



Putting Our Customers First

WATER & POWER RATEMAKING OVERVIEW

Energy and Environment Committee Presentation

February 3, 2016



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GENERAL RATEMAKING OVERVIEW

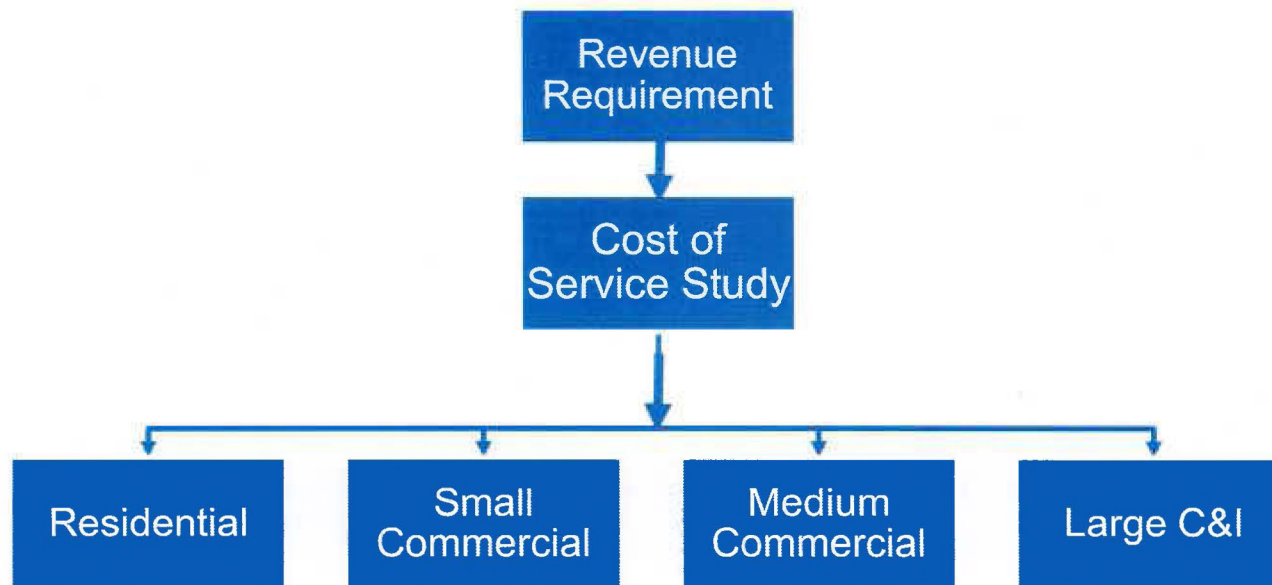
The Department’s financial plan and proposed rates are designed to gain access to bond markets at the lowest reasonable cost

Public Resources Advisory Group (PRAG) undertook a review of the financial metrics for both the Power System and Water System in June 2013 and recommended financial targets that result in a lower revenue requirement and therefore customer rates. The following recommendations were adopted by the Board:

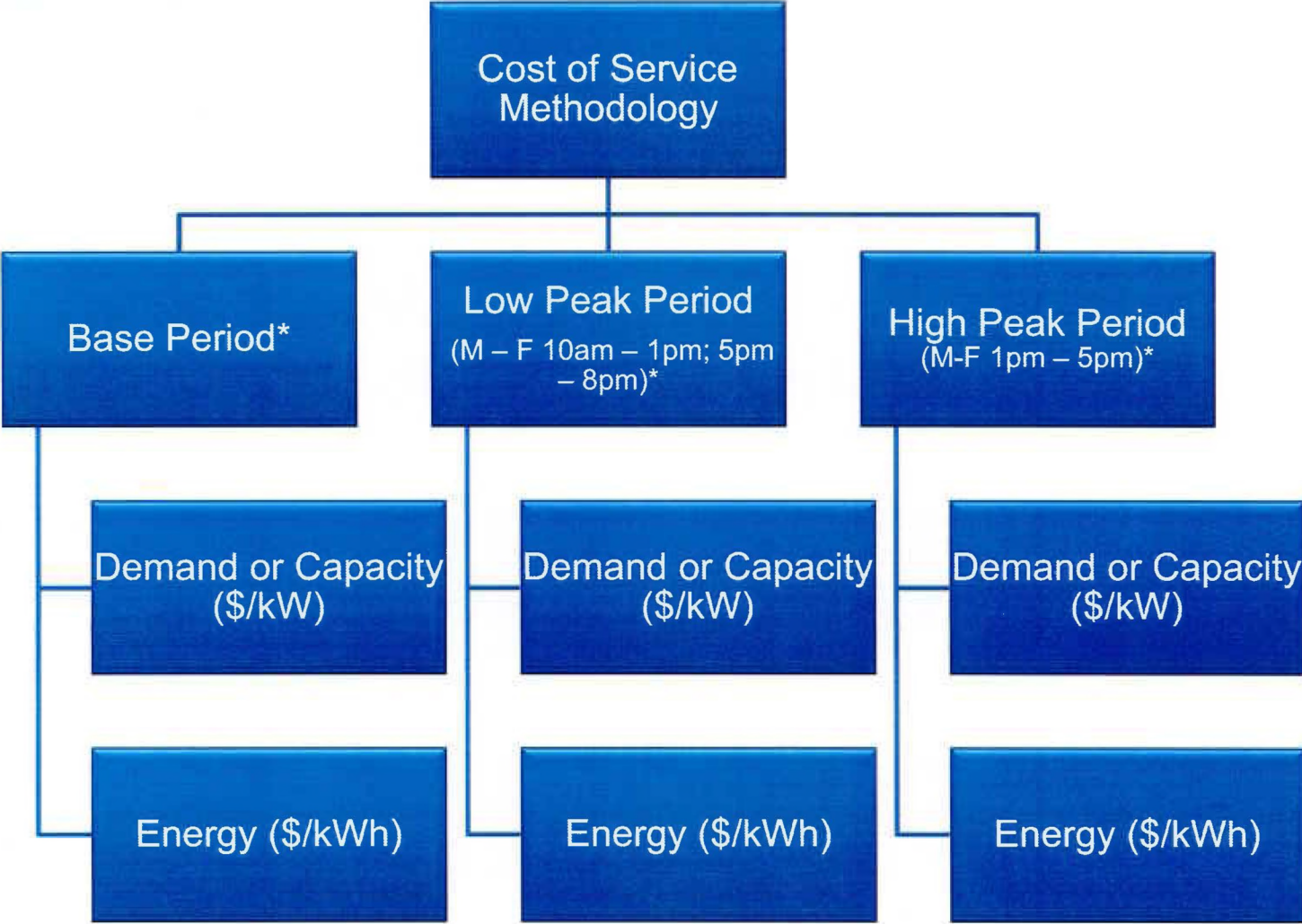
Metric	Power System Target	Water System Target
Operating Cash Target/ Days Cash on Hand	170 Days	150 Days
Full Obligation Coverage Rate	1.70	N/A
Debt Service Coverage	2.25	1.70
Capitalization Ratio	Less than 68%	Less than 65%

A cost of service study is developed to allocate the revenue requirement across customer classes

A cost of service study identifies functional costs and ascribes a portion of those costs to each major customer class on a cost causative basis.



