

# Department of Water and Power City of Los Angeles

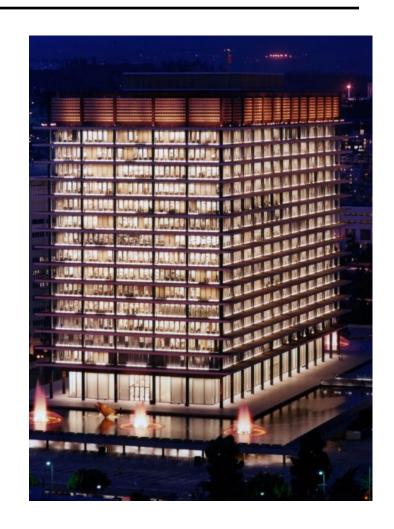
City of Los Angeles
4th Regional Investors Conference
March 19, 2018



www.ladwp.com

### **LADWP Overview**

- Largest municipal utility in the US
- 1.5 million power customers; 680,000 water customers
- Vertically integrated utility
- Owns more than 25% of state's transmission; not part of California ISO
- Reached 20% renewables in 2010; well-positioned to meet state-mandated level of 33% by 2020
- Diverse water resources; expanding local water supply
- Economically strong and diverse service territory
- Stable, broad customer base with steady growth
- Largest 10 customers provide 10.5% of Power revenues and 6.5% of Water revenues
- Approved multi-year rate increases provide favorable rate restructuring



## Key Figures – FY 2017

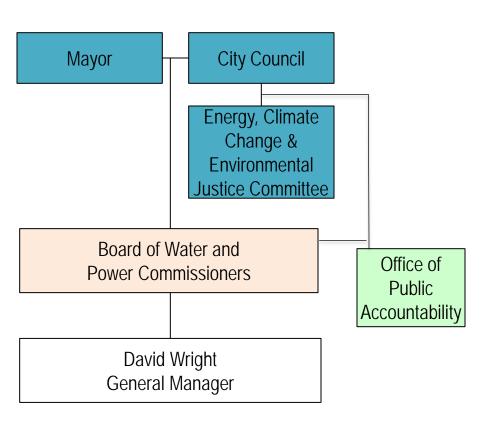
- Sales:
  - Energy Sales: 24 million MWh
  - Water Sales: 196 million HCF
- Operating Revenue:
  - Energy: \$3.7 billion
  - Water: \$1.1 billion
- Total Liquidity as of December 31, 2017:
  - Power: \$1.93 billion on hand including
    - ~\$458 million on deposit in a Debt Reduction Trust Fund and \$100 million in Rate Stabilization Fund
  - Water: \$503 million on hand including \$50.2 million in Expense Stabilization Fund
- Combined \$500 million revolving line of credit for both Water & Power Systems







## **Existing LADWP Governance**



#### General Manager

- Administers Department affairs and operations

## **Energy, Climate Change and Environmental Justice Committee**

 City Council Committee with jurisdiction of matters concerning the Department

#### **City Council**

 Approves rate requests and selection of Board of Water & Power Commissioners and General Manager

#### **Board of Water and Power Commissioners**

 Five-member Board establishes policy for the Department. Members appointed by Mayor and confirmed by City Council for five-year terms

#### Office of Public Accountability

- Executive Director is appointed by a citizens committee, subject to confirmation by City Council and Mayor
- Provides public, independent analysis to the Board and City Council

### LADWP's Transformation

- Replace aging infrastructure
- Transition to 100% clean energy
- Protect from drought, expand local water supplies, groundwater cleanup and storage
- Electrify transportation sector
- Improve customer service, keep rates competitive
- Expand customer-facing automation







