications of those rates. While over twenty years old, many of the report's recommendations continue to apply today. The major rate characteristics in the BRC Report as well as a brief synopsis of the Department's current and proposed performance are shown in Figure 12.

Figure 12: Blue Ribbon Committee Report Synopsis

Key Rate Characteristics in 1992 BRC Report	Department's Approach in 2015
Affordable	The Department's water rates have historically been among the lowest across comparable water suppliers in California.
Designed to Maximize the Efficient Allocation of Resources	The Department has no fixed monthly charges, and customer bills are based solely on water usage. As a result, customers have greater control over their water bills. A volumetric rate structure offers greater savings than a structure with both fixed and volumetric charges. Customers also pay more for excessive use when all of the revenue is derived from volumetric charges and the tiered rate design is based on a water budget allotment based conservation approach.
Forward-Looking	The Department is proposing to undertake a number of infrastructure and local supply projects that will enhance future reliability and local water supplies to replace expensive purchases from MWD. Using a marginal cost approach to guide rates appropriately considers the costs of these forward-looking projects.
Stable and Predictable	The Department has not had a base rate increase since 2009.
Simple and Understandable	The proposed water rate structure provides simplicity by applying all adjustment factors to all tiers. The tier 2 (and new tiers 3-4 in the case of Single-Dwelling Unit Residential customers) structure will be modified to be identical to the tier 1 structure for all major customer classes. The WSCA will become a rate differential between tiers, reflecting the increased water supply costs associated with higher usage.
Sufficient to Generate Adequate Revenue	Rates are set based on costs as reflected in the Department's financial plan and revenue requirement. The use of adjustment factors tied directly to costs helps to ensure adequate revenue in a manner that directly links costs and rates for many key programs. To provide financial stability the Department is proposing a Base Rate Revenue Target Adjustment factor that will be symmetric. When base rate revenues are less than forecast, this mechanism will allow the Department to recover the shortfall. When base rate revenues are higher than forecast, the Department will

Key Rate Characteristics in 1992 BRC Report	Department's Approach in 2015
	credit the additional base rate revenue back to customers. This process provides customers a fair decoupling of water usage from revenue and ensures that the Department will not have a shortfall in revenue to finance the largely fixed costs of operating the Water System.
Equitable Across Customer Classes	All customers within the same class pay the same rates based on their level of usage. The proposed rates and rate structure are based on the allocation of revenue requirements among the customer classes using a new cost of service study.
Designed to Encourage Conservation	The volumetric rates, allotment structure, the WSCA and tier rates are designed to encourage conservation. Proposed water budget allotments are based on the shortage year approach, which has been successful in incentivizing conservation.
Rate Setting Process Should be Understandable to the Public	Throughout the current rate setting process, the Department will continue to communicate openly with its customers through a variety of media to ensure that they understand the rate setting process. This process has already begun with some stakeholders.
Should Not Discourage Employment	The Department's water rates have historically been among the lowest across comparable water suppliers in California, which encourages businesses to move to Los Angeles, and to hire more employees. Under the current proposal, the majority of commercial and industrial customers will experience a rate increase of less than 6% per year (assuming normal precipitation) over the next five years.

5.2.4 California Center for Sustainable Communities at UCLA Water Rate Report Research Recommendations

LADWP's rate design objectives are consistent with a recent report from the UCLA California Center for Sustainable Communities that advocated for a restructuring of the existing tier structure to incentivize water conservation. In the report, "Residential Water Consumption in Los Angeles: What are the Drivers and are Conservation Measures Working," researchers at UCLA conducted a four-year study of water consumption patterns in the City of Los Angeles and the factors that drive residential water consumption (UCLA Water Rate Report). Their recommendations to further promote conservation included, but were not limited to, the following items[12].

- Implementing a multi-tiered pricing structure to increase conservation while minimizing the burden on low-income consumers.
- Establishing reasonable water budgets for households based on location and household characteristics.

[12] A complete text of the report and recommendations is available at: http://sustainablecommunities.environment.ucla.edu/wp-content/uploads/UCLA-Water-Consumption-Policy-Brief-FINAL.pdf

- Introducing educational programs and stronger financial incentives to promote the use of drought-resistant landscaping and improved irrigation.

LADWP's rate structure contains elements similar to the recommendations in the UCLA Water Rate Report.

5.3 RECENT INDUSTRY TRENDS

Currently, water utilities in California are dealing with multiple challenges including, but not limited to:

- Drought;
- Aging infrastructure; and
- Compliance with regulatory mandates.

In order to overcome these challenges, in general, water utilities in California and elsewhere are employing a number of rate design tools, including, but not limited to:

- Aligning supply costs directly to rates and tier differentials;
- Increased number of tiers;
- Tighter water budget allotments;
- Infrastructure factors; and
- Increased rates.

5.3.1 Drought

The drought has required water utilities to:

- Design rates to encourage customer conservation;
- Invest more in cost of conservation programs; and
- Adequately recover the costs associated with operating a water distribution system from reduced usage and revenue.

The combination of higher costs and reduced revenue from lower expected usage under drought conditions and mandatory water efficiency goals is a significant challenge for water utilities with a large amount of fixed costs.

5.3.2 Aging Infrastructure

As discussed in Chapter 3, LADWP is increasing investments to improve the reliability of its infrastructure. LADWP is not alone in its need to enhance critical water delivery facilities. The EPA's 2013 "Drinking Water Infrastructure Needs Survey and Assessment" forecasts the need for approximately $775 billion of required water and wastewater system investment nationwide over 20 years, including an estimated $384 billion for water infrastructure to replace thousands of miles of pipe as well as thousands of treatment facilities, storage tanks, and other key assets between 2011 and 2030. A similar study from the Conference of Mayors noted that more than $4 trillion may be required over the next 20 years to repair the nation's water and sewer infrastructure and to continue to meet regulatory requirements.[13]

5.3.3 Compliance with Regulatory Mandates

As discussed in Chapter 3, "Water Rate Drivers," continued implementation of multiple regulatory mandates is a major expense for LADWP (and other utilities).

These regulations have a significant impact on both LADWP's financial plans and proposed rate design.

5.3.4 Tier Structure

In response to increased conservation efforts, 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. For example, Golden State Water's Arcadia District will be increasing the number of tiers in its rates from three to four in its upcoming rate case. The Palmdale Water District is adding an "essential tier," that will increase its current number of tiers from five to six. In January 2014, San Diego Public Utilities increased its number of tiers from three to four. A higher number of tiers is becoming common practice among California water utilities, as shown by the examples in Figure 13.

[13] Source: U.S. Conference of Mayors' 2010 report, Trends in Local Government Expenditures on Public Water and Wastewater Services and Infrastructure: Past, Present and Future (http:// www.usmayors.org/publications/201002-mwc-trends.pdf)

Figure 13: Examples of California Utility Tier Structures

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

As noted above, the UCLA California Center for Sustainable Communities has advocated for a restructuring of the Department's existing tier structure to incentivize water conservation. 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 to achieve the conservation goals set by the Mayor. As discussed below, LADWP's proposed new Single-Dwelling Unit Residential rate design includes four tiers.

5.3.5 Water Budget Allotments

Water budgets are designed to provide customers an adequate, reasonably priced supply of water based on individual customer circumstances such as the temperature zone location or lot size. Water budgets set the amount of water available at lower tier prices. In response to the drought, utilities are tightening tier allotments, moving a higher percentage of water usage into higher end tiers (at higher prices), as shown in Figure 14.

Figure 14: Examples of California Utility Changing Water Budget Levels

Irvine Ranch[14]	Tier 1 (Low Volume)	Tier 2 (Base)	Tier 3 (Inefficient)	Tier 4 (Excessive)	Tier 5 (Wasteful)
2013	0-40%	41-100%	100-150%	151-200%	200%+
2014	0-40%	41-100%	100-130%	131-160%	161%+

[14] Irvine Ranch and Western Municipal set water budget allotments for residential customers and then apply rates based on the percentage of usage as compared to the total applicable water budget for the customer.

Western Municipal	Tier 1 (Indoor)	Tier 2 (Outdoor)	Tier 3 (Inefficient)	Tier 4 (Excessive)	Tier 5 (Unsustainable)
2013	Water budget	Water budget	100-150%	150-200%	200%+
2014	Water budget	Water budget	100-125%	125-150%	150%+
San Diego	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	
2013	0-7 HCF	8-14 HCF	15+ HCF	N/A	
2014	0-4 HCF	5-12 HCF	13-18 HCF	18+ HCF	
Arcadia (GSW)	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**	
2013	0-13 HCF	14-21 HCF	21+ HCF	N/A	
2014	0-10 HCF	11-19 HCF	20-45 HCF	45+ HCF	

In June of 2009, LADWP implemented shortage year rates, which reduced allotments by 15% for tier 1 to encourage additional conservation and helped make the Department a leader in water conservation. Given the continued drought, the Department's proposed water budget allotments will be based on the shortage year allotments, making the shortage year approach permanent. In addition, LADWP's proposed four-tier rate structure for Single-Dwelling Unit Residential customers will simplify and, in some cases, reduce water budget allotments, and higher rates for higher tier usage will encourage customers to stay within their allotments for lower tiers.

5.3.6 Infrastructure Factors

To help fund increased investments to replace aging infrastructure, some water utilities are beginning to implement specific rate elements to collect funds specifically for distribution facility upgrades. This rate design tool allows utilities to align specific revenues to specific expenses for infrastructure reliability programs.

To help ensure cost recovery of the high fixed costs of maintaining a water distribution system, in addition to infrastructure factors, some utilities are also implementing decoupling to decouple revenue collection from the volume of sales. As discussed in more detail in Section 5.4.14 below, decoupling is a simple mechanism that encourages conservation while maintaining financial stability for utilities. As there may be variances from forecasted usage and revenue, decoupling ensures fixed utility costs are recovered. Also, if forecasted usage and revenue is higher than expected, decoupling protects the customer from over-collection.

Figure 15 provides a list of states with utilities that use either some form of distribution system improvement charge and/or decoupling.

Figure 15: States with Utilities that Use Either a Form of Infrastructure Factor and/or Decoupling

Rate Design Mechanism	States with Mechanism in Place for at Least Some Utilities (2013)[15]
Distribution System Improvement Charge or Similar Mechanism Tying Rates to Specific Capital Investments	Arizona, Connecticut, Delaware, Illinois, Indiana, Maine, Missouri, Nevada, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island
General Decoupling (with Periodic True-up)	Arizona, California, Connecticut, Nevada, New York[16]

The Department is proposing a new adjustment factor to capture the costs of new water infrastructure reliability investments. This element of the rate structure should ensure customers pay for only the actual costs related to infrastructure improvements while providing LADWP with flexibility to plan larger projects over longer periods of time, without the risk of reduced or inadequate funding in future years. LADWP is also proposing base rate decoupling as discussed in Section 5.4.14.

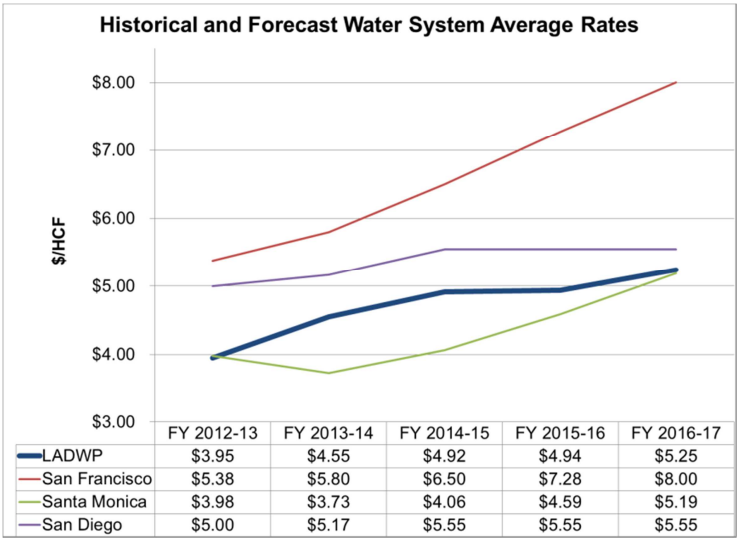
5.3.7 Rate Increases

Water utility rates have been increasing throughout California. In rate proposals to the California Public Utility Commission or local water boards and city councils, many utilities cite the same challenges as LADWP – regulatory mandates, infrastructure reliability and conservation programs – as the main drivers for increased rates. As shown in Figure 16, other major city water utilities in California have already increased rates and/or have announced future rate increases; however, LADWP's proposed system average rates will still be less than many other large cities in the State.

[15] Source: Alternative Regulation and Ratemaking Approaches for Water Companies: Supporting the Capital Investment needs of the 21st Century (Prepared for the National Association of Water Companies, Sept 2013 (http://www.nawc.org/uploads/documents-and-publications/documents/NAWC_Brattle_AltReg_Ratemaking_Approaches_102013.pdf)

[16] Examples include Connecticut Water Company and United Water. In California, Class A water utilities regulated by the CPUC.

Figure 16: Historical and Forecast Water Utility Average Rates[17]



	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
LADWP	$3.95	$4.55	$4.92	$4.94	$5.25
San Francisco	$5.38	$5.80	$6.50	$7.28	$8.00
Santa Monica	$3.98	$3.73	$4.06	$4.59	$5.19
San Diego	$5.00	$5.17	$5.55	$5.55	$5.55

As discussed further in Section 5.5 of this Chapter, the Department's residential rates currently compare favorably to other major California water utilities–a trend which is expected to continue after implementation of the proposed rates.

5.4 RATE STRUCTURE OVERVIEW

The Department has not increased base water rates since July of 2009[18]. As discussed above, the United States water industry is undergoing a significant transformation due to increased regulatory mandates, aging infrastructure and heightened need for conservation measures. In response to drought conditions, LADWP implemented shortage year rates in June 2009; to help address significant costs associated with water quality programs, the cap for the WQIA factor was increased to $0.85 per HCF in March 2012. However, the Department has not had a comprehensive rate action with the opportunity to review the overall rate structure since 2009. Figure 17 provides a summary of changes to the Water Rates Ordinance since 1995.

Figure 17: Recent Department Water Rates Ordinance Changes

Ordinance	Date Enacted	Summary of Changes
182047	3/19/2012	Remove $0.06 cap on WQIA factor and increase Provision J cap from $0.50 to $0.85
180823	8/11/2009	Amended Emergency Water Conservation Plan
N/A	6/1/2009	Implemented shortage year rates (enacted by Board resolution)

[17] Computed on an annual system-wide basis for all customer classes.

[18] The amount of adjustment factors have changed according to the approved rate ordinance

Ordinance	Date Enacted	Summary of Changes
180148	8/25/2008	Enacted Emergency Water Conservation Plan
179802	5/19/2008	Increased water revenue – base rates (3.15%: July 2008; 3.1%: July 2009)
177968	11/27/2006	Increased water revenue – base rates (2.75%: January 2007; 2.75%: July 2007)
175964	6/20/2004	Increased water revenue – base rates (11%: June 2004)
173017	2/4/2000	Increased water revenue – Schedule F (from 62 cents per HCF to 99 cents per HCF for tier 1)
171639	7/28/1997	Amended adjustment factors to eliminate WQIA sunset
170435	4/29/1995	Restructured residential rates

Few rate structure changes have been made over the last five years. In light of the continued drought in California and the Mayor's conservation directive, as well as the significant costs associated with Water System programs over the next five or more years, it is critical for LADWP to review both its level of rates and the rate design used to collect adequate revenue to continue providing safe and reliable service to customers.

5.4.1 Water Rate Ordinance

As a municipal utility, the Department's rates, both specific charges for the base rates and the provisions of the pass-through elements, are codified in a rate ordinance. The LADWP Water Rate Ordinance establishes several elements that determine the amount charged to customers:

- Water budget allotments;
- Tiered usage rates; and
- A volumetric approach to rates.

The current ordinance also includes shortage year allotments and rates.

Rates are based on two major components outlined in the ordinance:

- Base rates; and
- Adjustment factor provisions.

The LADWP Water Rate Ordinance covers three major customer classes:

- Single-Dwelling Unit Residential (Rate Schedule A);
- Multi-Dwelling Unit Residential (Rate Schedule B); and
- Commercial, Industrial, Governmental and Temporary Construction (Rate Schedule C).

In addition, rate schedules are provided for several special classes of customers such as Reclaimed Water Service (Rate Schedule D) and Private Fire Service (Rate Schedule E). Furthermore, the current Water Rates Ordinance also includes a separate rate for Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports (Rate Schedule F) customers.

Historically, LADWP's rates have been structured to provide incentives for conservation. The Department uses a combination of water budget allotments, tiered rates, and a completely volumetric rate design that ties customers' bills directly to the level of consumption. Actual customer rates consist of base rates (to recover the costs of general operations and administration) and adjustment factors (to recover specific program costs such as water quality or infrastructure reliability). The proposed rates ensure the Department collects its revenue requirement while protecting customers from over and under-collection of costs.

5.4.2 Water Budget Allotments

Water budget allotments are a major component of the LADWP rate design, especially for Single-Dwelling Unit Residential customers. Allotments determine the amount of water provided to customers within each tier; as noted earlier, conservation is enhanced by reducing the allotment available at lower tiered rates. Since water usage increases in the summer months, allotments are also increased this time of year to minimize the financial burden on customers. In addition, given the wide variety of Single-Dwelling Unit Residential customers due to factors such as lot size and temperature zone, additional allowances are made to develop reasonable water budgets for this class of customers.

Under this rate action, LADWP proposes minor adjustments to the allotments to recognize the need for additional conservation and move toward a simpler rate design that is easier for customers to understand and for the Department to implement. The major elements used to establish current water budget allotments and LADWP's proposed changes for each major customer class are summarized in Figure 18. Additional information about the calculation of allotments for each customer class is discussed in more detail in the sections pertaining to the specific customer class later in this chapter.

Figure 18: LADWP Water Budget Allotment Factors

Customer Class	Current Elements	Proposed Elements
Single-Dwelling Unit Residential[19]	• Lot size (five groups) • Temperature zone (three zones) • Time of year (Summer: June-Oct.) • Family size	• Lot size (Five groups with top two groups set the same) • Temperature zone (three zones) • Time of year (Summer: June-Sept.)

[19] The current budget allotment factors for Single-Dwelling Unit customers are used to establish the tier 1 allotment; with the increase in the number of tiers to four, the proposed elements will be used to determine the allotments for tiers 2 and 3.

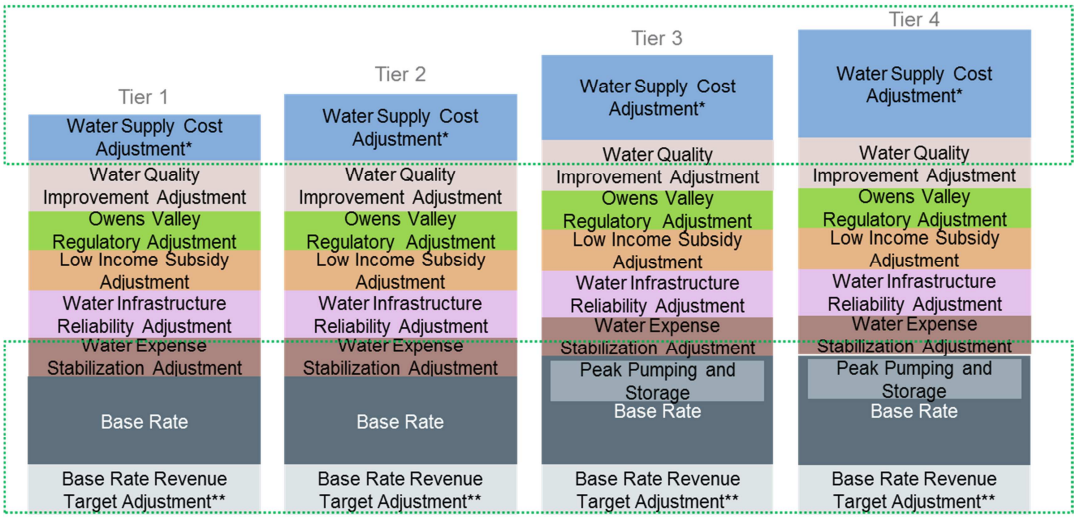
Customer Class	Current Elements	Proposed Elements
Multi-Dwelling Unit Residential	• Past usage level • Time of year (Summer: June-Oct.)	• Past usage level (followed by annual reductions to incentivize conservation) • Time of year (Summer: June-Sept.)
Commercial, Industrial, Governmental and Temporary Construction	• Past usage level • Time of year (Summer: June-Oct.)	• Winter – actual recent winter usage level • Summer – prior year actual winter usage plus five percent • Time of year (Summer: June-Sept.)

5.4.3 Tiered Usage Rates

Tiered rates are designed to increase the unit price as usage increases. Combined with water budget allotments, tiered rates help balance providing lower priced water for more essential needs with providing higher priced water for less essential needs. This balance reflects the cost of service in which the cost to meet higher demands increases as demand increases.

As part of its objectives to encourage conservation while simplifying the overall rate structure, the Department is proposing to synchronize the rate structure for all tiers. As discussed in more detail in Section 5.5 below, the Single-Dwelling Unit Residential rate structure will be expanded to four tiers, while the Multi-Dwelling Unit Residential and Commercial rate structure will continue to be two-tiered. However, the rate elements in each tier for each major customer class will now be the same as shown in Figure 19 for the Single-Dwelling Unit Residential customer class. These changes are key factors in the Department's plan to meet the Mayor's directive to reduce per capita water consumption by 20% by 2017. Customer bills will continue to show just the amount of usage and cost for water in each tier. The specific rate components are used to develop the tier rates but are not outlined on customer bills.

Figure 19: 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 factor is consolidated with the Water Quality factor (or base rates depending on the cost component).

LADWP proposes that all customer classes pay the same rate ($/HCF) for each adjustment factor, except the WSCA and BRRTA.[20] The unit costs associated with the programs recovered by each of the other factors are the same regardless of the customer class. Customers that consume more water will still pay a higher amount for these programs based on their higher usage level. This approach is both cost based and simple for customers to understand and LADWP to implement.

The WSCA will be one of the main factors used to differentiate rates amongst tiers. As usage increases, the Department must purchase larger amounts of more expensive water from the Metropolitan Water District (MWD) or other providers and invest in more costly water supply programs, incurring additional costs associated directly with these sources of water supply.

The BRRTA factor, a new proposed rate element to implement decoupling, will be different for each major customer class but will be applied to all tiers within each customer class equally.

The peak pumping and storage component of base rates is also tied directly to the level of consumption. LADWP must size its investment in these facilities to meet the peak demand caused by the higher level of consumption, incurring costs which would otherwise be avoided. Therefore, peak pumping and storage costs should be assigned to only higher usage customers.

[20] As discussed below, the peak pumping and storage component of base rates will also vary across customer classes and tiers.

5.4.4 Volumetric Approach to Rates

Another aspect of LADWP's rate design is the use of volumetric rates. This approach has been proven to encourage conservation, making LADWP a leader in this area. This process is consistent with cost-based pricing, as customers that consume more will pay more regardless of their customer class.

5.4.5 Shortage Year Allotments and Rates

Due to the drought situation, on June 1, 2009, 15% shortage year rates went into effect. Under shortage year rates, the first tier usage block was reduced by 15%, and second tier rates in the current high season (June – October) were increased by multiplying the high season tier 2 rate by 1.442. While shortage year rates have been applied, water usage has been reduced by approximately 16.4%[21] .

To continue encouraging conservation, the Department proposes to make shortage year allotments permanent by making usage allotments similar to the current shortage year levels. Minor adjustments to these allotments for specific times of year and customer classes are discussed later in this chapter. In addition, changes are proposed to recognize the use of four tiers for the Single-Dwelling Unit Residential customer class. Technological advancements should continue to provide new opportunities for conservation. Therefore, the Department can maintain lower allotments without adversely impacting customers and eliminate the need for shortage year rates and allotments in the future.

5.4.6 Adjustment Factor Provisions

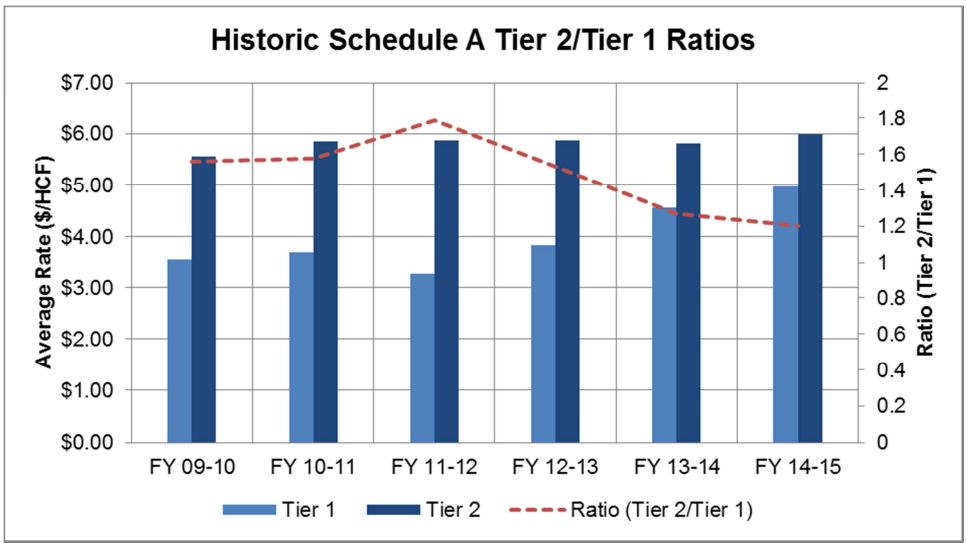
The rate structure outlined in Figure 19 above includes a series of adjustment factors and the base rate. LADWP has traditionally used adjustment factors to associate elements of the rate structure to specific costs. This transparent approach to the rate structure should ensure that customers only pay costs actually incurred for programs such as for water quality or for water procurement.

However, currently the application of the factors is not consistent among the tiers. The WPA and WQIA 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, Industrial, Governmental and Temporary Construction 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 Department 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 the Department's costs; since the WPA is applied as an adjustment factor for tier 1, but not tier 2, the differential between tier 1 and 2 overall rates has decreased from

[21] Data according to usage from June 2009 through August 2014.

1.56 in FY 2008-09 to 1.20 in FY 2014-15, as shown in Figure 20. The purchased water adjustment factor component, which recovers the costs of water purchases from MWD, is now a large part of the WPA and a significant part of the overall rate.

Figure 20: Tier 1 and 2 Rate Differential (Schedule A)



For tier 1 rates, the WPA can currently be changed quarterly with Board approval to reflect the actual cost of water purchases from MWD. MWD rates are expected to keep rising, which, on average, will result in higher purchased water costs in the future. In dry years, the additional demand for purchased water will further increase purchased water expense. All else being equal, the rate increases as additional water is purchased from MWD and decreases when less water is purchased. Unless a structural change is made, as the Department faces increasing MWD rates, tier 1 customers will bear a disproportionate burden of these costs as tier 2 rates do not change when the WPA increases to reflect higher purchased water costs.

The same situation applies to the WQIA, which is currently fixed in the base rate for tier 2 but changes with costs in tier 1 rates. As discussed in Chapter 3, regulatory mandates require the Department to make significant investments in water quality programs. These investments will cause the WQIA to increase in a disproportionate amount compared to other rate factors. Therefore, the Department proposes to separate the WPA (proposed to be replaced by the WSCA) and WQIA from the tier 2 base rates.

The Department proposes to continue the adjustment factor approach in the future with the following major changes:

- Replacing the Water Procurement Adjustment (WPA) factor with the new Water Supply Cost Adjustment (WSCA) factor;
- Elimination of the Water Security Adjustment (WSA) factor;

- Addition of a Water Infrastructure Reliability Adjustment (WIRA) factor;
- Addition of a Water Expense Stabilization Adjustment (WESA) factor; and
- Replacement of Water Revenue Adjustment (WRA) with Base Rate Revenue Target Adjustment (BRRTA).

These changes will apply to all major customer classes and tiers. As discussed above, LADWP proposes that all major customer classes pay the same amount for each adjustment factor, except the WSCA and BRRTA, which will be calculated for and applied to all major customer classes.

5.4.7 Water Supply Cost Adjustment

The Water Supply Cost Adjustment (WSCA) will replace the Water Procurement Adjustment and include all costs associated with water supply.

The WSCA was created in response to the San Juan Capistrano decision to correspond at a more granular level costs of water supply to the rates for each tier in each customer class. It is designed based on the economic premise of cost causation - customers who cause costs should pay for these costs. Residential customers are given an allocation of water proportional to lot size, season, and temperature zone. Water use greater than this allocation requires higher cost water supplies due to increased demand. For example, water use in Residential tier 4 is vastly greater than the water budget allocated amount and causes the need for the most expensive water supply source. Therefore, the principles of cost causation support allocation of the costs for more expensive water supplies to tier 4.

Increasing block rates that assign the highest cost of supplies to the highest water users currently appear to be the most equitable rates for ensuring that charges are proportional. If charging such rates results in high demand customers using less, the need for costly supplies is reduced, and the rates in the higher tier(s) can be reduced, maintaining proportionality.

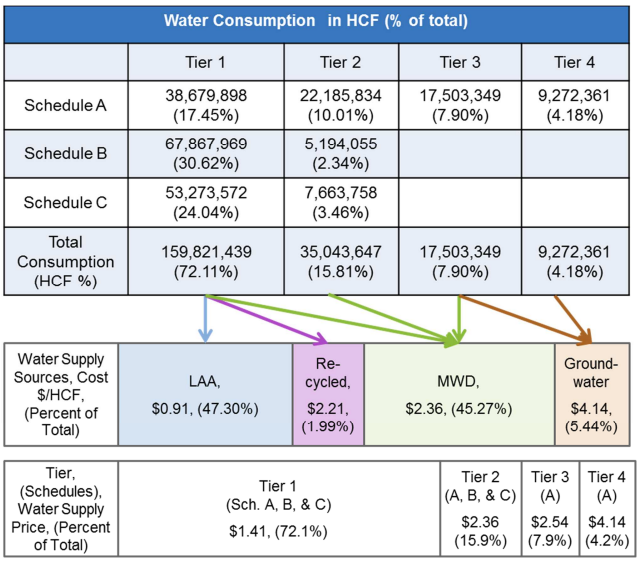
Tiers are defined based on the level and expected type of customer water consumption, as shown in Figure 21. Starting with the least expensive source of supply, water is assigned to each tier, based on the percentage of water demand in the tier met by the source.

Figure 21: Allocation of Water Supply to Tiers

Tier	Water Supply Allocation
Tier 1 (all classes)	Essential and/or indoor usage for all classes; allocated least expensive water sources
Tier 2 (all classes)	Considered necessary/efficient outdoor usage; allocated next lowest cost water sources
Tier 3 (Schedule A)	Less efficient irrigation; allocated higher cost of water supply
Tier 4 (Schedule A)	“Excessive” usage; allocated highest cost source(s) of water

An illustrative alignment of the water source supply costs to tiers, using the supply costs for each tier based on FY 2015-16 costs, forecast supply amounts and tier usage, is shown in Figure 22.

Figure 22: Allocation of Water Supply Sources and Costs to Set Tier Prices for FY 2015-16



The costs of the various sources of supply are calculated based on LADWP's cost to provide the specific water supply, divided by the forecasted hydrologic supply (in HCF) of the specific source. These costs are calculated and adjusted on an annual basis, and will reflect the appropriate year's costs. A summary of the assumptions and calculation for each source of supply and the resulting unit costs are summarized in Figure 23[22]. Note that due to the timing of projects for specific sources and projected supply amounts, these unit costs do not follow a uniform pattern over the five-year period. For more detailed information on the data and calculations underlying the costs of supply, please see Chapter 5 – Appendix C.

Figure 23: Summary of Costs for Each Water Supply Source

	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Groundwater Pumping	$4.14	$4.10	$4.18	$3.72	$1.40
LA Aqueduct	$0.91	$0.69	$0.64	$0.60	$0.60
MWD	$2.36	$2.30	$2.42	$2.50	$2.87
Recycled Water	$2.21	$2.51	$2.63	$4.16	$4.90

[22] Data shown is for FY 2015-16. Included in these total amounts are the over/under-collection amounts from the legacy Water Procurement Adjustment factor, conservation and bad-debt that are spread over the sources of supply based on the percentage of water for each source.

5.4.8 Water Security Adjustment

In FY 2014-15, LADWP recovered $59.7 million from the Water Security Adjustment. However, approximately 80% of these costs are associated with water quality programs. Therefore, LADWP proposes to eliminate the security factor and roll these 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 rates.

5.4.9 Water Infrastructure Reliability Adjustment

LADWP proposes to establish a new Water Infrastructure Reliability Adjustment (WIRA) factor to recover the capital costs associated specifically with investments to maintain and improve the reliability of the water distribution system. As discussed earlier, water utility infrastructure is aging, and significant capital investment is required to ensure customers continue to receive reliable water service. Recent water main breaks at UCLA and in the Hollywood Hills section of Los Angeles highlight the fragile nature of the infrastructure that customers depend on every day. Characteristics of the proposed infrastructure reliability factor include, but are not limited to:

- Aligning costs and cost recovery in a transparent manner;
- Ensuring investments are made to maintain and upgrade Water System reliability;
- Ensuring customers pay for only the expenditures actually incurred; if contracts for projects are delayed, customers do not pay;
- Establishing a common adjustment factor rate for similarly situated customers (the level of usage will drive the actual customer cost so larger users will pay more);
- Providing LADWP the flexibility to shift investment among a portfolio of projects and/or accounting periods while maintaining rates that reflect actual costs;
- Establishing a specific balancing account to track costs associated with infrastructure projects, allowing easy reporting and audit; and
- Providing protection for customers and LADWP from uncontrollable cost changes due to events such as material price changes and unforeseen regulatory changes.

The WIRA factor will only recover capital costs. LADWP estimates that water reliability projects will be funded 30-50% by cash to maintain financial stability. A balancing account will track costs and revenues to ensure only actual costs are recovered; adjustments will be made annually in July at the beginning of the fiscal year. Due to the specific alignment of costs and rates, no cap is necessary for the WIRA factor. In addition, to ensure an accurate matching of costs and rates and to avoid the accumulation of over or under-collected balances, uncollectible expenses associated with the WIRA will be included in the calculation of the factor.