For example, the cost of service methodology is used to guide Commercial electric rate design based on time period and rate components



*These time periods are specific to LADWP

Decoupling is a critical element of conservation based ratemaking

Decoupling is an industry best practice that is used within rate structures and enables power and water conservation WHILE covering a utility's fixed costs of providing reliable water and electricity services.

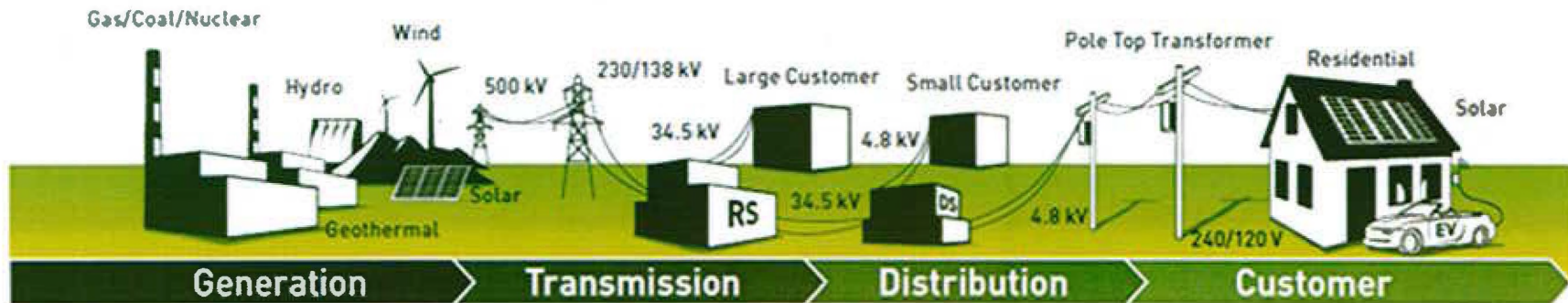


Revenues **ABOVE** sales target are returned to customers.

Revenues **BELOW** sales target are recovered through charges over the next calendar year.

POWER RATEMAKING OVERVIEW

Power System Infrastructure Overview



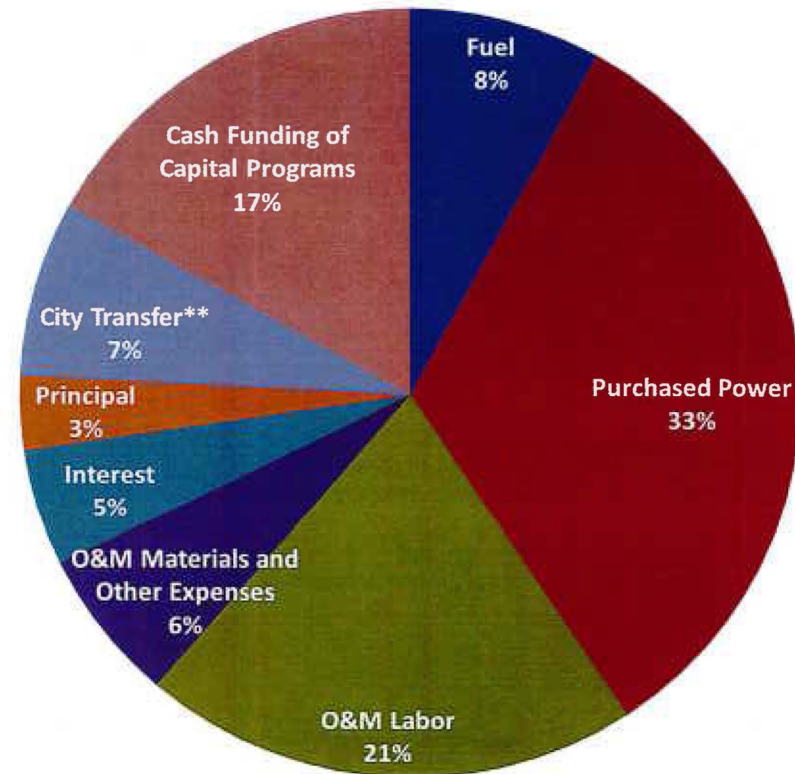
LADWP is a “vertically integrated” utility—both owning and operating the majority of its Generation, Transmission, and Distribution (G, T, and D) systems. Rate components are designed to recover specific costs associated with the G, T, and D infrastructure.

The Power System's revenue requirement is defined by the expenditures sufficient to operate and maintain the Power System and service debt

The revenue requirement is developed from the Power System's approved budget and is comprised of:

- O&M Labor
- O&M Materials and Other Expenses
- Purchased Power
- Fuel
- Cash Funding of Capital Programs
- Principal
- Interest
- City Transfer**

Power System FY 2015-16 Revenue Requirement Components*



*All Power System financial data in this presentation is based on Power Financial Case 143

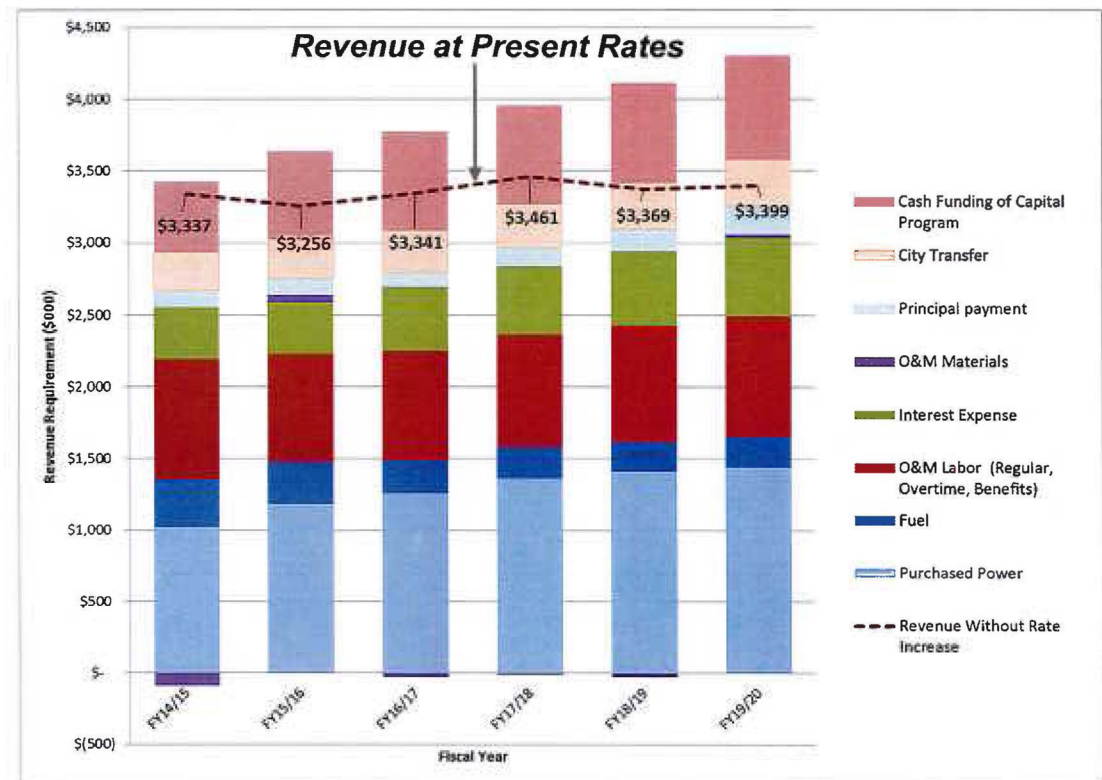
** Based on 8% of previous fiscal year's gross operating revenue

Without a rate increase, current revenues are projected to be inadequate to fund critical planned programs and daily operations

In the next five years, LADWP must invest in several key programs that are essential to ensure reliability, comply with regulatory mandates and provide services desired by customers.

