

CAPITAL REGION WATER

Water and Sewer Rate Presentation

November 9, 2016

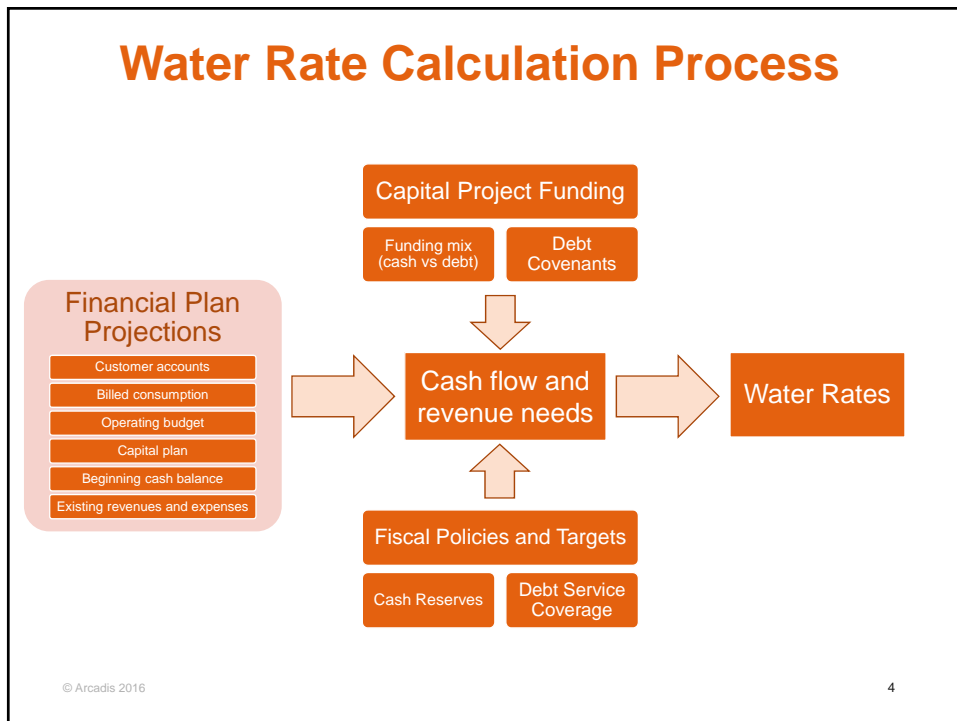
Outline

1. Overview of the Rate Modeling Process
2. Rate Increase Drivers
3. Projected 2017 Rates
4. Historical and Current Water and Sewer Rates
5. Rate Comparisons

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Water Rates

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Water Rate Drivers

1. Operating Expense Budget for FY2017
2. Capital Improvement Needs
3. Debt Service Coverage
4. Cash Reserve Target

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Water Rate Drivers

Capital Improvement Needs

Project Type	FY2017	FY2018	FY2019	FY2020
Raw Water Transmission	\$1,800,000	\$1,000,000	\$0	\$0
Water Reservoirs	2,202,000	0	0	0
Water Services Center	5,760,500	0	0	0
Transmission / Distribution Mains	1,600,000	2,700,000	2,000,000	2,500,000
Other Miscellaneous	1,779,455	2,000,000	2,000,000	1,861,660
Total	\$13,141,955	\$5,700,000	\$4,000,000	\$4,351,660
Capital Financing Plan				
Debt (PennVest Loan)	\$6,000,000	\$0	\$0	\$0
Cash Funding (PayGo)	7,141,955	\$5,700,000	\$4,000,000	4,351,660

* Amounts shown in FY2017 dollars

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Water Rate Drivers

Debt Service Coverage

Debt Service (DS) Coverage Ratio

$$= \frac{\text{Revenues} - \text{Operating Expense}}{\text{Debt Service}}$$

Trust Indenture Requirement (Senior) =	1.20
Management Target Minimum (Plan) =	1.35
Ending FY 2017 Coverage (Senior) =	1.35

Industry Medians (Fitch Ratings)			
	AAA	AA	A
DS Coverage Minimum	2.1	1.7	1.4

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Water Rate Drivers

Cash Reserves

Management Target Minimum =	200 days
Operating Reserve Minimum (Trust Indenture) =	60 days
Additional Management Target Minimum =	140 days

Projected Beginning FY2017 Cash =	\$14,937,000
Days Cash On-Hand =	531 days
Projected Ending FY 2017 Days Cash On-Hand =	392 days

* Includes Operating Account, Operating Reserve Account, Contingency Account, and Renewal & Replacement Fund.

