#### AUSTIN WATER COST OF SERVICE RATE STUDY PUBLIC INVOLVEMENT COMMITTEE NOVEMBER 29, 2016 – 4:00 P.M. WALLER CREEK CENTER – ROOM #104 625 E. 10<sup>TH</sup> STREET, AUSTIN, TEXAS



#### **AGENDA**

For more information, please visit <a href="http://www.austintexas.gov/department/2016-cost-service-rate-study">http://www.austintexas.gov/department/2016-cost-service-rate-study</a>

**MISSION:** The purpose of the Public Involvement Committee (PIC) is to examine the methodology being developed to determine cost of service for all customer classes with a primary focus on the retail customer classes, discuss the impacts of key cost of service factors, and advise the Austin Water Executive Team in their decision-making process.

**MEETING GOALS:** Discuss Austin Water service area and system characteristics, conclude discussion of revenue requirements, and introduce cost allocation.

#### CALL TO ORDER

#### 1. CITIZEN COMMUNICATION

The first 10 speakers signed up prior to the meeting being called to order will each be allowed a three-minute allotment to address their concerns regarding items not posted on the agenda.

#### 2. DISCUSSION ITEMS

- a. PIC Meeting 4 Review
- b. Austin Water System
- c. Disallowances from PUCT Order
- d. Revenue Requirements Discussion
- e. Cost Allocation

#### 3. STAFF BRIEFINGS, PRESENTATIONS, AND OR REPORTS

- a. Discuss Austin Water service area and system, operation, and financial characteristics, and Austin Water rates comparison
- b. Review PUCT Order Disallowances and Consultant's perspective for the new cost of service study
- c. Conclude revenue requirements discussion
- d. Introduce cost allocation and discuss common-to-all or retail only cost allocation of Water and Wastewater expenses and assets

#### 4. COMMITTEE DISCUSSION

a. PIC Member Questions and Discussion

#### 5. FUTURE AGENDA ITEMS

6. PUBLIC COMMENT7. ADJOURN

The City of Austin is committed to compliance with the American with Disabilities Act. Reasonable modifications and equal access to communications will be provided upon request. Meeting locations are planned with wheelchair access. If requiring Sign Language Interpreters or alternative formats, please give at least 4 days notice before the meeting date. Please call Felicia Cancino at the Austin Water Utility Department at 512-972-0114, for additional information; TTY users route through Relay Texas at 711 Page 2 of 2



# Presentation | PIC

# Presentation | PIC

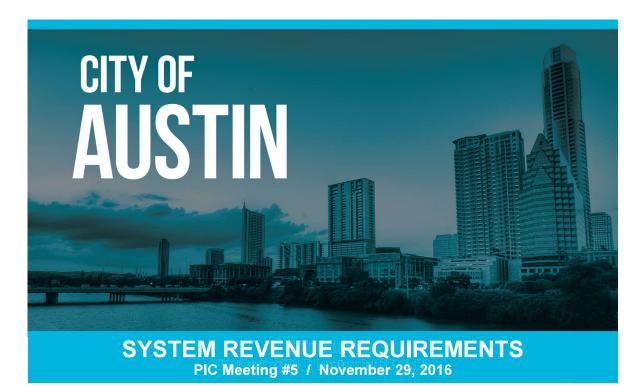




# Presentation | PIC



# Presentation | PIC









**TODAY'S PIC MEETING** 

- 1. Welcome
- 2. Citizen Comment (Standard Format 3 Min)
- 3. Executive Team Recap
- 4. PIC comments from the last meeting
- 5. Austin Water system and rate factors
- 6. Disallowances discussion
- 7. Other major revenue requirements
- 8. Cost allocation of Water and Wastewater Fund budgets
- Summary of today's meeting and look ahead
- 10. PIC and Public Comments
- 11. Adjourn