Major programs driving the need for increased revenues include:

- Infrastructure, including Power System Reliability Program (PSRP)
- Power Supply Transformation
- Customer Opportunities Programs
- Fuel for Traditional Generation



Legal guidance must be considered

LADWP must consider applicable legal guidance in developing proposed rates for power service. Potentially applicable guidance includes:

- 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, among other things: (1) the nature of the uses; (2) the quantity supplied; and (3) the value of the service”
- Proposition 26, which declares that “a charge imposed for a specific government service or product provided directly to the payor shall not exceed the reasonable costs of providing the service or product to the payor.”

The proposed power rate structure will encourage conservation and decouple sales from costs to maintain financial stability and avoid over-collection

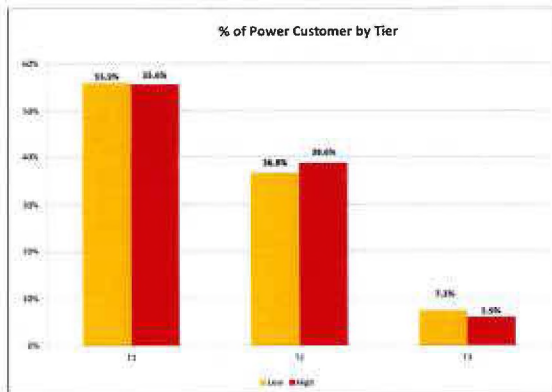
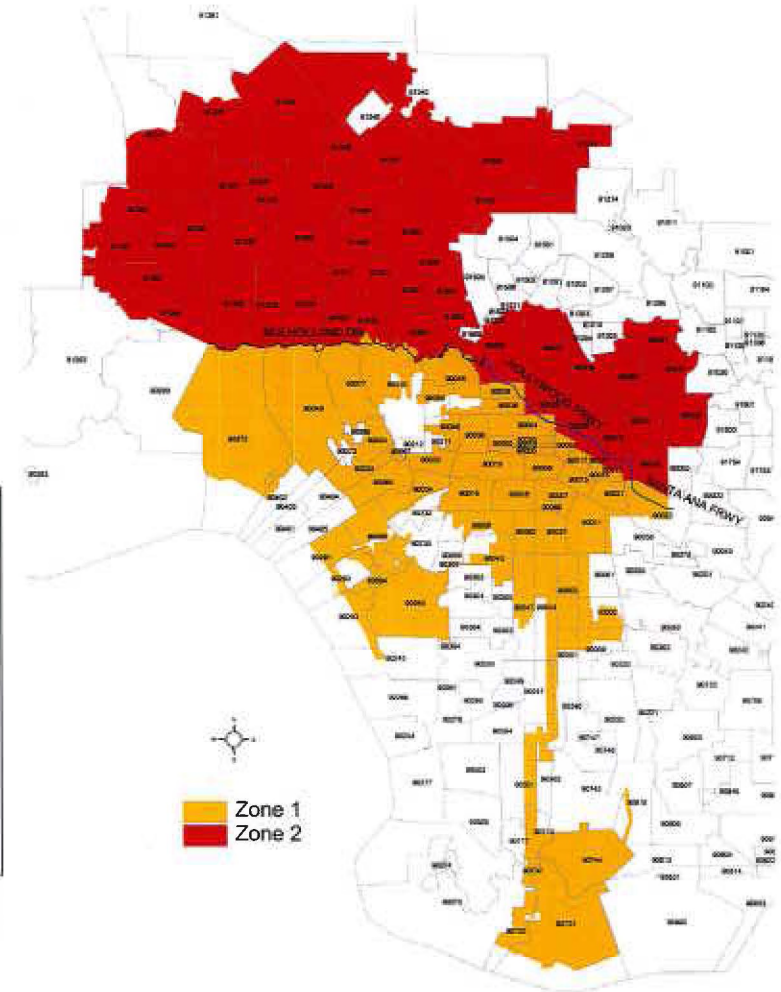
Over/Under Collection	Yes	Variable Energy Adjustment (VEA)	<ul style="list-style-type: none"> Fuel costs (natural gas, coal, nuclear, hydro) Non-RPS Purchase Power Agreements Includes funds for "Base Rate Revenue Target Adjustment" 	}	Incremental Proposed Ordinance
	Yes	Variable Renewable Portfolio Standard Energy Adjustment (VRPSEA)	<ul style="list-style-type: none"> Above minimum RPS purchases & market purchases for regulatory requirements 		
	Yes	Capped Renewable Portfolio Standard Energy Adjustment (CRPSEA)	<ul style="list-style-type: none"> RPS O&M, RPS debt services & energy efficiency annual revenue requirement (regulatory asset) 		
	Yes	Incremental Reliability Cost Adjustment (IRCA)	<ul style="list-style-type: none"> Additional funds to support the replacement/upgrade of Power System infrastructure (PSRP) 		
	Yes	Incremental Base	<ul style="list-style-type: none"> Rebuilding of in-basin power plants Base level of distribution/transmission costs A&G costs Customer Service 		
			<ul style="list-style-type: none"> Energy Cost Adjustment (Fuel, RPS, DSM/EE, Revenue Transfer) Base Rate Reliability Cost Adjustment Electricity Subsidy Adjustment 	}	"Capped" Ordinance as of November 3, 2010

- The overall proposed rate structure is designed to:
 - Adjust incremental reliability charge to be a full pass-through with over/under collection.
 - Set incremental base rate revenue target for five years and collect up to the target.
 - Adjust pass-through factors periodically.

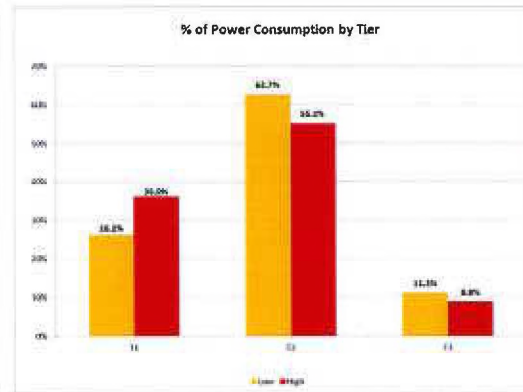
Power rate tiers are designed to provide additional consumption at lower rates to customers located in higher temperature zones

The LADWP service area is divided into two temperature zones using zip codes as a means of granularity. However, rates for both tiers remain comparable.