Industry Medians (Fitch Ratings)			
	AAA	AA	A
Days Cash On-Hand	764	485	221

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Other Water Rate Projection Assumptions

1. Billed consumption decrease of 0.8-0.9% per year.
2. Customer account growth of 0.1% per year.
3. Operating Expense escalation of 3.0% percent per year.
4. Debt Financing assumes PennVest subordinate lien loan Interest rate of 1.5% and a term of 20 years.

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Summary of FY2017 Water Rate Proposal

Description	Proposed FY 2017	Projected FY 2018	Projected FY 2019
Rate Increase (%)	11.7%	9.6%	4.9%
Typical Residential Monthly Bill Increase (\$)	\$4.89	\$4.47	\$2.50
Ending Operating Cash Days (Target=200)	\$6,939,000 247	\$5,559,000 200	\$5,752,000 200
Total Cash (Operating, Contingency, R&R) Days ¹	\$10,127,000 392	10,010,000 347	10,321,000 343
DS Coverage (Senior) -1.35 Target -1.20 Required	1.35x	1.48x	1.44x
DS Coverage (Total) -1.15 Target -1.00 Required	1.31x	1.43x	1.40x

¹Does not include DeHart proceeds.

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Projected FY 2017 Water Rates

Description	Existing FY 2016	Recommended FY 2017
Ready-to-Serve Charge:		
5/8"	\$6.22	\$6.95
3/4"	\$13.48	\$15.06
1"	\$27.03	\$30.20
1-1/2"	\$57.90	\$64.69
2"	\$106.15	\$118.60
3"	\$296.73	\$331.53
4"	\$530.72	\$592.97
6"	\$1,433	\$1,601
8"	\$2,547	\$2,846
10"	\$3,599	\$4,021
12"	\$5,732	\$6,404
Volume Charge (\$ per 1,000 gallons)		
-All Customers	\$7.88	\$8.80

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Residential Water Bill Comparison

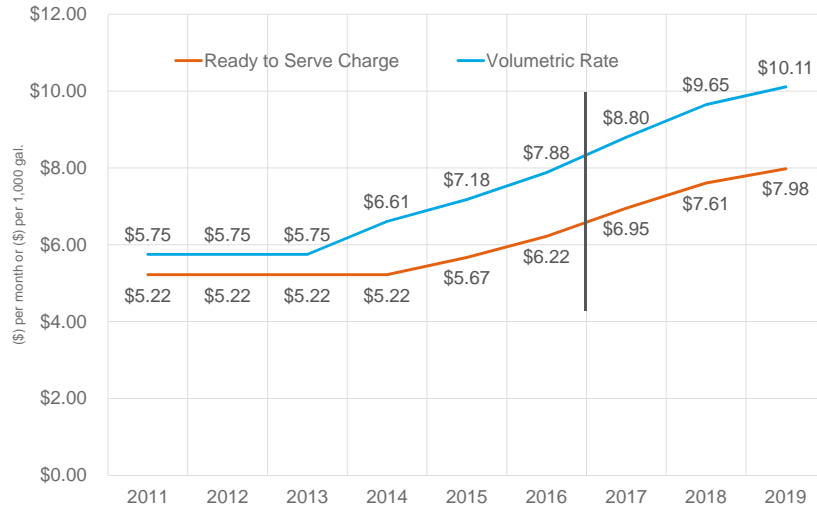
Based on a 5/8-inch meter and consumption of 4,500 gallons per month.