# **EXECUTIVE TEAM RECAP** COS 2016 | PIC Meeting 5 | November 29, 2016

# PIC COMMENTS **FROM LAST MEETING**

# **UTILITY & SYSTEM CHARACTERISTICS** Meeting 5 | November 29, 2016



#### Austin Water Revenue Requirements Recap

Joseph Gonzales, Utility Budget & Finance Manager





#### **RATE AND COST COMPARISON FACTORS**

- Surface Water Source
- Lime Softening Process
- Significant Elevation Changes
- Environmental Community Preferences
  - Water Quality Protection Lands
  - Wastewater Effluent Quality
  - CIP Projects
  - Hornsby Bend Biosolids Handling Facility



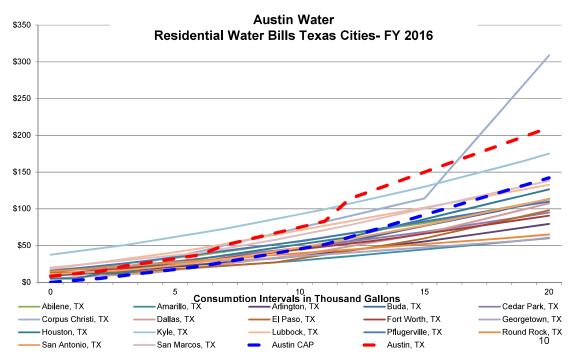
#### RATE AND COST COMPARISON FACTORS

- Austin Clean Water Program
- Drought Response
- High Growth City
- Fire Protection Investments
- Customer Assistance Program

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#### **RATE COMPARISON**

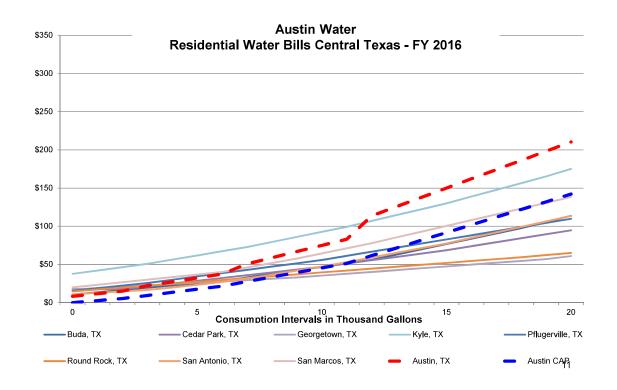


COS 2016 | PIC

Meeting 5 | November 29, 2016



#### **RATES COMPARISON**



# REVENUE REQUIREMENTS Disallowances Discussion

#### **PUBLIC UTILITY COMMISSION OF TEXAS**

#### PUCT WHOLESALE REVENUE REQUIRMENT DISALLOWANCES (PUC Docket No. 42857)

- General fund transfer
- 2. Rate case expenses
- 3. Reclaimed water system (capital & O&M costs)
- 4. Drainage fees
- 5. Reclassification of SWAP and commercial paper costs from capital to operating expense
- 6. Allocation of O&M expenses to reclaimed water
- 7. Depreciation

1.

#### **PUBLIC UTILITY COMMISSION OF TEXAS**

#### PUCT WHOLESALE REVENUE REQUIRMENT DISALLOWANCES (PUC Docket No. 42857)

- 8. Green Water treatment plant capital costs
- 9. Revenue Stability Reserve Funds
- 10. Barton Springs/Edwards Aquifer Conservation District
- 11. Govalle Wastewater Treatment Plant (capital & O&M costs)
- 12. Utility-wide contingency
- 13. Water Treatment Plant No. 4
- 14. Green Choice electricity

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
General Fund Transfer	42,779,685	15,595,809	968,394	10,458,751	11,420,086	2,920,707	1,415,938
% of Revenue Requirements	7.1%	7.6%	7.1%	7.7%	7.3%	6.5%	9.9%

Disallowance	Definition/ Explanation	RFC Perspective
1. General Fund Transfer	Allocated portion of 8.2% of total revenue	<ul> <li>Considered similar to operating expenses</li> <li>Cost of doing business</li> <li>Allocated to all customers</li> </ul>

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	Total	Residential	CAP	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Rate Case Expenses	-	-	-	-	-	-	-
% of Revenue Requirements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
2. Rate Case Expenses	Rate case expenses included in total system revenue requirements paid in year.	Non-Issue