Improving service reliability for LADWP customers will require long-term projects with long-term contracts. The certainty and cost based nature of these contracts requires a stable source of funding. The new WIRA factor provides this stability while protecting customers from overcharging due to project delays, cost savings or other unforeseen changes. For several years, the Power System rate structure has included a reliability adjustment factor. LADWP proposes to implement a similar approach for the Water System.

5.4.10 Water Expense Stabilization Adjustment

Preparing for unforeseen events such as earthquakes or major weather events is an important aspect of utility management. LADWP currently has a Water System Expense Stabilization Fund balance of $33 million. However, based on the potential cost of recovering from force majeure type events, the Department believes this balance should be increased to $50 million. The purpose of the Water Expense Stabilization Adjustment (WESA) factor is to establish funds to stabilize rates in the event of unforeseen events impacting water service delivery.

The WESA will provide funds required to meet the 150 days of cash on hand financial metric. Similar to other adjustment factors, uncollectible expense will be included in the balancing account to ensure accurate alignment of costs and rates.

5.4.11 Base Rate Revenue Target Adjustment

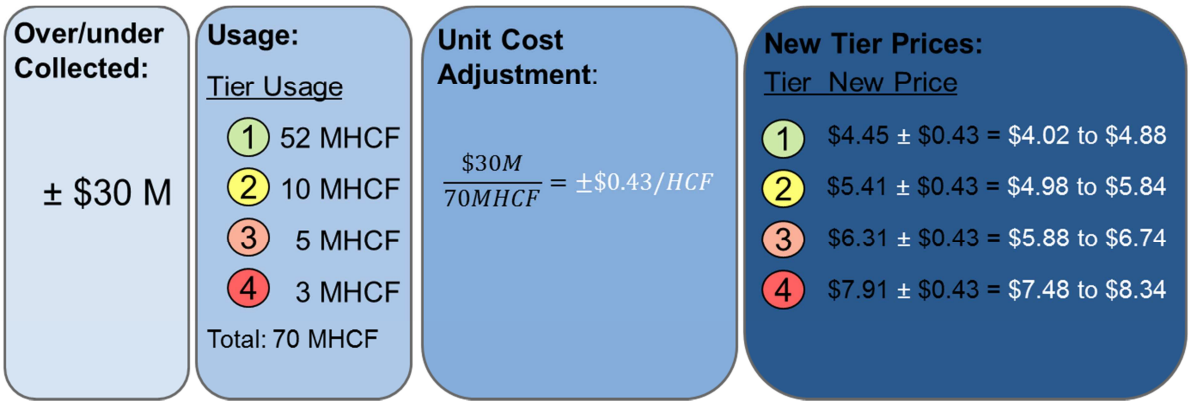
The Base Rate Revenue Target Adjustment (BRRTA) factor is designed to ensure base rates for each major customer class fully recover, but do not over-collect, the associated costs for each customer class by decoupling usage from revenue. LADWP proposes to develop the BRRTA on a customer class basis for the following customer class groups:

- Single-Dwelling Unit Residential (Schedule A);
- Multi-Dwelling Unit Residential (Schedule B); and
- All other customer classes.

The Department will track the over or under-collection by these groups and set the BRRTA factor to collect additional revenue or credit over-collected revenue through an adjustment to the following year's rates based on the consumption of the specific groups. To the extent LADWP over or under-recovers costs associated with base rates, the groups that contribute to the over or under-recovery should proportionately receive the benefit or contribute to the associated costs.

Figure 24 provides an illustrative example of the BRRTA decoupling mechanism based on the proposed four-tier Single-Dwelling Unit Residential customer rate structure. The over or under-collected amount ($30 million in this example) is divided by total usage (70 million HCFs in this example) to give a $/HCF unit cost adjustment ($0.43/HCF in this example).

Figure 24: Illustrative Decoupling Example (Single-Dwelling Unit Residential Customer Class)



Water usage volume is difficult to predict; therefore, the BRRTA decoupling mechanism is necessary, either to reduce extra revenues or to completely recover costs. Though over or under-collection may be noticeable initially, as users adjust to price signals, the BRRTA changes are expected to show a dampened oscillation pattern in the future.

Additional information about decoupling is provided in Section 5.4.14

5.4.12 Other Proposed Adjustment Factor Changes

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

- Remove the 5% adder previously included for financial stability.
- Eliminate the minimum charge of $5.00 per month that may be applied per service to accounts which have no recorded consumption for a period of more than two months.[23]
- Change the frequency of the WQIA, OVRA and LISA factors from quarterly to semi-annually to reduce the administrative cost and burden of system changes, contact center training and any required customer notifications.
- Remove unnecessary caps. Since adjustment factors are tied to specific auditable costs with specific balancing accounts for each factor, caps are an unnecessary administrative burden that lessens the alignment of costs and rates.
- Include uncollectible expenses in the calculation of adjustment factors to accurately align costs and rates.

A complete outline of each existing and proposed new adjustment factor is provided in Chapter 5-Appendix B.

[23] The minimum charge has not been implemented by LADWP.

5.4.13 Base Rates

Base rates cover the general costs of operating the Water System and providing water service that are not associated with specific programs, such as water quality. Costs included in base rates include:

- Routine maintenance and operation of the Water System;
- Infrastructure not covered by adjustment factors;
- Pumping and storage;
- Customer service;
- Billing; and
- Other general administrative costs;

Peak Pumping and Storage

Pumping and storage of water is a standard aspect of a water utility system for meeting both base and peak demand. The amount of customer demand can significantly impact the level of required pumping and storage.

For development of the tier rates, the amount of the base rate included in a tier price is based on whether peak pumping and storage costs are incurred to deliver the required level of water to serve that tier. The base rates for all customers, regardless of class or tier, include a minimum amount for the cost of infrastructure that supports pumping and storage required for base water use (indoor and efficient outdoor usage). In order to recover the cost of peak pumping and storage infrastructure only dispatched for above-normal water use, the Department includes a peak pumping and storage component within the base rates for customer usage that exceeds normal levels – Schedule A tiers 3 and 4, Schedule B tier 2 and Schedule C tier 2. This approach is similar to the treatment of base and peak costs for cost of service studies as outlined in the AWWA M1 Manual. The assignment of base and peak pumping and storage costs is outlined in Figure 25.

Figure 25: Assignment of Base and Peak Pumping and Storage Costs to Tiers

	Tier 1	Tier 2	Tier 3	Tier 4
Schedule A	Base Pumping & Storage Only	Base Pumping & Storage Only	Base + Peak Pumping & Storage	Base + Peak Pumping & Storage
Schedule B	Base Pumping & Storage Only	Base + Peak Pumping & Storage	-	-
Schedule C	Base Pumping & Storage Only	Base + Peak Pumping & Storage	-	-

System-wide water demand fluctuates based on the consumption choices of utility customers. During times of peak demand, additional cost is incurred to meet higher customer demand placed on the distribution system customers, across all classes, that consume amounts of water that typically exceeds the allocated water budget based for their respective customer class. The greater demand these customers place on the distribution system drives the need for increased plant investment in pumping and storage infrastructure to ensure adequate supply to meet their specific peak demand.

Cost of service is based on cost causation. The American Water Works Association (AWWA) M1 Manual, Principles of Water Rates Fees and Charges, uses the concept of base and peak usage to allocate certain costs. Based on the AWWA M1 principles, costs associated with infrastructure incurred to meet peak demand are typically assigned to peak capacity and should be allocated to customers that cause these "peak" costs. Peak pumping and storage costs can fall into this category.

Several components of LADWP's total (base plus peak) pumping and storage costs were determined by the Marginal Cost of Service Study presented in Chapter 4, 2014 Water Service Cost of Service Study:

- $0.110 per HCF for pumping O&M;
- $0.180 per HCF for distribution storage plant; and
- $0.090 per HCF for distribution storage O&M.

The unit marginal cost for pumping plant was not specifically calculated in the cost of service study, but has since been developed in the same manner as the other three components shown above.[24] Pumping plant (capital expense) is itemized in the same ten-year Capital Improvement Program (CIP) used for the cost of service study.[25] The ten-year net present value (NPV) of the pumping capital ($97.7 million) was divided by ten years to calculate the NPV ($9.77). The NPV was divided by the test year customer demand load (231,127,996)[26] to produce a pumping plant marginal cost of $0.042. This methodology mirrors the approach used to calculate the other component cost for pumping and storage.

For each component, the percentage of cost applied to peak pumping and storage is then determined as follows.

- Storage Plant (capital) – 50% - Half of the water stored by the Department is used as base reserve; the other half is dispatched to meet peaking demand. Therefore, half of the unit cost of the storage capital can be applied to the peak component.

[24] The marginal cost study treated pumping plant as part of overall distribution plant.

[25] Pumping capital is budgeted as FI 23220.

[26] Customer demand load for FY 2013-14 through FY 2022-23 consistent with the time period for the plant data in the ten-year CIP.

- Storage O&M – 100% - The Department operates and maintains storage facilities at a level adequate to meet peak supply requirements. Since costs are indifferent to whether the department maintains 50% of stored water as base reserves, 100% of the O&M costs associate with storage is allocated to peak.

- Pumping O&M – 50% of non-power costs - Based on LADWP's analysis of costs for FYs 2011-12 through 2013-14, pumping O&M costs are split approximately 50.4% to power and 49.6% to non-power.[27] The analysis shows that power costs would not vary significantly with the level of usage; therefore, the power component of O&M costs is assigned 100% to base. However, the non-power costs are not sensitive to the level of usage, so the non-power component of pumping O&M is split evenly between base and peak usage.

- Pumping Plant – 50% - Pumping plant investment is designed to provide both base and peak usage, so the unit cost is split evenly between base and peak.

Figure 26 provides the calculation of the peak pumping and storage unit costs.

Figure 26: Calculation of Peak Pumping and Storage Costs

			Total	Percent Applied	Applied to Peak
Storage	Capital		$0.180	50%	$0.090
	O&M		$0.090	100%	$0.090
Total Storage					**$0.180**
Pumping	O&M Total		$0.110		
	O&M Power	50.4%	$0.0554	0%	$0.000
	O&M Non-Power	49.6%	$0.0546	50%	$0.027
	Capital		$0.042	50%	$0.021
Total Pumping					**$0.048**
Total Peak Pumping and Storage					**$0.228**

The resulting total unit cost per HCF for peak pumping and storage is $0.228. As noted above, peak pumping and storage is mainly driven by higher usage, so the $0.228 is applied across only Schedules A tiers 3 and 4, Schedule B tier 2 and Schedule C tier 2. The specific peak pumping and storage costs per HCF for each applicable schedule and tier are derived based on the total costs and consumption applicable to each schedule and tier by applying the formulas shown in Figure 27.

[27] Calculations based on a 3 year average of power O&M expenses.

Figure 27: Distribution of Peak Pumping and Storage Costs Across Customer Rate Schedules

Schedule A Tiers 3&4 Peak Pumping and Storage Costs = Schedule A Total Volume * $0.22[28]/HCF / (Sch. A Tier 3 + Sch. A Tier 4 Usage)

Schedule B Tier 2 Peak Pumping and Storage Costs = Schedule B Total Volume * $0.22/HCF / (Sch. B Tier 2)

Schedule C Tier 2 Peak Pumping and Storage Costs = Schedule C Total Volume * $0.22/HCF / (Sch. C Tier 2)

The resulting peak pumping and storage portion of the base rate calculated for each customer schedule and tier are shown in Figure 28.

Figure 28: Peak Water Pumping and Storage Component of Base Rates

Schedule	Tier			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Schedule – A	$0.000	$0.000	$0.727	$0.727
Schedule – B	$0.000	$2.433		
Schedule – C	$0.000	$1.461		

5.4.14 Decoupling

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 these costs. This type of adjustment works for over-collection as well. 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 through an adjustment in rates-either as a reduced or added charge to customers.

Consumption and revenue variation will sometimes result in the collection of less revenue than was expected. In such cases, fixed costs are "under-recovered." This is particularly true when rates are designed based on average expected consumption. Revenue under-collection can reduce funding for infrastructure maintenance and improvements, increase the likelihood of deterioration in system reliability and compromise meeting financial metrics in the short-term if not mitigated by revenue stability tools. Without revenue stability tools, there is a risk that financial performance will be volatile from year to year, putting the utility's credit rating at risk.

[28] Initial estimates were $0.22 per HCF and were used to design rates. Subsequent analysis refined this estimate to $0.228, which will be detailed in Chapter 6.

Major causes of revenue variation and/or reduction include, but may not be limited to:

- Conservation initiatives: programs initiated by the utility or other entities to provide customers tools and technologies to use less water.
- Weather: variation in conditions differing from projected weather.
- Price elasticity reduction: reduction in consumption as a response to increased prices.
- Programmatic efficiency: reduction in waste rather than restricting use. Programmatic efficiency shows that small changes in consumer behavior can reduce water wastage. Examples of programmatic efficient steps include fixing leaking taps, taking showers rather than baths, installing displacement devices inside toilet cisterns, and using dishwashers and washing machines for full loads. As older appliances are replaced with higher efficiency appliances, water usage will continue to drop.
- Enforcement consumption reduction: conservation measures that are mandated by State and/or local authorities under drought conditions. Under the Urban Water Management Planning Act (UWMPA), passed and signed in 1983 but amended since, the Department can declare drought emergencies of varying severity (consistent with declarations of the California Department of Water Resources (DWR) and the Metropolitan Water District of Southern California (MWD)). Hence, the Department has a drought management plan approved by the DWR that has different levels of mandated conservation enforcement, such as odd-even watering days, specific industry reductions and direct rates that penalize high usage.

To help alleviate the risk associated with revenue variation in a fair manner, LADWP proposes to implement a symmetrical decoupling mechanism for all major customer classes using the BRRTA factor.

The majority of utility costs are fixed and cannot be changed easily (e.g., personnel, debt service); however, utility rates are largely volumetric or consumption based. Forecasting uncertainty presents special challenges to utility finances; revenue targets are typically established using forecasted levels of consumption, which include the impact of expected conservation. Therefore, whether conservation is above or below the forecast can have a direct effect on the financial condition of the utility and the ability to provide reliable service to customers. If actual conservation exceeds expected levels, consumption may be inadequate to produce revenues to recover fixed costs that are incurred regardless of the volume consumed.

Utility rate decoupling is common in California and throughout the United States. LADWP's current rate structure includes forms of decoupling for water and electric services. For example, the current Water Revenue Adjustment (WRA) factor[29] ensures base rate revenues are

[29] LADWP proposes to replace the current WRA factor with a new symmetrical Base Rate Revenue Target Adjustment factor.

adequate to cover fixed base costs. Other California investor-owned water and power utilities regulated by the California Public Utility Commission and the City of San Francisco wholesale water utility employ a form of decoupling. In the rest of the United States, at least twenty states have forms of water or electric utility rate decoupling.

5.4.15 Rate Development Process

Proposed rates for each tier within the three major customer classes (Schedules A, B and C) are equal to the total of the base rates, including the applicable portion of the peak pumping and storage component and all adjustment factors.

The WSCA and peak pumping and storage component of base rates differentiate the prices amongst tiers and customer classes. The BRRTA may also be different amongst the major customer classes, depending on the amount of over or under-collected revenue for each major customer class. The calculation of each of the remaining adjustment factors (WQIA, OVRA, LISA, WIRA and WESA) is based on the total aggregate revenue requirement for each factor divided by total aggregate usage of Schedules A, B, and C.[30] This calculation will result in equal adjustment factor rates for these factors for Schedules A, B and C and for each tier. The Water Rate Ordinance will provide an explanation for how each factor is calculated.

The total rate for each tier is set based on the following process:

- WSCA: Determine the WSCA for each tier at a system level based on the cost of water required to supply each tier, starting with the least expensive supply source; the WSCA will be the same for the same tier in all major customer classes. (See Section 5.4.7 for a description of the calculation of WSCA costs.)
- Peak Pumping and Storage: Determine the portion of the peak pumping and storage cost component of base rates to be allocated to Schedule A tiers 3 and 4, Schedule B tier 2 and Schedule C tier 2; peak pumping and storage costs are calculated separately for each of these tiers and allocated only to these classes/tiers. (See Section 5.4.13 for a description of the calculation of peaking pumping and storage costs for each applicable customer class/tier.)
- WQIA, OVRA, LISA, WIRA, WESA: Determine the system-level revenue requirement of these adjustment factors based on the financial plan. Divide the aggregate revenue requirement of each adjustment factor by total aggregate Schedule A, B and C[31] usage to calculate the amount of the adjustment factors; the amount of each of these factors will be the same for all major customer classes and tiers.

[30] Starting in year five, Schedule F usage will also be included in this calculation

[31] Starting in year five, Schedule F usage will also be included in this calculation

- Base Rate: Determine the system-level base rate for Schedules A, B, and C by calculating the revenue requirement not covered by the WSCA, peak pumping and storage component and the WQIA, OVRA, LISA, WIRA and WESA. Divide the remaining aggregate revenue requirement by the total aggregate system level Schedule A, B and C[32] usage to calculate the base rate. The base rate will be the same for all major customer classes and tiers.
- BRRTA: If a base rate over or under-collection amount exists for one or more customer classes (Schedules A, B and/or C), divide the under or over-collection amount for each customer class by the total usage for all tiers for that class to determine the BRRTA for each applicable customer class. The BRRTA will be the same for each tier within a specific customer class. (See Section 5.4.11 for the calculation of the BRRTA.)
- The total rate is the sum of all of these rate components as shown in Figure 29 for FY 2015-16. The same process is followed for each of the five years using the revenue requirement, adjustment factor costs and usage for each year.

Figure 29: Calculation of the Total Customer Rate (FY 2015-16)

Schedule	Tier			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Water Supply Factor:				
Schedule A	$ 1.41	$ 2.36	$ 2.54	$ 4.14
Schedule B	$ 1.41	$ 2.36		
Schedule C	$ 1.41	$ 2.36		
Peak Pumping and Storage:				
Schedule A	$ 0.000	$ 0.000	$ 0.727	$ 0.727
Schedule B	$ 0.000	$ 2.433		
Schedule C	$ 0.000	$ 1.461		
Base Rates and Other Adjustment Factors (WQIA, OVRA, LISA, WIRA, WESA, and BRRTA):				
Schedule A	$ 3.04	$ 3.04	$ 3.04	$ 3.04
Schedule B	$ 3.04	$ 3.04		
Schedule C	$ 3.04	$ 3.04		
Total:	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**
Schedule A	$ 4.45	$ 5.41	$ 6.31	$ 7.91
Schedule B	$ 4.45	$ 7.82		
Schedule C	$ 4.45	$ 6.86		

[32] Starting in year five, Schedule F usage will also be included in this calculation

5.5 SINGLE-DWELLING UNIT RESIDENTIAL (SCHEDULE A)

The Department proposes changes to the overall rate structure, water budget allotments and rates for Schedule A customers. As discussed above, LADWP proposes a four-tier rate structure for Single-Dwelling Unit Residential customers. The components and associated rates for each tier will be the same, with the exception of the WSCA, which will increase for each higher tier to reflect the higher costs of water supply required to meet increasing levels of demand and the peak pumping and supply component of base rates, which is applied to only Schedule A tiers 3 and 4 and Schedule B and C tier 2.

LADWP also proposes to implement decoupling in the form of the symmetrical BRRTA factor, designed to ensure recovery of base rate revenues as defined by the financial plan, and also protect customers from over-recovery by automatically returning excess revenues to customers. LADWP's approach to decoupling is discussed in Section 5.4.14 above.

Figure 19 in Section 5.4.3 above outlines the overall Schedule A rate structure.

In this section the proposed Single-Dwelling Unit Residential rate design is discussed in more detail.

5.5.1 Single-Dwelling Unit Residential Customer Water Budgets

Changes to water budget allotments for Single-Dwelling Unit Residential customers are proposed to further incentivize conservation. The major proposed changes include the following items.

- Eliminate household size variation as an element in determining water budgets. Currently, a base allotment of six HCF per month (150 gallons per day) is provided for a household of up to six people with increased amounts for additional people. Historically, this process has been confusing to customers and administratively complex. Many customers have not even reported actual household size.
- Establish a fixed tier 1 allotment based on eight HCF per month (200 gallons per day) for typical indoor use, which is an increase for many customers.
- Maintain the number of lot sizes at five (allotment for top two groups set the same) and use lot size as a factor in setting water budgets for tiers 2 and 3. Outdoor usage is typically the largest use of water. With today's irrigation technology and the options for drought-resistant landscape, customers should have alternatives to help manage the cost of outdoor water use.
- Modify the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates will reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.

- Eliminate shortage year rates. The new allotments are based on the shortage year concepts in light of the continued drought.

Figure 30 outlines the proposed water budget structure compared to the current approach. The changes are designed to tighten allotments, especially for higher usage levels and also make the structure easier for customers to understand and for LADWP's customer service representatives to communicate.

Figure 30: Single-Dwelling Unit Residential Customer Water Budget Proposal

	Current Approach (Two Tiers)	Proposed Approach (Four Tiers)
Tiers	Two	Four
Tier 2/3 Allotment Determination	Tier 1 allotment based on lot size, temperature zone, season and household size	Tier 2 and 3 allotments based on lot size, temperature zone and season
Lot Size Groups	• Five lot size groups • Tier 1 allotments vary by lot size in high and low seasons	• Five lot size groups (allotments for top two groups set the same) • Tier 2 and 3 allotments vary by lot size in high and low seasons
Temperature Zones	Three temperature zones	Three temperature zones for high season
Household Size – First Tier Usage	• Minimum Household Size – 6 people • Additional 2 HCF per person – next 3 persons • Additional 1 HCF per person – next 4 persons • For 24 specified ZIP codes, minimum household size - 8	All customers receive 8 HCF / month for tier 1 usage throughout the year
Seasonal Allotments	Different tier 1 allotments set for low and high seasons	Different tier 2 and 3 allotments for low and high seasons
Seasons	High season: June 1 to October 31	High season: June 1 to September 30, to be consistent with power*
Shortage Years	Provides for a reduction in tier 1 allotments in shortage years ("shortage year rates")	• Eliminate shortage year rates • Decoupling ensures financial stability during drought periods

*Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

The resulting allotments are shown in Figure 31. All customers will receive eight HCF for tier 1 usage. Additional water budget allotments will be applied to tiers 2 and 3 to recognize higher water use needs for larger lots, in higher temperature zones and during the summer. Usage above tier 3 allotments will be charged at tier 4 rates to all customers.

Figure 31: Single-Dwelling Unit Residential Customer Allotments (HCF)

Tier 1					
Indoor Use	8				
Tier 2 (Added to Tier 1 Water Allotment)					
Lot sizes (square feet)	7,500	11,000	17,500	43,559	43,559 +
Winter (Oct-May)	3	4	8	10	
Summer (June-Sep)					
Low temp	6	9	17	21	21
Mid temp	7	10	19	24	24
High temp	9	12	25	31	31
Tier 3 (Added to Tier 2 Water Allotment)					
Lot sizes (square feet)	7,500	11,000	17,500	43,559	43,559 +
Winter (Oct-May)	6	8	16	20	20
Summer (June-Sep)					
Low temp	12	18	34	42	42
Mid temp	14	20	38	48	48
High temp	18	24	50	62	62
Tier 4 (All Usage Above Tier 3)					

As shown in Figure 32, over 90% of customer bills will have usage in only tiers 1-3. The relatively higher tier 4 rates will incentivize reduced usage where the most opportunity for conservation exists.

Figure 32: Tier Distribution for Single-Dwelling Unit Residential Customers (FY 2012-13)

Lot Size (Square Feet)	Total Customers	Tier 1 Customers	Tier 2 Customers	Tier 3 Customers	Tier 4 Customers	% of Customers in Tier 4
Temperature Zone 1						
Up to 7,499	36,653	13,543	10,418	10,245	2,447	**6.7%**
7,500-10,999	8,375	1,232	2,041	3,725	1,377	**16.4%**
11,000-17,499	5,406	465	1,597	2,522	822	**15.2%**
Above 17,500	5,461	302	1,002	2,143	2,014	**36.9%**
Temperature Zone 2						
Up to 7,499	176,318	68,476	49,874	46,267	11,701	**6.6%**
7,500-10,999	36,567	7,635	10,134	13,779	5,019	**13.7%**
11,000-17,499	11,717	1,492	3,609	5,147	1,469	**12.5%**
Above 17,500	7,325	733	1,882	2,614	2,096	**28.6%**
Temperature Zone 3						
Up to 7,499	79,817	18,192	24,997	30,991	5,637	**7.1%**
7,500-10,999	66,667	8,411	21,037	31,693	5,526	**8.3%**
11,000-17,499	29,335	1,930	10,384	15,364	1,657	**5.6%**
Above 17,500	20,565	1,523	6,658	9,893	2,491	**12.1%**
Total	**484,206**	**123,934**	**143,633**	**174,383**	**42,256**	
% by Tier		**25.6%**	**29.7%**	**36.0%**	**8.7%**	

Combined with the proposed tier rates, which lowers initial rates for low usage customers, modifications to the Department's water budget structure are designed to help facilitate additional conservation to meet the Mayor's directive to reduce per capita usage by 20% by 2017.

5.5.2 Single-Dwelling Unit Residential Customer Tier Structure and Rates

As reflected in Figure 19, LADWP proposes a four-tier structure for Single-Dwelling Unit Residential rates. Tier thresholds will be generally set based on indoor and outdoor water use requirements and water supply costs, which should encourage water conservation; the major differentiating amount between tier rates will be water supply costs and peak pumping and storage costs.

5.5.3 Use of Evapotranspiration Factors

LADWP's tier thresholds are also guided by evapotranspiration adjustment factors (ETAFs), which are measures used to adjust the maximum calculated water use based on plants, turf, and

irrigation efficiency. This approach was developed by the California Department of Water Resources as part of a "Model Water Efficient Landscape Ordinance" in 2008.

According to a Department of Water Resource White Paper entitled "Evapotranspiration Adjustment Factor:"

> "The evapotranspiration adjustment factor (ETAF) is a coefficient that adjusts reference evapotranspiration (ETo) values based on a plant factor (PF) and irrigation efficiency (IE) and is used to calculate the maximum amount of water that can be applied to a landscape. ETo is a combination of evaporation and transpiration from standardized grass surfaces on which weather parameters are measured and ETo is then calculated. The plant factor includes effects of plant type, plant density, and microclimate on the water demand of a landscape. Irrigation efficiency is the amount of water that is beneficially used divided by the total amount of water applied.[33]"

The ETAF is calculated by dividing the plant factor by IE (PF / IE = ETAF).

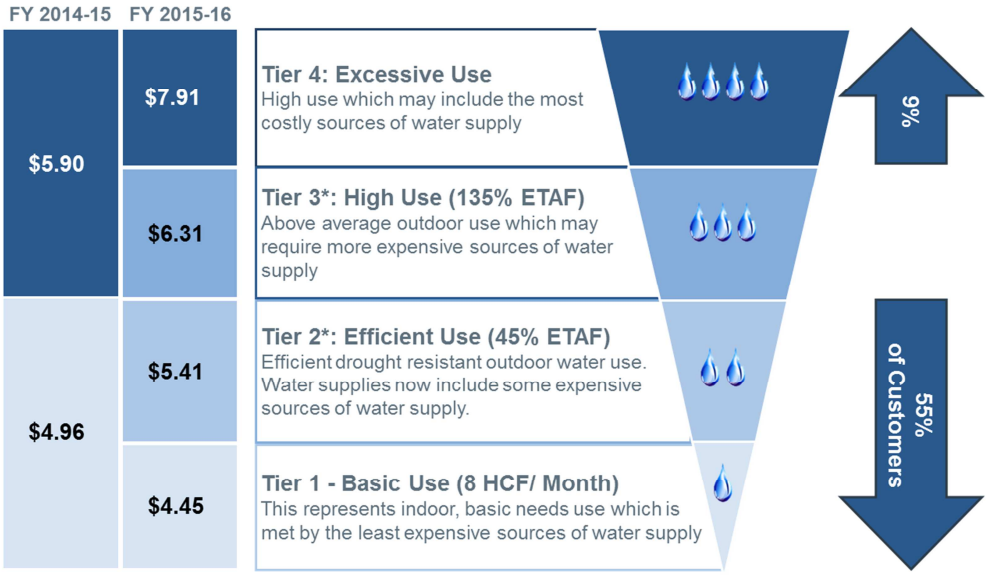
According to the Department of Water Resources study, in 2008, the Model Ordinance utilized a Statewide plant factor of 0.5, representing a mix of 1/3 high, 1/3 moderate, and 1/3 low water using plants. The irrigation efficiency was 0.625 (or 62.5%). The ETAF was obtained by dividing the average plant factor of 0.5 by the average irrigation efficiency of 62.5%, resulting in an ETAF of 0.8.

Since 2008, advances in irrigation technology and the availability of drought tolerant landscape have reduced ETAFs. The San Diego County Water Agency proposed an ETAF factor of 0.7. The Coachella Valley Water District adopted a more aggressive ETAF of 0.5.

To address the current drought, LADWP has developed its tier 2 rate using an ETAF of 45% to represent the most efficient landscape; to offset the strict ETAF and provide time for customers to adapt to the drought reduction programs, the initial tier 2 rates will be set lower than existing tier 1 rates. Tier 3 rates will be set using an ETAF of 135% to represent much less efficient irrigation and non-drought tolerant landscaping in an effort to encourage customers to transition to a more efficient combination. Figure 33 outlines the four tiers and assumptions regarding the type of landscape on which tier rates are based.

[33] White Paper: Evapotranspiration Adjustment Factor, January 25, 2008, prepared by the Department of Water Resources staff in support of the updated Model Water Efficient Landscape Ordinance (http://www.water.ca.gov/wateruseefficiency/docs/etWhitePaper.pdf)

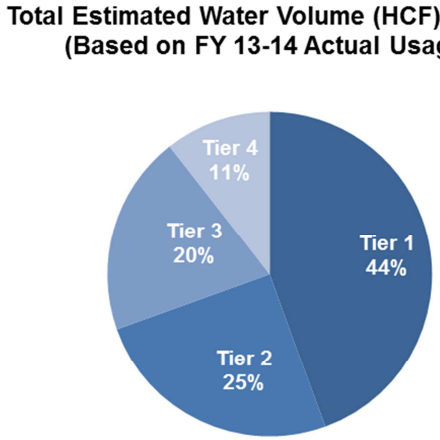
Figure 33: Single-Dwelling Unit Residential Customers Proposed Tier Water Usage Structure



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

Based on FY 2013-14 actual usage, following this proposed approach would result in almost 70% of overall water usage being in tiers 1 and 2, as shown in Figure 34.

Figure 34: Distribution of Single-Dwelling Unit Residential Customer Water Usage Among Proposed Tiers



Ideally, the proposed rate structure and rates will incentivize customers to eliminate their tier 4 usage.

5.5.4 Single-Dwelling Unit Residential Customer Proposed Rates and Rate Impact

Single-Dwelling Unit Residential rates for the five-year rate action are developed to recover the revenue requirement associated with providing service to this customer class while recognizing the increasing cost of providing water at higher levels of usage. The proposed rates for the five-year rate action based on the current financial plan are shown in Figure 35.

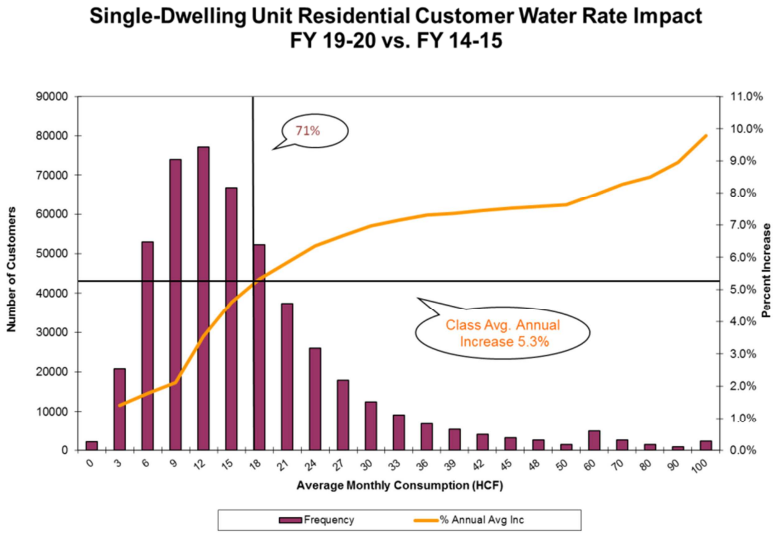
Figure 35: Proposed Single-Dwelling Unit Residential Rates

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$ 4.96	$ 4.45	$ 4.61	$ 4.92	$ 5.18	$ 5.32
Tier 2	$ 5.90	$ 5.41	$ 5.78	$ 6.29	$ 6.67	$ 7.32
Tier 3		$ 6.31	$ 6.59	$ 7.47	$ 8.37	$ 8.11
Tier 4		$ 7.91	$ 8.29	$ 8.77	$ 9.01	$ 9.97

The majority (almost 70%) of customers see no increase as a result of the restructuring in FY 2015-16. Most of the rate increase is focused on the higher levels of usage (tiers 3 and 4), where the most opportunity for conservation exists.

By assigning significant portions of the revenue requirement to heavy users, 71% of customers will see an increase below the class average over the next five years, as shown in Figure 36.

Figure 36: Single-Dwelling Unit Residential Customer Water Rate Impact[34]

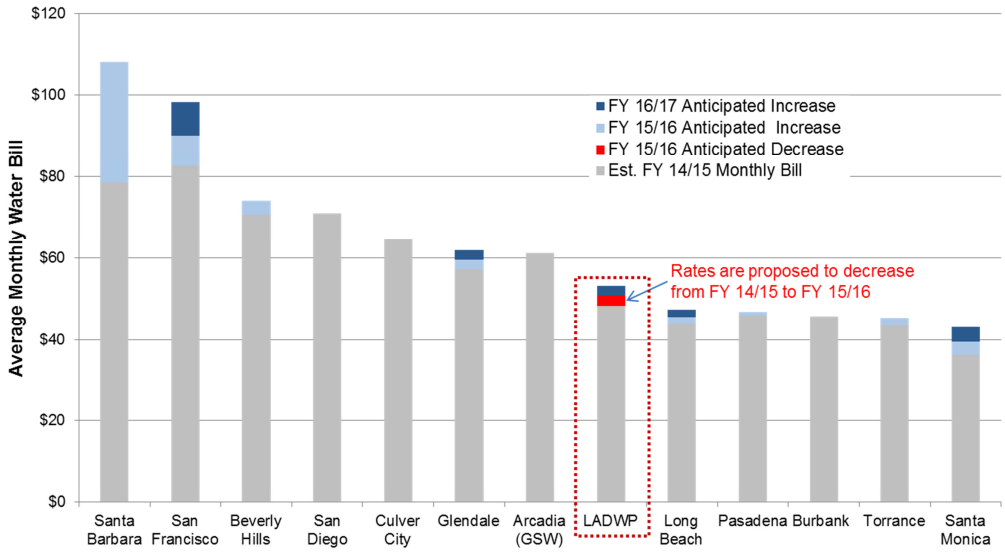


[34] "Average Monthly Consumption" on x-axis changes scale past 50 HCF.