## Snapshot of Just a Few Challenges Ahead (Legal Mandates)

#### Power

- State Mandated Green House Gas Reduction (AB 32, SB32 & AB197)
- Eliminate Once Through Cooling of all Coastal Power Plants (Clean Water Act – Rule 316b)
- South Coast Air Quality Management District Emission Reduction Mandates (NOx, SOx, PM, etc)
- Solar Incentive and FiT Programs (SB 1 & SB 1332)
- Divestiture of Coal Resources (SB 1368)
- Increase Renewable Resources (SB 350: 20% -2010 / 25% 2016 / 33% 2020 / 50%-2030)
- Cost Effective Energy Storage (AB 2514 & AB 2227 & SB801)
- Minimize Risk of Catastrophic Wildfire (SB 1028)
- Federal Solar Tariff
- Bio Energy Projects (SB 859)
- City Council 100% Clean Energy Motion

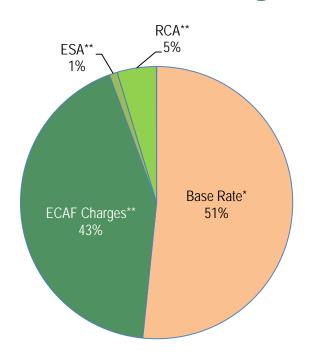
#### Water

- Cover all Remaining Open Reservoirs (Long Term 2 Enhanced Surface Water Treatment Rule)
- Convert Chlorine to Chloramines (Stage 2 Disinfectants and Disinfection Byproducts Rule)
- Owens Lake Dust Mitigation (Clean Air Act)
- Mayor's Executive Directive No. 5
  - -Reduce imported water purchases by 50% by 2025
  - -Expand local water sources to account for at least 50% by 2035



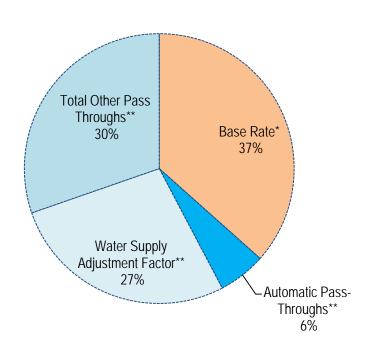
## Revenue Composition Under New Rate Structure

## Power System 49% Pass-Through



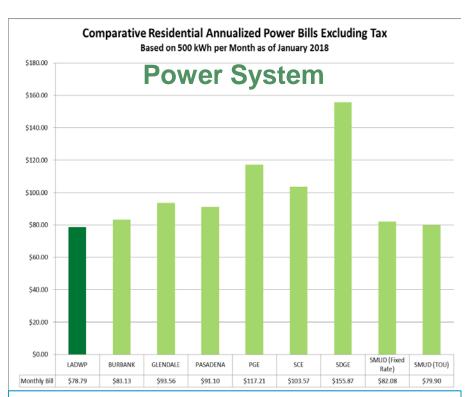
- \* Decoupled Base Revenue
- \*\* Pass-Through Costs

## Water System 63% Pass-Through





## Rates Remain Competitive: Residential



Sources: https://www.sce.com/wps/portal/home/regulatory/tariff-books/rates-pricing-choices:

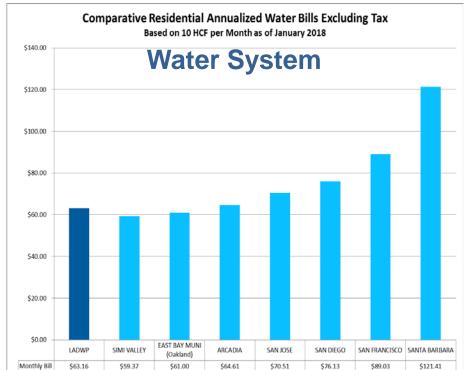
http://www.sdge.com/rates-regulations/current-and-effective-tariffs/current-and-effective-tariffs;

 $\frac{\text{http://www.burbankwaterandpower.com/electric/residential-electric-rates-and-charges;}{\text{http://www.glendaleca.gov/government/city-departments/glendale-water-and-power/rates;}}$ 

http://cityofpasadena.net/waterandpower/electric-rates/:

https://www.pge.com/tariffs/assets/pdf/tariffbook/ELEC\_SCHEDS\_E-1.pdf :https://www.smud.org/en/Rate-Information/Residential-Rates