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Reclaimed Water System	4,908,498	_	-	-	-	-	-
% of Revenue Requirements	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
3. Reclaimed Water System (capital & O&M costs)	Reclaimed water is currently subsidized by equal transfers from the water and sewer funds. All customers were allocated portion of transfer.	<ul> <li>Important source of supply that benefits all customers</li> <li>Reclaimed water subsidy costs should be recovered from the Water Fund</li> <li>Allocated to all customers</li> </ul>

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# PUCT DISALLOWANCES IN RATE RULING

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Drainage Fees	249,210	80,288	8,064	61,661	64,393	23,245	11,560
% of Revenue Requirements	0.04%	0.04%	0.06%	0.05%	0.04%	0.05%	0.08%

Disallowance	Definition/ Explanation	RFC Perspective
4. Drainage Fees	City of Austin utility departments charge other City departments for utility services, including drainage fees for impervious cover at AW facilities.	<ul> <li>Costs similar to other utilities' services, such as electricity and natural gas</li> <li>Cost of doing business</li> <li>Allocated to all customers</li> </ul>

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	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Expense SWAP & CP Costs	1,376,035	543,875	54,416	293,519	338,025	101,896	44,303
% of Revenue Requirements	0.2%	0.3%	0.4%	0.2%	0.2%	0.2%	0.3%

Disallowance	Definition/Explanation	RFC Perspective
5. Reclassification of SWAP and commercial paper costs from capital to operating expense	The City of Austin implemented Governmental Accounting Standards Board (GASB) Statements No. 65 in FY 14. GASB 65 requires that bond issue costs be expensed annually rather than amortized over the term of the associated debt issue.	Cost appropriate to include in revenue requirement because it reflects a test year cash outflow

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	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Reclaimed O&M Allocation	-	-	-	-	1	-	-
% of Revenue Requirements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
6. Allocation of O&M expenses to reclaimed water	One of the goals of the current COS study is to better identify costs associated with the Reclaimed Utility.	<ul> <li>Important source of supply that benefits all customers</li> <li>Reclaimed water subsidy costs should be recovered from the Water Fund</li> <li>Allocated to all customers</li> </ul>

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Depreciation	-	-	-	-	-	-	-
% of Revenue Requirements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
7. Depreciation	Depreciation allocation not applied under Cash Basis. PUC identified mislabeled cell in Cost of Service model.	RFC will develop a model that is either strictly Cash or strictly Utility basis based on direction by the Executive Team

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	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Green WTP capital costs	-	-	_	-	-	-	-
% of Revenue Requirements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
8. Green Water Treatment Plant capital costs	There are minimal FY17 capital revenue requirements related to the Green Water Treatment Plant (WTP) related to improvements made prior to decommissioning.	<ul> <li>This is a decommissioned plant</li> <li>Cash basis – costs are appropriate for common to all allocation</li> <li>Utility basis – costs would be considered retail only</li> </ul>

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Revenue Stability Reserve Fund	2,000,001	651,568	65,030	462,061	551,637	154,612	115,093
% of Revenue Requirements	0.3%	0.3%	0.5%	0.3%	0.4%	0.3%	0.8%

Disallowance	Definition/ Explanation	RFC Perspective
9. Revenue Stability Reserve Funds	The Water Revenue Stability Reserve Fund (Reserve Fund) was created in FY 13 through a collaborative effort of a Joint Committee consisting of public citizens and city board and commission members.	<ul> <li>Designated reserve fund to counter loss in water sales revenue from fluctuations in consumption</li> <li>Costs allocated to all customers</li> </ul>

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	Total	Residential	CAP	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Barton Springs/Edwards Aquifer							
Conservation	900,000	379,749	37,882	170,403	225,053	53,180	33,732
% of Revenue Requirements	0.1%	0.2%	0.3%	0.1%	0.1%	0.1%	0.2%

Disallowance	Definition/ Explanation	RFC Perspective
10. Barton Springs/Edwards Aquifer Conservation District	The Land Management Program contributes to Austin's water quality by absorbing rainfall which helps alleviate flooding and maximizes inflows of water to area creeks and lakes.	<ul> <li>Mandated by state legislation</li> <li>Cost of doing business</li> <li>Costs allocated to all customers</li> </ul>