5.5.5 Single-Dwelling Unit Residential Customer Comparative Rate Analysis

LADWP's typical Single-Dwelling Unit Residential bills (based on 12 HCF of monthly usage) will remain competitive with estimated bills of other California water utilities, as reflected in Figure 37.

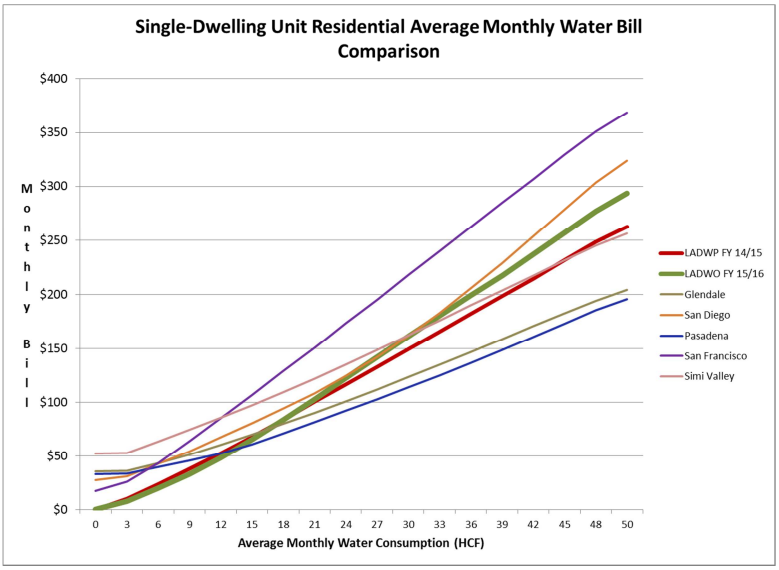
Figure 37: Single-Dwelling Unit Residential Customer Typical Bill Comparison Analysis (Estimated)[35]



LADWP's proposed rates and customer bills compare favorably to other major California utilities, especially at low usage levels that represent 50% or more of the Department's customers. Increasing rates for higher levels of usage incentivizes conservation where the most opportunity exists; however, LADWP rates will remain less than the rates of other large California cities based on rate increases announced for these cities, as shown in Figure 38.

[35] 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 sqft irrigated land and lowest pumping zone charge where applicable.

Figure 38: Single-Dwelling Unit Residential Customer Bill Comparisons for Major California Cities at Different Usage Levels[36]



In summary, the Department's proposed Single-Dwelling Unit Residential rates for the next five years are designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for low usage customers;
- Reduce consumption, especially from high usage customers, consistent with LADWP's conservation goals;
- Reduce the number of water budget determining factors;
- Provide a reasonable transition from two to four tiers;
- Align tier rates with water supply costs;
- Recover costs using adjustment factors tied to actual costs incurred; and
- Ensure full recovery of revenue requirement while protecting customers from over or under-recovery through decoupling.

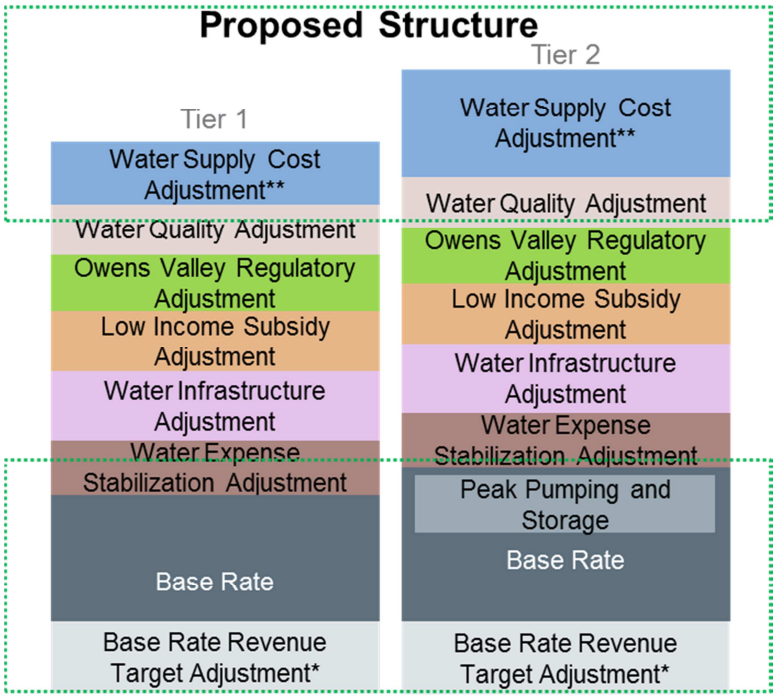
[36] "Average Monthly Water Consumption" on x-axis changes scale past 50 HCF.

5.6 MULTI-DWELLING UNIT RESIDENTIAL (SCHEDULE B)

To meet the Mayor's 20% conservation objective, Multi-Dwelling Unit Residential customers must also reduce consumption. Therefore, rates for this class must be developed to provide incentives for customers, especially higher users, to significantly reduce consumption.

LADWP proposes to structure rates for this customer class similar to Single-Dwelling Unit Residential. However, the current two-tier structure will be maintained. The proposed overall rate structure for the Multi-Dwelling Unit Residential customer class is shown in Figure 39.

Figure 39: Multi-Dwelling Unit Residential Proposed Rate Structure



*BRRTA could be positive (under-collection) or negative (over-collection).

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

Note: For simplification, the Water Security Adjustment is consolidated with the Water Quality Improvement Adjustment (or base rates depending on the cost component).

The Multi-Dwelling Unit Residential customer class rate structure will include the same BRRTA decoupling mechanism as Single-Dwelling Unit Residential customers to ensure recovery of base rate revenues as defined by the financial plan but also protect customers from over-recovery by returning excess revenues to customers.

5.6.1 Multi-Dwelling Unit Residential Water Budgets

Water budgets will also apply to Multi-Dwelling Unit Residential customers but will be designed with consideration of the characteristics of a multifamily environment, while still providing incentives for additional conservation. The major proposed changes include the following items.

- Initially adjust the high season water budget to relieve the pressure imposed on customers by the shortage year allotments. Currently year-round tier 1 allotments are based on 97.75% of the highest average winter water use (December-March) for the three years prior to the shortage year (2007-09). Basing allotments on a time period up to eight years old does not reflect current usage patterns, technologies or the actual number of people who reside in many of the multi-family buildings.
  - Set the base period (FY 2014-15) allotment for the high season (summer) usage at the highest of 100% of actual prior winter (December – March) usage or 100% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
  - For FY 2015-16, reduce usage to the highest of 93% of the base period (FY 2014-15) usage or 93% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
  - For FY 2016-17, reduce usage to the highest of 88% of the base period (FY 2014-15) usage or 88% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
  - Establish a 24 HCF per month minimum allotment in line with the current shortage year minimum allotment level.
- Eliminate shortage year rates. As aforementioned, the new allotments are based on the shortage year concepts in light of the continued drought.
- Modify the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates will reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.

Figure 40 outlines the proposed water budget structure compared to the current approach. The changes are designed to tighten allotments, especially for higher usage levels.

Figure 40: Multi-Dwelling Unit Residential Water Budget Proposal

	Current Approach	Proposed Approach
Tier 1 Allotment	• 97.75% of the highest average winter water use (Dec-Mar) for the three years prior to the shortage year (2007-09) • Applies year-round • 28 HCF per month minimum allotment	• Highest of 100% of the current recorded allotment established upon the effective date of the new ordinance or 100% of the average winter (December 2014-March 2015) usage • FY 2015-16: Reduced to highest of 93% of the recorded allotment established upon the effective date of the new ordinance or 93% of the December 2014-March 2015 average usage • FY 2016-17 (and beyond): Reduced to highest of 88% of the recorded allotment established upon the effective date of the new ordinance or 88% of the December 2014 – March 2015 average usage • 24 HCF per month minimum allotment • Applies year-round (no high/low season)
Shortage Years	Provides for a reduction in tier 1 allotments in shortage years ("shortage year rates")	• Eliminate shortage year rates • Decoupling ensures financial stability during drought periods
Seasons	High season: June 1 to October 31	High season: June 1 to September 30 (same as power)[37]

LADWP recognizes that some Schedule B customers have been successful in conserving water usage and therefore have fewer opportunities to further reduce usage compared to other Schedule B customers. If a Schedule B customer can demonstrate with verification by the Department that all possible water conservation measures have been implemented[38], the customer's first tier allotment shall remain fixed at the allocation level established upon the date of verification.

5.6.2 Multi-Dwelling Unit Residential Tier Structure and Rates

Proposed tier thresholds are set based on water supply costs and the assignment of the peak pumping and storage component of base rates to tier 2.

5.6.3 Multi-Dwelling Unit Residential Proposed Rates and Rate Impact

Multi-Dwelling Unit Residential rates for the five-year rate action are developed to recover the revenue requirement associated with providing service to this customer class while recognizing the increasing cost of water supply at higher levels of usage. The proposed rates for the five-year rate action based on the current financial plan are shown in Figure 41.

[37] Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

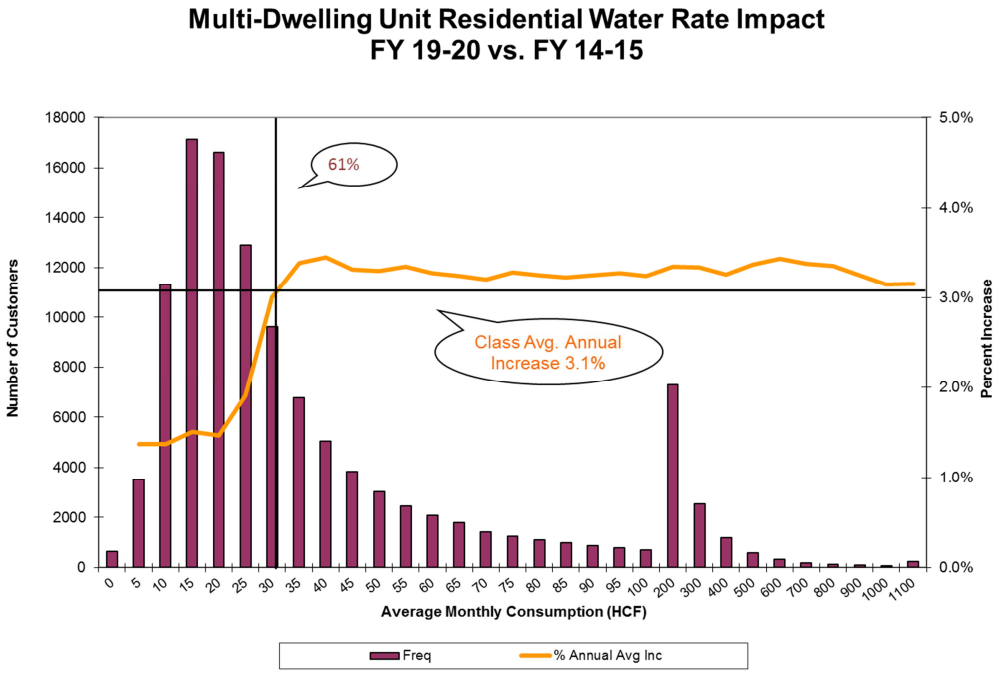
[38] Specific requirements for verification will be developed by LADWP and approved by the Board.

Figure 41: Proposed Multi-Dwelling Unit Residential Rates

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.97	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.90	$7.82	$7.48	$7.65	$8.03	$8.68

By assigning significant portions of the higher revenue requirement to heavy users, over 61% of customers will see an increase below the class average over the next five years, as shown in Figure 42.

Figure 42: Multi-Dwelling Unit Residential Customer Water Rate Impact[39]



Similar to Schedule A rates, Schedule B rates are designed to encourage conservation by assigning significant portions of the higher revenue requirement to heavy users commensurate with the above-average burden they place on the system.

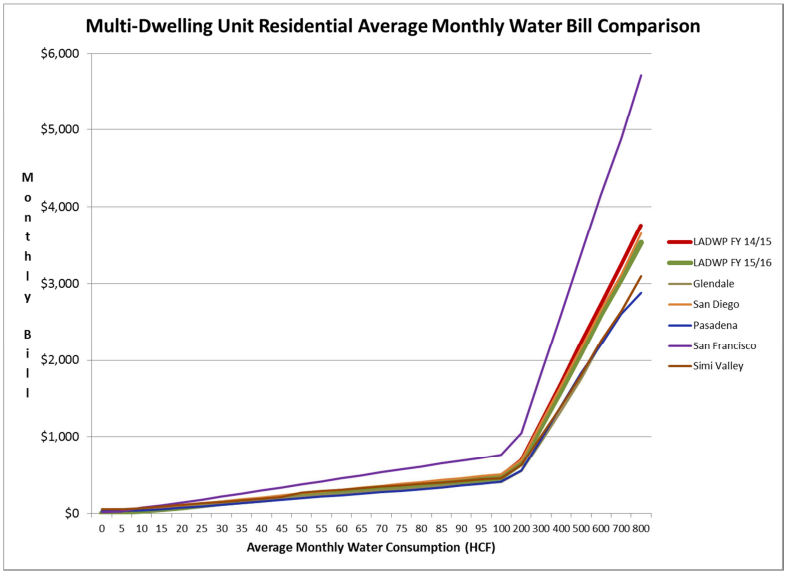
Given the nature of Multi-Dwelling Unit Residential customers, rate impacts are much flatter than Single-Dwelling Unit Residential customers. The highest average annual percentage increase over the next five years for any customer in this class is less than 3.4%.

[39] "Average Monthly Consumption" on x-axis changes scale past 100 HCF.

5.6.4 Multi-Dwelling Unit Residential Comparative Rate Analysis

LADWP's proposed rates for FY 2015-16 compare favorably with other utilities' rates, especially at usage levels up to 100 HCF (representing almost 90% of customers). Increasing rates for higher levels of usage incentivizes conservation where the most opportunity exists. However, LADWP's proposed rates are still comparable to other large California cities based on rate increases announced for these cities, as shown in Figure 43.

Figure 43: Multi-Dwelling Unit Residential Bill Comparisons for Major California Cities at Different Usage Levels[40]



The Department's proposed Multi-Dwelling Unit Residential rates for the next five years are designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for low usage customers;
- Reduce consumption, especially from high usage customers consistent with LADWP's conservation goals;
- Align tier rates with water supply costs;
- Recover costs using adjustment factors tied to actual costs incurred; and
- Ensure full recovery of revenue requirement while protecting customers from over or under-recovery through decoupling.

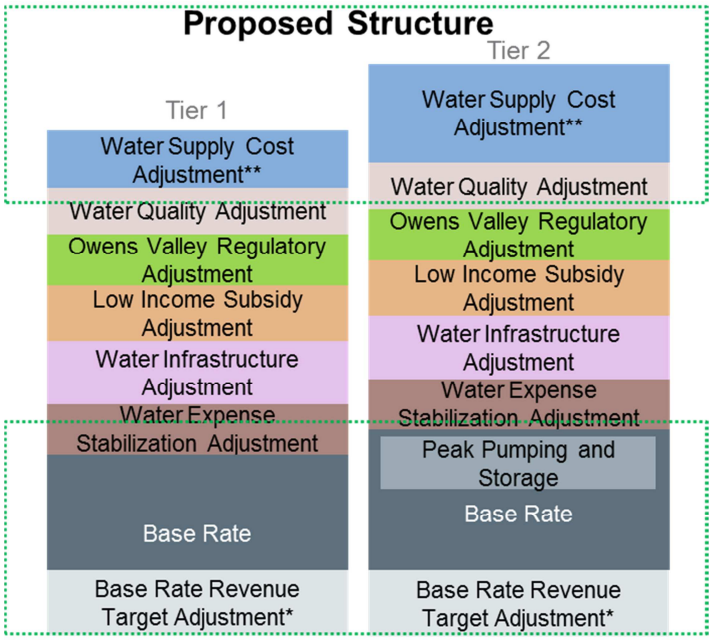
[40] "Average Monthly Water Consumption" on x-axis changes scale past 100 HCF.

5.7 COMMERICAL, INDUSTRIAL, GOVERNMENTAL AND TEMPORARY CONSTRUCTION CUSTOMERS (SCHEDULE C)

LADWP's proposed rates for Schedule C customers are based on the premise that Commercial, Industrial, Governmental and Temporary Construction customers have less discretionary water uses than residential customers and are, therefore, inherently more efficient water users and have fewer opportunities to conserve. Moreover, Schedule C customers are an important economic development engine for the Los Angeles region. Therefore, rates for this class must not be designed in a manner that discourages expansion by using price signals that are more appropriate for other customer classes.

LADWP proposes to structure rates for Schedule C similar to Schedule B rates with the same adjustment factors. In addition, a two-tier structure will be maintained. The proposed overall rate structure for the Commercial, Industrial, Governmental and Temporary Construction customer class is shown in Figure 44. The rate structure will be changed to be consistent for both tiers, with the main difference between tier prices being the increased cost of supply reflected in the WSCA and the peak pumping and storage component of the tier 2 base rate.

Figure 44: Commercial, Industrial Governmental and Temporary Construction Customer Proposed Rate Structure



*BRRTA could be positive (under-collection) or negative (over-collection).

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

Note: For simplification, the Water Security Adjustment is consolidated with the Water Quality Improvement Adjustment (or base rates depending on the cost component).

The Commercial, Industrial, Governmental and Temporary Construction customer class rate structure will include the same decoupling mechanism as the Multi-Dwelling Unit Residential rate structure, the BRRTA. The BRRTA ensures recovery of base rate revenues as defined by the financial plan and also protects customers from over-recovery by returning excess revenues to customers.

5.7.1 Commercial, Industrial, Governmental and Temporary Construction Customer Water Budgets

Initially, proposed tier 1 allotments for the low season will increase to offset the impact of recent shortage year rates and recognize the characteristics of this customer class, including its limited ability to contribute to conservation. Allotments will regularly be higher in the summer. These steps are designed to avoid penalizing seasonal fluctuations in business activity, which are not discretionary forms of less efficient water use.

The major proposed changes include the following items.

- Initially adjust the low and high season water budgets to relieve the pressure imposed on customers by the shortage year allotments. Currently, year-round tier 1 allotments are based on 97.75% of the highest average winter water use (December-March) for the three years prior to the shortage year (2007-09).
  - The low season allotment in the first year (FY 2015-16) is set at the highest of either 100% of actual preceding winter (December – March) usage or 100% of the current recorded tier 1 allotment upon the effective date of the ordinance.
  - The high season allotment is set at the highest of either 105% of actual preceding winter (December – March) usage or 105% of current recorded tier 1 allotment upon the effective date of the ordinance.

  The allotment benchmark is based on each customer's actual usage, so the customer has more control.
- Eliminate shortage year rates. As discussed above, the new allotments are based on the shortage year concepts in light of the continued drought.
- Modify the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates will reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.

Figure 45 outlines the proposed water budget structure compared to the current approach. The changes should relieve customers from the burden imposed by the shortage year allotments and facilitate expansion of jobs and facilities to help the local economy.

Figure 45: Commercial, Industrial, Governmental and Temporary Construction Customer Water Budget Proposal

	Current Approach	Proposed Approach
Tier 1 Allotment	• 97.75% of the highest average winter water use (Dec-Mar) for the three years prior to the shortage year (2007-09) • Applies year-round	• Low season: Highest of 100% of the current recorded tier 1 allotment established upon the effective date of the ordinance or 100% of the actual preceding winter (December 2014–March 2015) usage • High season: Highest of 105% of the current recorded tier 1 allotment established upon the effective date of the ordinance or 105% of actual preceding winter (December 2014–March 2015) usage
Shortage Years	Provides for a reduction in tier 1 allotments in shortage years ("shortage year rates")	• Eliminate shortage year rates • Decoupling ensures financial stability during drought periods
Seasons	High season: June 1 to October 31	High season: June 1 to September 30 (same as power)[41]

5.7.2 Commercial, Industrial, Governmental and Temporary Construction Customer Tier Structure and Rates

Similar to other customer classes, proposed tier thresholds are set based on water use requirements (peak pumping and storage in tier 2 base rates) and water supply costs (WSCA) to encourage water conservation.

5.7.3 Commercial, Industrial, Governmental and Temporary Construction Customer Proposed Rates and Rate Impact

Commercial, Industrial, Governmental and Temporary Construction customer rates for the five-year rate action are developed to recover the revenue requirement associated with providing service to this customer class while recognizing the increasing cost of water supply at higher levels of usage. The proposed rates for the next five years based on the current financial plan are shown in Figure 46.

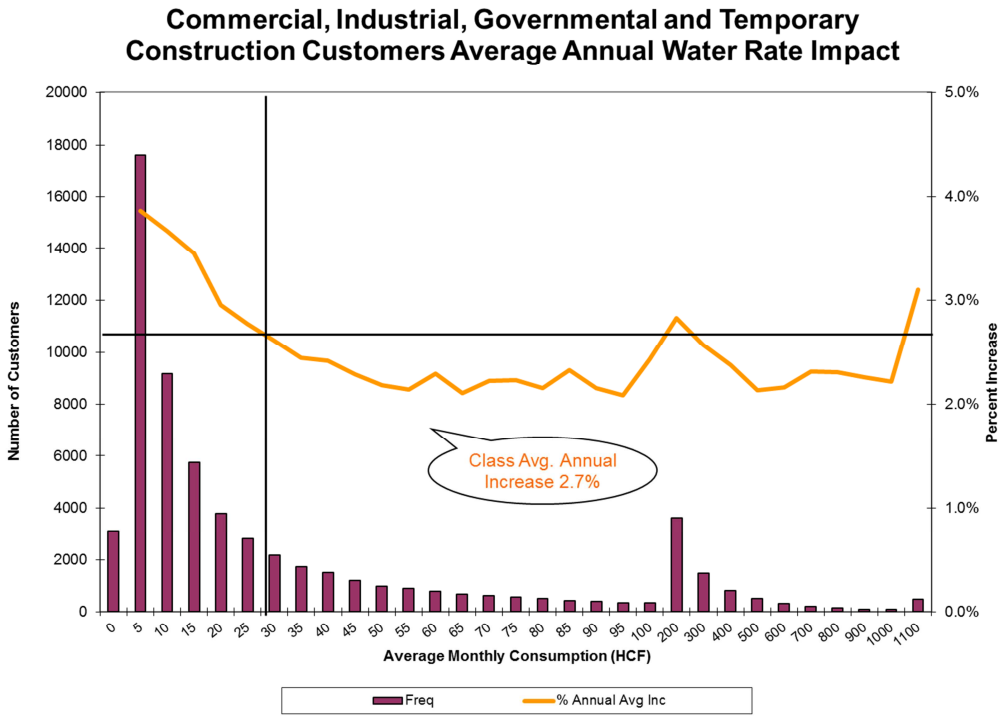
Figure 46: Proposed Commercial, Industrial Governmental and Temporary Construction Customer Rates

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.06	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.90	$6.86	$7.23	$7.74	$8.11	$8.77

[41] Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

Rates are still higher for tier 2, but the difference between the highest and lowest tier is less than for residential customers. The increase for approximately 67% of customers is less than the class average, as shown in Figure 47.

Figure 47: Commercial, Industrial, Governmental and Temporary Construction Customer Water Rate Impact[42]

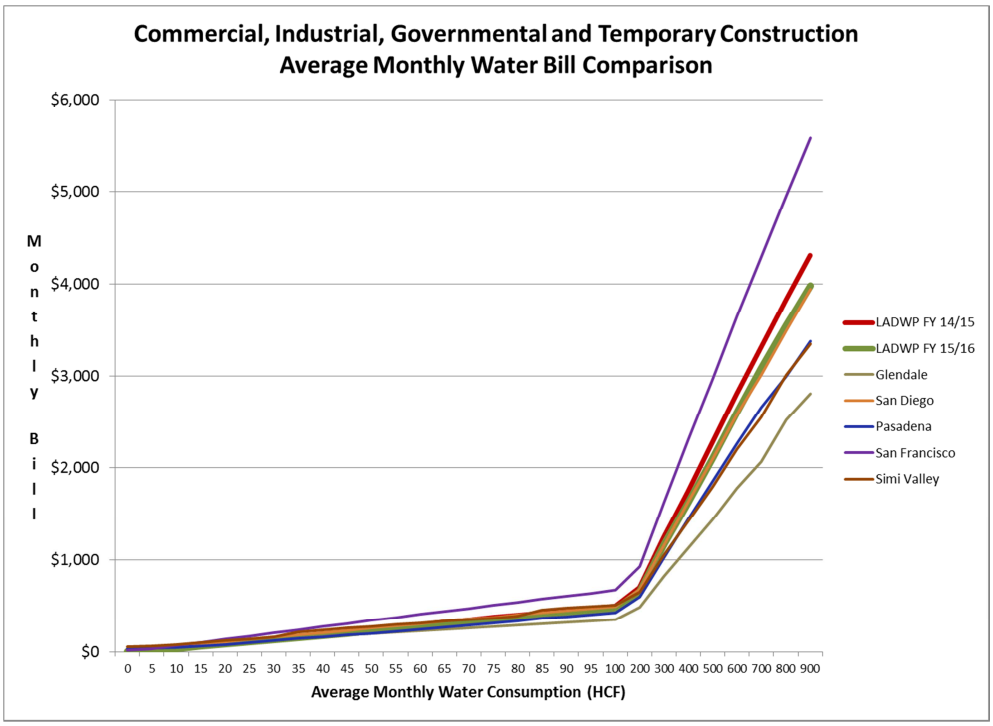


5.7.4 Commercial, Industrial, Governmental and Temporary Construction Customer Comparative Rate Analysis

LADWP's proposed rates and customer bills for FY 2015-16 compare favorably, especially at usage levels up to around 200 HCF that represent over 94% of customers. However, even at the highest levels of usage, LADWP rates are still comparable to other large California cities based on rate increases currently announced for these cities, as shown in Figure 48.

[42] "Average Monthly Consumption" on x-axis changes scale past 100 HCF.

Figure 48: Commercial, Industrial, Governmental and Temporary Construction Customer Bill Comparisons for Major California Cities at Different Usage Levels[43]



In summary, the Department's proposed Commercial, Industrial, Governmental and Temporary Construction customer rates for the next five years are designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for most Schedule C customers;
- Balance conservation and business development;
- Align tier rates with water supply costs;
- Recover costs from adjustment factors tied to actual costs; and
- Ensure full recovery of revenue requirement while protecting customers from over or under-recovery through decoupling.

[43] "Average Monthly Water Consumption" on x-axis changes scale past 100 HCF.

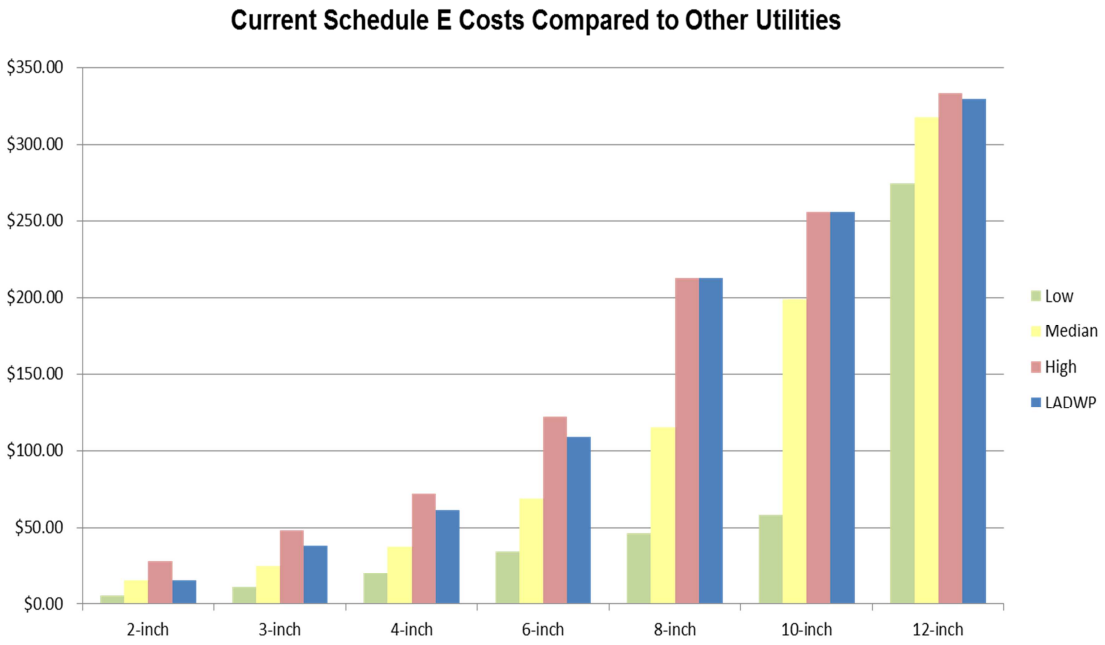
5.8 RECYCLED WATER SERVICE (SCHEDULE D)

Over time, as facilities to deliver Recycled Water Service (Schedule D) become more widely available, several levels of standard service and rates may be established; however, for now, LADWP proposes to continue its current contract approach.

5.9 PRIVATE FIRE (SCHEDULE E)

Current LADWP Private Fire costs are comparable to other utilities, as shown in Figure 49.

Figure 49: Current LADWP Private Fire (Schedule E) Costs Compared to Other Utilities in California[44]



Proposed service availability charge components of the rates will be set based on expected inflation (as measured by the GDP Price Index[45]) to maintain comparable rates to other utilities in California, address capacity design requirements and meet public policy considerations. The proposed service availability charges by connection sizes for Schedule E rates are shown in Figure 50.

[44] Comparison consisted of nine other utilities in California.

[45] https://www.cbo.gov/sites/default/files/cbofiles/attachments/49892-Outlook2015.pdf

Figure 50: Proposed LADWP Private Fire (Schedule E) Service Availability Charges

Size	Current	FY 2015-16 (Proposed)	FY 2016-17 (Proposed)	FY 2017-18 (Proposed)	FY 2018-19 (Proposed)	FY 2019-20 (Proposed)
≤1-in	$ 3.10	$ 3.15	$ 3.20	$ 3.26	$ 3.33	$ 3.39
1.5-in	$ 11.00	$ 11.18	$ 11.35	$ 11.57	$ 11.80	$ 12.04
2-in	$ 15.63	$ 15.88	$ 16.13	$ 16.44	$ 16.77	$ 17.10
3-in	$ 38.49	$ 39.11	$ 39.73	$ 40.49	$ 41.30	$ 42.12
4-in	$ 61.35	$ 62.33	$ 63.33	$ 64.53	$ 65.82	$ 67.14
6-in	$ 108.48	$ 110.22	$ 111.98	$ 114.11	$ 116.39	$ 118.72
8-in	$ 212.39	$ 215.79	$ 219.24	$ 223.41	$ 227.87	$ 232.43
10-in	$ 255.79	$ 259.88	$ 264.04	$ 269.06	$ 274.44	$ 279.93
12-in	$ 328.87	$ 334.13	$ 339.48	$ 345.93	$ 352.85	$ 359.90
14-in	$ 511.58	$ 519.77	$ 528.08	$ 538.12	$ 548.88	$ 559.85
16-in	$ 612.07	$ 621.86	$ 631.81	$ 643.82	$ 656.69	$ 669.83
20-in	$ 821.03	$ 834.17	$ 847.51	$ 863.62	$ 880.89	$ 898.51

Schedule E commodity charges will be the same as Schedule C rates. In general, LADWP rates will remain close to the range of comparable California utilities. Please note that planned rate increases for other utilities have not been considered in this analysis as other utilities have not disclosed information about their future private fire service rate increases.

5.10 PUBLICLY-SPONSORED IRRIGATION; RECREATIONAL; AGRICULTURAL, HORTICULTURAL, AND FLORICULTURAL USES; COMMUNITY GARDENS AND YOUTH SPORTS (SCHEDULE F)

As noted in Section 5.2.2 above, the cost of service study results indicate that Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural uses; Community Gardens and Youth Sports (Schedule F) revenue is significantly under cost, and this situation will be gradually addressed over time.

- Current revenue-$11.4M
- Required revenue in FY2019-20 (based on cost of service)-$44.38M

Schedule F applies to a specifically defined and unique class of customers that mainly include public outdoor parks, gardens, recreational/youth athletic facilities and non-profit educational facilities. Parcels of land used exclusively for commercial production of agricultural, horticultural

or floricultural products in conformance with recognized practices of husbandry are also included.

5.10.1 Schedule F Proposed Rates and Revenue

Immediately aligning rates with costs will result in a significant rate increase for customers. Common rate making principles include the avoidance of rate shock; therefore, due to the magnitude of the rate change, aligning revenue to the results of the cost of service study requires a gradual transition process. In the past, Schedule F customers may have paid less than the cost of service as a result of policy that reflects certain offsetting factors:

- LADWP receives free use of public irrigated land for well sites and storage space;
- LADWP receives free use of public irrigated land for stormwater detention and retention basins that aid stormwater capture for water supply;
- Residents that use public irrigated land are not charged directly for the cost of irrigation water and instead pay a negligible amount in their water rates to subsidize a portion of the cost of such irrigation water; and
- Schedule F customers' supply of water for irrigation is not as reliable because irrigation use is a lower beneficial use under State law and may therefore be subject to greater reductions during droughts.

These factors will continue to exist in the future and therefore warrant consideration in the rates Schedule F customers pay.

A phased rate change will move the Schedule F rates toward the cost of service. An immediate rate change to achieve full cost of service would be an increase of approximately 289%, which is a large rate shock that would result in severe budgetary problems for the City's Recreation and Parks Department and other Schedule F customers. Without a budget increase for irrigation water, the City could be forced to irrigate only one-sixth of its parks, which would be extremely disruptive to the public, as well as damaging to the City's investment in irrigated parks and fields.