Rates at other utilities subject to change



Sources: <a href="http://www.ebmud.com/customers/billing-questions/rates-and-charges/">https://www.ebmud.com/customers/billing-questions/rates-and-charges/</a>; <a href="https://www.sandiego.gov/water/rates/rates">https://www.sandiego.gov/water/rates/rates</a>;

http://www.gswater.com/simi-valley/download/rates\_accountability/SI-1-R.pdf;

http://www.gswater.com/sanabriel/download/rates\_accountability/R3-1-R.pdf;

https://sjwater.s3.amazonaws.com/files/documents/Schedule%201%20Jan%209%202018.

<u>pdf;</u> <u>http://sfwater.org/modules/showdocument.aspx?documentid=7742</u>

https://www.santabarbaraca.gov/gov/depts/pw/resources/rates/wtrsewer/changes.asp

Rates at other utilities subject to change





#### **Diverse Generation Mix**

Diverse mix of resources, declining use of coal with net dependable capacity of 120% of peak demand

Department Owned Facilities <sup>1</sup>				
		Net Dependable		
Type of Fuel	Facilities	(MWs)	(%)2	
Natural Gas	4	3,319	42.4%	
Large Hydro	1	1,175	15.0%	
Renewables	39	285	3.6%	
Total	44	4,779	61.0%	

Jointly Owned Facilities and Contracted Capacity Rights <sup>1</sup>			
	Net Dependable		
Type of Fuel	Facilities	(MWs)	(%)2
Coal (IPP)	1	1,202	15.3%
Natural Gas (Apex)	1	480	6.1%
Hydro (Hoover)	1	304	3.9%
Nuclear (PVNGS)	1	380	4.8%
Renewables/DG	32,329	693	8.9%
Total	32,333	3,059	39.0%

- Net maximum plant capacity of 9,890 MWs and net dependable capacity of 7,794 MWs1
  - Peak demand of 6,502 MWs (August 31, 2017)
- Capacity allows minimal exposure to uncertain markets to meet customer demand
- Base load generation is fueled by various sources
- Extensive transmission network
  - The Department owns and operates in excess of 25% of the transmission facilities in the State (over 19,840 miles)
  - Department serves as operating agent for:
    - Pacific DC Intertie (co-owner)
    - Southern Transmission System (contract capacity rights)
    - Mead-Adelanto Transmission Project (co-owner), and
    - Certain Navajo-McCullough facilities (co-owner)