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Govalle WWTP - O&M Costs	396,262	124,653	12,340	108,959	101,737	31,965	16,608
% of Revenue Requirements	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

Disallowance	Definition/ Explanation	RFC Perspective
11. Govalle Wastewater Treatment Plant (capital & O&M costs)	AW uses the plant site for various treatment support functions, emergency wastewater flow diversion, and for storage of treatment plant and infrastructure assets.	<ul> <li>This is a decommissioned plant</li> <li>Cash basis and Utility Basis – O&amp;M costs are appropriate for common to all allocation</li> <li>Capital costs excluded from Utility Basis</li> </ul>

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	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Utility-wide Contingency	1,711,922	670,110	67,077	371,024	419,460	130,424	53,827
% of Revenue Requirements	0.3%	0.3%	0.5%	0.3%	0.3%	0.3%	0.4%

Disallowance	Definition/ Explanation	RFC Perspective
12. Utility-wide Contingency	Revenue requirement item designed to provide funds in case of emergency repair or other unplanned contingency	Rationale and justification for estimated contingency required.

	Total	Residential	CAP	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
WTP4	4,748,080	1,571,878	159,504	1,061,811	1,314,092	356,582	284,213
% of Revenue Requirements	0.8%	0.8%	1.2%	0.8%	0.8%	0.8%	2.0%

Disallowance	Definition/ Explanation	RFC Perspective
13. Water Treatment Plant No. 4	Plant was under construction at time of filing and was deemed not 'used and useful'	Water Treatment Plant No. 4 is now in service and part of AW's integrated system. All customers benefit and should share in cost.

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	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
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2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Green Choice electricity	800,000	-	-	-	-	-	-
% of Revenue Requirements	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Disallowance	Definition/ Explanation	RFC Perspective
14. Green Choice Electricity	Austin Water switched to power sources that are all derived from green energy (solar and wind)	In FY17, Austin Water switched from the Green Choice to the Commercial Energizer rate

#### REVENUE REQUIREMENTS

# Other Major Requirements

#### OTHER MAJOR REQUIREMENTS

	Total	Residential	CAP	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Transfers to Capital Program	51,200,000	17,038,107	1,481,575	12,837,474	13,878,764	4,012,422	1,951,658
% of Revenue Requirements	8.5%	8.3%	10.8%	9.4%	8.9%	9.0%	13.7%

Other Major Requirement	Definition/ Explanation	RFC Perspective
1. Transfer to Capital Program (cash funding of CIP)	Cash funding of capital projects as "pay-as-you-go" financing to avoid issuing debt and associated financing costs over 30 years	Cash funded capital is allocated to all customers under the Cash Basis approach and is reflected in the capital structure under the Utility Basis

#### **OTHER MAJOR REQUIREMENTS**

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Utility Billing System Support	20,401,455	16,966,266	1,475,327	506,198	1,448,249	1,118	4,297
% of Revenue Requirements	3.4%	8.2%	10.8%	0.37%	0.93%	0.003%	0.03%

Other Major Requirement	Definition/ Explanation	RFC Perspective
2. Utility Billing System Support	Costs allocated to Austin Water for our share of Austin Energy's management of Utility billing system, call center, bill escalations, meter reading, etc.	<ul> <li>Cost of doing business</li> <li>Allocated to all customers using appropriate cost allocation methodology</li> </ul>

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#### OTHER MAJOR REQUIREMENTS

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Administrative Support	12,511,992	5,016,825	442,793	2,652,936	3,076,527	746,478	576,433
% of Revenue Requirements	2.1%	2.4%	3.2%	2.0%	2.0%	1.7%	4.0%

Other Major Requirement	Definition/ Explanation	RFC Perspective
3. Administrative Support	Costs allocated to Austin Water for internal services such as Corporate Purchasing, Human Resources, City Manager's Office, etc.	<ul> <li>Cost of doing business</li> <li>Allocated to all customers</li> </ul>