	Zone 1 Monthly Usage (kWh)	Zone 2 Monthly Usage (kWh)
Tier 1	0 ≤ and ≤ 350	0 ≤ and ≤ 500
Tier 2	350 < and ≤ 1050	500 < and ≤ 1500
Tier 3	> 1050	> 1500



High Zone: Less Customers in Tier 3



High Zone: less Consumption in Tier 2 and Tier 3

Key Commercial Rate Component Definitions

The proposed rate increase is assigned across the applicable existing facilities charge, demand charge, and energy charges to align the rate design with cost of service rate design considerations.

Monthly Fixed Service Charge: A portion of the monthly bill that does not vary with usage, and is the same for all Commercial customers in a particular class, utilized primarily to recover meter reading, billing and other associated costs.

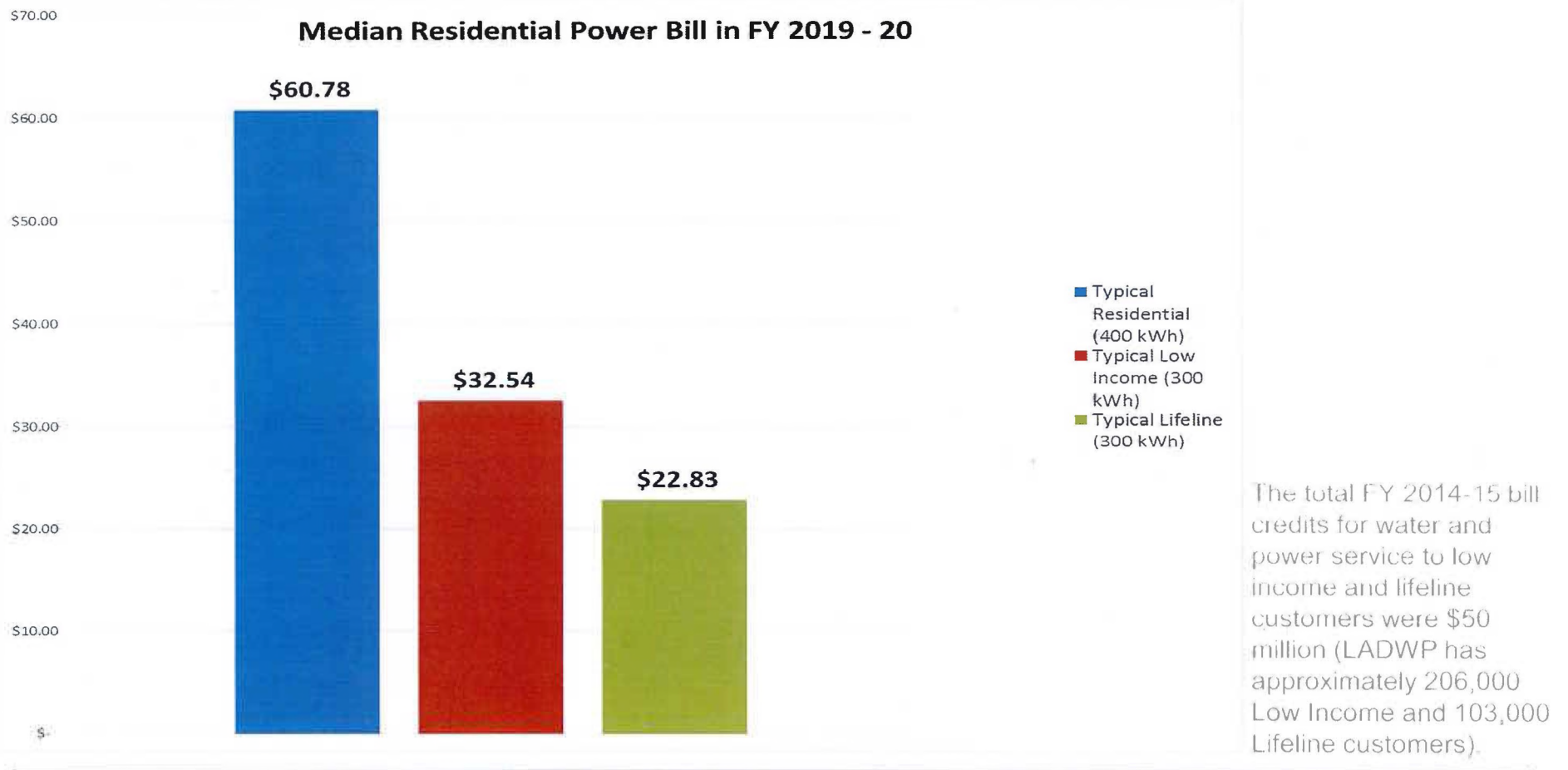
Facilities Charge (kW): A charge based on the customer's previous 12 month highest recorded peak predominantly recovers the capacity costs of owning, operating, and maintaining LADWP distribution infrastructure.

Demand Charge (kW): This is an electric delivery monthly charge based on the customer's highest peak consumption recorded during the billing period. Recovers the capacity costs for generation and transmission for that month.

Energy Charges (kWh): There are charges per unit of energy (kWh) consumed by the customer that recover various costs.

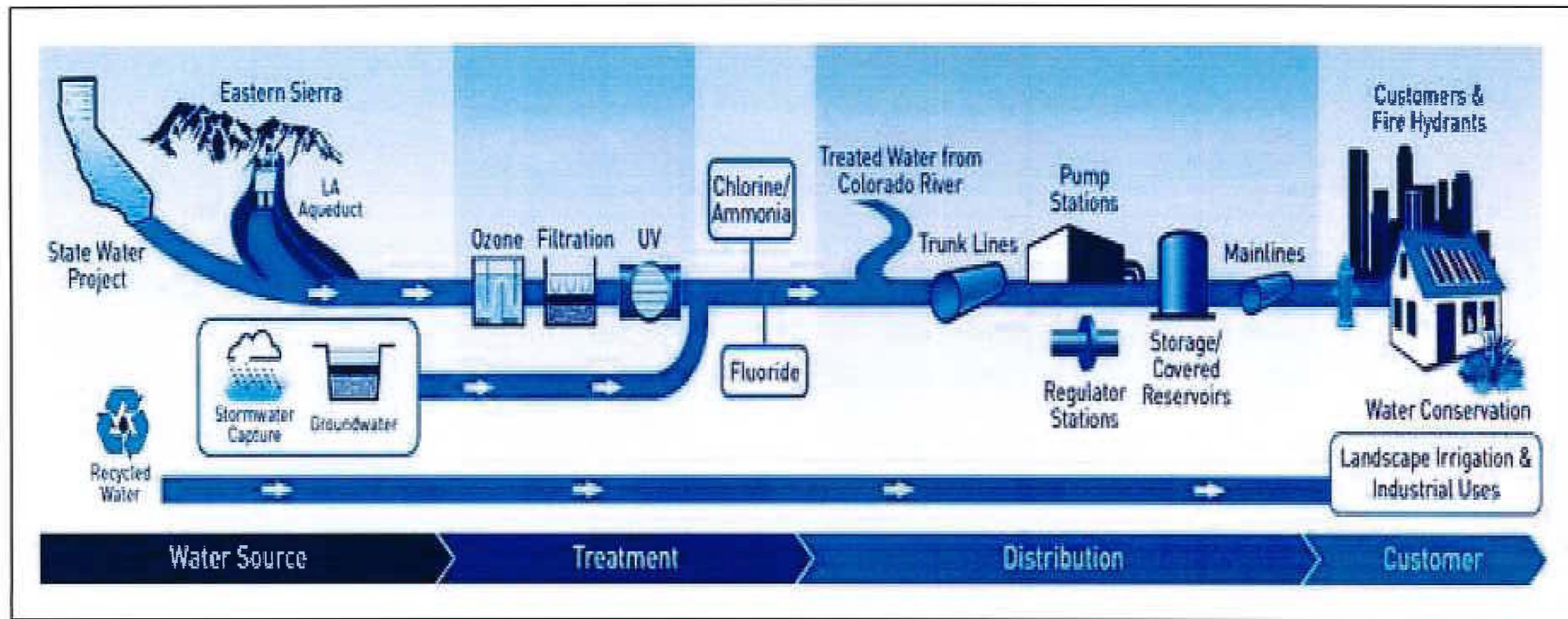
LADWP's current and proposed rate design helps keep power service affordable for low income and lifeline Residential customers