#### **LADWP Transmission System**

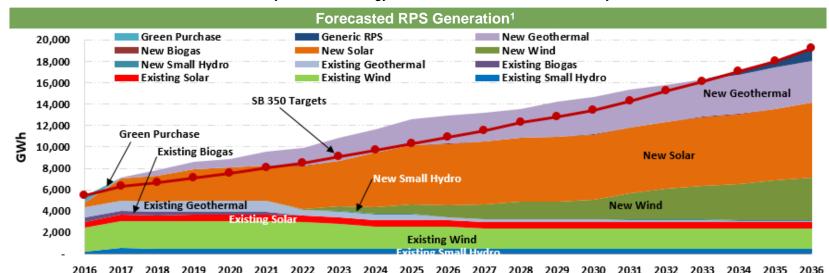




### **Managing Regulatory Mandates**

Long-term planning has resulted in cost-effective strategies

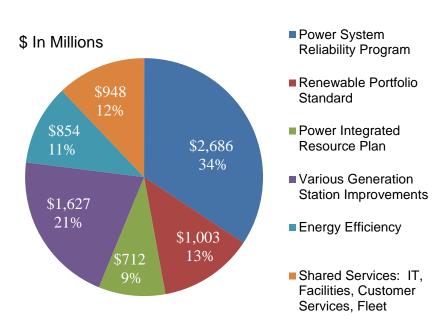
- Renewable targets: Strong existing base of renewables, supplying 29% of 2016 energy needs
  - Have met RPS targets to date
  - Approximately \$1.0 billion capital spending anticipated over the next five years for Renewable Portfolio Standard
  - Expect to reach 33% Renewable Portfolio Standard by adding approximately 300 MW of new renewables by 2020 through a competitive selection process
- Eliminating coal: Either have divested from or have contracts in place to eliminate coal by 2026
  - The 2016 divestiture of the Department's interest in the Navajo plant reduced reliance on coal and cut greenhouse gas emissions
  - IPP, which currently contracts 44.6% of its capacity to LADWP, has amended its Power Sales Contract to replace its coal units with combined cycle natural gas units by July 2025
- Modernizing Coastal Generation Fleet: Eliminating once-through ocean (OTC) cooling
  - Repowering is currently on hold while LADWP conducts an OTC Study to provide a comprehensive reliability assessment to determine whether viable alternative hybrid clean energy solutions exist to maintain reliability





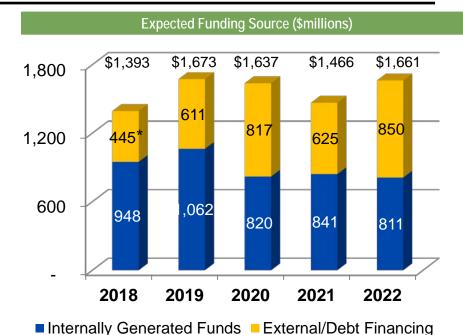
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## Five-Year Capital Improvement Plan (CIP): \$7.83 Billion



Driven by the Power IRP, developed in conjunction with strategic plan goals:

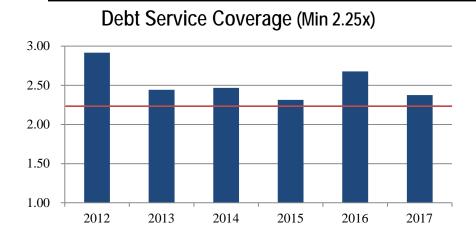
- Safe and reliable electric service
- Cost competitive
- Environmental stewardship

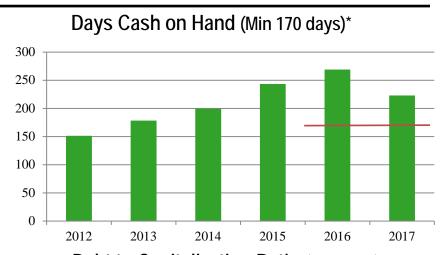


Of \$7.8 billion five-year CIP, \$4.5 billion (57%) is cash funded and \$3.5 billion (43%) is debt funded

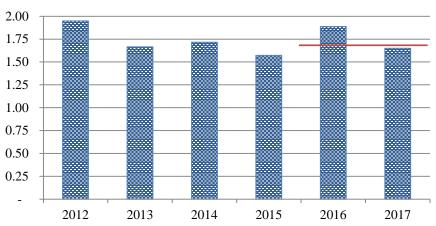
Board-adopted planning criteria targets maintaining debt-to-capitalization ratio of less than 68%

## Financial Overview – Power System Strong Operating Results & Financial Metrics





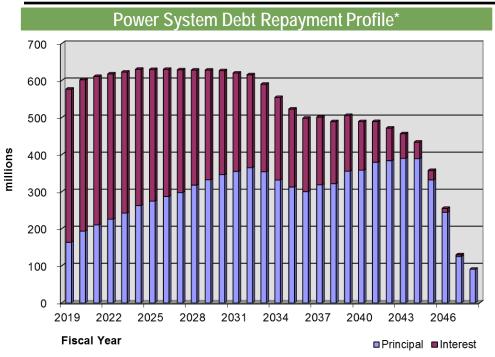
Full Obligation Ratio (Min 1.7x)







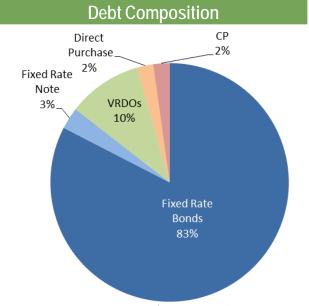
### Conservative Debt Profile



\*Debt repayment profile excludes \$200 million commercial paper.