#### **OTHER MAJOR REQUIREMENTS**

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Transfers for Debt Defeasance	15,000,000	ı	-	-	-	-	
% of Revenue Requirements	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Other Major Requirement	Definition/ Explanation	RFC Perspective
4. Transfers of CRFs for Debt Defeasance	Transfers of collected CRFs for use to defease, or pay off, existing debt to reduce and manage debt service requirements. Use restricted by State law.	One industry accepted use of CRFs is for debt payments used to finance growth-related capital

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#### OTHER MAJOR REQUIREMENTS

	Total	Residential	САР	Multifamily	Commercial	Large Volume	Wholesale
2017 Revenue Requirements	604,138,696	205,779,380	13,660,827	136,033,244	155,602,543	44,691,769	14,257,221
Financial Benchmarks	-	-	-	-	-	-	-
% of Revenue Requirements	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Other Major Requirement	Definition/ Explanation	RFC Perspective
5. Financial Benchmarks of Debt Service Coverage, Cash Reserves and CIP Debt to Equity Ratio	Major financial benchmarks which Rating Agencies review to assess bond ratings	All customers, including outside city customers, have a stake in the financial health of their service provider; therefore including costs required to meet financial benchmarks may be appropriate to allocate to all customers

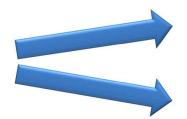
#### REVENUE REQUIREMENTS

# Common-to-all vs. Retail/Wholesale Only

#### **COST ALLOCATIONS**

- Operating Costs
- Capital Costs

O&M and Capital Costs



Common to All

Specific to One Customer Group

#### **WATER O&M COST CENTERS**

#### **Water Cost Centers**

- Water Treatment
- Pipeline Operations
- Distribution System Support
- One Stop Shop
- Support Services
- Conservation & Reuse
- Billing & Customer Services
- Transfers & Other Requirements
- Water Conservation

#### **Key Water Service Functions**

- Raw Water
- Treatment
- Pump Stations & Booster Stations
- Pump Stations Power
- Tanks/ Reservoirs
- Transmission Mains
- Distribution Mains



- Retail Meters & Services
- Meters & Services
- Customer Service
- Small Calls
- Non-Wholesale Special Allocations

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### WATER 0&M COST ALLOCATIONS

Function	Common to All Costs (Retail and Wholesale)	Retail Only Costs	Wholesale Only Costs	
Raw Water – LCRA Water Rights	X			
Raw Water – Watershed Land Purchases		X		
Treatment	X			
Pump Stations & Booster Stations	X		There	
Pump Stations Power	X		are no	
Tanks/ Reservoirs	X		Wholesale	
Transmission Mains	X		Only	
Distribution Mains		X	O&M Costs	
Direct Fire		X	Costs	
Retail Meters & Services		X		
Meters & Services	X			
Customer Service	X			
Small Calls	X			
Non-Wholesale Special Allocations		X		

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#### **WATER CAPITAL COSTS**

#### **Cash Basis Revenue Requirement**

- Debt Service
- Construction Fund / Capital Outlay
- Transfer to Reserve Fund
- Capital Project Mgt. Fund

#### **Utility Basis Revenue Requirement**

- Depreciation Expense
- Return on Rate Base

#### **Key Water Service Functions**

- Raw Water
- Treatment
- Pump Stations & Booster Stations
- Pump Stations Power
- Tanks/ Reservoirs
- Transmission Mains
- Distribution Mains
- Direct Fire
- Retail Meters & Services
- Meters & Services
- Customer Service
- Small Calls
- Non-Wholesale Special Allocations

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### WATER CAPITAL COST ALLOCATIONS

Function	Common to All Costs (Retail and Wholesale)	Retail Only Costs	Wholesale Only Costs		
Raw Water – LCRA Water Rights	X				
Raw Water – Watershed Land Purchases		X			
Treatment	X				
Pump Stations & Booster Stations	X		There		
Pump Stations Power	X		are no		
Tanks/ Reservoirs	X		Wholesale		
Transmission Mains	X		Only		
Distribution Mains		X	O&M		
Direct Fire		X	Costs		
Retail Meters & Services		X			
Meters & Services	X				
Customer Service	X				
Small Calls	X				
Non-Wholesale Special Allocations		X			