LADWP continues to provide programs to assist our low income and lifeline customers. As depicted below, low income and lifeline customers will pay significantly lower bills.



WATER RATEMAKING OVERVIEW

Water System Infrastructure Overview



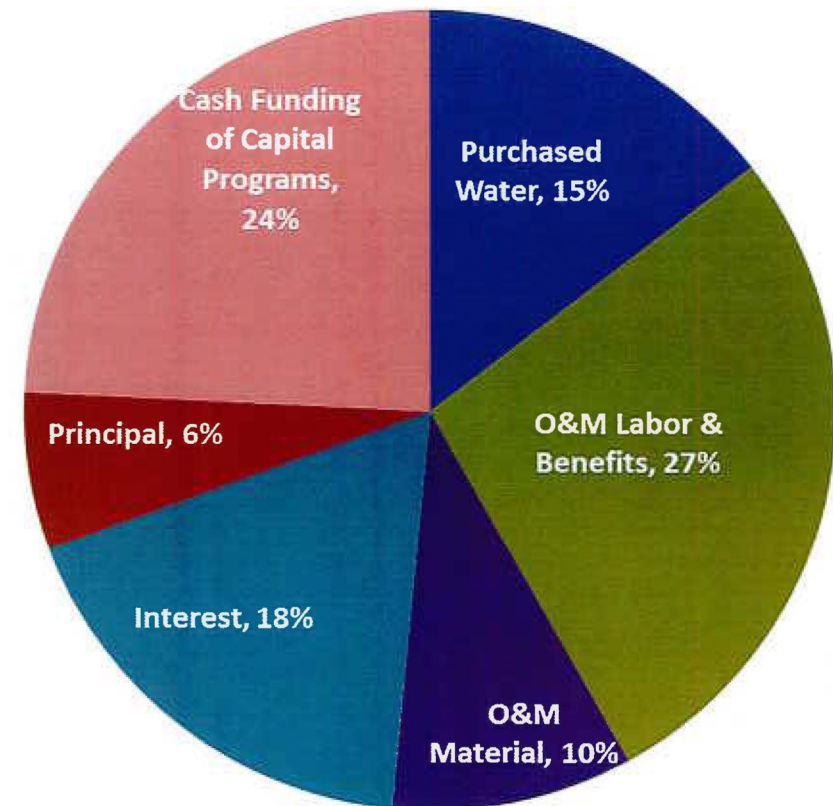
LADWP receives its water supply from a complex and expansive network that spreads across the Western United States.

The Water System's revenue requirement is defined by the expenditures sufficient to operate and maintain the Water System and service debt

The revenue requirement is developed from the Water System's approved budget and is comprised of:

- Purchased Water
- Cash Funding of the Capital Program
- Principal
- Interest
- O&M Labor
- O&M Materials

Water System FY 2015-16 Revenue Requirement Components*

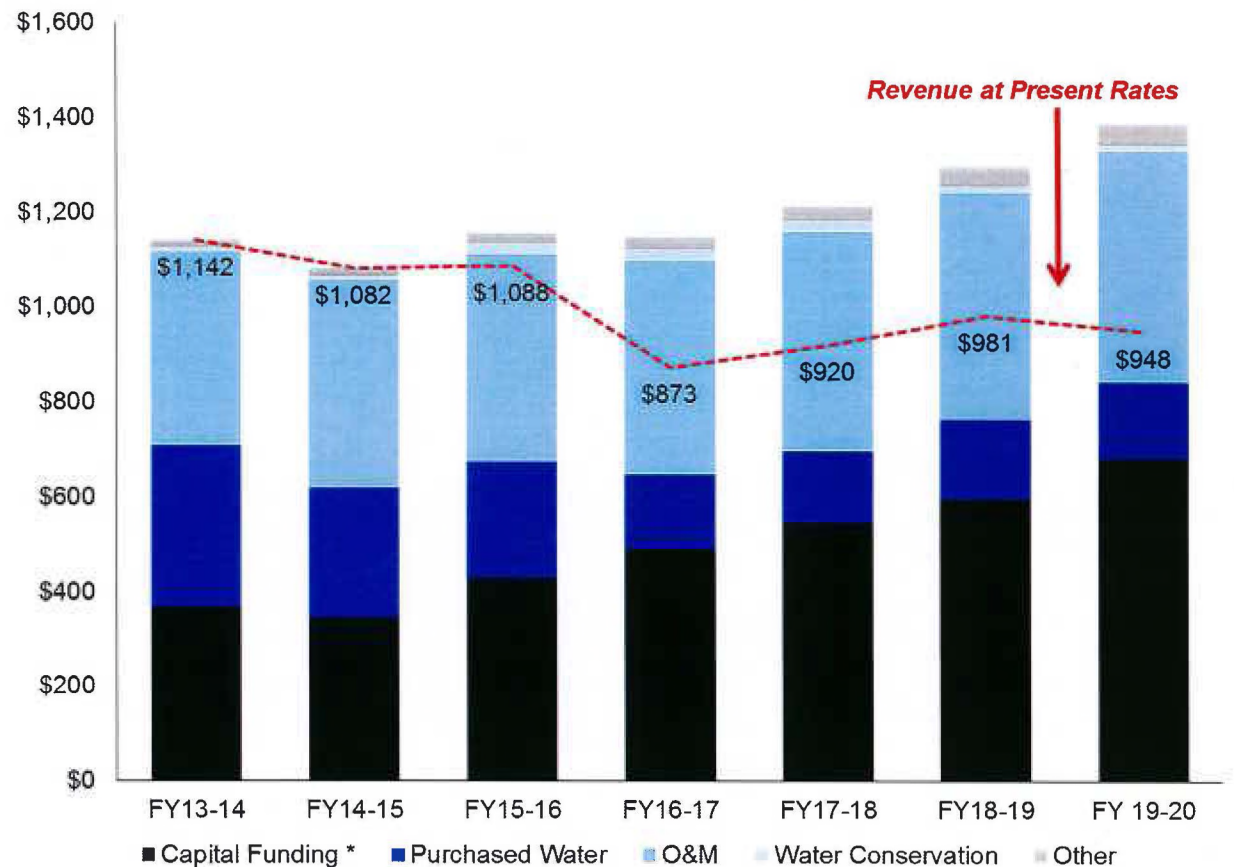


*All Water System financial data in this presentation is based on Water Financial Case 94

Under the current rate structure, the Department expects a revenue shortfall; new rates were developed to close this revenue gap

Major programs driving the need for increased revenues 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).