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Historical and Projected Water Rates*



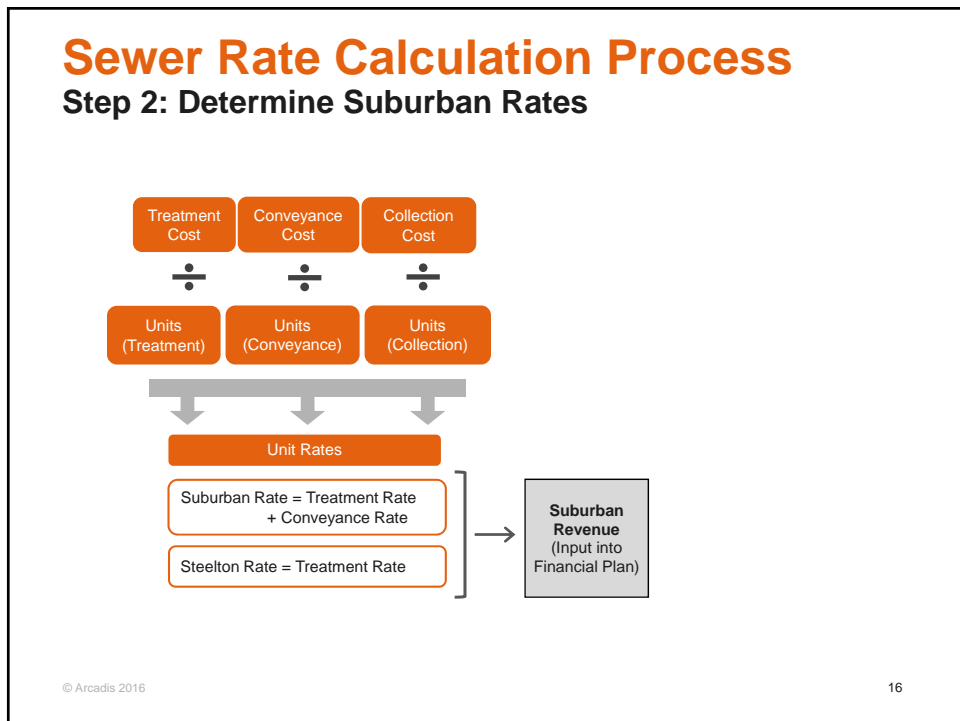
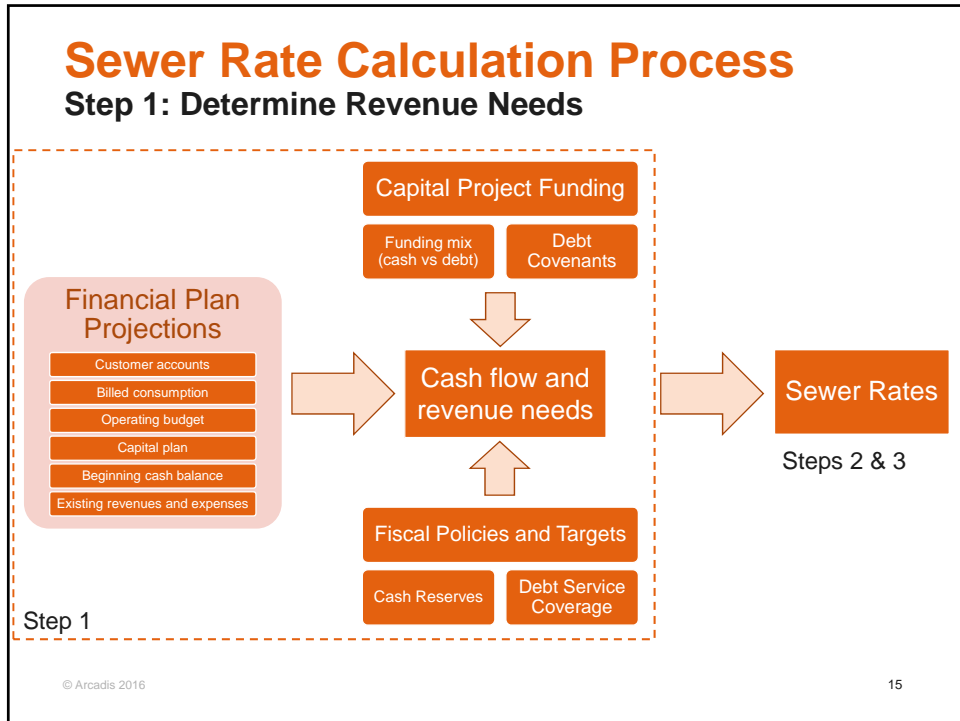
*Assumes no change to RTS calculation methodology for FY 2018 and FY 2019.