#### Power System Credit Ratings as of March 15, 2018

Bond Ratings	Long-Term	Outlook
Standard & Poor's	AA	Stable
Moody's Investors Service	Aa2	Stable
Fitch Ratings	AA	Stable



- \$9.074 billion outstanding (including \$200 million CP) payable from the Power Revenue Fund
- 83% of debt portfolio is long-term, fixed-rate bonds.
- 17% is a combination of VRDOs supported by bank facilities with staggered maturities, direct purchase, commercial paper, and a fixed rate note.
- No interest rate swaps or auction rate securities;





Water System

## LADWP Is Nation's 2<sup>nd</sup> Largest Municipal Water Utility

LADWP provides water service to the second most populous city in the U.S.

- ~4 million residents in 2017; 473 square miles
  - Water System revenues of ~\$1.12 billion in FY 2017
    - \$418.0 million of operating income before depreciation
  - Diverse and stable customer base
    - Broad-based economy
    - Top 25 non-governmental employers in LA County comprise about 6.4% of labor force
    - LA County per capita income is above national average
  - Commitment to maintaining affordable rates



#### Water System Customers

Average Number of Customers

Year Ending June 30	2017	2017 (%)	
Single-Family Residential	487,000	71.6%	
Multiple Dwelling Units	121,000	17.8%	
Commercial and Industrial	65,000	9.6%	
Other	7,000	1.0%	
Total	680,000	100.0%	

### Water System's Goals

#### Commitment to Financial Stability

- Management & Board-adopted financial metrics
- Strong cash balances
- Consistently strong debt service coverage

#### Maintain Competitive Rates

- Cost adjustment factors designed to recover certain costs
- Utilize rate increases as appropriate
- Commitment to maintaining affordable rates

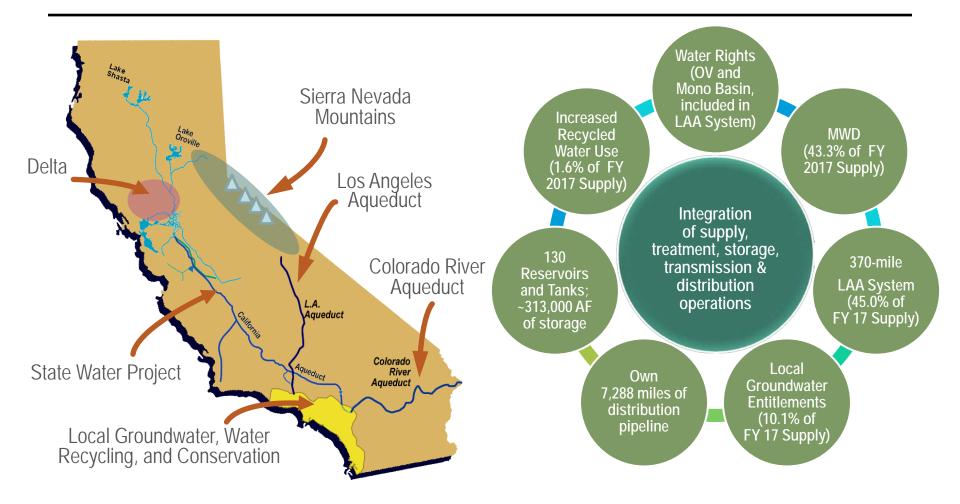
#### Maintain Diverse Mix of Water Sources

- Maintain sources from Los Angeles Aqueduct and Metropolitan Water District of Southern California
- Increased use of recycled water
- Clean-up and expand use of groundwater