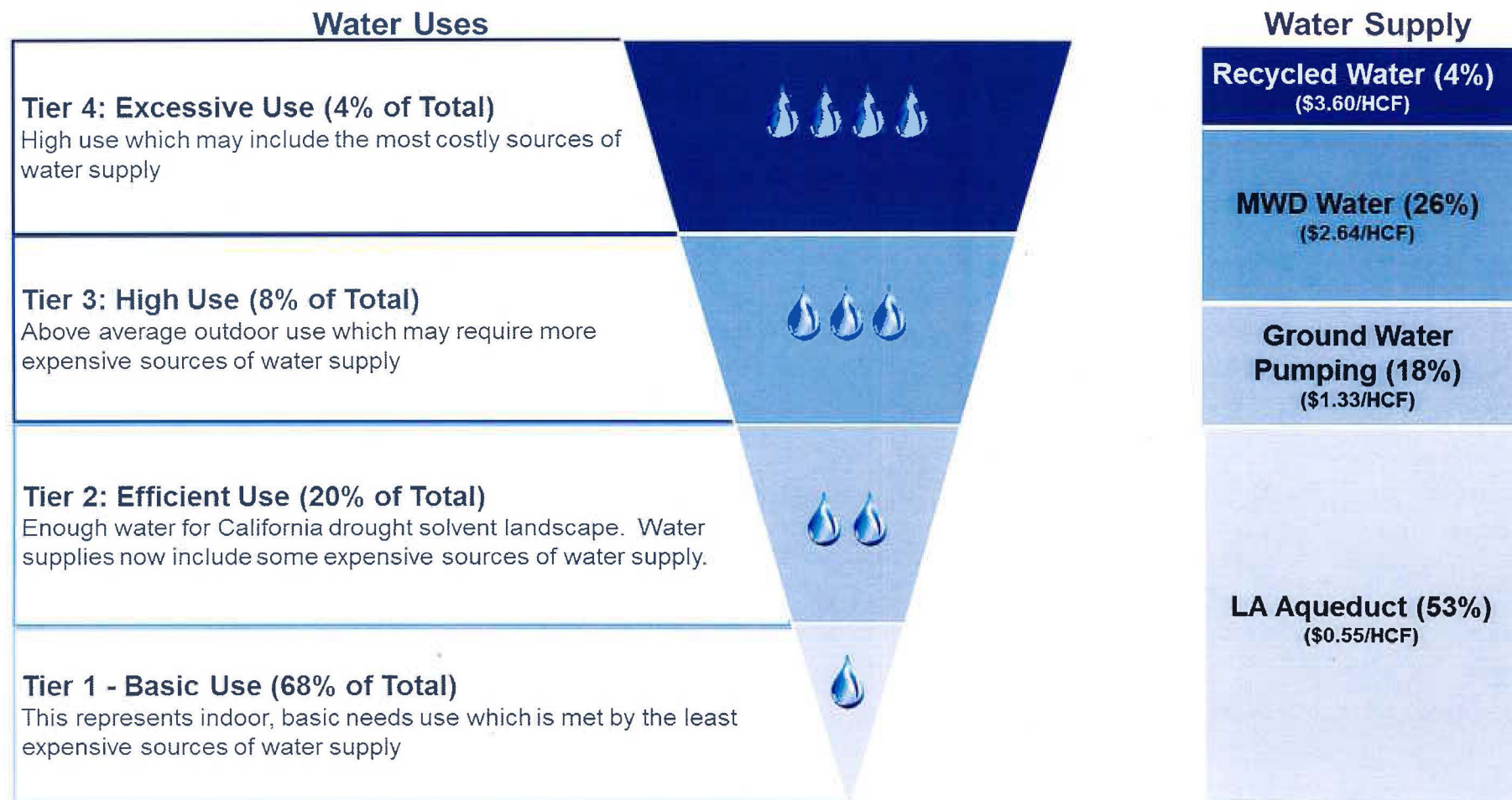


Legal guidance must be considered

Applicable guidance includes:

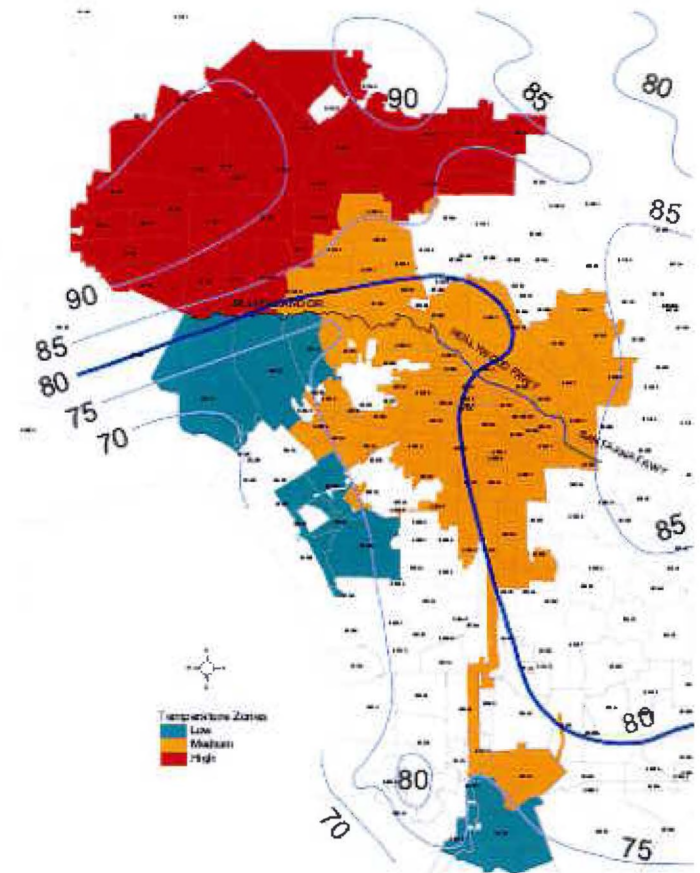
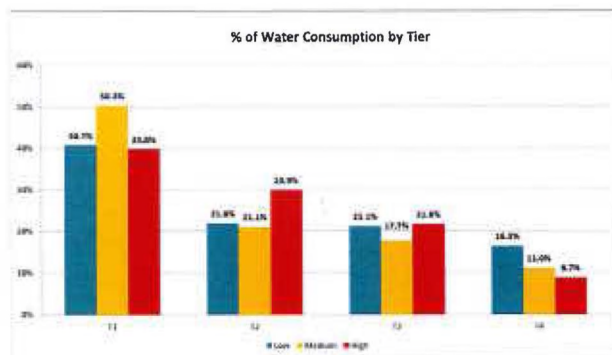
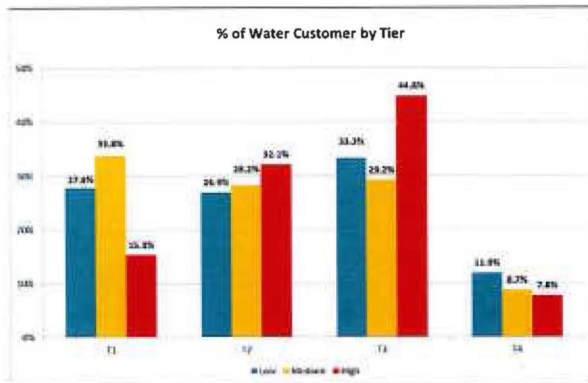
- City Charter Section 609 (c): The Board is obligated to establish water rates sufficient to cover the debt service and necessary operating expenses to maintain the Water System.
 - Necessary expenses include meeting regulatory mandates, investing in infrastructure for better reliability, and accelerating the availability of local water supply sources
- Proposition 218:
 - Revenues derived from the water fee shall not exceed the funds to provide the service
 - Revenues derived from the fee shall not be used for any purpose other than that for which the fee was imposed
 - The amount of a fee 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
 - No water fee may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question