LADWP proposes to take the following steps for Schedule F:

- Increase rates until revenues are aligned with cost of service by year five, a reasonable period of time.
- Explore the use of recycled water with Schedule F customers where facilities exist – recycled water rates are higher than current Schedule F rates, but less than expected future rates.
- Work with Schedule F customers to identify savings; examples include:
  - Efficient irrigation equipment

- Drought tolerant landscaping
- Energy efficient pool pumps

The proposed rates to align revenue with the cost of service within a reasonable period of five years are shown in Figure 51.

Figure 51: Proposed Schedule F Rates

	Current	Proposed				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**[46]
Tier 1	$1.37	$1.97	$2.65	$3.48	$4.40	$5.32
Tier 2	$5.90	$6.81	$7.18	$7.71	$8.11	$8.77

As the cost of water increases, the economic return on investing in more efficient irrigation processes becomes more attractive. Improved efficiency reduces the amount of irrigation, potentially reducing the allocation of costs to Schedule F customers as their demand decreases compared to other customer classes. Therefore, the ultimate total rate increase to align with costs could be less than 289% as irrigation efficiency improves.

Currently, Schedule F revenue is less than the cost of water supply, a major component of the overall cost of water service. The increase in Schedule F rates would result in revenue covering the approximate cost of service noted above by the end of the five-year rate period as shown in Figure 52.

Figure 52: Proposed Schedule F Revenue Transition

$ M	**Current**	**Proposed**				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Estimate Revenue	$ 11.4	$ 16.4	$ 22.1	$ 29.0	$ 36.7	$ 44.3

5.11 MISCELLANEOUS OTHER PROPOSED CHANGES

Several other minor changes to the Department's rate structure are proposed to provide continued incentives for conservation for all customer classes and usage levels. These changes are summarized in Figure 53.

[46] In year five, Schedule F rates will be the same as Schedule C rates

Figure 53: Miscellaneous Changes

	Miscellaneous Other Proposed Changes
Household Size (General Provision Q)	General Provision Q will be removed from the ordinance. The proposed Single-Dwelling Unit Residential customer water budgets will not change based on household size; tier 1 allotments will be assumed to include eight HCF regardless of household size. This approach will significantly reduce the permutations in the water budget allotment structure, reduce confusion for customers and improve efficiency for the customer service and billing processes.
Removal of Seasonal Pricing	Remove seasonal pricing from tier 2 rates for Single-Dwelling Unit Residential, Multi-Dwelling Residential and Commercial, Industrial, Governmental and Temporary Construction customers. Instead, seasonal allotments will be used to capture seasonality. Unlike power, water can be stored; therefore, it is important to promote conservation across all seasons. The Department's proposal to remove seasonal pricing will send clear price signals encouraging conservation year-round. As an added benefit, this change will simplify the billing process. Currently, there are a number of variables that impact normal year water rates (seasonal changes to tier 2 base rates, quarterly changes to pass through factors, and changes to tier 1 allotments), which make the proration of monthly billing factors extremely difficult to compute. The elimination of seasonal changes to base rates will significantly simplify this calculation.
Removal of the 5% adder	The current Water Rate Ordinance includes an adder of 5% for financial stability of the Department. The Department will modify the ordinance to remove reference to the 5% provision.
Minimum Charge (General Provision D)	General Provision D will be removed from the ordinance. There will be no minimum charge.

A ORIGINAL DEVELOPED RATES

This appendix provides the water service rate design LADWP originally developed based on long-standing LADWP and industry rate design principles that were followed prior to the recent Fourth Appellate District of the California Court of Appeal decision in Capistrano Taxpayers Association v. City of San Juan Capistrano. The Department's final proposed rate design, as presented in Chapter 5, Water Rate Design, is based on a revised approach developed in light of this court decision. While there are differences between the two rate designs, the resulting rates from the new approach are fairly similar to those rates that would have been developed with the prior methodology. Both designs provide incentives for increased conservation.

The main differences between the original approach and final proposed approach to the water rate design are summarized in Figure 1.

Figure 1: Main Differences Between Originally Developed and Final Proposed Rate Design Approaches

Originally Developed Approach	Final Proposed Approach
Tier differential for all customer classes set based on the Water Procurement Adjustment (WPA) factor that recovers the cost of purchased water, demand side management and water reclamation	• WPA factor eliminated. • Tier differential set based on a new Water Supply Cost Adjustment (WSCA) factor that recovers the cost of all sources of water supply[1] and the peak pumping and storage component of base rates[2] as discussed below
Base Rate Revenue Target Adjustment (BRRTA) factor applies to tiers 1, 2 and 3 for Schedule A and tier 1 for Schedule B, unless resulting tier 3 (Schedule A) or tier 1 (Schedule B) rate was above tier 4 (Schedule A) or tier 2 (Schedule B)	BRRTA factor applies to all tiers for all customer classes
All adjustment factors, except WPA set the same across all tiers and customer classes	WSCA varies by tier but not customer class
Base rates set the same across all tiers for a specific customer class	Peak pumping and storage component of base rates applied to only Schedule A tiers 3 and 4, Schedule B tier 2 and Schedule C tier 2
Schedule A Rate Design:	Tier levels differentiated by water supply and peak

[1] For information about the WSCA, refer to Section 5.4.7 of Chapter 5, Water Rate Design.

[2] For information about the peak pumping and storage component of base rates, refer to Section 5.4.13 of Chapter 5, Rate Design.

Originally Developed Approach	Final Proposed Approach
Tier levels differentiated by water supply costs defined by the WPA as follows: • Tier 2 – customer class average • Tier 1 – less than class average • Tier 3 – Above class average • Tier 4 – marginal cost of water supply	pumping and storage costs: • Water supply assigned to tiers, starting with the least expensive source of supply and with the same tier treated equally for all major customer classes • Peak pumping and storage costs applied to tiers 3 and 4 only to reflect the added cost associated with high levels of water usage
Schedule B Rate Design: Tier levels differentiated by water supply costs defined by the WPA as follows: • Tier 1 – average supply cost • Tier 2 - closer to the marginal cost of water (recycled water)	Tier levels differentiated by water supply and peak pumping and storage costs: • Water supply assigned to tiers, starting with the least expensive source of supply and with the same tier treated equally for all major customer classes • Peak pumping and storage costs applied to tier 2 only to reflect the added cost associated with high levels of water usage
Schedule C Rate Design: Tier levels differentiated by water supply costs defined by the WPA as follows: • Tier 1 – average supply cost • Tier 2 - closer to the marginal cost of water (recycled water)	Tier levels differentiated by water supply and peak pumping and storage costs: • Water supply assigned to tiers, starting with the least expensive source of supply and with the same tier treated equally for all major customer classes • Peak pumping and storage costs applied to tier 2 only to reflect the added cost associated with high levels of water usage
Schedule A Water Budget: • Tier 1 - 8 HCF • Tier 2 and 3 allotments based on lot size, temperature zone and season	No change

Originally Developed Approach	Final Proposed Approach
Schedule B Water Budget: • Tier 1 (base year) – allotment set at the highest of 105% of the current recorded allotment established upon the effective date of the new ordinance or 105% of the average winter (December 2014-March 2015) usage • Tier 1 (FY 2015-16) – allotment set at the highest of 93% of the recorded allotment established upon the effective date of the new ordinance or 93% of the average (December 2014-March 2015) usage • Tier 1 (FY 2016-17) – allotment set at the highest of 88% of the recorded allotment established upon the effective date of the new ordinance or 88% of the preceding average (December 2014-March 2015) usage; FY 2016-17 allotment applies for FY 2017-18 through FY 2019-20	Schedule B Water Budget: • Tier 1 (base year) – allotment set at the highest of 100% of the current recorded allotment established upon the effective date of the new ordinance or 100% of the average winter (December 2014-March 2015) usage • Tier 1 (FY 2015-16) – no change • Tier 1 (FY 2016-17) – no change
Schedule C Water Budget: • Tier 1 (year 1) low season – allotment set at the highest of 105% of actual preceding winter (December – March) usage or 105% of the current recorded tier 1 allotment upon the effective date of the ordinance. • Tier 1 (year 1) high season - allotment set at the highest of either 115% of actual preceding winter (December – March) usage or 115% of current recorded tier 1 allotment upon the effective date of the ordinance.	Schedule C Water Budget: • Tier 1 (year 1) low season – allotment set at the highest of actual preceding winter (December – March) usage or the current recorded tier 1 allotment upon the effective date of the ordinance. Tier 1 (year 1) high season - allotment set at the highest of either 105% of actual preceding winter (December – March) usage or 105% of current recorded tier 1 allotment upon the effective date of the ordinance.

The following sections of this appendix provide the originally developed rate design and the process followed to develop the original rate design.

1.1 SINGLE-DWELLING UNIT RESIDENTIAL (SCHEDULE A)

LADWP's original design utilized a four-tier rate structure for Single-Dwelling Unit Residential customers that included the same adjustment factors and base rate components and associated rates for each tier, an exception being the WPA factor. The WPA was designed to increase for each higher tier to reflect the higher incremental costs of water supply needed to meet increasing levels of demand. The original rate structure included decoupling in the form of a symmetrical BRRTA factor, designed to ensure recovery of base rate revenues as defined by the financial plan, and also to protect customers from over-recovery by automatically returning excess revenues to customers.

1.1.1 Single-Dwelling Unit Residential Customer Water Budgets

Changes to water budget allotments for Single-Dwelling Unit Residential customers were designed to further incentivize conservation. The major changes, which included the following items, have not been changed in the final proposed rate design.

- Eliminate household size variation as an element in determining water budgets. Currently, a base allotment of six HCF per month (150 gallons per day) is provided for a household of up to six people with increased amounts for additional people. Historically, this process has been confusing to customers and administratively complex. Many customers have not even reported actual household size.
- Establish a fixed tier 1 allotment based on eight HCF per month (200 gallons per day), which is an increase for many customers.
- Decrease the number of lot sizes from five to four with lot size a factor in setting water budgets for tiers 2 and 3. Outdoor usage is typically the largest use of water. With today's irrigation technology and the options for drought-resistant landscape, customers should have alternatives to help manage the cost of outdoor water use.
- Modify the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates will reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.
- Eliminate shortage year rates. The new allotments are based on the shortage year concepts in light of the continued drought.

Figure 2 provides a comparison of the originally developed water budget structure compared to the current approach. The changes were designed to tighten allotments, especially for higher usage levels and also make the structure easier for customers to understand and for LADWP's customer service representatives to communicate.

Figure 2: Single-Dwelling Unit Residential Customer Originally Developed Water Budget Proposal

	Current Approach (Two Tiers)	Originally Developed Approach (Four Tiers)
Household Size – First Tier Usage	• Minimum household size – Six people • Additional two HCF per person – next three persons • Additional one HCF per person - next four persons • For 24 specified ZIP codes, minimum household size - eight	All customers receive eight HCF per month for tier 1 usage throughout the year
Tier Allotment Determination	Tier 1 allotment based on lot size, temperature zone, season and household size	• Tier 1 based on 8 HCF • Tier 2 and 3 allotments based on lot size, temperature zone and season
Lot Size Groups	• Five lot size groups • Tier 1 allotments vary by lot size in high and low seasons	• Four lot size groups • Tier 2 and 3 allotments vary by lot size in high and low seasons
Temperature Zones	Three temperature zones	Three temperature zones
Seasonal Allotments	Different tier 1 allotments set for low and high seasons	Different tier 2 and 3 allotments for low and high seasons
Seasons	High season: June 1 to October 31	High season: June 1 to September 30, to be consistent with power*
Shortage Years	Provides for a reduction in tier 1 allotments in shortage years ("shortage year rates")	• Eliminate shortage year rates • Decoupling ensures financial stability during drought periods

*Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

The resulting allotments for the originally developed rate structure are shown in Figure 3. All customers would receive eight HCF for tier 1 usage. Additional water budget allotments would be applied to tiers 2 and 3 to recognize higher water use needs for larger lots, in higher temperature zones and during the summer. Usage above tier 3 allotments would be charged at tier 4 rates to all customers.

Figure 3: Originally Developed Single-Dwelling Unit Residential Customer Allotments (HCF)

Tier 1					
Indoor Use	8				
Tier 2 (Added to Tier 1 Water Allotment)					
Lot sizes (square feet)	7,500	11,000	17,500	43,559	43,559 +
Winter (Oct-May)	3	4	8	10	

Summer (June-Sep)					
Low temp	6	9	17	21	21
Mid temp	7	10	19	24	24
High temp	9	12	25	31	31
Tier 3 (Added to Tier 2 Water Allotment)					
Lot sizes (square feet)	7,500	11,000	17,500	43,559	43,559 +
Winter (Oct-May)	6	8	16	20	20
Summer (June-Sep)					
Low temp	12	18	34	42	42
Mid temp	14	20	38	48	48
High temp	18	24	50	62	62
Tier 4 (All Usage Above Tier 3)					

As shown in Figure 4, over 90% of customer bills would have usage in only tiers 1-3. The relatively higher tier 4 rates would incentivize reduced usage where the most opportunity for conservation exists.

Figure 4: Originally Developed Tier Distribution for Single-Dwelling Unit Residential Customers

Lot Size (Square Feet)	Total Customers	Tier 1 Customers	Tier 2 Customers	Tier 3 Customers	Tier 4 Customers	% of Customers in Tier 4
Temperature Zone 1						
Up to 7,499	36,653	13,543	10,418	10,245	2,447	**6.7%**
7,500-10,999	8,375	1,232	2,041	3,725	1,377	**16.4%**
11,000-17,499	5,406	465	1,597	2,522	822	**15.2%**
Above 17,500	5,461	302	1,002	2,143	2,014	**36.9%**
Temperature Zone 2						
Up to 7,499	176,318	68,476	49,874	46,267	11,701	**6.6%**
7,500-10,999	36,567	7,635	10,134	13,779	5,019	**13.7%**
11,000-17,499	11,717	1,492	3,609	5,147	1,469	**12.5%**
Above 17,500	7,325	733	1,882	2,614	2,096	**28.6%**

Lot Size (Square Feet)	Total Customers	Tier 1 Customers	Tier 2 Customers	Tier 3 Customers	Tier 4 Customers	% of Customers in Tier 4
Temperature Zone 3						
Up to 7,499	79,817	18,192	24,997	30,991	5,637	**7.1%**
7,500-10,999	66,667	8,411	21,037	31,693	5,526	**8.3%**
11,000-17,499	29,335	1,930	10,384	15,364	1,657	**5.6%**
Above 17,500	20,565	1,523	6,658	9,893	2,491	**12.1%**
Total	**484,206**	**123,934**	**143,633**	**174,383**	**42,256**	
% by Tier		**25.6%**	**29.7%**	**36.0%**	**8.7%**	

Combined with tier rates, which lowers initial rates for low usage customers, modifications to the Department's water budget structure were designed to help facilitate additional conservation to meet the Mayor's directive to reduce per capita usage by 20% by 2017. None of these aspects of the Schedule A water budget approach from the originally developed rate design have changed in the final proposed rate design.

1.1.2 Single-Dwelling Unit Residential Customer Tier Structure and Rates

LADWP had originally developed a four-tier structure for Single-Dwelling Unit Residential rates which is consistent with the final proposed structure. Tier thresholds generally were set based on indoor and outdoor water use requirements and water supply costs, which should encourage water conservation; the major differentiating amount between tier rates was water supply costs.

1.1.3 Use of Evapotranspiration Factors

LADWP's originally developed tier thresholds were guided by evapotranspiration adjustment factors (ETAFs), which are measures used to adjust the maximum calculated water use based on plants, turf, and irrigation efficiency. This approach, developed by the California Department of Water Resources as part of a "Model Water Efficient Landscape Ordinance" in 2008, has not changed in developing the final proposed rates.

According to a Department of Water Resource White Paper entitled "Evapotranspiration Adjustment Factor:"

> "The evapotranspiration adjustment factor (ETAF) is a coefficient that adjusts reference evapotranspiration (ETo) values based on a plant factor (PF) and irrigation efficiency (IE) and is used to calculate the maximum amount of water that can be applied to a landscape. ETo is a combination of evaporation and transpiration from standardized grass surfaces on which weather parameters are measured and ETo is then calculated. The plant factor includes effects of plant type, plant density, and microclimate on the water demand of a landscape.

> Irrigation efficiency is the amount of water that is beneficially used divided by the total amount of water applied.[3]"

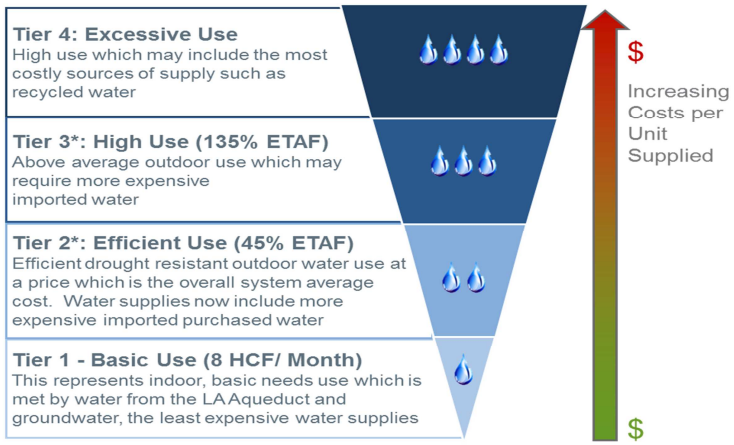
The ETAF is calculated by dividing the plant factor by IE (PF / IE = ETAF).

According to the Department of Water Resources study, in 2008, the Model Ordinance utilized a Statewide plant factor of 0.5, representing a mix of 1/3 high, 1/3 moderate, and 1/3 low water using plants. The irrigation efficiency for purposes of the ETAF in the ordinance was 0.625 (or 62.5%). The ETAF was obtained by dividing the average plant factor of 0.5 by the average irrigation efficiency of 62.5%, resulting in an ETAF of 0.8.

Since 2008, advances in irrigation technology and the availability of drought tolerant landscape have reduced ETAFs. The San Diego County Water Agency proposed an ETAF factor of 0.7. The Coachella Valley Water District adopted a more aggressive ETAF of 0.5.

To address the current drought, LADWP originally developed its tier 2 rate using an ETAF of 45% to represent the most efficient landscape; to offset the strict ETAF and provide time for customers to adapt to the drought reduction programs, the initial tier 2 rates were set lower than existing tier 1 rates. Tier 3 rates were set using an ETAF of 135% to represent much less efficient irrigation and non-drought tolerant landscaping in an effort to encourage customers to transition to a more efficient combination. Figure 5 outlines the four tiers and assumptions regarding the type of landscape on which tier rates are based. These aspects of the originally developed rate design have not changed in the final proposed rate design.

Figure 5: Originally Developed Single-Dwelling Unit Residential Customers Proposed Tier Water Usage Structure

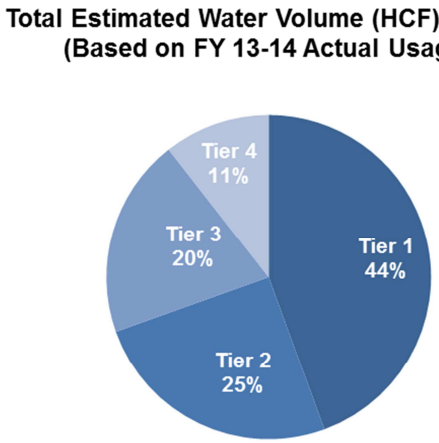


* Tier 2 and 3 allotments would also vary based on temperature zone and lot size.

[3] White Paper: Evapotranspiration Adjustment Factor, January 25, 2008, prepared by the Department of Water Resources staff in support of the updated Model Water Efficient Landscape Ordinance (http://www.water.ca.gov/wateruseefficiency/docs/etWhitePaper.pdf)

Based on FY 2013-14 actual usage, following this proposed approach would result in almost 70% of overall water usage being in tiers 1 and 2, as shown in Figure 6.

Figure 6: Distribution of Single-Dwelling Unit Residential Customer Water Usage Among Tiers for Originally Developed Rate Design



The originally developed rate structure and rates were established to incentivize customers to eliminate their tier 4 usage.

1.1.4 Rate Development Process

Consistent with the final proposed rate design, rates for each tier would represent the total of the base rate and all adjustment factors; the calculations of the adjustment factors would be based on accounting records. Amongst the four tiers, the base rate component and all adjustment factors (except the WPA and the BRRTA) were originally developed to be the same on a volumetric basis using the following process.

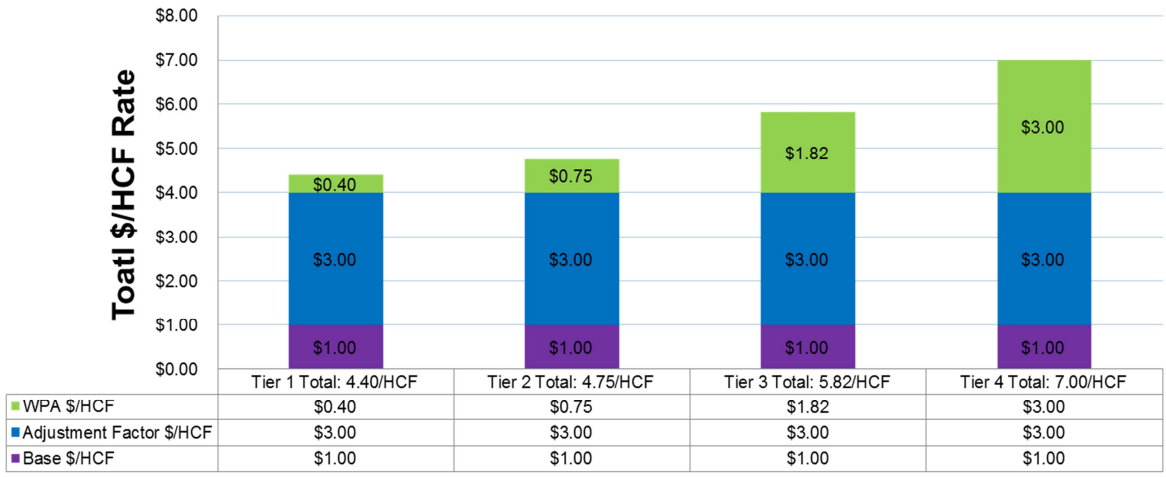
- Determine the total customer class rate per HCF (total class revenue requirement divided by total class usage).
- Deconstruct the total class HCF amount into the following components:
  - Total of the following adjustment factors: Water Quality Improvement Adjustment (WQIA), Owens Valley Regulatory Adjustment (OVRA), Low Income Subsidy Adjustment (LISA), Water Infrastructure Reliability Adjustment (WIRA) and Water Expense Stabilization Adjustment (WESA).
  - Base rates; and
  - Water Procurement Adjustment (WPA) to reflect water supply costs.

Starting with the total class $ per HCF rate, subtract the per HCF amount of all the adjustment factors except the WPA to get a base plus WPA rate for each tier.

- The base plus WPA per HCF rate was then further deconstructed by removing the total class base HCF rate to determine the total customer class WPA.
- The base rate and all adjustment factors (except the WPA) per HCF rates were set the same for all class usage.
- WPA rates by tier were then set by spreading the remaining revenue requirement representing the WPA based on the different water supply costs and ETAF guidelines.

This methodology sets rates for each tier based on water supply costs with tier 1 rates generally based on the lowest supply cost over time, LA aqueduct supply, and tier 4 rates based on the highest reasonable supply cost, recycled water. The components of the tiers, with rates representing the originally developed FY 2015-16 rates for each tier, are provided in Figure 7.

Figure 7: FY 2015-16 Originally Developed Single-Dwelling Unit Residential Customer Tier Rate Components



	Tier 1 Total: 4.40/HCF	Tier 2 Total: 4.75/HCF	Tier 3 Total: 5.82/HCF	Tier 4 Total: 7.00/HCF
WPA $/HCF	$0.40	$0.75	$1.82	$3.00
Adjustment Factor $/HCF	$3.00	$3.00	$3.00	$3.00
Base $/HCF	$1.00	$1.00	$1.00	$1.00

1.1.5 Single-Dwelling Unit Residential Customer Proposed Rates

Single-Dwelling Unit Residential rates for the five-year rate action were originally developed through the process outlined above to recover the revenue requirement while recognizing the increasing cost of water supply at higher levels of usage. The original resulting rates for FY 2015-16 aligned to the following cost principles.

- Tier 1 rates were below the average overall customer class rates to recognize the most efficient use of water and recognize the necessity of basic (largely indoor) water use.
- Tier 2 rates approximated the average customer class rate, reflecting the average customer class cost of service (generally based on lower costs of water sources such as LA Aqueduct supply).
- Tier 3 rates were above the average overall customer class cost recognizing the increasing cost of supply, which encourages conservation.

- Tier 4 rates were close to the marginal cost of water supply (recycled water).

The difference between the tier 2 rate and the tier 4 rate was approximately equal to the difference between the average water supply cost and the long run marginal cost of recycled water. In total, the proposed rates were set to ensure recovery of the total revenue requirement. The originally developed rates for the five-year rate action based on the then current financial plan are shown in Figure 8.

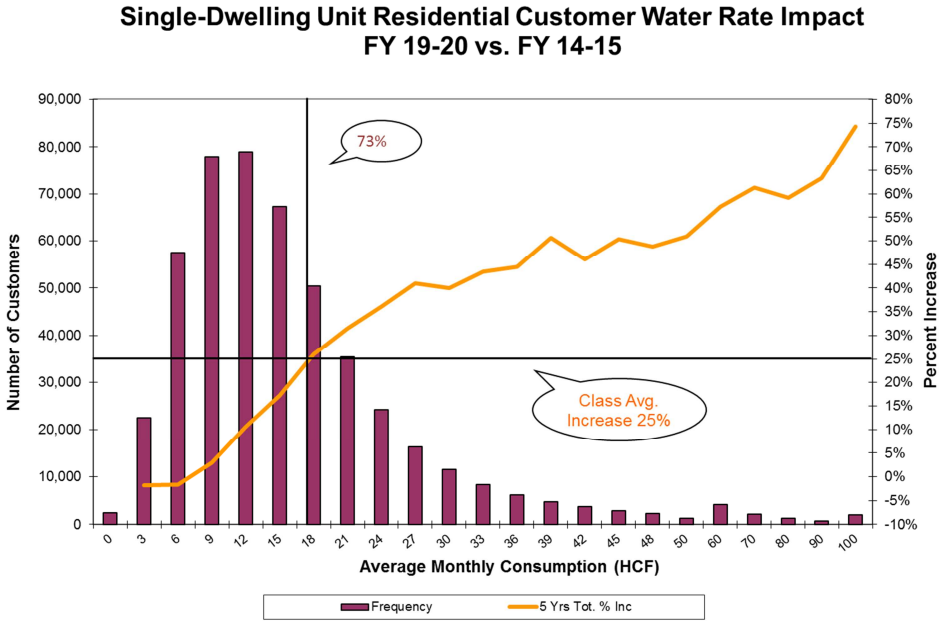
Figure 8: Originally Developed Single-Dwelling Unit Residential Rates

	Current	Originally Developed				
Fiscal Year	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**
Tier 1	$ 4.96	$ 4.40	$ 4.60	$ 4.85	$ 4.98	$ 5.12
Tier 2	$ 5.90	$ 4.75	$ 5.15	$ 5.67	$ 6.09	$ 6.49
Tier 3		$ 5.82	$ 6.54	$ 7.70	$ 8.14	$ 8.49
Tier 4		$ 7.00	$ 10.00	$ 10.00	$ 10.00	$ 10.00

By following this process and the ETAF guidelines, the originally developed rates for tiers 1 and 2 were set at or below the current tier 1 rate; therefore, the majority (almost 70%) of customers saw no increase as a result of the restructuring in FY 2015-16. Most of the rate increase was focused on the higher levels of usage (tiers 3 and 4), where the most opportunity for conservation exists. These characteristics of the originally developed rates remain largely the same with the final proposed rates.

By assigning significant portions of the revenue requirement to heavy users, 73% of customers would see an increase below the class average over the next five years, as shown in Figure 9.

Figure 9: Originally Developed Single-Dwelling Unit Residential Customer Water Rate Impact[4]

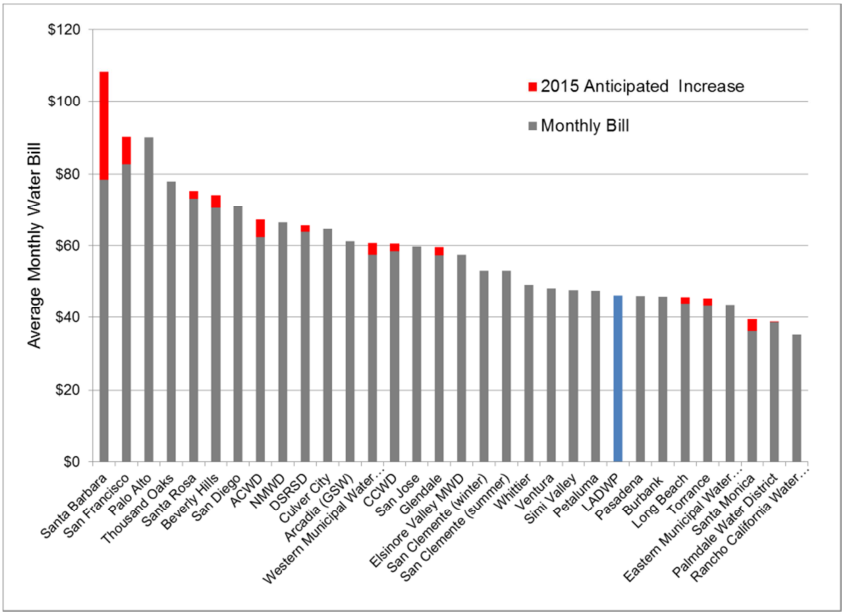


1.1.6 Single-Dwelling Unit Residential Customer Comparative Rate Analysis

LADWP's typical Single-Dwelling Unit Residential bills (based on 12 HCF of monthly usage) for proposed FY 2015-16 were originally developed to remain competitive with estimated bills of other California water utilities, as reflected in Figure 10.

[4] "Average Monthly Consumption" on x-axis changes scale past 50 HCF.

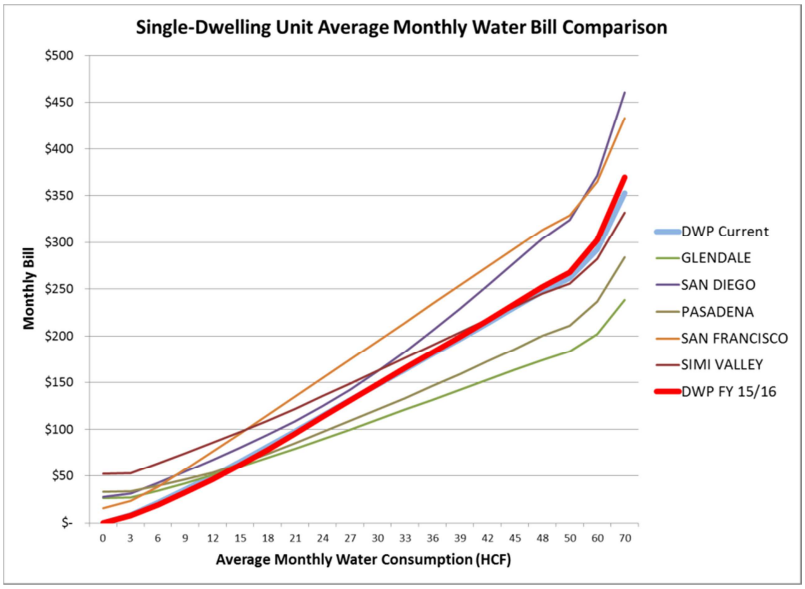
Figure 10: Single-Dwelling Unit Residential Customer Typical Bill Comparison Analysis (Estimated)[5]



LADWP's originally developed rates and customer bills for FY 2015-16 compared favorably to other major California utilities, especially at low usage levels that represent 50% or more of the Department's customers. Increasing rates for higher levels of usage incentivizes conservation where the most opportunity exists; however, LADWP rates would remain less than the rates of other large California cities based on rate increases announced for these cities, as shown in Figure 11. LADWP's proposed rates would also result in typical bills lower than other major California cities.

[5] 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 sqft irrigable land and lowest pumping zone charge where applicable.

Figure 11: Single-Dwelling Unit Residential Customer Bill Comparisons for Major California Cities at Different Usage Levels Based on Originally Developed Rates[6]



In summary, the Department's originally developed Single-Dwelling Unit Residential rates for the next five years were designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for low usage customers;
- Reduce consumption, especially from high usage customers, consistent with LADWP's conservation goals;
- Reduce the number of water budget determining factors;
- Provide a reasonable transition from two to four tiers;
- Align tier rates with water supply costs;
- Recover costs using adjustment factors tied to actual costs incurred; and
- Ensure full recovery of revenue requirement while protecting customers from over or under-recovery through decoupling.

These objectives continue to be met by the final proposed rates.

1.2 MULTI-DWELLING UNIT RESIDENTIAL (SCHEDULE B)

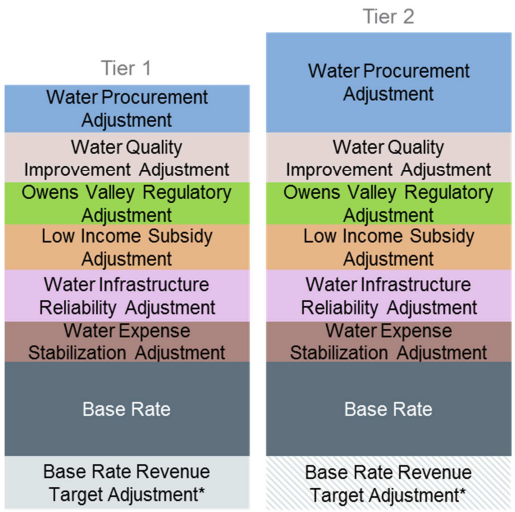
To meet the Mayor's 20% conservation objective, Multi-Dwelling Unit Residential customers must also reduce consumption. Therefore, the originally developed rates for Schedule B were

[6] "Average Monthly Water Consumption" on x-axis changes scale past 50 HCF.

established to provide incentives for customers, especially higher users, to significantly reduce consumption.

The originally developed Schedule B rate structure was similar to Schedule A with the same adjustment factors and amounts as for Single-Dwelling Unit Residential customers with the exception of the WPA and BRRTA. However, a two-tier structure was maintained. The originally developed overall rate structure for the Multi-Dwelling Unit Residential customer class is shown in Figure 12.