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### WASTEWATER O&M COST CENTERS

#### **Wastewater Cost Centers**

- Wastewater Treatment Support
- Wastewater Treatment
- Collection System Operations
- Collection System Support
- One Stop Shop
- Support Services
- Conservation and Reuse
- Billing and Customer Services
- Transfers & Other Requirements

#### **Key Wastewater Service Functions**

- Collection
- Interceptors
- Lift Stations (Conveyance)
- Plant Raw WW Pumping
- Primary Clarifiers
- Aeration Basins
- Secondary Clarifiers
- Filters
- · Disinfection and Outfall
- Sludge Thickening
- Biosolids Management
- Customer Service
- Wholesale and Industrial Services

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#### WW O&M COST ALLOCATIONS

	Common to			Commercial	
	All Costs	Retail		and	
E	(Retail and	Only	Wholesale	Industrial	Surcharge
Function	Wholesale)	Costs	Only Costs	Monitoring	Customers
Collection		Х			
Interceptors	X				
Lift Stations (Conveyance)	X				
Plant Raw WW Pumping	X				
Preliminary Treatment	X				
Industrial Waste Control				50.0%	50.0%
Primary Clarifiers	X				
Flow Equalization Basins	X				
Aeration Basins	X				
Secondary Clarifiers	X				
Return Sludge Pumping	Х				
Waste Sludge Pumping	X				
Filters	X				
Disinfection and Outfall	X				
Sludge Thickening	X				
Biosolids Management	Х				
Customer Service	X				
Wholesale & Industrial Services			80.0%	20.0%	··•/

#### **WASTEWATER CAPITAL COSTS**

#### **Cash Basis Revenue Requirement**

- Debt Service
- Construction Fund / Capital Outlay
- Transfer to Reserve Fund
- Capital Project Mgt. Fund

#### **Utility Basis Revenue Requirement**

- Depreciation Expense
- Return on Rate Base

#### **Key Wastewater Functions**

- Collection
- Interceptors
- Lift Stations (Conveyance)
- Plant Raw WW Pumping
- Primary Clarifiers
- Aeration Basins
- Secondary Clarifiers
- Filters
- Disinfection and Outfall
- Sludge Thickening
- Biosolids Management
- Customer Service
- Wholesale and Industrial Services

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#### **WW CAPITAL COST ALLOCATIONS**

Function	Common to All Costs (Retail and Wholesale)	Retail Only Costs	Wholesale Only Costs	Commercial and Industrial Monitoring	Surcharge Customers
Collection		Х			
Interceptors	X				
Lift Stations (Conveyance)	X				
Plant Raw WW Pumping	X				
Preliminary Treatment	X				
Industrial Waste Control				50.0%	50.0%
Primary Clarifiers	X				
Flow Equalization Basins	X				
Aeration Basins	X				
Secondary Clarifiers	X				
Return Sludge Pumping	X				
Waste Sludge Pumping	X				
Filters	X				
Disinfection and Outfall	X				
Sludge Thickening	X				
Biosolids Management	X				
Customer Service	X				
Wholesale & Industrial Services			80.0%	20.0%	***



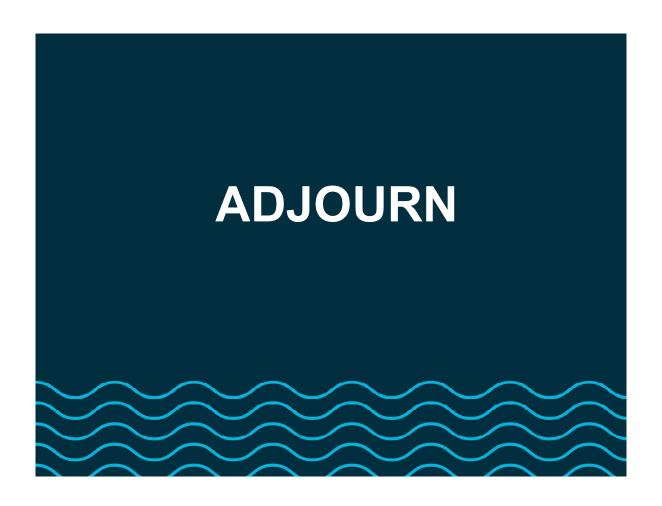
## RECAP OF TODAY'S DISCUSSION

- I. Review Austin Water System and Rates
  - II. Conclude Revenue Requirements
    - III. Introduce Cost Allocation