Tiers are based on water consumption and associated water supply costs -
 Tier 1 reflects basic indoor use and supply and Tier 4 reflects excessive use
 - Percentages and prices below reflect typical conditions

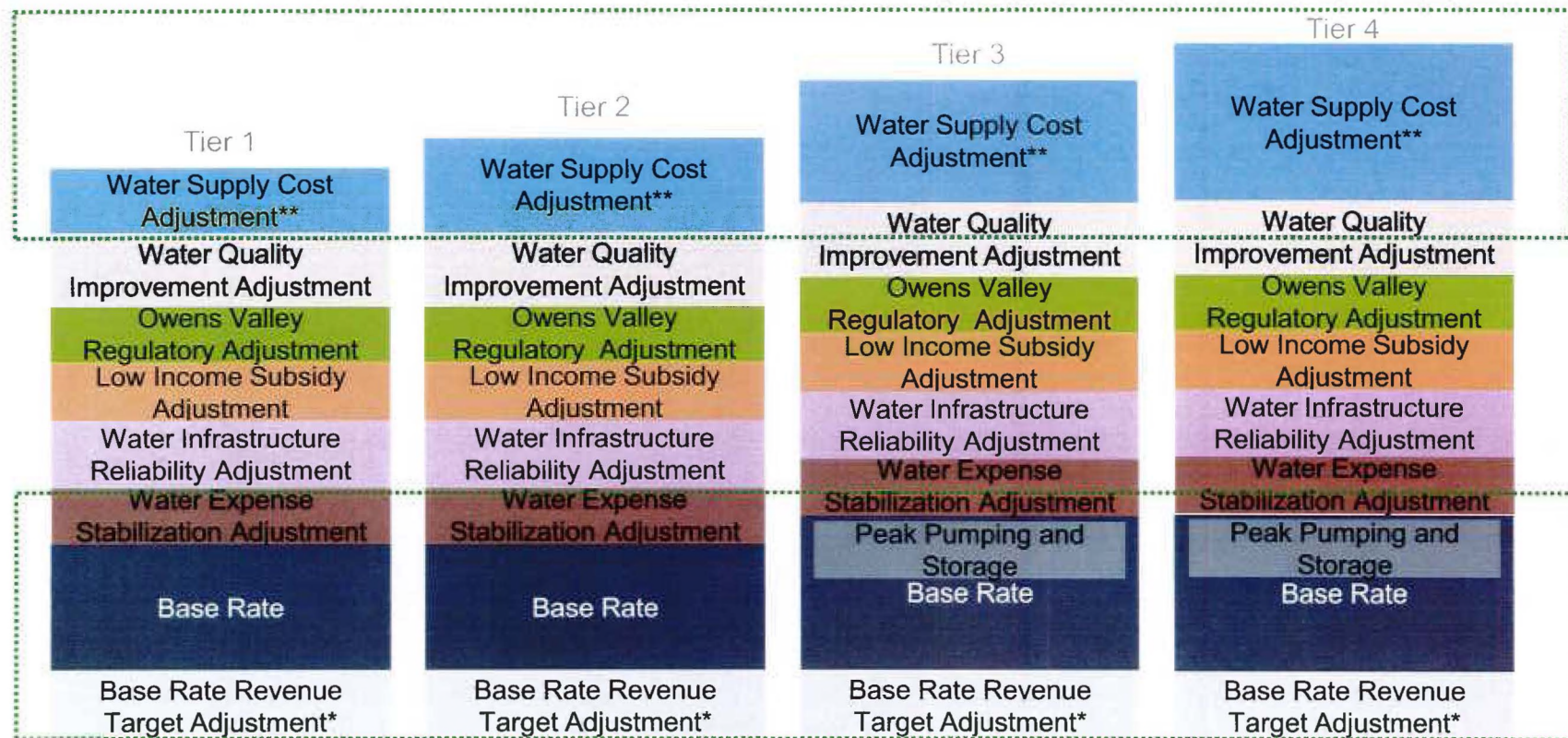


Water rate tiers are designed to provide appropriate water allotments for each temperature zone

The LADWP service area is divided into three temperature zones using zip codes as a means of granularity.



The proposed Single-Dwelling Unit Residential rate structure utilizes a four tier approach