#### **Sound Asset Management Principles**

- Maintain and upgrade infrastructure
- Ensure future reliability

## Water System Draws From Diverse Water Resources Across the State

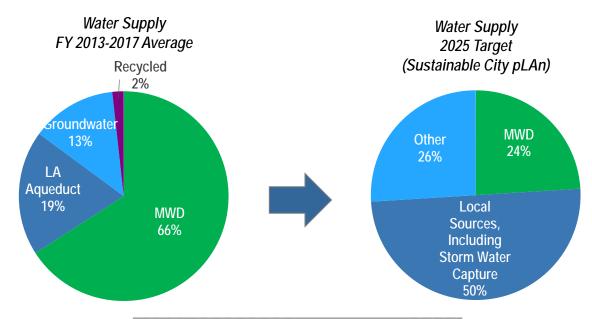




## Long-Term Strategy to Diversify Water Supply Mix

Groundwater clean-up and local water supply projects expected to reduce expensive MWD water purchases by 50%

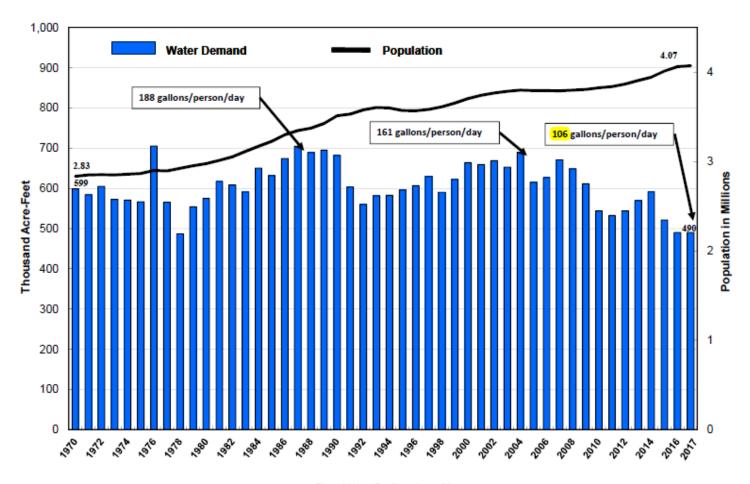
- Groundwater Clean-Up
- Stormwater Capture Master Plan
  - Master Plan completed in 2015
  - Additional 68,000 to 114,000 AFY captured over the next 20 years
- Recycled Water Projects
  - Augment water supply by 59,000 AFY by 2035





### Water Conservation

- Meeting Mayor's goals
- State conservation targets
- Long-term view of water use



Note: - Population was updated with 2010 US Census data.

Fiscal Year Ending June 30



## Focus on Infrastructure Replacement

LADWP has implemented an asset management program to address the long-term sustainability of its major facilities and infrastructure.

Focused on projects necessary to:

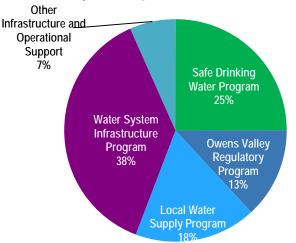
- ✓ Protect existing water supplies
- ✓ Comply with increasing water quality standards
- ✓ Expand and upgrade the distribution system
- ✓ Develop new water resources

Focused on diversifying funding sources:

- ✓ Internally generated funds
- ✓ Revenue bonds
- ✓ CA State Water Resources Control Board

#### **Summary of Capital Improvements**

Major Components Include:



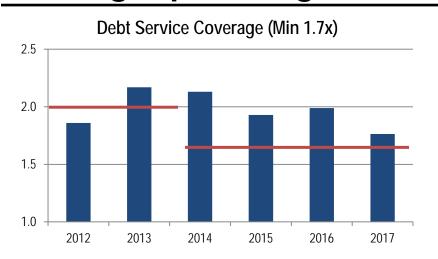
Expected Funding Sources (\$6.6 billion over 5 Years)

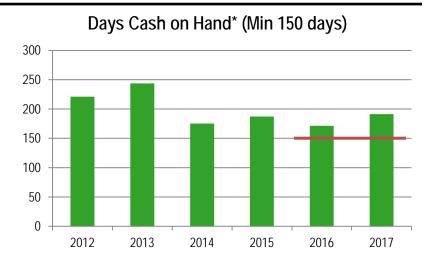


<sup>1.</sup> Consists of a portion of the proceeds of the 2018 Series A Bonds, a portion of previously issued Bonds, proceeds of additional Water System Revenue Bonds, and proceeds of additional loans from the State Water Resources Control Board