Figure 12: Originally Developed Multi-Dwelling Unit Residential Rate Structure



* Base Rate Revenue Target Adjustment (BRRTA) could be positive (under-collection) or negative (over-collection); to encourage conservation; this adjustment would be applied only to tier 1 unless the resulting tier 1 rate equaled or exceeded the tier 2 rate, in which case the BRRTA would also apply to tier 2.

Note: For simplification the Water Security Adjustment is consolidated with the Water Quality Improvement Adjustment (or base rates depending on the cost component).

The Multi-Dwelling Unit Residential customer class rate structure included the same BRRTA decoupling mechanism as for Single-Dwelling Unit Residential customers to ensure recovery of base rate revenues as defined by the financial plan but also protect customers from over-recovery by returning excess revenues to customers. Similarly, to send the strongest conservation signals, the BRRTA was applied only to tier 1 unless the resulting tier 1 rate equaled or exceeded the tier 2 rate, in which case the BRRTA would also apply to tier 2.

1.2.1 Multi-Dwelling Unit Residential Water Budgets

Water budgets were designed based on the characteristics of a multifamily environment while still providing incentives for additional conservation. The major changes for the originally developed rate design included the following items designed to help relieve the pressure of shortage year allotments on customers.

- Set the base period (FY 2014-15) allotment for the high season (summer) usage at the highest of 105% of actual prior winter (December – March) usage or 105% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
- For FY 2015-16, reduce usage to the highest of 93% of the base period (FY 2014-15) usage or 93% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
- For FY 2016-17, reduce usage to the highest of 88% of the base period (FY 2014-15) usage or 88% of the current recorded tier 1 allotment upon the effective date of the new ordinance.
- Establish a 24 HCF per month minimum allotment in line with the current shortage year minimum allotment level.
- Eliminate shortage year rates. As aforementioned, the new allotments are based on the shortage year concepts in light of the continued drought.
- Modify the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates will reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.

Figure 13 outlines the originally developed water budget structure compared to the current approach. The changes were designed to tighten allotments, especially for higher usage levels.

Figure 13: Originally Developed Multi-Dwelling Unit Residential Water Budget Proposal

	Current Approach	Originally Developed Approach
Tier 1 Allotment	• 97.75% of the highest average winter water use (Dec-Mar) for the three years prior to the shortage year (2007-09) • Applies year-round (no high/low season) • 28 HCF per month minimum allotment	• Highest of 105% of the current recorded allotment established upon the effective date of the new ordinance or 105% of the average winter (December 2014-March 2015) usage • Reduced to highest of 93% of the recorded allotment established upon the effective date of the new ordinance or 93% of the average winter (December 2014-March 2015) usage in FY 2015-16 • Highest of 88% of the recorded allotment established upon the effective date of the new ordinance or 88% of the preceding average winter (December 2014-March 2015) usage in FY 2016-17 through FY 2019-20 • 24 HCF per month minimum allotment • Applies year-round (no high/low season)
Seasons	High season: June 1 to October 31	High season: June 1 to September 30 (consistent with power)[7]
Shortage	Provides for a reduction in tier 1 allotments in shortage years	• Eliminate shortage year rates

[7] Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

	Current Approach	Originally Developed Approach
Years	("shortage year rates")	• Decoupling ensures financial stability during drought periods

LADWP recognizes that some Schedule B customers have been successful in conserving water usage and therefore have fewer opportunities to further reduce usage compared to other Schedule B customers. If a Schedule B customer can demonstrate with verification by the Department that all possible water conservation measures have been implemented[8], the customer's first tier allotment shall remain fixed at the allocation level established upon the date of verification.

1.2.2 Multi-Dwelling Unit Residential Tier Structure and Rates

Proposed tier thresholds were generally set based on water use requirements and water supply costs to encourage water conservation; the major differentiating amount between tier rates were water supply costs.

1.2.3 Rate Development Process

Similar to Single-Dwelling Unit Residential customer rates, originally developed Multi-Dwelling Unit Residential customer rates for each tier represented the total of base rates and all adjustment factors. The base rate component and all adjustment factors (except the WPA and BRRTA) are set the same for both of the tiers on a volumetric basis using the following process.

- Starting with the total class HCF rate, subtract the per HCF amount of all the adjustment factors except the WPA to get a base plus WPA rate for each tier.
- The base plus WPA HCF rate was then further deconstructed by removing the total class base HCF rate to determine the total customer class WPA.
- The base rate and all adjustment factors (except the WPA) per HCF rates were set the same for all class usage regardless of tier.
- The WPA was higher for tier 2 to reflect the higher cost of water supply as usage increases.

This methodology set rates for each tier based on water supply costs. Tier 1 rates were generally based on the average supply cost and tier 2 rates were set closer to the marginal cost of water (recycled water). Therefore, the originally developed rate structure provided consistency across both tiers with the main difference between tier prices being the incremental cost of supply reflected in the WPA factor.

The decoupling mechanism, BRRTA factor, for the multi-dwelling unit residential customer class was calculated following the same process as for Single-Dwelling Unit Residential customers.

[8] Specific requirements for verification will be developed by LADWP and approved by the Board.

However, the Multi-Dwelling Unit Residential BRRTA reflected the over/under-collection for this specific customer class. In addition, to encourage conservation within this customer class, the BRRTA was applied only to tier 1, unless the resulting tier 1 rate exceeds the tier 2 rate, in which case the BRRTA will be applied to both tiers 1 and 2.

1.2.4 Multi-Dwelling Unit Residential Proposed Rates

The originally developed Multi-Dwelling Unit Residential rates for the five-year rate action were established through the process outlined above to recover the revenue requirement while recognizing the increasing cost of water supply at higher levels of usage. The resulting rates for FY 2015-16 aligned to the following cost principles.

- To help provide incentives for conservation, while minimizing the impact on low usage customers, tier 1 rates were set close to the Schedule B customer class average.
- Tier 2 rates were set approximately 30% above tier 1 rates to reflect supply marginal cost differences and balance conservation incentives with recognition that not all tier 2 usage is always inefficient for this customer class.

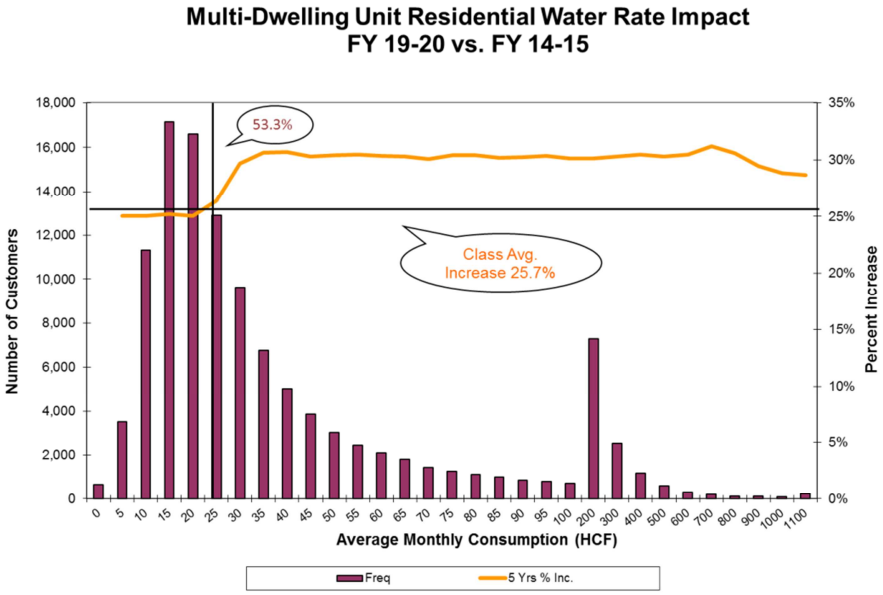
The difference between the originally developed tier 1 and tier 2 rates was approximately the difference between the average water supply cost and the long run marginal cost of recycled water. In total, the originally developed rates were set to ensure recovery of the total revenue requirement. The originally developed rates for the five-year rate action based on the then current financial plan are shown in Figure 14.

Figure 14: Originally Developed Multi-Dwelling Unit Residential Rates

	Current	Originally Developed				
Fiscal Year	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**
Tier 1	$4.97	$4.93	$5.22	$5.64	$5.93	$6.22
Tier 2	$5.90	$6.44	$6.80	$7.31	$7.71	$8.07

By assigning significant portions of the higher revenue requirement to heavy users, over 50% of customers would have seen an increase below the class average over the next five years, as shown in Figure 15.

Figure 15: Originally Developed Multi-Dwelling Unit Residential Customer Water Rate Impact[9]



Similar to Schedule A rates, Schedule B rates encourage conservation by assigning significant portions of the higher revenue requirement to heavy users commensurate with the above-average burden they place on the system.

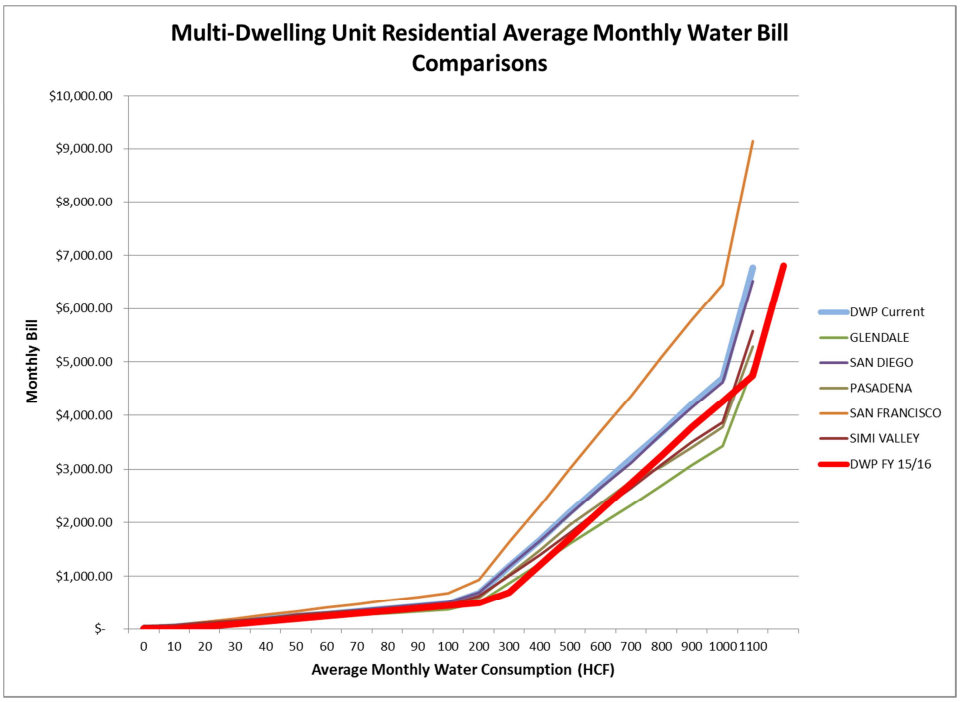
Given the nature of Multi-Dwelling Unit Residential customers, rate impacts were much flatter than Single-Dwelling Unit Residential customers. The highest average annual percentage increase over the next five years for any customer in this class was less than 6.3%.

1.2.5 Multi-Dwelling Unit Residential Comparative Rate Analysis

LADWP's originally developed rates for FY 2015-16 compared favorably with other utilities' rates, especially at usage levels up to 100 HCF (representing almost 90% of customers). Increasing rates for higher levels of usage incentivizes conservation where the most opportunity exists. However, LADWP's originally developed rates were still comparable to other large California cities based on rate increases announced for these cities, as shown in Figure 16.

[9] "Average Monthly Consumption" on x-axis changes scale past 100 HCF.

Figure 16: Multi-Dwelling Unit Residential Bill Comparisons for Major California Cities at Different Usage Levels Based on Originally Developed Rates[10]



The Department's originally developed Multi-Dwelling Unit Residential rates for the next five years were designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for low usage customers;
- Reduce consumption, especially from high usage customers, consistent with LADWP's conservation goals;
- Align tier rates with water supply costs;
- Recover costs using adjustment factors tied to actual costs incurred; and
- Ensure full recovery of revenue requirement while protecting customers from over- (or under-) recovery through decoupling.

These objectives continue to be met by the final proposed rates.

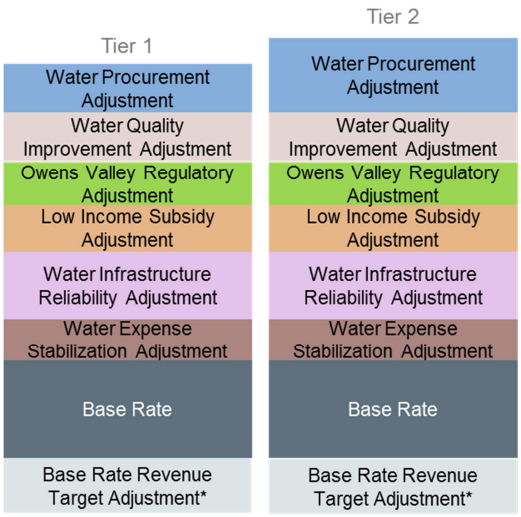
[10] "Average Monthly Water Consumption" on x-axis changes scale past 100 HCF.

1.3 COMMERICAL, INDUSTRIAL, GOVERNMENTAL AND TEMPORARY CONSTRUCTION CUSTOMERS (SCHEDULE C)

LADWP originally developed rates for Schedule C customers that were based on the premise that Commercial, Industrial, Governmental and Temporary Construction customers have less discretionary water uses than residential customers and are, therefore, inherently more efficient water users and have fewer opportunities to conserve. Moreover, Schedule C customers are an important economic development engine for the Los Angeles region. Therefore, rates for this class must not be designed in a manner that discourages expansion by using price signals that are more appropriate for other customer classes.

LADWP originally developed a Schedule C rate structure similar to Schedule B with the same adjustment factors. Rate amounts for base rates and adjustment factors were also the same, with the exception of the WPA. In addition, a two-tier structure was maintained. The originally developed overall rate structure for the Commercial, Industrial, Governmental and Temporary Construction customer class is shown in Figure 17. The rate structure was changed to be consistent for both tiers with the main difference between tier prices being the incremental cost of supply reflected in the WPA.

Figure 17: Originally Proposed Commercial, Industrial Governmental and Temporary Construction Customer Proposed Rate Structure



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

Note: For simplification, the Water Security Adjustment is consolidated with the Water Quality Improvement Adjustment (or base rates depending on the cost component).

The Commercial, Industrial, Governmental and Temporary Construction customer class rate structure would also include the same decoupling mechanism as the Multi-Dwelling Unit Residential rate structure, the BRRTA. The BRRTA would ensure recovery of base rate revenues as defined by the financial plan and also protect customers from over-recovery by returning excess revenues to customers. However, for Schedule C, the BRRTA rate would always apply to both tiers 1 and 2.

1.3.1 Commercial, Industrial, Governmental and Temporary Construction Customer Water Budgets

The originally developed tier 1 allotments for the low season would increase to offset the impact of recent shortage year rates and recognize the characteristics of this customer class, including its limited ability to contribute to conservation. Allotments would regularly be higher in the summer. These steps were designed to avoid penalizing seasonal fluctuations in business activity, which were not a discretionary form of less efficient water use.

The major originally developed changes included the following items.

- Adjusted the low and high season water budgets to relieve the pressure imposed on customers by the shortage year allotments. Currently, year-round tier 1 allotments are based on 97.75% of the highest average winter water use (December-March) for the three years prior to the shortage year (2007-09).
  - The low season allotment in the first year (FY 2015-16) was set at the highest of either 105% of actual preceding winter (December – March) usage or 105% of the current recorded tier 1 allotment upon the effective date of the ordinance.
  - The high season allotment was set at the highest of either 115% of actual preceding winter (December – March) usage or 115% of current recorded tier 1 allotment upon the effective date of the ordinance.

  The allotment benchmark was based on each customer's actual usage, so the customer would have more control.
- Eliminated shortage year rates. As discussed above, the new allotments were based on the shortage year concepts in light of the continued drought.
- Modified the high season to be consistent with power rates (June – September). Aligning the seasons for water and power rates would reduce the number of changes customers see on their bills and make the billing and customer service processes more efficient over time.

Figure 18 outlines the originally developed water budget structure compared to the current approach. The changes should relieve customers from the burden imposed by the shortage year allotments and facilitate expansion of jobs and facilities to help the local economy.

Figure 18: Originally Developed Commercial, Industrial, Governmental and Temporary Construction Customer Water Budget Proposal

	Current Approach	Originally Developed Approach
Tier 1 Allotment	• 97.75% of the highest average winter water use (Dec-Mar) for the three years prior to the shortage year (2007-09) • Applies year-round	• Low season: Highest of 105% of the current recorded tier 1 allotment established upon the effective date of the ordinance or 105% of the actual preceding year winter (December 2014–March 2015) usage • High season: Highest of 115% of the current recorded tier 1 allotment established upon the effective date of the ordinance or 115% of actual preceding year winter (December 2014–March 2015) usage
Seasons	High season: June 1 to October 31	High season: June 1 to September 30, to be consistent with power[11]
Shortage Years	Provides for a reduction in tier 1 allotments in shortage years ("shortage year rates")	• Eliminate shortage year rates • Decoupling ensures financial stability during drought periods

1.3.2 Commercial, Industrial, Governmental and Temporary Construction Customer Tier Structure and Rates

Similar to other customer classes, the originally developed tier thresholds were generally set based on water use requirements and water supply costs to encourage water conservation; the major differentiating amount between tier rates was water supply costs.

1.3.3 Rate Development Process

Proposed Commercial, Industrial, Governmental and Temporary Construction customer rates for each tier represented the total of base rates and all adjustment factors. Customers would see only the final tier rates on the bill; the calculations of the adjustment factors were based on accounting records.

The originally developed structure and rates for the base and all adjustment factors, except the WPA, were the same for both tiers on a volumetric basis using the following process, which was similar to the approach used for setting Multi-Dwelling Unit Residential rates.

- Starting with the total class HCF rate, subtract the per HCF amount of all the adjustment factors except the WPA to get a base plus WPA rate for each tier.
- The base plus WPA HCF rate was then further deconstructed by removing the total class base HCF rate to determine the total customer class WPA.
- The base rate and all adjustment factors (except the WPA) per HCF rates were set the same for all class usage regardless of tier.

[11] Based on months when usage occurs; may be billed in later months depending on billing and meter read cycles.

- The WPA was higher for tier 2 to reflect the higher cost of water supply as usage increases.

This methodology set rates for each tier based largely on water supply costs. Therefore, the rate structure was changed to be largely consistent for both tiers with the main difference between tier prices being the incremental cost of supply reflected in the WPA factor.

The decoupling mechanism, BRRTA factor, for the Commercial, Industrial, Governmental and Temporary Construction customer class was calculated following the same process as for residential customers. However, the same BRRTA was applied to both tiers 1 and 2.

1.3.4 Commercial, Industrial, Governmental and Temporary Construction Customer Proposed Rates

Commercial, Industrial, Governmental and Temporary Construction customer rates for the five-year rate action were originally developed through the process outlined above to recover the revenue requirement while recognizing the increasing cost of water supply at higher levels of usage. The resulting rates for FY 2015-16 aligned to the following cost principles.

- Tier 1 rates were set at approximately 95% of the average cost ($/HCF) to balance conservation-pricing and economic development and stability.
- Tier 2 rates were set approximately 30% above tier 1 to reflect supply cost differences and balance conservation incentives with recognition that not all tier 2 usage is always inefficient.

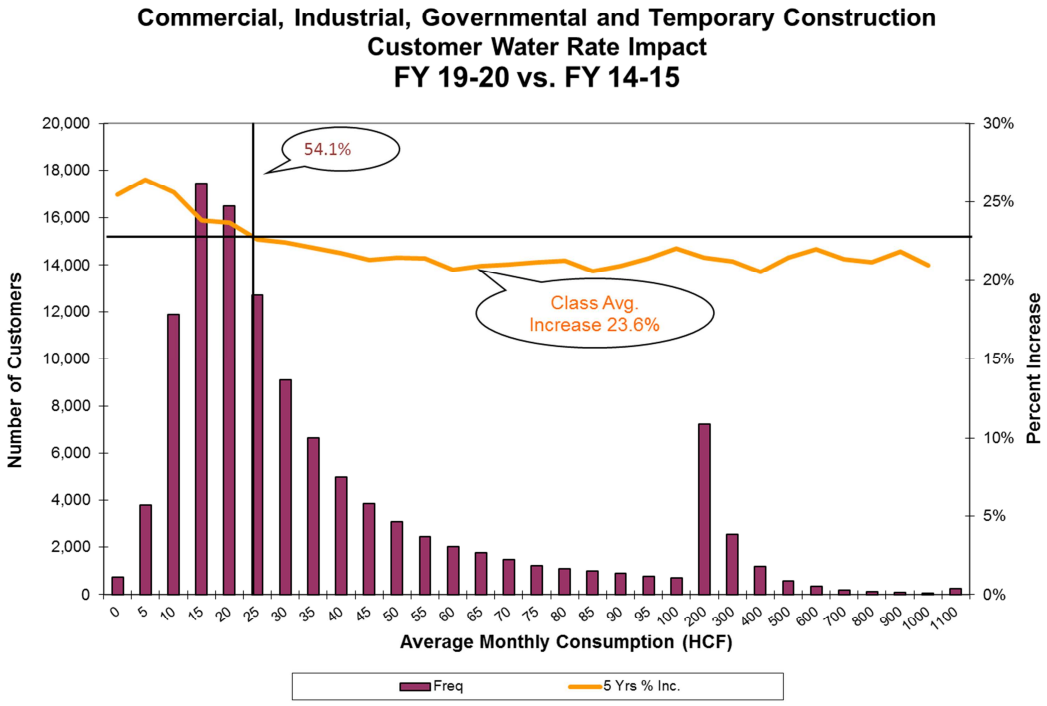
The difference between the tier 1 rate and the tier 2 rate was approximately the difference between the average water supply cost and the long run marginal cost of recycled water. However, unlike residential customers, rate increases were balanced between tiers 1 and 2 to encourage business development and continue conservation incentives. In total, the proposed rates were set to ensure recovery of the total revenue requirement. The originally developed rates for the next five years based on the then current financial plan are shown in Figure 19.

Figure 19: Originally Developed Commercial, Industrial Governmental and Temporary Construction Customer Rates

	Current	Originally Developed				
Fiscal Year	**FY 14-15**	**FY 15-16**	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**
Tier 1	$5.06	$4.76	$5.06	$5.46	$5.74	$6.03
Tier 2	$5.90	$6.20	$6.58	$7.11	$7.46	$7.83

Rates were still higher for tier 2, but the difference between the highest and lowest tier was less than for residential customers. The increase for approximately half of customers was less than the class average, as shown in Figure 20.

Figure 20: Originally Developed Commercial, Industrial, Governmental and Temporary Construction Customer Water Rate Impact[12]

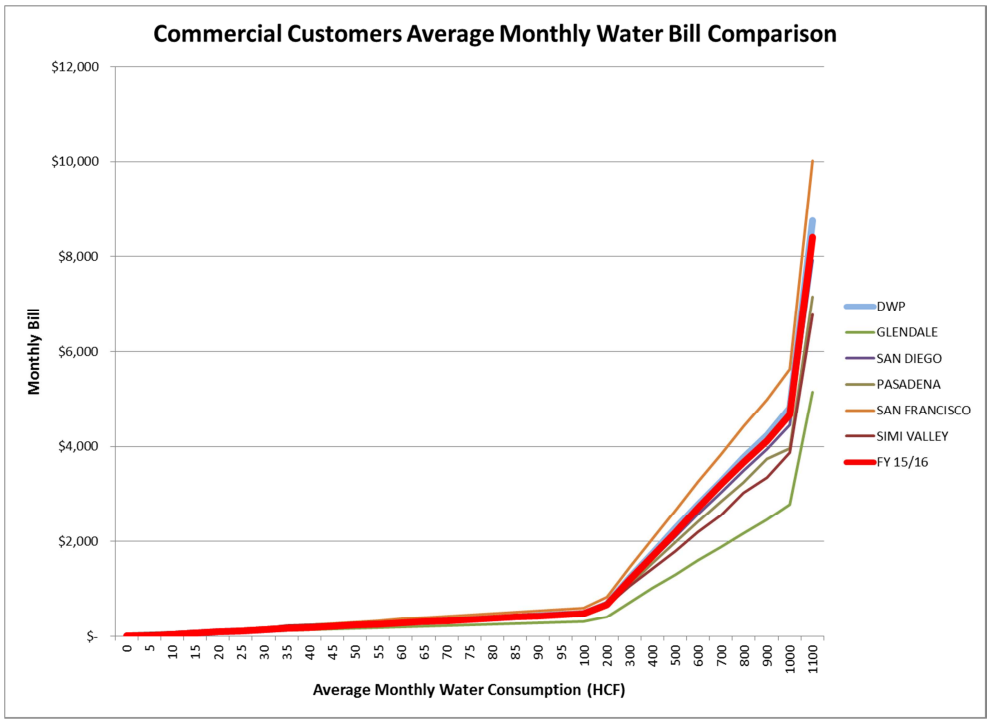


1.3.5 Commercial, Industrial, Governmental and Temporary Construction Customer Comparative Rate Analysis

LADWP's originally developed rates and customer bills for FY 2015-16 compared favorably, especially at usage levels up to around 200 HCF that represented over 95% of customers. However, even at the highest levels of usage, LADWP rates were still comparable to other large California cities based on rate increases currently announced for these cities, as shown in Figure 21.

[12] "Average Monthly Consumption" on x-axis changes scale past 100 HCF.

Figure 21: Commercial, Industrial, Governmental and Temporary Construction Customer Bill Comparisons for Major California Cities at Different Usage Levels Based on Originally Developed Rates[13]



In summary, the Department's proposed Commercial, Industrial, Governmental and Temporary Construction customer rates for the next five years were designed to achieve the following objectives:

- Maintain competitiveness with other major California water utilities for most Schedule C customers;
- Balance conservation and business development;
- Align tier rates with water supply costs;
- Recover costs from adjustment factors tied to actual costs; and
- Ensure full recovery of revenue requirement while protecting customers from over or under-recovery through decoupling.

These objectives continue to be met by the final proposed rates.

[13] "Average Monthly Water Consumption" on x-axis changes scale past 100 HCF.

B WATER RATE STRUCTURE PROPOSED ADJUSTMENT FACTORS

This appendix outlines the new proposed adjustment factors as compared to the current approach.

	Current Approach	Proposed Approach
Water Procurement Adjustment (WPA) – Purchased Water (PW), Conservation, Water reclamation (WR)	• 5% adder for financial stability • Adjusted quarterly • $0.06 quarterly cap for conservation /water reclamation (WR) • Conservation/WR capital can be 100% cash or debt funded	• Recovery of costs associated with costs of supply will be replaced by the Water Supply Cost Adjustment factor
Water Supply Cost Adjustment Factor (WSCA)	• Costs associated with purchased water, demand side management and water reclamation portion of supply costs are collected through WPA • No current adjustment factor that specifically aligns budget, supply costs and tier differentials	• Costs for all sources of water supply will be recovered through the WSCA • Tier price differentials for all customer classes to be based on supply costs, according to the amount of supply required to meet the consumption of each tier, starting with the least expensive source • Adjust semiannually • Include bad debt and conservation costs • Include uncollectible expense in balancing account
Water Quality Improvement Adjustment (WQIA)	• 5% adder for financial stability • Adjusted quarterly • $0.85 quarterly cap for WQIA, conservation, WR and supply	• Remove 5% adder • Remove $0.85 quarterly cap • Remove the transfer of 95% over-collection from OVRA • Include uncollectible expense in balancing account • Adjust semiannually
Water Security Adjustment (WSA)	• 5% adder for financial stability • Adjusted quarterly	• Eliminate factor and move 80% of the costs into the WQIA, with the remainder added to base rates (approximately 80% of the WSA costs are associated with water quality projects)

	Current Approach	Proposed Approach
Owens Valley Regulatory Adjustment (OVRA)	• 5% adder for financial stability • Adjusted quarterly • $0.015 quarterly cap	• Remove 5% adder • Adjust semiannually • Remove $0.015 quarterly cap • Include uncollectible expense in balancing account • Include Owens Valley Master Plan and dust mitigation capital • Amortize $34M remaining over-collection balance into the factor over one year to lower the factor initially
Low Income Subsidy Adjustment (LISA)	• 5% adder for financial stability • Adjusted quarterly • $0.015 quarterly cap	• Remove 5% adder • Adjust semiannually • Increase cap to $0.030 to reflect semiannual adjustment
Base Rate Revenue Target Adjustment (BRRTA)	• Decoupling mechanism (Water Revenue Adjustment factor) to recover under-collection of base rate revenue in total for all customer classes • Water Revenue Adjustment (WRA) factor adjusted annually, when invoked	• Recover under-collection and credit over-collection back to customers • Three separate balancing accounts – Single-Dwelling Unit Residential, Multi-Dwelling Unit Residential and Other customer groups • Adjust annually (January) • Include uncollectible expense in balancing account
Water Infrastructure Reliability Adjustment (WIRA)	No current adjustment factor to specifically recover cost of infrastructure reliability investment (program cost included in base rates)	• Cash funded/debt service of water infrastructure capital programs • Adjust annually (July) • Include uncollectible expense in balancing account
Water Expense Stabilization Adjustment (WESA)	No current factor (expense stabilization included in OVRA)	• Include current $33M Water System Expense Stabilization Fund balance • Factor established to build anticipated $50M balance by end of first year (FY 2015-16) and maintain balance • Provides cash to meet the 150 days of cash on hand metric • Adjust annually (July) • Include uncollectible expense in balancing account

C WATER SUPPLY COST BY SOURCE DETAIL

This appendix provides the data and calculations for the Water Supply Cost Adjustment (WSCA) factor for each year of the rate action period.

Figure 1 outlines the unit cost of each element of the WSCA and the amount and percentage for each source of water supply for the five-year rate action period based on Financial Plan Case No. 33 used to develop the revenue requirement presented in Chapter 3, Rate Drivers. Separately identifying all water supply costs for the WSCA for rate design purposes required minor modifications to the classification of revenue from the original Financial Plan Case No. 33 revenue requirement as some of the costs captured in the WSCA were previously part of base rates.[1] However, since the impact of the new WSCA on the revenue requirement is immaterial, LADWP has not restated the revenue requirement at this time. The WSCA includes the cost of the source water supply plus a proportionate[2] amount of the costs of conservation and bad debt and the over or under-recovery based on the volume for the specific source and the initial over or under-recovery accounts for the Water Procurement Adjustment from prior fiscal years.

[1] FY 2015-16 revenue is reduced by $3.4 million due to certain water reclamation projects that will no longer be securitized as a result of including these projects in the WSCA. Over the five-year period, the cumulative reduction in revenue is $2 million, which is very immaterial when compared to cumulative revenue of over $5 billion over the five-year period. These changes are reflected in Financial Plan Case Number 77a.

[2] The proportion is determined by the percentage of total water supply budgeted to be obtained from each source.

Figure 1: Unit Costs for Water Supply Components and Volumes for Each Source of Water Supply

		Current	Forecast				
		FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Unit Cost ($/HCF)	Groundwater Pumping	$1.541	$3.777	$3.907	$4.026	$3.620	$1.315
	LA Aqueduct	$1.468	$0.553	$0.499	$0.489	$0.488	$0.515
	MWD	$1.823	$2.005	$2.115	$2.264	$2.392	$2.787
	Recycled Water[3]	$19.021	$1.846	$2.320	$2.474	$4.066	$4.787
	Conservation	$0.162	$0.096	$0.102	$0.106	$0.061	$0.061
	Bad Debt Expense		$0.018	$0.016	$0.016	$0.016	$0.016
	(Over)Under Recovery		$0.245	$0.069	$0.028	$0.017	$0.036
Supply (AF)	Groundwater Pumping	67,200	28,708	28,708	28,708	32,711	92,109
	LA Aqueduct	91,070	249,689	256,369	263,049	269,730	261,077
	MWD	374,478	238,942	215,014	191,354	179,356	135,150
	Conservation & Recycled Water	10,368	10,505	10,643	15,311	18,713	19,063
	Total Supply	**543,116**	**527,844**	**510,733**	**498,421**	**500,510**	**507,398**
Volume (%)	Groundwater Pumping	12%	5%	6%	6%	7%	18%
	LA Aqueduct	17%	47%	50%	53%	54%	51%
	MWD	69%	45%	42%	38%	36%	27%
	Conservation & Recycled Water	2%	2%	2%	3%	4%	4%
	Total Supply	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

[3] For the purposed of the WSCA, Stormwater costs are included in Recycled Water

Figure 2, Figure 3, Figure 4, Figure 5, and Figure 6 provide the applicable O&M, capital depreciation, debt cost and other budgeted costs associated with each source of water supply.

Figure 2: Cost of In-City Groundwater Pumping

	Current	Forecast				
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Pumping[4]						
O&M	$39,323,000	$41,443,000	$43,061,400	$44,551,500	$45,780,100	$46,964,900
Depreciation	$2,704,353	$2,704,353	$2,704,353	$2,704,353	$2,704,353	$2,704,353
Return on Investment	$3,089,716	$3,089,716	$3,089,716	$3,089,716	$3,089,716	$3,089,716
Total In-City Pumping	$45,117,069	$47,237,069	$48,855,469	$50,345,569	$51,574,169	$52,758,969
Total Local Groundwater Production (AF)	70,000	29,904	29,904	29,904	34,074	95,947
Less: Loss (AF)	2,800	1,196	1,196	1,196	1,363	3,838
Net Local Ground Water Production (AF)	67,200	28,708	28,708	28,708	32,711	92,109
Pumping Unit Cost per HCF (Cost per AF / 435.6)	**$ 1.541**	**$ 3.777**	**$ 3.907**	**$ 4.026**	**$ 3.620**	**$ 1.315**

[4] Pumping costs included for groundwater are the pumping costs directly associated with the groundwater source of supply. Pumping costs required for the distribution system are not included.