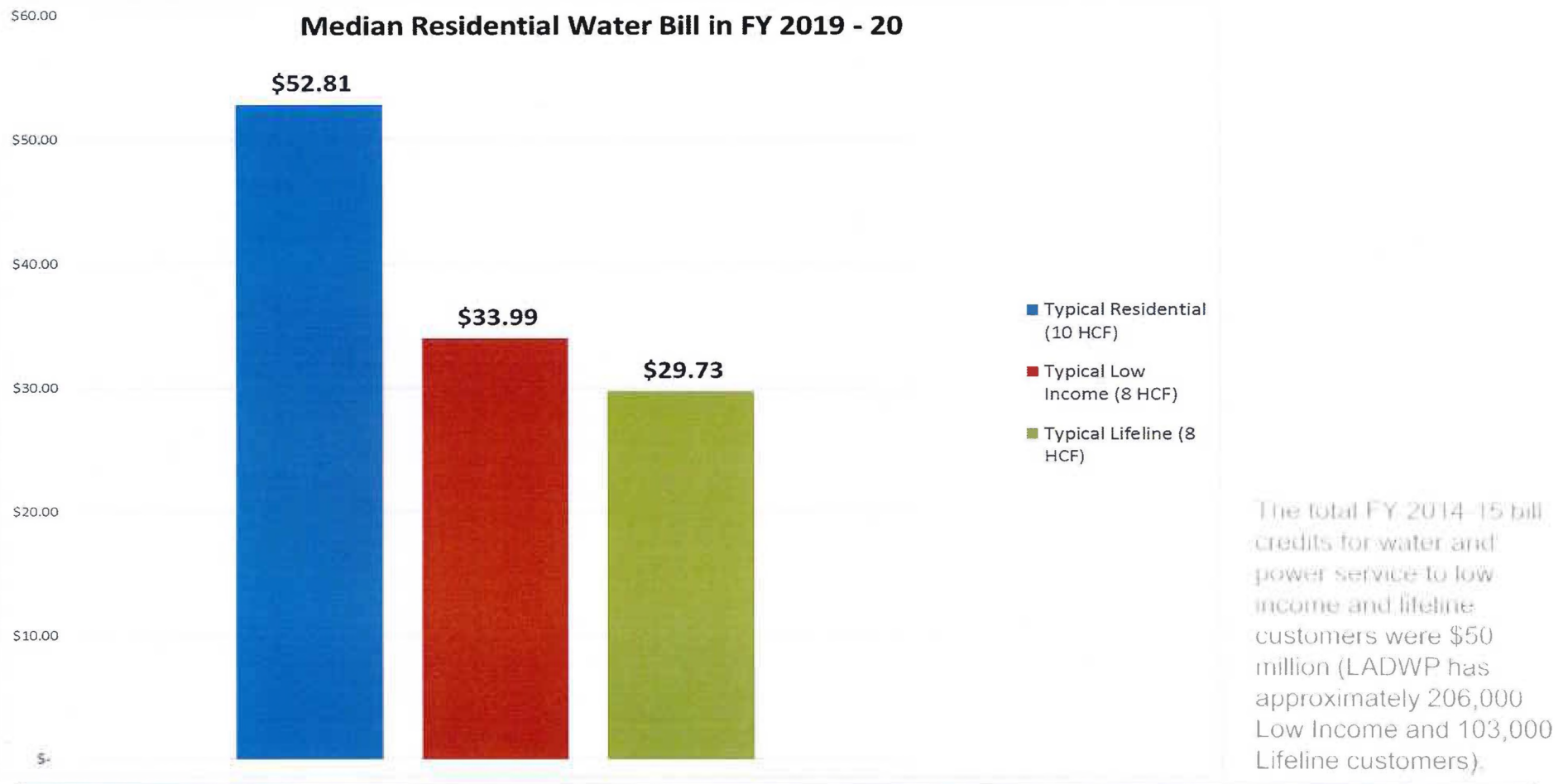
*Base Rate Revenue Target Adjustment (BRRTA) could be positive (under-collection) or negative (over-collection).

**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).

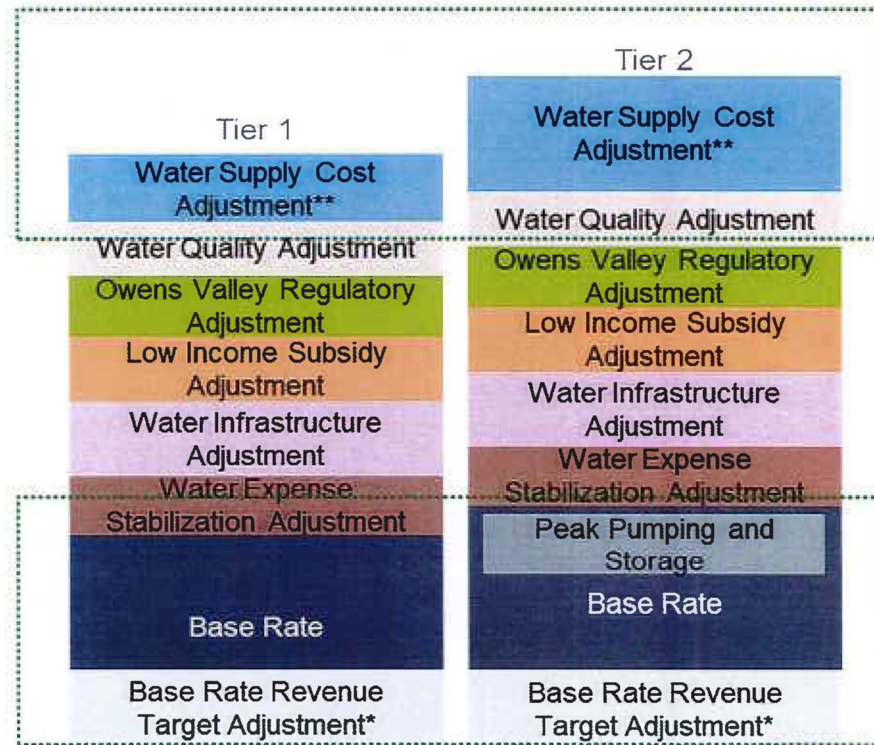
LADWP's current and proposed rate design helps keep water service affordable for low income and lifeline Residential customers

LADWP continues to provide programs to assist our low income and lifeline customers. As depicted below, low income and lifeline customers will pay significantly lower bills.



APPENDIX

The proposed Multi-Dwelling Unit Residential and Commercial & Industrial rate design maintains a two tiered structure



*Base Rate Revenue Target Adjustment (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).

Water Budget Allotments and Tier Calculations

Customer Class	Current Elements	Proposed Elements
Single-Dwelling Unit Residential	<ul style="list-style-type: none"> • Lot size (five groups) • Temperature zone (three zones) • Time of year (Summer: June-Oct.) • Family size 	<ul style="list-style-type: none"> • Lot size (Five groups with top two groups set the same) • Temperature zone (three zones) • Time of year (Summer: June-Sept.)*
Multi-Dwelling Unit Residential	<ul style="list-style-type: none"> • Past usage level • Time of year (Summer: June-Oct.) 	<ul style="list-style-type: none"> • Past usage level (followed by annual reductions to incentivize conservation) • Time of year (Summer: June-Sept.)*
Commercial, Industrial, Governmental and Temporary Construction	<ul style="list-style-type: none"> • Past usage level • Time of year (Summer: June-Oct.) 	<ul style="list-style-type: none"> • Winter – actual recent winter usage level • Summer – actual recent winter usage plus five percent • Time of year (Summer: June-Sept.)*

* The proposed summer season was changed to match the summer season for power

LADWP's tier thresholds are guided by the scientific measure of how much water is needed for an area and is calculated based on plants, turf, and climate (temperature zone).

Tier allotments vary depending on temperature zone, season, and lot size

This approach recognizes higher typical water use needs for larger lots, in higher temperature zones and during the summer.

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 +
<u>Winter (Oct-May)</u>	3	4	8	10	
<u>Summer (June-Sep)</u>					
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 +
<u>Winter (Oct-May)</u>	6	8	16	20	20
<u>Summer (June-Sep)</u>					
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)					