#### PIC -SCHEDULE & TOPICS

Meeting	Day	<u>Date</u>	<u>Objective</u>
4	<del>Tues</del>	<del>27-Sep</del>	Orientation
2	Wed	<del>5-Oct</del>	Revenue requirements
3	<del>Tues</del>	<del>25-Oct</del>	Revenue requirements - Cont'd
4	<del>Tues</del>	<del>8-Nov</del>	Revenue requirements - Cont'd
5	Tues	29-Nov	Revenue requirements
6	Tues	13-Dec	Water Cost Allocation
7	Wed	4-Jan	Wastewater Cost Allocation
8	Tues	17-Jan	Rates and Customer Impacts
			Rates and Customer Impacts -
9	Tues	31-Jan	Cont'd
10	Tues	21-Feb	Overview of Results and Wrap-up

# **ADDITIONAL** COMMENTS COS 2016 | PIC Meeting 5 | November 29, 2016







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# AW Rate and Cost Factors | PIC





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#### Austin Water Cost of Service Rate Study 2016

#### **Rate and Cost Comparison Factors**

- I. Austin Water Rate and Cost Comparison Factors
  - A. <u>Source of Supply</u>: Austin Water is a surface water utility. Surface water sources are significantly more expensive to treat than groundwater sourced utilities such as San Antonio.
  - B. <u>Lime Softening Treatment</u>: Austin Water uses a lime softening process to treat drinking water. This treatment approach produces high quality water but the process of using lime is more expensive when compared to other conventional treatment technologies. We have been lime softening for nearly 100 years and a treatment technology change significantly increases the risk of adverse impacts to our distribution system (think Flint Michigan) so we will be using lime softening for many years to come. While lime softening is more expensive, it does have the value added quality of producing a softened water so the majority of our customers do not have the added expensive of a private water softening system.
  - C. <u>Elevations</u>: Austin Water's service area has significant changes in elevation. This requires us to manage several different pressure zones and increases our pumping costs when compare to other utilities.
  - D. <u>Drinking Water Supply Investments</u>: In 1999, Austin Water invested \$100M to reserve and prepay for water supplies with the Lower Colorado River Authority (LCRA). This approach had many long term benefits (price certainty, reserving water supply through the year 2100) but a portion of the investment was debt financed that is still being paid today. Many utilities pay for raw water use and reservation fees as they are incurred and do not take the long term forward look to secure the water supply. Our LCRA contract is often cited by bond rating agencies as an integral part of our creditworthiness. For example, Standard & Poor's latest rating narrative noted our LCRA agreement as a key factor contributing to our AA/Stable rating and noted it as follows "Water supply agreement with the Lower Colorado River Authority (LCRA) since 1999, effectively securing a 100-year water supply at a reasonable cost, and one which was not interrupted by LCRA even during the recent severe and prolonged drought"
  - E. <u>Community Preferences for Investments to Preserve and Protect the Environment</u>: Austin places a high value on protecting the environment and Austin Water has contributed significantly to these values as expressed in Council policy direction to the Utility.
    - 1. <u>Water Quality Protection Lands</u>: Austin Water invested \$100M to purchase thousands of acres of land designed to improve and protect the area's water quality (Barton Springs for example). In addition, the Utility is responsible for annual costs to staff and resource programs to maintain and operate the water quality protection lands to maximize water quality benefits.
    - 2. <u>Green Choice Power</u>: Austin Water switched to power sources that are all derived from green (solar and wind) energy. These green energy sources are more expensive than traditional carbon based energy.
    - 3. <u>Wastewater Effluent Quality</u>: Austin Water Wastewater Treatment processes are designed to produce a very high quality wastewater effluent. We are one of the only Utilities to have river water quality downstream of our wastewater treatment plants rated exceptional by TCEQ.
    - 4. <u>CIP Projects</u>: Austin Water takes special steps to design and fund environmental protections into our capital improvement plan (CIP) projects. For example, Austin water funded a separate, independent oversight process, known as Environmental Commissioning (EC), to govern environmental protections during the construction of our Water Treatment Plant 4 (WTP4) project. Through the EC process, we were