Figure 3: Cost of Los Angeles Aqueduct

	Current	Forecast				
	FY 2014-15	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Los Angeles Aqueduct						
LAA Total O&M*	$33,137,000	$39,803,200	$38,804,600	$39,617,900	$41,821,000	$43,843,200
Depreciation	12,180,941	12,180,941	12,180,941	12,180,941	12,180,941	12,180,941
Property Taxes	12,413,602	12,413,602	12,413,602	12,413,602	12,413,602	12,413,602
Total Operating Expense	$57,731,542	$64,397,742	$63,399,142	$64,212,442	$66,415,542	$68,437,742
Less: Other Income (Negative) & Expense (Positive), Net	($3,602,048)	($4,102,048)	($4,602,048)	($5,102,048)	($5,602,048)	($6,102,048)
Less: Water for Hydraulic Plant (G/L 7341000)	($5,630,000)	($9,882,000)	($12,741,000)	($12,854,000)	($13,151,000)	($13,476,000)
Less: Revenue from Owens Valley	($21,949)	($21,949)	($21,949)	($21,949)	($21,949)	($21,949)
Add: Return on Investment	$9,744,614	$9,744,614	$9,744,614	$9,744,614	$9,744,614	$9,744,614
Total Cost of Production	$58,222,160	$60,136,360	$55,778,760	$55,979,060	$57,385,160	$58,582,360
Total Aqueduct Production (AF)	94,865	260,093	267,051	274,009	280,968	271,955
Less: Loss (AF)	3,795	10,404	10,682	10,960	11,239	10,878
Net Acre Feet - Aqueduct	91,070	249,689	256,369	263,049	269,730	261,077
Cost per AF ($ per AF)	$639.31	$240.85	$217.57	$212.81	$212.75	$224.39
Cost per HCF (Cost per AF / 435.6)	**$ 1.468**	**$ 0.553**	**$ 0.499**	**$ 0.489**	**$ 0.488**	**$ 0.515**

* LAA Total O&M Expense includes functional items for both source of supply and pumping for the LAA. Those functional items include: Source of Supply – 302-2001 LA Aqueduct Operation North, 302-2005 LA Aqueduct Operation South, 302-2015 LA Aqueduct Maintenance South, 302-2025 LA Aqueduct Maintenance North, 302-2035 Resource Management O&M, 322-2507 Hazardous Substance Mgmt Prgm - Aqueduct (Job 53004 only), 335-3200 Dam Stability Analysis (75% is for Northern Aqueducts), 401-3005 East Sierra Environmental, 409-2023 Southern District Eng & Oper, and Pumping – 311-2009 Groundwater Pump O&M North

Figure 4: Cost of Metropolitan Water District Water

	Current	Forecast				
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
MWD						
Purchased Water Cost	$297,449,641	$208,680,247	$198,097,990	$188,737,998	$186,867,757	$164,052,020
Total Water Volume Purchased from MWD	390,081	248,898	223,973	199,327	186,829	140,781
Less: Loss (AF)	15,603	9,956	8,959	7,973	7,473	5,631
Net Water Purchased from MWD	374,478	238,942	215,014	191,354	179,356	135,150
MWD Unit Cost per AF	$794.306	$873.351	$921.327	$986.331	$1,041.883	$1,213.853
MWD Unit Cost per HCF (Cost per AF / 435.6)	**$1.823**	**$2.005**	**$2.115**	**$2.264**	**$2.392**	**$2.787**

Figure 5: Cost of Conservation

	Current	Forecast				
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Conservation						
Conservation O&M	$16,535,300	$21,363,900	$21,818,800	$22,271,400	$12,830,300	$13,083,800
100% of the Conservation Capital (Actual Only)	$20,510,500					
Total Conservation	$37,045,800	$21,363,900	$21,818,800	$22,271,400	$12,830,300	$13,083,800
Sales (Excluding D&F)	$228,460,958	$222,036,886	$214,838,989	$209,660,206	$210,538,763	$213,436,432
Conservation Unit Cost per HCF (Cost per AF / 435.6)	**$0.162**	**$0.096**	**$0.102**	**$0.106**	**$0.061**	**$0.061**

Figure 6: Cost of Recycled Water[5]

	Current	Forecast				
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Recycled Water						
RW O&M	$9,229,100	$7,843,600	$8,673,200	$8,712,400	$9,091,200	$8,752,400
West Basin Rec. Water Purchases	$582,680	$605,987	$630,226	$655,435	$11,155,700	$11,601,928
100% of the RW Capital (Actual Only)	$76,093,400					
Debt Service of 100% of the RW Capital			$1,450,925	$7,135,739	$12,893,093	$19,398,789
Total Recycled Water	$85,905,180	$8,449,587	$10,754,352	$16,503,574	$33,139,993	$39,753,117
Recycled Water Production (AF)	10,800	10,943	11,086	15,949	19,493	19,857
Less: Loss (AF)	432	438	443	638	780	794
Recycled Water Production (AF)	10,368	10,505	10,643	15,311	18,713	19,063
RW Unit Cost per AF	$8,285.608	$804.318	$1,010.504	$1,077.887	$1,770.935	$2,085.385
RW Unit Cost per HCF (Cost per AF / 435.6)	**$19.021**	**$1.846**	**$2.320**	**$2.474**	**$4.066**	**$4.787**

[5] For the purposed of the WSCA, Stormwater costs are included in Recycled Water

LOS ANGELES DEPARTMENT OF WATER AND POWER

WATER SYSTEM RATE ACTION REPORT

Chapter 6: Revised Proposed Rate Plan

December 2015

CONTENTS

FIGURES

REVISED PROPOSED WATER RATE ACTION PLAN

6.1 SUMMARY

The Los Angeles Department of Water and Power (LADWP or the Department) is the nation's largest municipal utility and supplies water to nearly four million citizens of Los Angeles through the operation of over 7,200 miles of water transmission and distribution mains. In July 2015, LADWP published its rate action report based on the initial financial plan developed from the November 2014 version of the Department's budget. Subsequently, a FY 2015-16 budget was approved by the Board of Water and Power Commissioners (Board) and City Council (Council). In addition, LADWP has actively pursued discussions with the Ratepayer Advocate and other stakeholders. A revised financial plan[1] has now been developed to reflect the approved budget and other changes made in response to stakeholder input. This updated financial plan, provided in Appendix A, underlies the Department's revised proposed rate action plan.

The purpose of this chapter is to discuss the Department's revised proposed water service rate action plan and explain the changes between the revised proposed rates and the initial proposed rates[2] outlined in Chapter 5. This chapter will also provide detailed new rates for applicable customer classes. In developing the revised proposed rates, the Department has solicited feedback from the public, the Ratepayer Advocate, and other external stakeholders, and revised the rate design where applicable.

The new rates are proposed to take effect beginning April 1, 2016. To account for the delay from the start of the current fiscal year, any shortfall will be recovered through the revenue decoupling mechanism in the Base Rate Revenue Target Adjustment (BRRTA) factor over a 2-year period (January 1, 2017 – December 31, 2018).

6.1.1 Major Changes between the Initial and Revised Rate Design

The revised financial plan resulted in several major changes between the initial and revised proposed rates. Figure 1 provides a high-level summary of those changes. In developing this revised proposal, LADWP continues to strike a balance between meeting regulatory requirements, providing reliable service, planning for a sustainable and secure water supply, and maintaining reasonable rates.

[1] Financial Plan Case No. 94.

[2] The initial proposed rates are based on Financial Plan Case No.33 and Case No. 77a, where applicable.

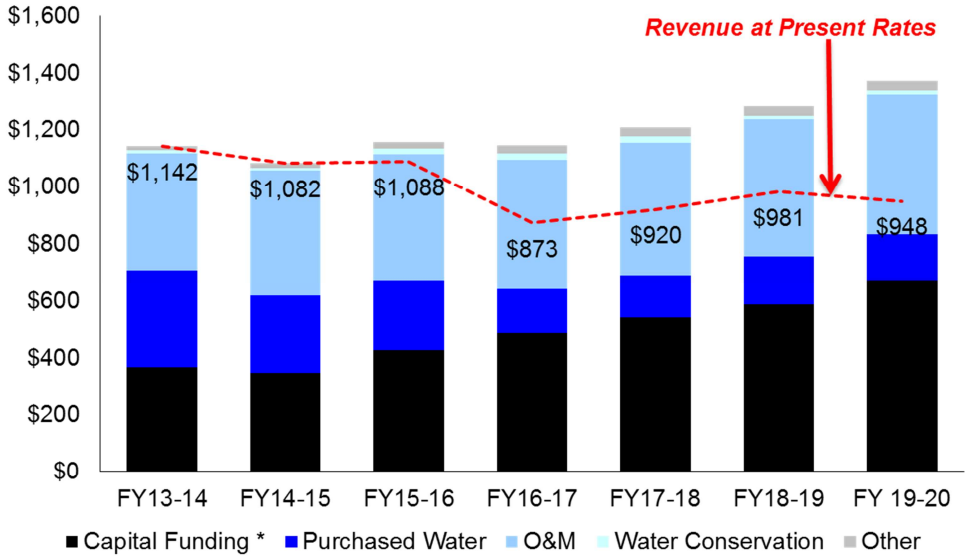
Figure 1: Major Changes Reflected in the Revised Proposed Rate Design

Change	Description
Delayed Rate Action Effective Date	The revised proposed rates will now be effective April 1, 2016.
Approved FY 2015-16 Water System Budget	The Board approved Water System budget is now the basis for the proposed financial plan.
Owens Lake Dust Mitigation Program	The Eastern Sierra regulatory compliance and Owens Lake dust mitigation capital and O&M budgets have been updated to include Phases 9 and 10 of the Owens Lake Dust Mitigation Program and also reflect additional estimated interest rate costs expected to be incurred as a result of delayed implementation of securitization.
Reduced Consumption Forecast	Customer demand has fallen in alignment with Mayoral Executive Directive No. 5. The new rates reflect a revised estimated decrease in overall water consumption across Single-Dwelling Unit and Multi-Dwelling Unit Residential customer classes.
Securitization	Implementation of securitization has been delayed from July 1, 2015 to July 1, 2016, requiring the Department to finance some projects through more expensive debt.
Updated FY 2014-15 Financial Results	Actual financial results for FY 2014-15 have been revised as of June 30, 2015.
Proposed Rates	Rates for the five-year rate action are developed to recover the revenue requirement associated with providing service to each customer class and tier while recognizing the increasing cost of water supply at higher levels of usage. The methodology for calculating the rates has not changed, however the assumptions and numbers used to calculate the revised rates reflect the underlying assumptions of the revised financial plan.

6.1.2 Revised Five-Year Revenue Requirement

This chapter discusses the impact of the financial plan modifications on the five-year revenue requirement. The core cost drivers have not changed, although in the revised proposed rate design, the rates for recovering some of those costs have been updated. Figure 2 illustrates the revised potential shortfall the Department expects with no rate increase over the proposed rate period.

Figure 2: Revenue Shortfall Based on Revised Financial Plan (Given No Rate Increase, Including Purchased Water)



Overall, the total revenue requirement for the five years has increased by $100 million with a total average revenue requirement increase of $20 million per year over the average annual initial rate increase presented to the Board in July 2015. The revised average annual rate increase is 5.26%. Figure 3 and Figure 4 illustrate the initial and revised proposed system average revenue and rate changes by major cost category. The revised presentation of the revenue requirement reflects actual results for FY 2014-15 as of June 2015, the Board approved FY 2015-16 budget and other recent updates to the approved budget. It also presents the revised revenue requirement in the context of the pass through factors established in the draft Water Rate Ordinance provided to the RPA on August 7, 2015.

Figure 3: Initial Year-Over-Year (YOY) Rate Driver Breakdown of Proposed Revenue Requirement Increase

Rate Driver	Average Annual Revenue Requirement Increase ($M)	Average Annual System Retail Rate Increase (Cents/HCF)	Average Annual Rate Increase (%)
Conservation	-6[3]	0.13	-0.50%
Groundwater	5	0.54	0.40%
Stormwater	2	0.18	0.13%
Recycled Water	4	1.31	0.35%
Owens Valley	4	0.32	0.35%
Water Quality	22	0.36	2.06%
Infrastructure – Base	16	-0.04	1.96%

[3] Many investments in conservation programs are eligible for lower financing costs through securitization, resulting in a reduction in revenue requirement for conservation projects.

Rate Driver	Average Annual Revenue Requirement Increase ($M)	Average Annual System Retail Rate Increase (Cents/HCF)	Average Annual Rate Increase (%)
Infrastructure – Pass-Through	44	4.32	3.72%
Total before Purchased Water	90	7.13	8.48%
Purchased Water	-44	-1.24	-3.53%
Total	46	5.89	4.96%

Figure 4: Revised Year-Over-Year (YOY) Rate Driver Breakdown of Proposed Revenue Requirement Increase

Rate Driver	Average Annual Revenue Requirement Increase ($M)	Average Annual System Retail Rate Increase (Cents/HCF)	Average Annual Rate Increase (%)
WSCA - Water Conservation	-1	0.33	-0.06%
WSCA - Water Recycling	-2	0.03	-0.18%
WSCA - Stormwater	-2	0.01	-0.15%
WSCA - LA Aqueduct	-3	0.22	-0.28%
WSCA - Ground Water	1	0.76	-0.05%
Owens Valley	13	1.48	1.07%
Water Quality	21	0.87	1.83%
WSCA - Purchased Water	-21	0.79	-1.92%
Water Infrastructure - Pass Thru	37	2.93	3.10%
Water Infrastructure - Base	23	1.54	1.90%
Total	66	8.95	5.26%

6.1.3 Revised Proposed Rates

Figure 5, Figure 6 and Figure 7 show the Department's revised proposed rates for the five-year rate action for three major customer classes: Single-Dwelling Unit Residential, Multi-Dwelling Unit Residential and Commercial, Industrial, Governmental and Temporary Construction. The rates for each class are contained in separate Schedules. Additional detail can be found in section 6.8, Revised Proposed Rate Design.

Figure 5: Revised Proposed Single-Dwelling Unit Residential Rates (Schedule A)

	Proposed				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$6.77	$6.82	$6.72	$6.95	$7.26
Tier 3	$7.52	$7.57	$7.62	$7.90	$8.58
Tier 4	$7.52	$7.57	$7.80	$9.41	$10.58

Figure 6: Revised Proposed Multi-Dwelling Unit Residential Rates (Schedule B)

	Proposed				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$9.27	$8.58	$8.13	$8.36	$8.67

Figure 7: Revised Proposed Commercial, Industrial and Governmental and Temporary Construction Rates (Schedule C)

	Proposed				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$8.27	$8.32	$8.23	$8.46	$8.76

Recycled Water Service (Schedule D) will continue to be contract-based. Private Fire Service (Schedule E) service availability charges will continue to change based on the average historical rate of inflation. The revised proposed Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports Service Rates (Schedule F) will continue to increase smoothly over the five-year rate period to align revenue with the cost of service, as shown in Figure 8.

Figure 8: Revised Proposed Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural Uses; Community Gardens and Youth Sports Service Rates (Schedule F)

	Revised Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20[4]**
Tier 1	$2.11	$2.83	$3.50	$4.36	$5.48
Tier 2	$6.78	$8.26	$8.18	$8.43	$8.76

6.2 UPDATED FY 2014-15 FINANCIAL RESULTS

The revised proposed financial plan and rates also reflect the updated FY 2014-15 financial results, which are now based on close to final audited accounting records. Where applicable, the presentation of budget data reflects updated actual results as of June 30, 2015.

[4] In year five, Schedule F rates will be the same as Schedule C rates.

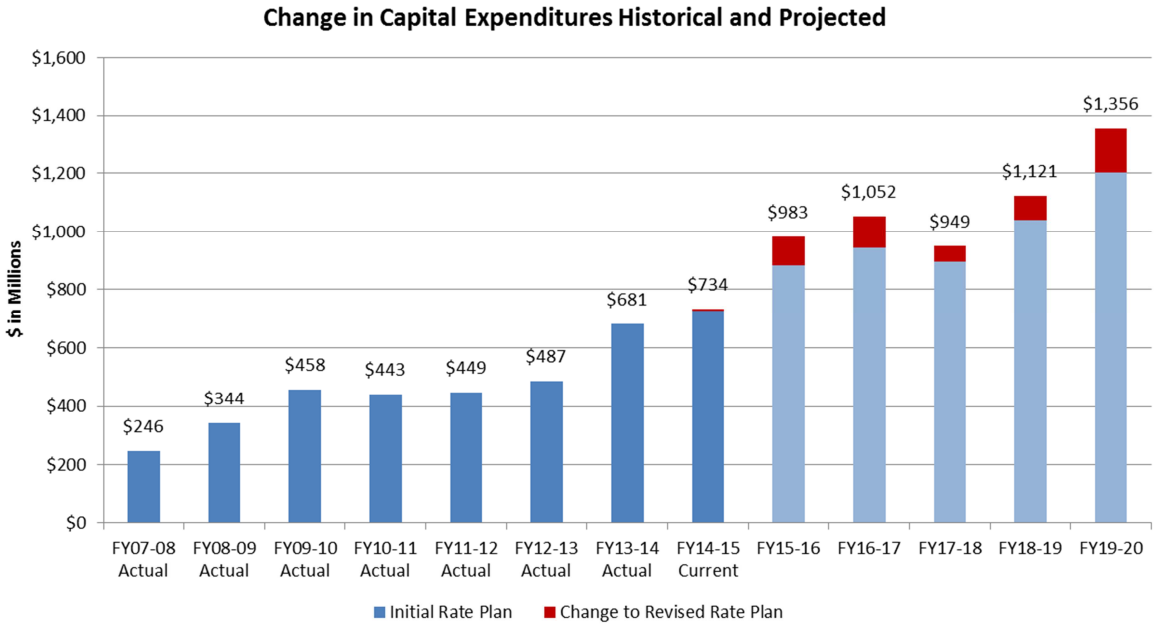
6.3 APPROVED FY 2015-16 WATER SYSTEM BUDGET

The revised proposed rates reflect the final approved budget for FY 2015-16. The only significant change between the initial and approved FY 2015-16 budget is a revised Eastern Sierra regulatory compliance and Owens Lake dust mitigation budget that includes Phase 9 and Phase 10 of the Owens Valley Master Plan.

Based on the final budget, proposed capital spending will increase by an average of $124 million per year over the next five years (FY 2015-16 through FY 2019-20). The average annual capital spending has increased $99 million from the initial rate plan; for FY 2015-16, the projected capital expenditures reflected in the revised proposed rates are $98 million more than in the initial rate plan. Figure 9 shows the change in planned capital expenditures.

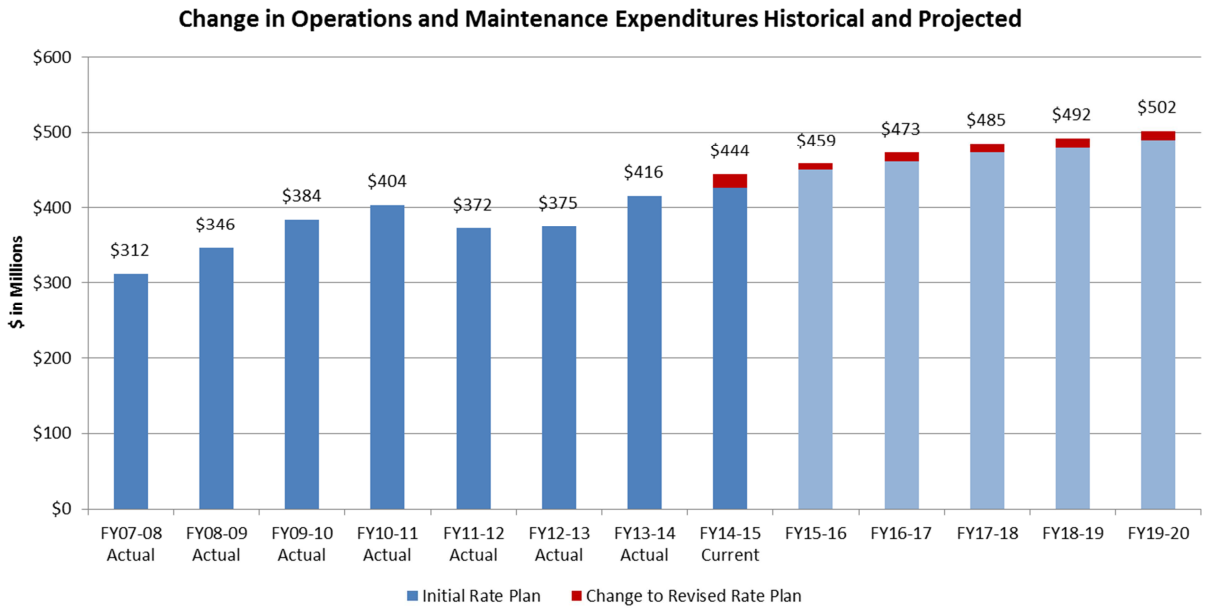
In addition, the approved FY 2015-16 budget includes additional water conservation.

Figure 9: Change in Capital Expenditures Historical and Projected



The revised O&M expenses, shown in Figure 10, increase at an average of $11 million per year through FY 2019-20 (excluding purchased water). The average annual O&M spending has increased $12 million from the initial rate plan; for FY 2015-16, the revised projected O&M expenditures reflected in the revised proposed rates are $9 million more than the initial proposed rate plan.

Figure 10: Change in Operations and Maintenance Expenditures Historical and Projected



6.4 OWENS LAKE DUST MITIGATION PROGRAM

In December 2014, the Department signed a historic Agreement with the Great Basin Unified Air Pollution Control District. 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% of the excess blowing dust. The agreement affords the Department:

- 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 Phases 9 and 10 of the Owens Lake Dust Mitigation Program and make improvements to the existing system to conserve water. The costs for these phases were not included in the initial proposed rates, but are reflected in the revised proposed rates. Figure 11 illustrates the revised projected costs associated with dust mitigation efforts for an average annual total expenditure increase of $114 million or 121% over the five years. A portion of this work will be securitized at a lower interest rate, reducing the costs immediately incurred by ratepayers.

Figure 11: Eastern Sierra Regulatory Compliance and Owens Lake Dust Mitigation Initial and Revised Proposed Expenditures for FY 2014-15 through FY 2020-21

($ Millions)	**Current**	**Initial Proposed Rate Period Costs**						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$32.3	$31.0	$34.2	$34.9	$35.9	$36.2	$172.2	*$36.4*
Capital	-	$73.3	$30.8	$66.3	$62.1	$68.4	$300.9	*$65.1*
Total	**$32.3**	**$104.3**	**$65.0**	**$101.2**	**$98.0**	**$104.6**	**$473.1**	***$65.1***
	Current	**Revised Proposed Rate Period Costs**						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	$29.5	$38.9	$45.2	$46.2	$47.4	$47.8	$225.5	*$48.1*
Capital	-	$192.1	$139.3	$118.5	$148.9	$220.3	$819.1	*$218.9*
Total	**$29.50**	**$231.00**	**$184.50**	**$164.70**	**$196.30**	**$268.10**	**$1,044.60**	**$267.00**
	Current	**Difference Between Initial and Revised Costs**						
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total	*FY 2020-21*
O&M	-$2.80	$7.90	$11.00	$11.30	$11.50	$11.60	$53.30	$11.70
Capital	-	$118.80	$108.50	$52.20	$86.80	$151.90	$518.20	$153.80
Total	**-$2.80**	**$126.70**	**$119.50**	**$63.50**	**$98.30**	**$163.50**	**$571.50**	**$201.90**

The new investment in waterless dust control methods is expected to be revenue neutral in the long run as the amount of purchased water required to support dust mitigation efforts is expected to decrease. 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.

6.5 REVISED WATER CONSUMPTION FORECAST

In October of 2014, Mayor Eric Garcetti issued Mayoral Executive Directive No. 5 (ED 5). The terms of ED 5 include:

- A reduction in per capita potable water use of 20% by 2017;
- A reduction in the Department's purchase of imported potable water of 50% by 2024; and
- The creation of an integrated water strategy that increases local water supplies and that improves water security in the context of climate change and seismic vulnerability.

The ratepayers of Los Angeles have effectively abided by the guidelines of ED 5 and have voluntarily decreased their overall water consumption. The Department's initial proposed rates were based on a forecasted 20% decrease in total per capita water sales over three years.

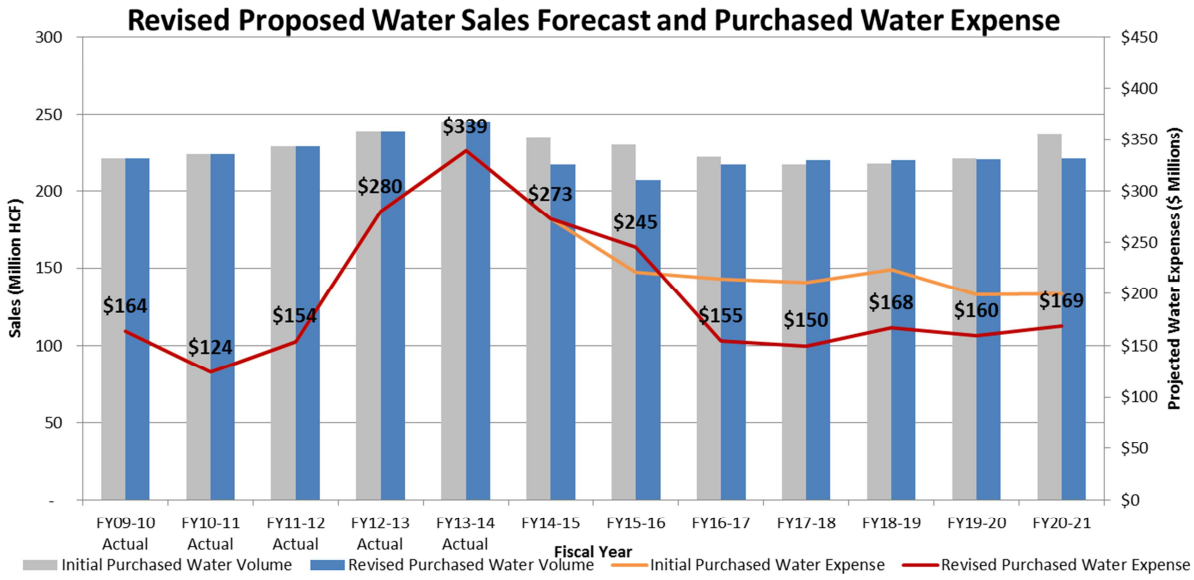
However, based on more current information, water savings efforts throughout the city are exceeding initial forecasts. Therefore, the Department's revised proposed rates are based on a revised water sales forecast, which reflects an additional near-term decrease in Single-Dwelling Unit and Multi-Dwelling Unit Residential customer consumption. The initial and revised sales volumes are illustrated in Figure 12.

Figure 12: Initial and Revised Projected Water Sales Forecast

Million HCF	Current	Projected				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Initial	234.3	229.9	222.5	217.1	218.0	221.0
Revised	217.2	207.4	217.4	219.9	220.0	220.5
Difference	-17.1	-22.5	-5.1	2.8	2.0	-0.5

The revised purchased water expense projection has also decreased over the five-year rate action timeframe reflecting lower forecasted consumption. Figure 13 illustrates the forecasted purchased water expense and consumption.

Figure 13: Initial and Revised Proposed Water Sales Forecast and Related Purchased Water Expense



6.6 SECURITIZATION

As noted in Chapter 3, the Department will benefit from utilizing securitization to finance a substantial portion of capital projects over the next five years. In October 2013, the California legislature enacted AB 850 which expanded the financing powers of a Joint Powers Authority (JPA) by authorizing JPAs to issue “rate reduction bonds” secured by utility project charges to finance water conservation, reclamation and mitigation projects. The Department’s assumptions estimate that the interest rate for securitization will be 25 basis points lower than interest rates for traditional Department debt.

The initial proposed rates assumed securitization was utilized to finance certain projects beginning July 1, 2015. However, development of the revised proposed rates assumes securitization will be implemented on July 1, 2016, requiring the Department to finance several core projects using traditional forms of debt for an additional twelve months. Overall, the revised non-securitized and securitized borrowing will increase by $127 M or 3.5% over the amount in the initial financial plan for the next five years. Figure 14 illustrates the initial and revised expected borrowing plan for the Water System.

Figure 14: LADWP Initial and Revised Projected Securitization and Non-Securitization Borrowing

($Millions)	Historical			Initial 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	Five-Year Total
LADWP Borrowing (Non-Securitized)	$352	$509	$436	$112	$233	$259	$416	$395	$1,414
Borrowing for Securitization	$0	$0	$0	$409	$475	$427	$409	$542	$2,261
Total	$352	$509	$436	$511	$708	$686	$825	$937	$3,675
	Historical			Revised 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	Five-Year Total
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
Total	$352	$509	$399	$749	$762	$679	$904	$1,096	$4,191
	Historical			Difference Between Initial and Revised Projections					
	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total
LADWP Borrowing (Non-Securitized)	-	-	-$37	$637	$101	$100	$153	$308	$1,301
Borrowing for Securitization	-	-	-	-$409	-$47	-$107	-$74	-$149	-$785
Total	-	-	-$37	$238	$54	-$7	$79	$159	$516

In addition, the delayed implementation of the new rates and securitization means that the Department will approach its debt capitalization ceiling sooner. While the Board approved capitalization ratio of 65% will not be exceeded, the Department's revenue requirement increased slightly to keep debt levels near the 65% threshold. LADWP will continue to monitor its financial metrics closely and cash fund capital projects or reduce spending to keep debt near the 65% capitalization ratio.

6.7 OTHER MISCELLANEOUS CHANGES

Several other additional changes that have a minor impact on rates are reflected in the revised financial plan and proposed rates.

- An update of $165 million in the Water System's state loan for a revised total loan amount of $390 million as shown in Figure 15.

Figure 15: Updated State Loan Details

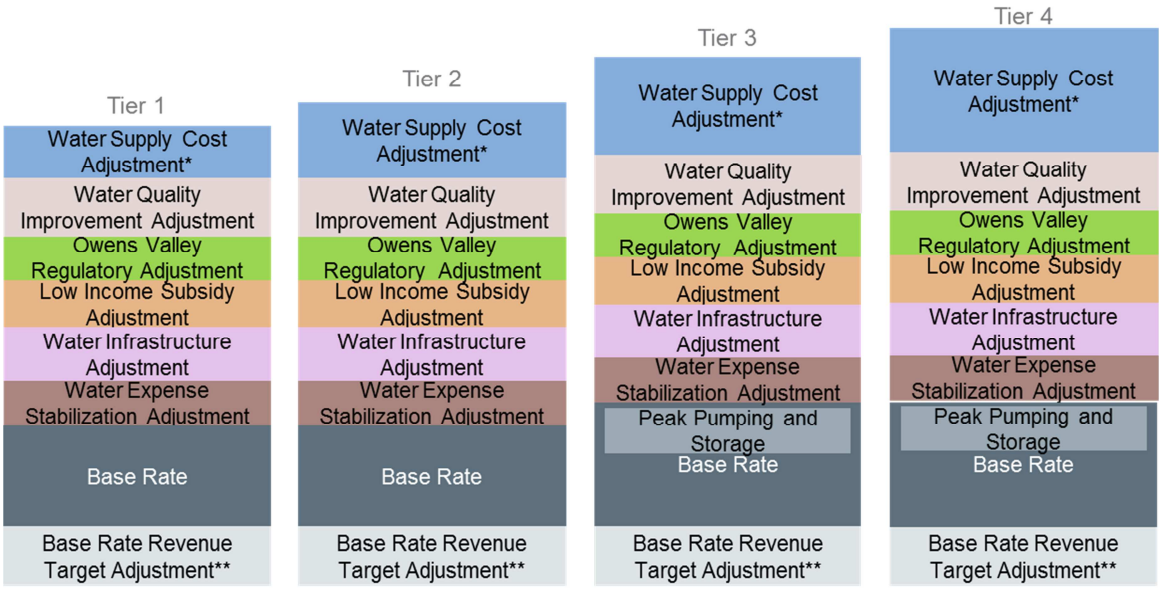
($ Million)	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Five-Year Total
Revised State Loan	$151	$81	$72	$53	$34	$390
Preliminary State Loan	$112	$56	$36	$31	$20	$225

- Effective date of January 1, 2017 for Water Expense Stabilization Adjustment Factor (WESA) collection for the emergency fund as compared to July 1, 2015 in the initial financial plan.
- Updated WESA balance to reflect a target of $50 million from FY 2016-17 forward as compared to starting July 1, 2015 in the initial financial plan.
- A $25 million reduction of water recycling capital expense.

6.8 REVISED PROPOSED RATE DESIGN

The revised proposed rate design is expected to recover the necessary costs for operating and maintaining the Water System. The Department will continue to follow the same proposed tiered structure rate design outlined in Chapter 5 with fairly minor adjustments to proposed rates. Figure 16 illustrates the proposed rate design for Single-Dwelling Unit Residential Customers presented in Chapter 5, which has not been changed. The revised rates, which reflect the final Board approved FY 2015-16 budget, revised revenue requirement and other minor changes discussed above are discussed further in this section.

Figure 16: 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 factor is consolidated with the Water Quality factor (or base rates depending on the cost component).

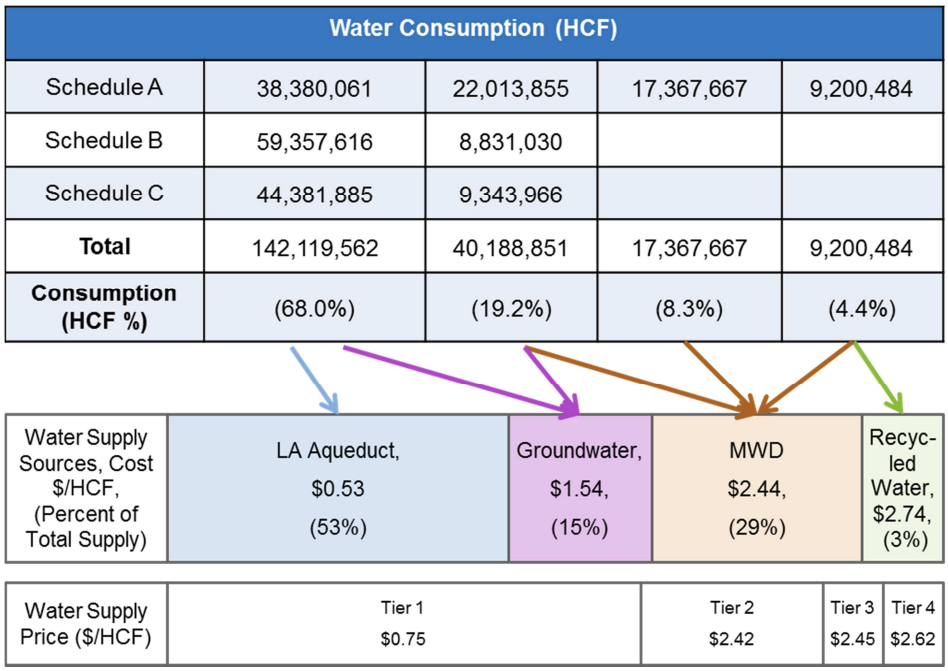
6.8.1 Water Supply Cost Adjustment (WSCA)

As discussed in Chapter 5, LADWP introduced the WSCA in response to the San Juan Capistrano decision to align, at a more granular level, the costs of water supply to the rates for each tier in each customer class. The WSCA is designed based on the economic premise of cost causation - customers who cause costs should pay for these costs. Residential customers are given an allocation of water considering lot size, season, and temperature zone. Since water use greater than this allocated amount requires higher cost water supplies, tier rates increase with higher levels of demand. Additional details can be found in Chapter 5.