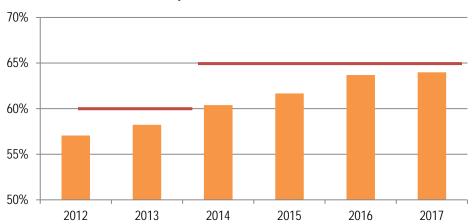


## Water System Financial Overview— Strong Operating Results & Financial Metrics



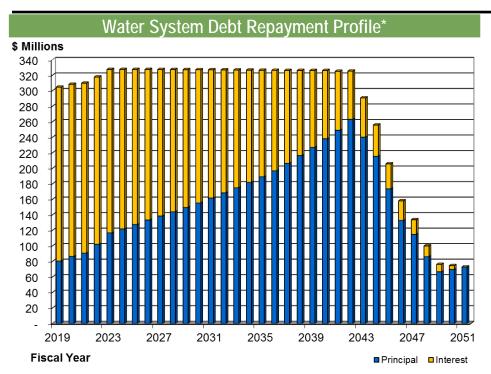


Debt to Capitalization Ratio (Max 65%)





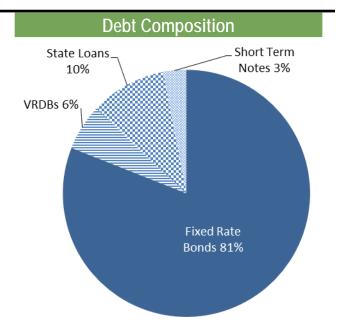
## Water System Conservative Debt Profile



<sup>\*</sup>Excludes \$150 million Note from Revolving Credit Agreement

#### Water System Credit Ratings as of March 15, 2018

Bond Ratings	Long-Term	Outlook
Standard & Poor's	AA+	Stable
Moody's Investors Service	Aa2	Stable
Fitch Ratings	AA	Stable



Total Debt: \$5.245 Billion:

- Includes \$150 million note from Revolving Credit Agreement and \$544.8 million of State Loans.
- No interest rate swaps or auction rate securities; VRDB bank facilities extended with staggered expiration dates from 2019 through 2021.

## **Bond Security Legal Protections**

	Power	Water
<b>Source of Payment:</b> Power and Water revenue funds are separate funds established by City Charter in the City Treasury under the control of Board of Commissioners.	<b>√</b>	<b>√</b>
Rate Covenant. Board sets rates and charges, subject to approval of City Council as mandated by City Charter, to provide revenues that together with other available funds shall be at least sufficient to pay debt service and operating and maintenance expenses.	<b>√</b>	$\checkmark$
Additional Obligations. Adjusted net Income for any 12 consecutive months within 18 consecutive months ending immediately prior to issuance of Additional Parity Obligations shall be at least 1.25 times the Maximum Annual Adjusted Debt Service on all Parity Obligations including proposed bonds.	<b>√</b>	<b>√</b>
<b>Transfer to the City.</b> May not exceed the net income of the prior fiscal year or increase Power System debt to total capitalization to exceed 75%.	$\checkmark$	

## LADWP Is Committed to Meeting Operational Needs and Financial Goals

- Diverse power and water sources
- Meet or exceed all regulatory commitments
  - Power: RPS, carbon reduction, other environmental
  - Water: quality, safety, sustainability, environmental
- Continue investing in Water and Power System reliability
- Maintain competitive retail rates and financial stability
- Improve customer service





## **Upcoming Financing Transaction**

**Power System**: Up to \$415.7 M refunding transaction in March 2018\*

- Serial bonds maturing from July 1, 2019 –
   2038
- Par call in 2028
- Expected to price the week of March 26, 2018

\*Preliminary Subject to change