- able to construct large utility infrastructure in highly sensitive preserve lands without causing harm. Our commitment to environmentally friendly CIP work often requires increased investment. For example, during the construction of the WTP4 finished water transmission main, we selected tunneling (versus open cut) as the environmentally preferred approach and lowered our tunnel depth to provide ample protection to sensitive springs and creeks.
- 5. Hornsby Bend Biosolids Handling Facility: Austin Water operates the Hornsby Bend Biosolids Handling Facility as a no-discharge sludge treatment plant. Austin Water has historically and will continue to compost its biosolids into the product Dillo Dirt or land application purposes. Austin Water has also invested in a biogas generator to produce electricity that offsets the plants needs.
- F. <u>Fire Protection Investments</u>: Austin Water provides the community with an extremely robust fire protection system. Our water system, paired with the highly capable Austin Fire Department, resulted in the 2016 Insurance Services Organization (ISO) rating Austin with a Fire Protection Classification of 1. This is the highest fire protection rating a city can receive. This rating is indicative of the emphasis we place on public health and safety.
- G. <u>Austin Clean Water Program (ACWP)</u>: In 2009, Austin Water completed a \$400M investment to reduce the risk of sanitary sewer overflows (SSOs) in our wastewater collection system and clear an EPA administrative order (AO). We are in good standing with TCEQ and EPA and, unlike many large wastewater utilities; we are not currently under an SSO or CSO administrative order or consent decree. Many Utilities are just now beginning major programs to bring their systems into compliance with EPA mandates. For example, the San Antonio Water System (SAWS) is just beginning a \$1B+ SSO reduction consent decree.
- H. <u>High Growth City</u>: For many years, Austin has remained at the top of the charts in terms of population and job growth. This has required Austin Water to invest heavily to design and construction water and wastewater utility infrastructure to keep up with our booming population and economic growth. These investments have added to our debt service and required the Utility to periodically add staff to keep up with our growing customer base. The Utility has taken steps to manage growth impacts including the recent implementation of a capital recovery fees (CRFs) system designed to recover the maximum allowed by Texas law. Since 2014, our revised CRF system has generated nearly \$54M in growth driven fees that we are using to pay and defease the debt associated with system growth but it will take several more years of increased collections to offset previous growth driven capital investments.
- I. <u>Customer Assistance Program (CAP)</u>: During our last cost of service, the Utility recommend the creation of a program to provide financial assistance to customers experiencing financial distress. Our CAP program has grown to over 25,000 (this number needs to be verified) receiving monthly reductions on their water and wastewater bills. Protecting and preserving essential water services for our most vulnerable customers is an important community value that Austin Water needs to continue into the future.
- J. <u>Drought Response</u>: By many standards, the region's recent multi-year drought was the most severe since the construction of the Highland Lake reservoirs in the late 1930s. Austin Water's drought response, coupled with our long term conservation programs, saved nearly 250,000 acre-feet of water (81 billion gallons) and was a critical factor in keeping Highland Lakes storage above the emergency level of 600,000 acre feet (the point that requires across the board pro-rata water use curtailment). Although successful in preserving the water supply, the Utility's drought response profoundly impacted water use across our system with demand dropping from a peak of 190 gallons per capita per day in 2006 to a low of 122 in 2015. These water use reductions severely impacted Austin Water's finances and required the Utility, in consultation with a citizen advisory group, to develop and implement a series of rate increases, revenue stabilizing surcharges, fixed/variable revenue rebalancing, and cost reduction strategies that were needed to preserve our core financial metrics. While

these changes impacted rates, the Utility has emerged out of the shadow of the drought with a more resilient business model that will result in long term rate stability and high bond ratings into the future.

1. A key component of our drought response strategies includes our heavily inclining block rate structure. By design, our rates are structure to send a strong pricing signal as water use increases. This skews our results when compared to other utilities.