The structure of the WSCA will remain unchanged; however, due to the revised water consumption and water supply price forecasts, the specific supply costs allocated to customer classes and tiers have changed. These costs will be updated semi-annually throughout the rate period to reflect each time period's forecasted cost, available supply and usage. The WSCA will be adjusted semi-annually to ensure customers pay only the actual costs of water supply. Figure 17 illustrates the revised WSCA calculation for the revised proposed rates based on the

revised projected supply costs and volumes and customer usage for the period beginning in July of FY 2016-17.[5]

Figure 17: Revised Proposed Water Supply Cost Calculation (Effective July of FY 2016-17)



In addition, a pro-rated amount of water conservation costs and the over/under balancing account from prior years are added to determine the total amount of the WSCA as shown in Figure 18.

Figure 18: Revised Proposed Water Supply Cost Adjustment Factor Calculation (Effective July of FY 2016-17)

	Tier 1	Tier 2	Tier 3	Tier 4
Water Supply Cost	$0.750	$2.424	$2.445	$2.616
Water Conservation Costs	$0.104	$0.104	$0.104	$0.104
Over/Under Balancing Account	$0.423	$0.423	$0.423	$0.423
Total WSCA Factor	$1.277	$2.951	$2.972	$3.143

The costs of the various sources of supply will continue to be calculated based on LADWP's cost to provide the specific water supply, divided by the forecasted hydrologic supply (in HCF) of the specific source. A summary of the initial and revised forecasted unit costs for each source of

[5] FY 2016-17 is the first full fiscal year with the proposed new rate structure in place.

supply are summarized in Figure 19[6]. Note that due to the timing of projects for specific sources and projected supply amounts, these unit costs do not follow a uniform pattern over the five-year period. Appendix B provides the revised data and calculations for the WSCA factor for each year of the rate action period. The projected revised proposed costs for each source of supply shown in Figure 19 are based on an average projected supply cost as of July and as of January for each fiscal year.

Figure 19: Summary of Costs for Each Water Supply Source (Average of July and January Projections)

	Initial Proposed Costs				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Groundwater Pumping	$4.14	$4.10	$4.18	$3.72	$1.40
LA Aqueduct	$0.91	$0.69	$0.64	$0.60	$0.60
MWD	$2.36	$2.30	$2.42	$2.50	$2.87
Recycled Water	$2.21	$2.51	$2.63	$4.16	$4.90
	Revised Proposed Costs				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Groundwater Pumping	$1.43	$1.48	$1.34	$1.34	$1.15
LA Aqueduct	$0.64	$0.53	$0.55	$0.56	$0.58
MWD	$2.22	$2.49	$2.64	$2.76	$3.07
Recycled Water	$1.76	$2.49	$2.80	$4.40	$5.21

The changes in cost per HCF for each supply source are largely due to the anticipated changes in production volumes available to meet the new consumption forecast. The reallocation of consumption across water sources affects the unit cost of water for that source.

Since water supply costs are recovered through an adjustment factor, customers will only pay for the costs actually incurred. If the production volumes of a source is higher than forecast and forecasted costs do not change, the WSCA will be reduced in the future to credit customers back revenue from any over-collected costs.[7]

[6] The WSCA is updated semi-annually. Values shown here are an average unit cost of the July and January WSCA forecasted estimate for each fiscal year.

[7] If the production volume is less than forecast and costs do not change, the WSCA could be adjusted upward in the future to offset any shortfall in cost recovery.

6.8.2 Peak Pumping and Storage

Pumping and storage of water is a standard aspect of a water utility system for meeting both base and peak demand. However, the amount of customer demand can significantly impact the level of required pumping and storage. As noted in Chapter 5, the initial proposed rates were based on an earlier calculation of peak pumping and storage - $0.22 per HCF; the revised proposed rates shown in this chapter are based on the $0.228 peaking pumping and storage calculation shown in Chapter 5 as reflected in Figure 20.

Figure 20: Calculation of Peak Pumping and Storage Costs (Effective July of FY 2016-17)

			Total	Percent Applied	Applied to Peak
Storage	Capital		$0.180	50%	$0.090
	O&M		$0.090	100%	$0.090
Total Storage					**$0.180**
Pumping	O&M Total		$0.110		
	O&M Power	50.4%	$0.0554	0%	$0.000
	O&M Non-Power	49.6%	$0.0546	50%	$0.027
	Capital		$0.042	50%	$0.022
Total Pumping					**$0.055**
Total Peak Pumping and Storage					**$0.228**

The specific peak pumping and storage costs per HCF for each applicable rate schedule and tier continue to be derived based on the total costs and consumption applicable to each schedule and tier as outlined in chapter 5 and shown in Figure 21.

Figure 21: Distribution of Peak Pumping and Storage Costs across Customer Rate Schedules

$$\text{Schedule A Tiers 3\&4 Peak Pumping and Storage Costs} = \frac{\text{Schedule A Total Volume} * \$0.228/\text{HCF}}{(\text{Sch. A Tier 3} + \text{Sch. A Tier 4 Usage})}$$

$$\text{Schedule B Tier 2 Peak Pumping and Storage Costs} = \frac{\text{Schedule B Total Volume} * \$0.228/\text{HCF}}{(\text{Sch. B Tier 2})}$$

$$\text{Schedule C Tier 2 Peak Pumping and Storage Costs} = \frac{\text{Schedule C Total Volume} * \$0.228/\text{HCF}}{(\text{Sch. C Tier 2})}$$

The resulting peak pumping and storage portions of the base rate calculated for each customer schedule and tier are shown in Figure 22. The peak pumping and storage component of base rates reflects the revised total and tier volumes forecasted for each rate schedule.

Figure 22: Initial and Revised Peak Water Pumping and Storage Component of Base Rates (Effective July of FY 2016-17)

	Initial Proposed Peak Pumping and Storage			
Schedule	**Tier**			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Schedule – A	$0.000	$0.000	$0.727	$0.727
Schedule – B	$0.000	$2.433		
Schedule – C	$0.000	$1.461		
	Revised Proposed Peak Pumping and Storage			
Schedule	**Tier**			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Schedule – A	$0.000	$0.000	$0.746	$0.746
Schedule – B	$0.000	$1.760		
Schedule – C	$0.000	$1.499		
	Percent Difference Between Initial and Proposed Peaking Pumping and Storage			
Schedule	**Tier**			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Schedule – A	0.00%	0.00%	2.61%	2.61%
Schedule – B	0.00%	-27.66%		
Schedule – C	0.00%	2.60%		

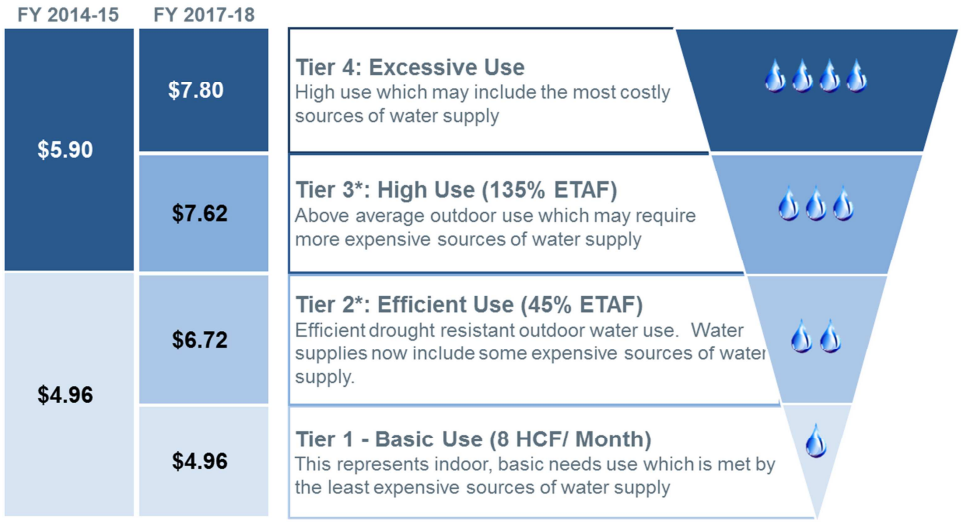
6.8.3 Changes to Evapotranspiration Adjustment Factors

As discussed in Chapter 5, the Department has considered various recommendations to adjust the preliminary proposed evapotranspiration adjustment factors (ETAFs) for the five-year rate period. At this time, the Department proposes not to change the proposed ETAF breakpoints in the revised rate plan. LADWP is proposing several important rate design changes including expansion to four tiers for Single-Dwelling Unit Residential customers, significant reductions in allocations to reflect additional conservation and the new WSCA factor to align water supply costs and usage among customer classes and rate tiers. The proposed ETAFs were designed to help balance the implications of these changes, by providing important conservation signals. For example, LADWP notes that the ETAF California standard for drought tolerant landscape is 55%; however, given the extreme drought LADWP has proposed using a 45% ETAF for tier 2. Given the extent and inter-relation of these improvements to the rate design, the Department proposes to maintain the original proposed ETAFs.

As the Department observes how customer consumption patterns manifest under the revised proposed rates, it is possible the Department may revisit the proposed ETAF breakpoints at a later time. However, due to the complexities of unit cost recovery and the uncertain nature of

customer consumption patterns, it is the Department's opinion, that for the next five years, rates should continue to be designed with the initially proposed ETAFs. However, LADWP will work with the RPA to review the ETAFs during the post year two check-in period. Figure 23 illustrates the initially proposed ETAFs and the revised corresponding tier rates.

Figure 23: Single-Dwelling Unit Residential Customer Proposed Tier Water ETAF



*Tier 2 and 3 allotments would also vary based on temperatures zones and lot size.

6.8.4 Revised Proposed Rate Design

The revised proposed rates for each tier within the three major customer classes (Schedules A, B and C) are equal to the total of the base rates, including the applicable portion of the peak pumping and storage component, and all adjustment factors. No changes are proposed to the rate structure presented in Chapter 5. However, the water rates for most of the customer classes and the application of several of the adjustment factors have been updated to accommodate the revised proposed revenue requirement, new consumption forecast and April 1, 2016 effective date for new rates. To account for the delay from the start of the current fiscal year, any shortfall will be recovered through the revenue decoupling mechanism in the Base Rate Revenue Target Adjustment (BRRTA) factor over a 2-year period (January 1, 2017 – December 31, 2018).

The WSCA and peak pumping and storage component of base rates will continue to differentiate the prices amongst tiers and customer classes; the WSCA will continue to be based on actual supply costs, supply volumes and customer usage. The Base Rate Revenue Target Adjustment (BRRTA) may also vary amongst the major customer groups, depending on the amount of over or under-collected revenue from the Department established base rate revenue targets for each major customer group. The calculation of each of the remaining adjustment factors (WQIA, OVRA, LISA, WIA and WESA) will continue to be based on the total aggregate revenue

requirement for each factor divided by total aggregate retail sales.[8] The Water Rates Ordinance provides a further explanation for how each factor is calculated.

Figure 24 illustrates the calculation of the total rates for Schedules A, B, and C across all applicable tiers based on the revenue requirement and consumption forecasts in the revised financial plan for the period beginning July of FY 2016-17.[9]

Figure 24: Calculation of the Revised Total Customer Rate (Effective July of FY 2016-17)

Schedule	Tier			
	Tier 1	**Tier 2**	**Tier 3**	**Tier 4**
Water Supply Factor:				
Schedule A	$1.28	$2.95	$2.97	$3.14
Schedule B	$1.28	$2.95		
Schedule C	$1.28	$2.95		
Peak Pumping and Storage:				
Schedule A	$0.000	$0.000	$0.746	$0.746
Schedule B	$0.000	$1.760		
Schedule C	$0.000	$1.499		
Base Rates and Other Adjustment Factors (WQIA, OVRA, LISA, WIA, WESA, and BRRTA):				
Schedule A	$3.81	$3.87	$3.85	$3.68
Schedule B	$3.81	$3.87		
Schedule C	$3.81	$3.87		
Total:	**Tier 1**	**Tier 2**	**Tier 3**	**Tier 4**
Schedule A	$5.09	$6.82	$7.57	$7.57
Schedule B	$5.09	$8.58		
Schedule C	$5.09	$8.32		

Except for April 1, 2016, rates presented in the Proposition 218 notice are based on an average of projected rate components for each semi-annual update in a given fiscal year. For FY 2016-17, for example, the rates calculated above are averaged with the analogous rate components projected for January of FY 2016-17 for a yearly average projected rate.

[8] Starting in year five, Schedule F usage will also be included in the factor calculations.

[9] Proposed rates for FY 2016-17 through FY 2019-20 will be calculated based on the revised financial plan in a similar manner.

Single-Dwelling Unit Residential Customers (Schedule A)

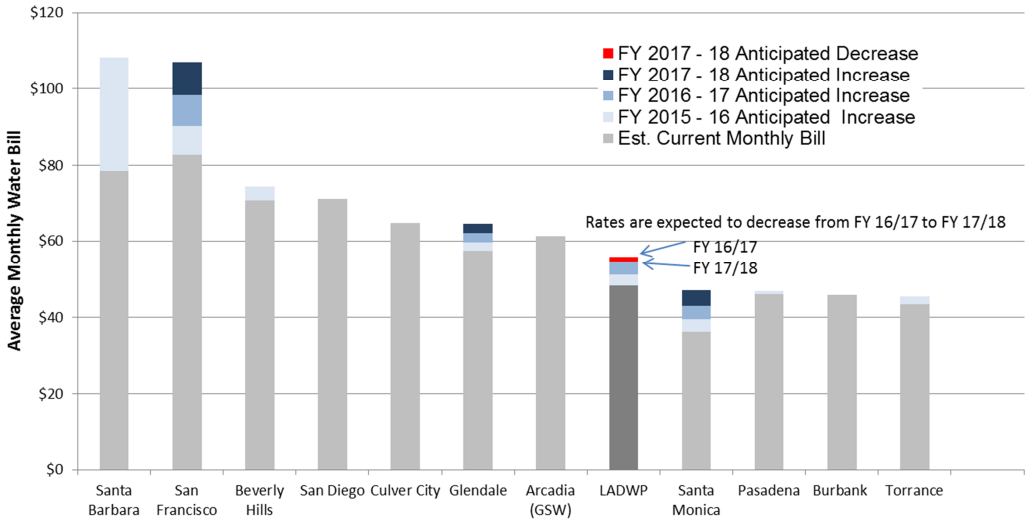
The revised proposed Single-Dwelling Unit Residential rates reflect the revenue requirement and revised consumption forecasts in the revised financial plan. As a result the WSCA has been updated to reflect the reduced near term water sales forecast and there is now less separation between tier prices for Schedule A customers in the near term rate action period. If the level of water consumption increases, then more expensive water sources will be used to meet the larger demand. The most expensive supply will be used for the upper tiers resulting in larger tier price separations. This will provide appropriate conservation signals to encourage customers to reduce consumption. These revised proposed rates are designed to provide the revenue to recover the costs of serving this customer class. The revised proposed rates for the five-year rate period are shown in Figure 25.

Figure 25: Revised Proposed Single-Dwelling Unit Residential Rates

	Initial Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$5.41	$5.78	$6.29	$6.67	$7.32
Tier 3	$6.31	$6.59	$7.47	$8.37	$8.11
Tier 4	$7.91	$8.29	$8.77	$9.01	$9.97
	Revised Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$6.77	$6.82	$6.72	$6.95	$7.26
Tier 3	$7.52	$7.57	$7.62	$7.90	$8.58
Tier 4	$7.52	$7.57	$7.80	$9.41	$10.58

LADWP's typical Single-Dwelling Unit Residential bills (based on 12 HCF of monthly usage) will continue to remain competitive with estimated bills of other major California water utilities, as illustrated in Figure 26.

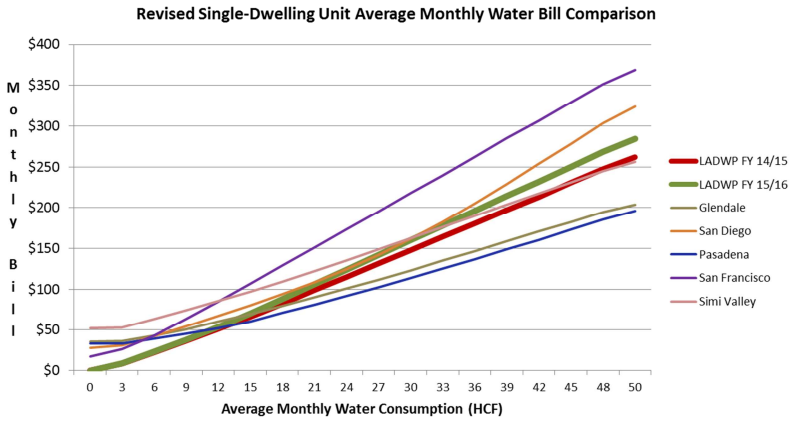
Figure 26: Revised Single-Dwelling Unit Residential Customer Typical Bill Comparison Analysis (Estimated)[10]



LADWP's proposed rates and customer bills still compare favorably to other major California utilities, especially at low usage levels that represent the majority of the Department's customers. Single-Dwelling Unit Residential customers' estimated total bills increase with additional usage at a faster rate than peer utilities providing LADWP customers a greater incentive to conserve water than customers of many other California water utilities. Figure 27 illustrates the estimated monthly bills for Schedule A customers as a function of total monthly usage.

[10] 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 sqft irrigated land and lowest pumping zone charge where applicable. These estimates do not reflect changes announced after January 2015.

Figure 27: Revised Single-Dwelling Unit Average Monthly Water Bill Comparison[11]



Multi-Dwelling Unit Residential Customers (Schedule B)

Multi-Dwelling Unit Residential rates for the five-year rate period are developed to recover the revenue requirement associated with providing service to this customer class while recognizing the increasing cost of water supply at higher levels of usage. The revised proposed rates for the five-year rate action are based on the revised financial plan and are shown in Figure 28.

Figure 28: Proposed Multi-Dwelling Unit Residential Rates

	Initial Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$7.82	$7.48	$7.65	$8.03	$8.68
	Revised Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$9.27	$8.58	$8.13	$8.36	$8.67

Commercial, Industrial, Governmental and Temporary Construction

Commercial, Industrial, Governmental and Temporary Construction customer rates for the five-year rate period are developed to recover the revenue requirement associated with providing service to this customer class while recognizing the increasing cost of water supply at higher levels of usage. The revised proposed rates for the next five years are shown in Figure 29.

[11] These estimates do not reflect changes announced after January 2015.

Figure 29: Proposed Commercial, Industrial Governmental and Temporary Construction Customer Rates

	Initial Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$4.45	$4.61	$4.92	$5.18	$5.32
Tier 2	$6.86	$7.23	$7.74	$8.11	$8.77
	Revised Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Tier 1	$5.55	$5.09	$4.96	$5.13	$5.48
Tier 2	$8.27	$8.32	$8.23	$8.46	$8.76

Publicly-Sponsored Irrigation; Recreational; Agricultural, Horticultural, and Floricultural uses; Community Gardens and Youth Sports

As discussed in Chapter 5, the rates for Schedule F customers will be transitioned for alignment with the cost of service, based on the results of the cost of service study outlined in Chapter 4. The revised proposed rates continue to target an alignment of revenues and costs within the reasonable period of five years, as shown in Figure 30.

Figure 30: Proposed Schedule F Rates

	Initial Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20[12]**
Tier 1	$1.97	$2.65	$3.48	$4.40	$5.32
Tier 2	$6.81	$7.18	$7.71	$8.11	$8.77
	Revised Proposed Rates				
Fiscal Year	**4/1/16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20[13]**
Tier 1	$2.11	$2.83	$3.50	$4.36	$5.48
Tier 2	$6.78	$8.26	$8.18	$8.43	$8.76

As the cost of water increases, the economic return on investing in more efficient irrigation processes becomes more attractive. Improved efficiency reduces the amount of irrigation,

[12] In year five, Schedule F rates will be the same as Schedule C rates.

[13] In year five, Schedule F rates will be the same as Schedule C rates.

potentially reducing the allocation of costs to Schedule F customers as their demand decreases compared to other customer classes. Therefore, the ultimate total rate increase to align revenues with costs could be less as irrigation efficiency improves.

Currently, Schedule F revenue is less than the cost of water supply, a major component of the overall cost of water service. The proposed increase in Schedule F rates would result in revenue covering the approximate cost of service noted above by the end of the five-year rate period as shown in Figure 31.

Figure 31: Proposed Schedule F Revenue Transition

$ M	Current	Initial Proposed Revenue				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Estimate Revenue	$ 11.4	$ 16.4	$ 22.1	$ 29.0	$ 36.7	$ 44.3
$ M		**Revised Proposed Revenue**				
Fiscal Year	**FY 2014-15**	**FY 2015-16**	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Estimate Revenue	$ 11.4	$17.8	$23.3	$27.5	$33.1	$40.3

A REVISED FINANCIAL CASE PLAN NUMBER 94

This appendix provides the details for Financial Case Plan Number 94, the official case upon which the revised proposed revenue requirement is determined.

Water FY16 Case#94 Final Rate Case Assumptions

Case Description

1 Planned Financial Metrics

Debt Service Coverage Ratio	1.70
Cash Balance (Water Revenue Fund)	150 operating days
Capitalization Ratio	65%

2 Sales Volumes / Forecasted Purchased Water Schedule

3 % price increase for MWD water rates

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
	4.90%	5.40%	5.50%	5.50%	6.20%	6.90%	7.60%

4 Budget Data for Capital and O&M

IBIS 04/22/15

5 Securitization

100% of Water Quality, GroundWater, Conservation and Recycled Water (include StormWater) capital projects, and Owens Valley Dust Mitigation & Master Project - Effective 7/1/16

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
DWP Fixed Interest Rate			5.35%	5.35%	5.35%	5.35%	5.35%
Interest Rate Saving			0.25%	0.25%	0.25%	0.25%	0.25%
Interest Rate Use for Securitization (JPA)			5.10%	5.10%	5.10%	5.10%	5.10%

6 Pass Through Design

Effective 4/1/2016

7 Expense Stabilization Factor

Collect additional $16.6M to reach a target of $50M in Expense Stabilization Fund in FY16/17

1/1/2017

8 Water Security Elimination

Move WS Capital and O&M FIs to Water Quality and Infrastructure effective

4/1/2016

9 Infrastructure Pass Thru Funding

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Cash		30%	35%	35%	30%	30%	30%
Debt		70%	65%	65%	70%	70%	70%

10 New Money (Bond) Issue

Includes new money bond issuance

2014 Series A

11 Interest Expense - Rate Assumptions

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Variable	0.18%	0.41%	0.88%	1.31%	1.61%	1.75%	1.75%
Fixed	4.25%	5.35%	5.35%	5.35%	5.35%	5.35%	5.35%

12 Interest Income - Rate Assumptions

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Variable	0.98%	1.21%	1.70%	2.12%	2.38%	2.56%	2.56%

13 BABs Subsidy Reduction

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Reduce subsidy by 7.2%	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)

14 State Revolving Fund Loan

($ Million)	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Amount	128.1	151.4	80.5	71.5	52.8	33.5	3.0

15 Recycled Water Capital Adjustment

($ Million)	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Capital	57.2	105.4	106.6	108.0	119.1	273.3	279.6
Adjustment	0.0	(25.0)	0.0	0.0	0.0	0.0	0.0
Adjusted Captial	57.2	80.4	106.6	108.0	119.1	273.3	279.6

16 Pass Through Factors

Reflects the latest update of

January-16

17 Owens Valley Master Plan

Yes

18 Depreciation for existing Plant Assets

4/10/2015

19 Unfunded Pension Liability as Regulatory Assets

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
FY14/15	0.0	351.8	291.0	231.0	175.6	122.1	71.0

20 GASB 45 - Post Retirement Health Care (use Annual Required Contribution)

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
Annual Required Contribution	73.4	73.4	72.7	70.1	67.4	65.5	61.2
OPEB Cost	68.2	70.6	72.7	73.3	74.4	77.1	78.5

21 Bad Debt Allowance %

Recovers through Pass Thru Factors

	FY15	FY16	FY17	FY18	FY19	FY20	FY21
	1.5%	1%	1%	1%	1%	1%	1%

Water System Financial Plan Summary
($ in millions)

Water FY16 Case#94 Final Rate Case

O&M and Capex per - IBIS 04/22/15

Base Revenue/HCF Inc %	-0.8%	-2.9%	-1.3%	3.3%	6.8%	3.5%	0.3%	1.3%	2.4%
Water Supply Cost Adjustment/HCF Inc %	6.0%	17.8%	9.9%	-7.6%	0.6%	-3.1%	-0.1%	1.2%	1.6%
Conservation & Reclaimed Water/HCF Inc %	-1.7%	0.7%	1.5%	0.2%	-6.6%	0.0%	0.0%	0.0%	0.0%
Water Quality Factor (WQIA)/HCF Inc %	12.5%	0.7%	-3.2%	3.3%	3.6%	-1.1%	0.1%	0.4%	0.5%
Water Infrastructure Factor/HCF Inc %	0.0%	0.0%	0.0%	2.2%	6.6%	1.4%	2.9%	2.5%	3.4%
Water Expense Stabilitzation Revenue/HCF Inc %				0.0%	1.4%	-1.3%	0.0%	0.0%	0.0%
Security Factor/HCF Inc %	-2.3%	-0.1%	3.6%	-0.3%	-6.2%	0.0%	0.0%	0.0%	0.0%
Owens Lake & LORP Factor/HCF Inc %	-0.7%	0.1%	-1.6%	2.5%	0.3%	-0.6%	0.1%	0.2%	0.0%
Low Income Subsidy/HCF Inc %	-0.4%	-0.2%	0.2%	0.7%	-0.2%	-0.1%	0.0%	0.0%	0.0%
Water Revenue/HCF Inc %	-1.1%	-1.1%	0.0%	1.7%	0.9%	-1.5%	-0.8%	0.0%	0.0%
Securitization Revenue/HCF Inc %	0.0%	0.0%	0.0%	0.0%	2.5%	1.6%	1.8%	2.0%	3.2%
Total Billed Revenue/HCF Inc %	11.5%	15.1%	9.0%	6.0%	9.8%	-1.1%	4.1%	7.5%	11.1%
Total Billed Revenue/HCF Inc % excl PW	5.5%	-2.8%	-0.9%	13.6%	9.1%	1.9%	4.2%	6.4%	9.5%
5 Year Average (starting FY16)								5.3%	
5 Year Avg excluding PW (starting FY16)								7.1%	

Base Revenue Incr ($M)	12.2	-30.5	-40.8	19.5	93.8	49.9	4.3	17.6	35.7
WSCA Revenue Incr ($M)	57.8	163.9	70.3	-97.2	23.4	-35.0	-1.4	16.0	23.8
Conservation & Reclaimed Water Incr ($M)	-11.0	5.7	9.6	-0.9	-71.8	0.0	0.0	0.0	0.0
Water Quality Factor (WQIA)/HCF Inc %	107.7	5.3	-44.2	28.1	48.8	-12.1	1.3	5.6	7.7
Water Infrastructure Factor/HCF Inc %	0.0	0.0	0.0	22.4	76.0	19.5	35.9	32.6	48.0
Expense Stabilitzation Revenue Incr ($M)				0.0	16.5	-16.3	-0.2	0.0	0.0
Security Factor/HCF Inc %	-16.0	-1.1	32.1	-6.4	-68.0	0.0	0.0	0.0	0.0
Owens Lake & LORP Factor/HCF Inc %	-3.0	0.5	-19.5	24.2	6.2	-7.1	0.9	3.1	0.7
Low Income Subsidy Incr ($M)	-1.9	-1.8	0.5	6.3	-0.6	-1.2	-0.5	0.4	-0.2
Water Revenue Incr ($M)	-8.6	-10.2	0.0	17.3	11.7	-18.8	-10.2	0.0	0.0
Securitization Revenue Incr ($M)		0.0	0.0	0.0	28.2	21.1	22.0	25.9	45.5
Base + Pass Thru Revenue Billed Incr ($M)	137.2	131.8	8.0	13.4	164.2	0.1	52.2	101.3	161.2

	Actual	Actual	(3-6)	Forecast					
	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1 . ***Sales (Million HCF)***	***237.1***	***235.1***	***217.2***	***207.4***	***217.4***	***219.9***	***220.0***	***220.5***	***221.2***
2 . **Revenue:** *									
a . Base Rates	394.1	363.5	322.8	342.3	436.1	486.0	490.3	507.9	543.6
b . Water Supply Cost Adjustment Factor (previously known as Purchased Water)	317.1	365.6	340.6	394.1	304.9	307.0	321.2	333.0	360.3
c . Conservation & Reclaimed Water	56.3	66.5	110.4	83.6	0.0	0.0	0.0	0.0	0.0
d . Water Infrastructure Adjustment Factor			0.0	15.7	105.8	117.9	154.3	189.7	237.0
e . Water Expense Stabilization Adjustment Factor				0.0	16.7	0.0	0.0	0.0	0.0
f . Water Security Adjustment Factor	51.4	79.4	63.6	66.0	0.0	0.0	0.0	0.0	0.0
g . Water Quality Adjustment Factor	160.5	168.6	124.4	169.8	185.3	188.4	191.8	198.5	204.8
h . Base Revenue Target Adjustment Factor	0.7	0.0	57.2	0.0	0.0	0.0	0.0	0.0	0.0
i . Owens Valley Regulatory Adjustment Factor	30.1	43.2	68.8	58.8	51.9	52.4	53.2	56.7	56.7
j . Low Income Subsidy Adjustment Factor	22.5	23.7	22.8	29.4	26.8	26.8	26.7	26.7	26.7
k . Water Rights Revenue	4.1	2.7	1.8	4.1	6.4	6.6	9.0	9.2	9.3
l . Other Operating Revenue	13.5	46.3	-19.6	4.7	4.8	4.8	4.9	4.9	5.0
m . Allowance for Uncollectible Accounts	-8.1	-17.8	-10.4	-10.8	-10.9	-12.3	-12.1	-12.4	-13.1
Total Operating Revenue before Securitization	**1,042.2**	**1,141.8**	**1,082.4**	**1,157.5**	**1,127.7**	**1,177.6**	**1,239.4**	**1,314.3**	**1,430.3**
l . Securitization Revenue		**0.0**	**0.0**	0.0	28.2	49.2	71.3	97.2	142.6
Total Operating Revenue Include Securitization	**1,042.2**	**1,141.8**	**1,082.4**	**1,157.5**	**1,155.9**	**1,226.8**	**1,310.6**	**1,411.4**	**1,572.9**
System Average Rate before Securitization($/HCF)	**3.95**	**4.55**	**4.96**	**5.26**	**5.64**	**5.48**	**5.62**	**5.95**	**6.45**
System Average Rate include Securitization ($/HCF)	**3.95**	**4.55**	**4.96**	**5.26**	**5.77**	**5.71**	**5.94**	**6.39**	**7.10**
3 . **Purchased Water Expenses**	280.4	339.4	273.1	245.4	154.6	150.0	167.5	159.5	168.8
4 . **Operation & Maintenance Expenses**									
a. Water Quality	41.2	42.9	43.3	84.1	87.9	92.4	96.7	97.4	100.6
b. Water Reclamation	3.7	9.3	7.7	7.8	8.7	8.7	9.1	8.7	7.8
c. Water Conservation	11.2	9.7	7.8	21.4	21.8	22.3	12.8	13.1	13.3
d. In-City Pumping	30.4	35.7	43.8	41.4	43.0	44.5	45.7	46.9	48.3
e. Water Security	31.8	33.5	37.7	0.0	0.0	0.0	0.0	0.0	0.0
f. Owens Valley/LORP	28.6	48.2	29.5	38.9	45.2	46.2	47.4	47.8	48.1
g. Infrastructure	232.5	239.0	274.5	265.3	266.8	270.9	280.0	287.8	293.6
Total O & M Expenses	**379.5**	**418.4**	**444.3**	**458.9**	**473.4**	**484.9**	**491.8**	**501.7**	**511.8**
5 . **Legal Settlement Expense**							0.0	0.0	0.0
6 . **Depreciation (including Amortization of Regulatory Assets)**	112.7	123.3	136.6	156.8	169.0	188.5	209.3	232.8	260.4
7 . **Property Taxes**	12.6	12.6	13.3	16.4	18.1	18.1	18.1	18.1	18.1
8 . **Other Income/Expense (Net)**	27.8	32.1	24.8	18.7	19.5	21.0	21.9	22.5	22.4
9 . **Interest Expense(Net)**	150.0	156.0	164.0	202.6	219.7	229.9	249.2	276.0	311.5
10 . **Contribution in Aid of Construction**	16.7	28.3	34.4	12.6	21.1	27.5	34.2	42.1	55.9
11 . **Net Income without Securitization**	**151.6**	**152.4**	**110.3**	**108.7**	**125.0**	**139.8**	**137.9**	**161.2**	**194.7**
Net Income with Securitization			**110.3**	**108.7**	**133.6**	**154.7**	**159.5**	**190.7**	**238.1**
12 . **Capital Expenditures:**									
a. Water Conservation	2.6	14.7	33.4	37.5	38.6	38.8	39.6	40.3	41.0
b. Water Quality	204.6	245.2	172.3	328.9	330.7	234.6	199.4	166.3	434.1
c. Water Reclamation	37.0	37.3	57.2	80.4	106.6	108.0	119.1	273.3	279.6
d. Water Security	15.8	43.3	24.7	0.0	0.0	0.0	0.0	0.0	0.0
e. Owens Valley				192.1	139.3	118.5	148.9	220.3	218.9
f. Infrastructure - Pass Through				209.4	280.6	295.1	439.1	481.8	574.7
Infrastructure - Base	222.5	328.9	446.5	134.4	156.2	153.8	175.3	174.0	117.9
Capital Expenditures	**482.5**	**669.5**	**734.2**	**982.7**	**1,052.0**	**948.8**	**1,121.4**	**1,356.0**	**1,666.2**
13a . **DWP Borrowing**	**352**	**509**	**399**	**598**	**254**	**288**	**516**	**670**	**668**
13b . **State Loan**				**151**	**81**	**72**	**53**	**34**	**3**
13c . **Borrowing for Securitization**		**0**	**0**	**0**	**428**	**320**	**335**	**393**	**691**
14a . **Debt Service**	**192**	**203**	**214**	**263**	**302**	**328**	**351**	**394**	**434**
14b . **Debt Service for Securitization**		**0**	**0**	**0**	**28**	**49**	**71**	**97**	**143**
15 . **Cash on hand**	**415**	**336**	**342**	**296**	**282**	**268**	**278**	**279**	**287**
16 . **Days of Operating Cash**	**225**	**159**	**171**	**150**	**159**	**150**	**150**	**150**	**150**
17 . **Days of Operating Cash with Debt Service**	**175**	**126**	**132**	**110**	**109**	**100**	**99**	**95**	**93**
Financial Ratios									
18 **Debt Service Coverage Ratio**	**2.19**	**2.08**	**1.83**	**1.78**	**1.70**	**1.70**	**1.70**	**1.70**	**1.77**
19 **Capitalization Ratio**	**0.58**	**0.60**	**0.61**	**0.64**	**0.64**	**0.64**	**0.64**	**0.65**	**0.65**
20 **Addtn'l Bond Test Ratio:** (prev / max)									
Debt Service Coverage	**1.17**	**1.46**	**1.52**	**1.32**	**1.43**	**1.51**	**1.53**	**1.50**	**1.55**
**** FY14-15 reflects actual through June (3-6) 2015 and Approved Pass Thru Factor through Jan 2016***									
Infrastructure O&M Increase		**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Infrastructure Capex Increase		**0.0**	**0.0**	**-25.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Water System Income Statement

($ in millions)

Water FY16 Case#94 Final Rate Case

Fiscal Year ending June 30,	Actual 2013	Actual 2014	(3-6) 2015	Forecast 2016	2017	2018	2019	2020	2021
Consumption (Million HCF)	*237.1*	*235.1*	*217.2*	*207.4*	*217.4*	*219.9*	*220.0*	*220.5*	*221.2*
Revenue From Base Rates	394.1	363.5	322.8	342.3	436.1	486.0	490.3	507.9	543.6
Revenue from Water Supply Cost Adjustment (WSCA) Factor	197.8	361.7	432.0	334.8	358.1	323.1	321.7	337.7	361.6
Revenue from Conservation & Reclaimed Water (WPA) Factor	57.3	63.0	72.7	71.8	0.0	0.0	0.0	0.0	0.0
Revenue from Water Quality Factor (WQIA)	163.3	168.6	124.4	152.5	201.4	189.3	190.6	196.2	203.9
Revenue from Infrastructure				22.4	98.5	118.0	153.9	186.5	234.5
Revenue from Water Expense Stabilization Adjustment Factor				0.0	16.5	0.2	0.0	0.0	0.0
Revenue from Security Factor	43.3	42.3	74.4	68.0	0.0	0.0	0.0	0.0	0.0
Revenue from Owens Lake & LORP Factor	47.6	48.1	28.6	52.8	59.0	52.0	52.8	56.0	56.6
Revenue from Low Income Subsidy Factor	23.8	22.0	22.5	28.8	28.2	27.0	26.5	26.9	26.8
Revenue from Base Revenue Target Adjustment	10.3	0.0	0.0	17.3	29.0	10.2	0.0	0.0	0.0
Total Retail Revenue	**937.5**	**1,069.3**	**1,077.3**	**1,090.7**	**1,226.8**	**1,205.8**	**1,235.9**	**1,311.3**	**1,427.1**
System Average before Securitization ($/HCF)	**3.95**	**4.55**	**4.96**	**5.26**	**5.64**	**5.48**	**5.62**	**5.95**	**6.45**
Change in Accrued Revenue	9.1	41.6	(18.2)	0.0	0.0	0.0	0.0	0.0	0.0
Change in (Over)/Under Collection of WSC Adj Factor	119.4	3.9	(91.3)	59.3	(53.2)	(16.2)	(0.5)	(4.7)	(1.3)
Change in (Over)/Under Collection of Conservation/RW	(1.0)	3.5	37.7	11.9	0.0	0.0	0.0	0.0	0.0
Change in (Over)/Under Collection of WQIA Factor (O&M/DS only)	(2.9)	0.0	0.0	17.2	(16.0)	(0.8)	1.2	2.2	0.9
Change in (Over)/Under Collection of Infrastructure				(6.8)	7.3	(0.0)	0.4	3.2	2.4
Change in (Over)/Under Collection of Water Expense Stabilization				0.0	0.2	(0.2)	0.0	0.0	0.0
Change (Over)/Under Security Factor	8.0	37.1	(10.8)	(2.0)	0.0	0.0	0.0	0.0	0.0
Change (Over)/Under Owens Lake Factor	(17.5)	(4.9)	40.2	5.9	(7.2)	0.4	0.4	0.7	0.1
Change (Over)/Under Low Income Subsidy Factor	(1.3)	1.7	0.3	0.5	(1.5)	(0.3)	0.2	(0.2)	(0.0)
Change (Over)/Under Base Revenue Target Adjustment	(9.5)	(0.0)	57.2	(17.3)	(29.0)	(10.2)	0.0	0.0	0.0
Water Rights Revenue	4.1	2.7	1.8	4.1	6.4	6.6	9.0	9.2	9.3
Other Operating Revenue	4.3	4.7	(1.4)	4.7	4.8	4.8	4.9	4.9	5.0
Allowance for Uncollectible Accounts	(8.1)	(17.8)	(10.4)	(10.8)	(10.9)	(12.3)	(12.1)	(12.4)	(13.1)
Additional allowance for Uncollectible Accounts						0.0			
Total Operating Revenue	**1,042.2**	**1,141.8**	**1,082.4**	**1,157.5**	**1,127.7**	**1,177.6**	**1,239.4**	**1,314.3**	**1,430.3**
Purchased Water	280.4	339.4	273.1	245.4	154.6	150.0	167.5	159.5	168.8
Demand Side Management	11.2	9.7	7.8	21.4	21.8	22.3	12.8	13.1	13.3
Operation & Maintenance Expense	368.2	408.7	436.5	437.5	451.6	462.7	479.0	488.6	498.5
Legal Settlement Expense							0.0	0.0	0.0
Amortization of Regulatory Assets	1.1	2.5	4.1	7.5	10.2	13.1	16.1	19.6	23.4
Depreciation	111.6	120.9	132.5	149.3	158.7	175.5	193.3	213.2	237.0
Property Taxes	12.6	12.6	13.3	16.4	18.1	18.1	18.1	18.1	18.1
Total Operating Expenses	**785.1**	**893.7**	**867.3**	**877.5**	**815.1**	**841.5**	**886.7**	**912.1**	**959.0**
Operating Income	257.1	248.1	215.1	280.1	312.6	336.1	352.6	402.1	471.3
Gain/Loss on Asset Sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Income/Expenses, Net	27.8	32.1	24.8	18.7	19.5	21.0	21.9	22.5	22.4
Income Before LT Debt Exp.	284.9	280.2	239.9	298.7	332.2	357.1	374.5	424.7	493.7
Interest On Fixed LT Debt	160.6	169.3	186.6	211.5	231.0	242.8	262.4	291.2	322.9
Interest On Variable LT Debt	0.4	1.8	0.1	1.3	2.9	4.3	4.3	4.3	4.3
Amortization of Debt Expenses	(6.0)	(10.6)	(13.1)	(2.6)	(5.6)	(4.8)	(2.0)	(0.1)	0.4
Long Term Debt Expense	155.0	160.4	173.6	210.2	228.2	242.3	264.6	295.4	327.6
AFUDC	(5.0)	(4.4)	(9.6)	(7.6)	(8.5)	(12.5)	(15.4)	(19.4)	(16.1)
Net Long Term Debt Expense	150.0	156.0	164.0	202.6	219.7	229.9	249.2	276.0	311.5
Contributions in Aid of Construction	16.7	28.3	34.4	12.6	12.6	12.5	12.5	12.5	12.5
CIAC - Amortization of Regulatory Asset (Securitization)				0.0	8.6	15.0	21.7	29.5	43.4
Change in Fund Net Assets before Securitization		**152.4**	**110.3**	**108.7**	**125.0**	**139.8**	**137.9**	**161.2**	**194.7**
Change in Fund Net Assets with Securitization	**151.6**	**152.4**	**110.3**	**108.7**	**133.6**	**154.7**	**159.5**	**190.7**	**238.1**
Transfer To City Reserve Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Extraordinary gain/(loss) on extinguishment of debt									
Increase in Fund Net Assets with Securitization	151.6	152.4	110.3	108.7	133.6	154.7	159.5	190.7	238.1

Calculation for System Average Rate ($/HCF)								
Consumption (Million HCF)	*235.1*	*217.2*	*207.4*	*217.4*	*219.9*	*220.0*	*220.5*	*221.2*
Billed Revenue Before Securitization	1,069.3	1,077.3	1,090.7	1,226.8	1,205.8	1,235.9	1,311.3	1,427.1
Securitization Revenue	0.0	0.0	0.0	28.2	49.2	71.3	97.2	142.6
Billed Revenue Include Securitization	1,069.3	1,077.3	1,090.7	1,255.0	1,255.0	1,307.2	1,408.5	1,569.7
System Average before Securitization ($/HCF)	4.55	4.96	5.26	5.64	5.48	5.62	5.95	6.45
System Average include Securitization ($/HCF)	4.55	4.96	5.26	5.77	5.71	5.94	6.39	7.10

Los Angeles Department of Water
Water System Balance Sheet
($ in millions)

Water FY16 Case#94 Final Rate Case

	Actual	(3-6)	Forecast					
Fiscal Year ending June 30,	2014	2015	2016	2017	2018	2019	2020	2021
Plant Assets:								
Plant in Service	7,377.4	7,813.4	8,772.6	9,615.6	10,554.1	11,544.3	12,613.9	13,905.3
C W I P	923.8	1,182.0	1,149.6	1,304.4	1,261.0	1,336.3	1,550.1	1,847.5
Gross Plant	8,301.2	8,995.4	9,922.2	10,919.9	11,815.1	12,880.6	14,164.0	15,752.8
Accum. Depreciation	2,351.0	2,482.0	2,618.9	2,767.8	2,936.3	3,125.7	3,338.5	3,578.9
Net Plant Assets	5,950.2	6,513.4	7,303.4	8,152.1	8,878.8	9,754.9	10,825.5	12,173.9
Current Assets:								
Revenue Fund	335.7	342.0	296.2	282.1	268.3	278.4	279.2	287.1
Construction Fund	212.2	110.3	0.0	0.0	0.0	0.0	0.0	0.0
Construction Fund - Securitization		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance Funds & Others	26.9	27.9	28.9	29.9	30.9	31.9	32.9	33.9
Expense Stabilization Fund	33.4	33.5	33.5	49.8	50.0	50.0	50.0	50.0
Bond Redemption & Interest Fund	114.8	131.7	164.6	192.7	201.2	221.9	241.8	263.9
Accounts Receivable	105.9	85.7	106.8	111.2	108.8	108.2	112.5	119.3
Due from/to Power System	(40.3)	(3.9)	(3.9)	(3.9)	(3.9)	(3.9)	(3.9)	(3.9)
Accrued Revenue	88.0	69.0	69.0	69.0	69.0	69.0	69.0	69.0
Material & Supplies	19.6	19.3	19.3	19.3	19.3	19.3	19.3	19.3
Prepayments	18.1	19.7	19.7	19.7	19.7	19.7	19.7	19.7
Total Current Assets	914.3	835.2	734.2	769.9	763.4	794.6	820.6	858.4
Regulatory Assets - Reclamation	67.1	106.5	112.4	116.7	124.0	135.7	167.4	199.8
Regulatory Assets - Conservation			37.5	76.1	114.9	154.5	194.7	235.7
Net Pension Asset	7.0	(15.6)	(15.6)	(15.6)	(15.6)	(15.6)	(15.6)	(15.6)
Net Postretirement Asset	309.8	313.5	314.4	314.4	313.4	311.2	307.4	307.4
Regulatory Asset - Unfunded Pension Liability		0.0	351.8	291.0	231.0	175.6	122.1	71.0
Total Assets	**7,248.4**	**7,753.0**	**8,838.2**	**9,704.6**	**10,409.9**	**11,310.9**	**12,422.1**	**13,830.7**
Retained Earning	1,849.3	1,908.0	2,004.1	2,116.6	2,243.9	2,369.2	2,517.9	2,700.1
Accumulated CIAC	908.4	942.8	955.3	976.5	1,004.0	1,038.2	1,080.2	1,136.1
Prior Period Adjustment - Cost of Issuance	(17.1)							
Fund Net Assets	2,740.5	2,850.8	2,959.5	3,093.1	3,247.8	3,407.4	3,598.1	3,836.2
Fixed Rate Bonds	3,513.1	3,791.3	4,330.1	4,507.8	4,707.1	5,131.8	5,696.2	6,252.1
State Loan	304.0	421.7	573.1	653.6	725.1	777.9	811.4	814.4
Variable Rate Bonds	325.0	325.0	325.0	325.0	325.0	325.0	325.0	325.0
Long Term Debt Due 1 YR	(27.2)	(39.0)	(68.1)	(80.9)	(83.9)	(98.4)	(106.3)	(112.5)
Non - Current Debt	4,114.9	4,499.0	5,160.2	5,405.5	5,673.3	6,136.2	6,726.4	7,279.0
Current Liabilities:								
Long Term Debt Due in 1 Yr	27.2	39.0	68.1	80.9	83.9	98.4	106.3	112.5
Accrued Interest on Bonds	88.6	94.7	96.6	111.8	117.3	123.5	135.5	151.4
Accounts Payable	182.4	185.2	185.2	185.2	185.2	185.2	185.2	185.2
LT Workers Comp. Liab.	26.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Customer Deposit	113.4	137.9	139.2	140.6	142.0	143.5	144.9	146.3
Accrued Postretirement Liab.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Payable to City's Reserve Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Over (Under) Recovery Water Supply Cost Adju	(120.9)	(29.6)	(89.0)	(35.7)	(19.6)	(19.0)	(14.3)	(13.0)
Over (Under) Recovery Conservation & Reclain	50.4	11.9	0.0	0.0	0.0	0.0	0.0	0.0
Over (Under) Recovery Water Quality	0.0	0.0	(17.2)	(1.2)	(0.4)	(1.6)	(3.8)	(4.7)
Over (Under) Recovery Infrastructure			6.8	(0.5)	(0.5)	(0.8)	(4.0)	(6.5)
Over (Under) Recovery Water Expense Stabilization			0.0	(0.2)	0.0	0.0	0.0	0.0
Over (Under) Recovery Water Security	(12.8)	(2.0)	0.0	0.0	0.0	0.0	0.0	0.0
Over (Under) Recovery Owens Lake	39.4	(0.8)	(6.7)	0.5	0.1	(0.4)	(1.1)	(1.2)
Over (Under) Recovery Water Subsidy	(1.6)	(2.0)	(2.5)	(1.0)	(0.7)	(1.0)	(0.8)	(0.7)
Over (Under) Recovery BRTA	0.6	(56.5)	(39.2)	(10.2)	0.0	0.0	0.0	0.0
Total Current Liabilities	393.0	403.2	366.7	495.5	532.8	553.3	573.4	594.8
Unfunded Pension Liability		0.0	351.8	291.0	231.0	175.6	122.1	71.0
Regulatory Assets - Securitization			0.0	419.5	724.9	1,038.4	1,402.2	2,049.7
Total Fund Net Assets and Liabilities	**7,248.4**	**7,753.0**	**8,838.2**	**9,704.6**	**10,409.9**	**11,310.9**	**12,422.1**	**13,830.7**

Water System Source of Funds

($ in millions)

Water FY16 Case#94 Final Rate Case

Fiscal Year ending June 30,		Actual 2013	Actual 2014	(3-6) 2015	Forecast 2016	2017	2018	2019	2020	2021
Revenue Fund		295.9	415.0	335.7	342.0	296.2	282.1	268.3	278.4	279.2
Construction Fund			42.9	212.2	110.3	0.0	0.0	0.0	0.0	0.0
Beginning Cash		295.9	457.9	547.9	452.2	296.2	282.1	268.3	278.4	279.2
Available From Operation		101.2	117.4	147.6	123.3	298.6	245.0	231.7	262.4	318.5
Cont. In Aid Of Construction		16.7	28.3	34.4	12.6	12.6	12.5	12.5	12.5	12.5
Cont. In Aid Of Construction - Securitization				0.0	0.0	8.6	15.0	21.7	29.5	43.4
Bond Proceeds for Capex		322.0	380.0	271.0	598.0	253.9	287.9	515.8	669.7	668.4
State Loan		29.5	129.2	128.1	151.4	80.5	71.5	52.8	33.5	3.0
Bond Proceeds for Refunding		208.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Bond Proceeds for Disc/Prem on Refunding		45.3	46.3	0.0	0.0	0.0	0.0	0.0	0.0	
Change In Current Assets		(23.7)	(9.4)	(20.0)	(99.5)	(92.6)	(52.4)	(70.2)	(93.5)	(103.3)
Change In Current Liabilities		37.5	47.1	32.4	3.3	16.6	6.9	7.6	13.4	17.3
Regulatory Asset - Unfunded Pension Liability				0.0	(351.8)	60.8	60.0	55.4	53.5	51.1
Unfunded Pension Liability				0.0	351.8	(60.8)	(60.0)	(55.4)	(53.5)	(51.1)
Regulatory Assets - Securitization				0.0	0.0	419.5	305.4	313.5	363.8	647.6
Clearing Depreciation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refunded Bonds		(237.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accrued Interest on Refunded Bonds		(16.3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Premium (Discount) on Bonds		51.6	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0
Bond Issue Costs		(1.7)	(1.0)	(0.8)	(6.0)	(2.5)	(2.9)	(5.2)	(6.7)	(6.7)
Sale of Assets		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Adjustments										
Total Source		829.0	1,195.8	1,180.5	1,235.4	1,291.3	1,171.1	1,348.5	1,563.1	1,879.9
Less: Capital Expenditures (excl CIAC, REV, AFUDC & DSM&Reclaimed Regulatory Assets)	*	414.0	669.5	734.2	939.2	1,009.2	902.7	1,070.1	1,284.0	1,592.8
Adjustment to reconcile with Cash			21.6	5.8						
Ending Cash		**415.0**	**547.9**	**452.2**	**296.2**	**282.1**	**268.3**	**278.4**	**279.2**	**287.1**

* FY12 & FY13- excluding Regulatory Assets and including adjustment to reconcile to revenue fund.

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Water System Operating Results

($ in millions)

Water FY16 Case#94 Final Rate Case

	Actual	Actual	(3-6)	Forecast					
Fiscal Year ending June 30,	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Total Operating Revenue (Cash basis)	937.8	1,058.9	1,067.3	1,088.7	1,227.1	1,204.9	1,237.7	1,313.0	1,428.2
Additional allowance for Uncollectible Accounts		0.0	0.0			0.0			
Purchased Water	280.4	339.4	273.1	245.4	154.6	150.0	167.5	159.5	168.8
Conservation	11.2	9.7	7.8	21.4	21.8	22.3	12.8	13.1	13.3
O & M Expenses	368.2	408.7	436.5	437.5	451.6	462.7	479.0	488.6	498.5
Legal Settlement Expense							0.0	0.0	0.0
Taxes	12.6	12.6	13.3	16.4	18.1	18.1	18.1	18.1	18.1
Total O & M Less Depreciation	672.5	770.4	730.7	720.6	646.1	653.0	677.4	679.3	698.6
Net Proceeds From Assets Sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AFUDC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Income/Expenses, Net	27.8	32.1	24.8	18.7	19.5	21.0	21.9	22.5	22.4
Total Other Income	27.8	32.1	24.8	18.7	19.5	21.0	21.9	22.5	22.4
Balance Avail for DS	**293.1**	**320.6**	**361.4**	**386.8**	**600.5**	**573.0**	**582.2**	**656.3**	**752.0**
Interest on Fixed Rate Debt	160.6	169.3	186.6	211.5	231.0	242.8	262.4	291.2	322.9
Fixed Rate Bond Maturities	30.9	32.2	27.2	50.6	68.1	80.9	83.9	98.4	106.3
Interest on Variable Rate Debt	0.4	1.8	0.1	1.3	2.9	4.3	4.3	4.3	4.3
Variable Rate Bond Maturities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Debt Service	**191.9**	**203.2**	**213.8**	**263.5**	**301.9**	**328.0**	**350.5**	**393.9**	**433.5**
Balance Available After DS	**101.2**	**117.4**	**147.6**	**123.3**	**298.6**	**245.0**	**231.7**	**262.4**	**318.5**
Available From Operation	**101.2**	**117.4**	**147.6**	**123.3**	**298.6**	**245.0**	**231.7**	**262.4**	**318.5**

LOS ANGELES DEPARTMENT OF WATER AND POWER
FINANCIAL PLAN - RATING AGENCY RATIOS

($ in millions)

Water FY16 Case#94 Final Rate Case

FY ENDING JUNE 30		Actual 2013	Actual 2014	(3-6) 2015	Forecast 2016	2017	2018	2019	2020	2021
① Debt Service Coverage Ratio:										
Total Operating Revenue (Accrual Basis)		1042.2	1141.8	1082.4	1157.5	1127.7	1177.6	1239.4	1314.3	1430.3
Total O&M (excluding Depreciation)		(672.5)	(770.4)	(730.7)	(720.6)	(646.1)	(653.0)	(677.4)	(679.3)	(698.6)
Total Other Income		27.8	32.1	24.8	18.7	19.5	21.0	21.9	22.5	22.4
BABs Subsidy		(18.5)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)
Bal. Avail. for Debt Service (Accrual Basis)		379.0	386.3	359.3	438.4	483.9	528.4	566.7	640.3	736.9
Debt Service										
Interest on Fixed Rate Debt		160.6	169.3	186.6	211.5	231.0	242.8	262.4	291.2	322.9
Fixed Rate Bond Maturities		30.9	32.2	27.2	50.6	68.1	80.9	83.9	98.4	106.3
Interest on Variable Rate Debt		0.4	1.8	0.1	1.3	2.9	4.3	4.3	4.3	4.3
Variable Rate Bond Maturities		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BABs Subsidy		(18.5)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)	(17.2)
Total Debt Service (less BAB subsidy)		173.4	186.0	196.7	246.3	284.7	310.8	333.3	376.7	416.3
Debt Service Coverage (Accrual Basis Net of BABs)		**2.19**	**2.08**	**1.83**	**1.78**	**1.70**	**1.70**	**1.70**	**1.70**	**1.77**
② Additional Bond Tests Ratio:										
Max Debt Service		286.6	286.6	286.6	318.2	333.8	351.0	382.1	422.6	463.0
Net Income		151.6	152.4	110.3	108.7	133.6	154.7	159.5	190.7	238.1
LT Debt Expense		155.0	160.4	173.6	210.2	228.2	242.3	264.6	295.4	327.6
Amortization of Regulatory Assets		1.1	2.5	4.1	7.5	10.2	13.1	16.1	19.6	23.4
Depreciation		111.6	120.9	132.5	149.3	158.7	175.5	193.3	213.2	237.0
Adjusted Net Income (as defined in Master Bond Reso)		419.2	436.2	420.4	475.8	530.8	585.6	633.5	718.9	826.1
Additional Bond Test Ratio (previous year adjusted net income /max debt service)		**1.17**	**1.46**	**1.52**	**1.32**	**1.43**	**1.51**	**1.53**	**1.50**	**1.55**
③ Days of Operating Cash:										
Purchased Water Expenses		280.4	339.4	273.1	245.4	154.6	150.0	167.5	159.5	168.8
Total O & M Expenses		379.5	418.4	444.3	458.9	473.4	484.9	491.8	501.7	511.8
Property Taxes		12.6	12.6	13.3	16.4	18.1	18.1	18.1	18.1	18.1
Total Operating Expenses		672.5	770.4	730.7	720.6	646.1	653.0	677.4	679.3	698.6
Total Operating Expenses / 365 days	a	1.8	2.1	2.0	2.0	1.8	1.8	1.9	1.9	1.9
Cash on hand	b	415.0	335.7	342.0	296.2	282.1	268.3	278.4	279.2	287.1
Days of Operating Cash	b/a	**225**	**159**	**171**	**150**	**159**	**150**	**150**	**150**	**150**
④ Capitalization Ratio:										
Long-term Debt	a	3,597.4	4,114.9	4,499.0	5,160.2	5,405.5	5,673.3	6,136.2	6,726.4	7,279.0
Fund Net Assets	b	2,605.2	2,740.5	2,850.8	2,959.5	3,093.1	3,247.8	3,407.4	3,598.1	3,836.2
Total Long-term Debt + Fund Net Assets	c	6,202.6	6,855.4	7,349.8	8,119.7	8,498.6	8,921.2	9,543.6	10,324.4	11,115.2
Capitalization Ratio	a/c	**58%**	**60%**	**61%**	**64%**	**64%**	**64%**	**64%**	**65%**	**65%**

B REVISED WATER SUPPLY COST BY SOURCE DETAIL

This appendix provides the revised data and calculations for the Water Supply Cost Adjustment (WSCA) factor for each year of the rate action period.

Figure 1 outlines the amount and percentage for each source of water supply in the WSCA and the amount and percentage for each source of water supply for the five-year rate action period based on Financial Plan Case No. 94.

The WSCA continues to include the cost of the source water supply plus a proportionate[1] amount of the costs of conservation and bad debt and the over or under-recovery based on the volume for the specific source and the initial over or under-recovery accounts for the Water Procurement Adjustment from prior fiscal years. As discussed in Chapter 6, the revised WSCA will be updated semi-annually to reflect more current supply and costs.

[1] The proportion is determined by the percentage of total water supply budgeted to be obtained from each source.

Figure 1: Unit Costs for Water Supply Components and Volumes for Each Source of Water Supply

		Forecast								
		FY 15-16	**FY 16-17**		**FY 17-18**		**FY 18-19**		**FY 19-20**	
		April - 16	**July - 16**	**Jan - 17**	**Jul - 17**	**Jan - 18**	**Jul - 18**	**Jan - 19**	**Jul - 19**	**Jan – 20**
Unit Cost ($/HCF)	Groundwater Pumping	1.434	1.535	1.419	1.321	1.367	1.414	1.263	1.143	1.158
	LA Aqueduct	0.642	0.529	0.534	0.548	0.548	0.558	0.567	0.584	0.589
	MWD	2.217	2.442	2.530	2.628	2.657	2.685	2.843	3.032	3.097
	Recycled Water[2]	1.759	2.743	2.233	2.466	3.135	4.440	4.367	5.232	5.189
Supply (AF)	Groundwater Pumping	80,700	75,811	83,155	90,499	89,059	87,619	98,851	110,083	110,083
	LA Aqueduct	217,880	266,112	265,920	265,728	265,536	265,344	265,152	264,960	264,768
	MWD	182,848	144,776	137,620	130,465	132,091	133,718	122,856	111,994	112,917
	Recycled Water	12,000	12,480	15,360	18,240	18,336	18,432	18,768	19,104	19,152
	Total Supply	476,176	499,179	502,055	504,932	505,022	505,113	505,627	506,141	506,920
Volume (%)	Groundwater Pumping	16%	15%	17%	18%	18%	17%	20%	22%	22%
	LA Aqueduct	44%	53%	53%	53%	53%	53%	52%	52%	52%
	MWD	37%	29%	27%	26%	26%	26%	24%	22%	22%
	Recycled Water	2%	3%	3%	4%	4%	4%	4%	4%	4%
	Total Supply	100%	100%	100%	100%	100%	100%	100%	100%	100%

[2] For the purposes of the WSCA, Stormwater costs are included in Recycled Water.

Figure 2, Figure 3, Figure 4, Figure 5 and Figure 6 provide the applicable O&M, capital depreciation, debt cost and other budgeted costs associated with each source of water supply. The amounts shown in these figures reflect the estimated annual costs used to calculate the unit costs as of July of each fiscal year. Since the WSCA will be trued up semi-annually to reflect actual costs, supply amounts and tier usage, separate unit costs have been estimated for January and July of each fiscal year as shown in Figure 1. The proposed rates for FY 2016-17 through FY 2019-20 outlined in chapter 6 were developed based on an average of the July and January estimated unit costs. FY 2015-16 unit costs are used to calculate the WSCA effective April 1, 2016.

Figure 2: Cost of In-City Groundwater Pumping

	Forecast				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Pumping[3]					
O&M	$44,599,175	$44,898,200	$46,299,400	$48,156,500	$49,007,600
Depreciation	$2,704,353	$2,704,353	$2,704,353	$2,704,353	$2,704,353
Return on Investment	$3,089,716	$3,089,716	$3,089,716	$3,089,716	$3,089,716
Total In-City Pumping	$50,393,244	$50,692,269	$52,093,469	$53,950,569	$54,801,669
Total Local Groundwater Production (AF)	84,063	78,970	94,270	91,270	114,670
Less: Loss (AF)	3,363	3,159	3,771	3,651	4,587
Net Local Ground Water Production (AF)	80,700	75,811	90,499	87,619	110,083
Pumping Unit Cost per HCF (Cost per AF / 435.6)	**$1.434**	**$1.535**	**$1.321**	**$1.414**	**$1.143**

[3] Pumping costs included for groundwater are the pumping costs directly associated with the groundwater source of supply. Pumping costs required for the distribution system are not included.

Figure 3: Cost of Los Angeles Aqueduct

	Forecast				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Los Angeles Aqueduct					
LAA Total O&M*	$38,555,901	$38,704,700	$39,547,500	$41,764,400	$43,743,800
Depreciation	$11,352,198	$11,738,366	$12,238,120	$12,422,424	$12,729,900
Property Taxes	$12,289,465	$12,413,602	$12,413,602	$12,413,602	$12,413,602
Total Operating Expense	$62,197,564	$62,856,668	$64,199,221	$66,600,425	$68,887,302
Less: Other Income (Negative) & Expense (Positive), Net	($4,710,130)	($4,769,154)	($4,816,846)	($4,865,014)	($4,913,664)
Less: Water for Hydraulic Plant (G/L 7341000)	($5,782,650)	($6,403,000)	($6,595,000)	($8,967,000)	($9,156,000)
Less: Revenue from Owens Valley	($21,730)	($21,949)	($21,949)	($21,949)	($21,949)
Add: Return on Investment	$9,238,562	$9,623,820	$10,675,009	$11,725,313	$12,664,603
Total Cost of Production	$60,921,617	$61,286,384	$63,440,435	$64,471,775	$67,460,291
Total Aqueduct Production (AF)	226,196	277,200	276,800	276,400	276,000
Less: Loss (AF)	8,316	11,088	11,072	11,056	11,040
Net Acre Feet - Aqueduct	217,880	266,112	265,728	265,344	264,960
Cost per AF ($ per AF)	$279.61	$230.30	$238.74	$242.97	$254.61
Cost per HCF (Cost per AF / 435.6)	**$0.642**	**$0.529**	**$0.548**	**$0.558**	**$0.584**

* LAA Total O&M Expense includes functional items for both source of supply and pumping for the LAA. Those functional items include: Source of Supply – 302-2001 LA Aqueduct Operation North, 302-2005 LA Aqueduct Operation South, 302-2015 LA Aqueduct Maintenance South, 302-2025 LA Aqueduct Maintenance North, 302-2035 Resource Management O&M, 322-2507 Hazardous Substance Mgmt Prgm - Aqueduct (Job 53004 only), 335-3200 Dam Stability Analysis (75% is for Northern Aqueducts), 401-3005 East Sierra Environmental, 409-2023 Southern District Eng & Oper, and Pumping – 311-2009 Groundwater Pump O&M North.

Figure 4: Cost of Metropolitan Water District Water

	Forecast				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
MWD					
Purchased Water Cost	$176,571,928	$153,986,317	$149,350,825	$156,385,196	$147,926,576
Total Water Volume Purchased from MWD (AF)	190,467	150,808	135,901	139,289	116,661
Less: Loss (AF)	7,619	6,032	5,436	5,572	4,666
Net Water Purchased from MWD (AF)	182,848	144,776	130,465	133,718	111,994
MWD Unit Cost per AF	$965.675	$1,063.620	$1,144.758	$1,169.517	$1,320.843
MWD Unit Cost per HCF (Cost per AF / 435.6)	**$2.217**	**$2.442**	**$2.628**	**$2.685**	**$3.032**

Figure 5: Cost of Conservation

	Forecast				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Conservation					
Conservation O&M	$21,691,575	$21,805,400	$22,258,300	$12,817,700	$13,068,500
Sales (Excluding D&F) (HCF)	206,371,915	208,876,564	211,283,959	211,359,627	218,640,222
Conservation Unit Cost per HCF (Cost per AF / 435.6)	**$0.105**	**$0.104**	**$0.105**	**$0.061**	**$0.060**

Figure 6: Cost of Recycled Water[4]

	Forecast				
	FY 2015-16	**FY 2016-17**	**FY 2017-18**	**FY 2018-19**	**FY 2019-20**
Recycled Water					
RW O&M	$8,464,750	$8,672,400	$8,707,500	$9,090,100	$8,747,900
West Basin Rec. Water Purchases	$728,920	$630,226	$655,435	$11,155,700	$11,601,928
100% of the RW Capital (Actual Only)	-	-	-	-	-
Debt Service of 100% of the RW Capital	-	$5,607,586	$10,232,234	$15,404,479	$23,185,911
Total Recycled Water	$9,193,670	$14,910,212	$19,595,169	$35,650,279	$43,535,739
Recycled Water Production (AF)	12,500	13,000	19,000	19,200	19,900
Less: Loss (AF)	500	520	760	768	796
Recycled Water Production (AF)	12,000	12,480	18,240	18,432	19,104
RW Unit Cost per AF	$766.139	$1,194.729	$1,074.297	$1,934.151	$2,278.881
RW Unit Cost per HCF (Cost per AF / 435.6)	**$1.759**	**$2.743**	**$ 2.466**	**$4.440**	**$5.232**

[4] For the purposes of the WSCA, Stormwater costs are included in Recycled Water.