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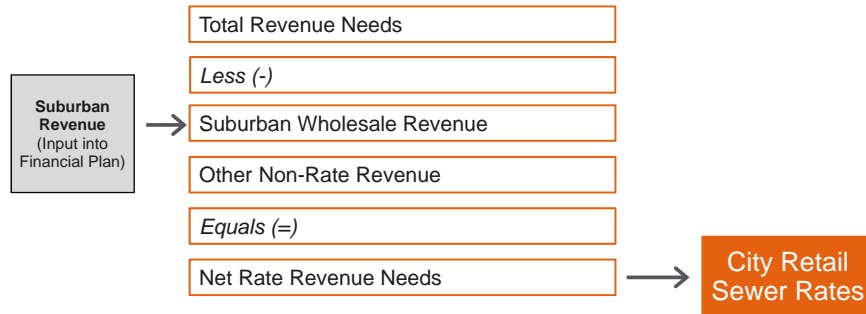
Sewer Rates

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Sewer Rate Calculation Process

Step 3: Determine City Retail Sewer Rates



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Sewer Rate Drivers

1. Operating Expense Budget for FY2017
2. Capital Improvement Needs
3. Debt Service Coverage
4. Cash Reserve Target

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Sewer Rate Drivers

Capital Improvement Needs

Project Type	FY2017	FY2018	FY2019
Collection System Improvements	\$ 6,383,500	\$ 9,670,000	\$ -
Conveyance System Improvements	8,244,500	1,845,000	1,800,000
Pump Station Improvements	-	5,550,000	12,275,000
AWTF Improvements	9,415,530	7,450,000	294,327
Wet Weather-Related Projects	6,927,523	2,198,773	238,773
Miscellaneous Other	1,290,000	-	-
Total	\$ 32,261,053	\$ 26,713,773	\$ 14,608,100
Capital Financing Plan			
Debt (Rev Bonds / PennVest Loan)	\$25,000,000	\$21,713,773	\$9,608,100
Cash Funding (PayGo)	7,261,053	5,000,000	5,000,000

* Amounts shown in FY2017 dollars

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Sewer Rate Drivers

Debt Service Coverage

Debt Service (DS) Coverage Ratio

$$= \frac{\text{Revenues} - \text{Operating Expense}}{\text{Debt Service}}$$

Trust Indenture Requirement (Senior) = 1.10

Management Target Minimum (Plan) = 1.25

Ending FY 2017 Coverage (Senior) = 1.43

Industry Medians (Fitch Ratings)			
	AAA	AA	A
DS Coverage Minimum	2.1	1.7	1.4

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Sewer Rate Drivers

Cash Reserves

Management Target Minimum =	180 days
Projected Beginning FY2017 Cash =	\$26,076,000
Days Cash On-Hand =	787 days
Projected Ending FY 2017 Days Cash On-Hand =	615 days

* Includes Operating Account and Renewal, Replacement, and Redemption Fund.

Industry Medians (Fitch Ratings)			
	AAA	AA	A
Days Cash On-Hand	764	485	221

Other Sewer Rate Projection Assumptions

1. Billed consumption decrease of 0.8 to 0.9% per year for City customers.
2. No change in Suburban customer billed consumption in future years.
3. Operating Expense escalation of 3.0% percent per year.
4. Debt financing assumption of \$5.5M subordinate PennVest loan Interest rate of 1.5% and a term of 20 years.
5. Debt financing assumption of \$19.5M Revenue Bonds Interest rate of 5.0% and a term of 30 years.

Summary of FY2017 Sewer Rate Proposal

Description	Proposed FY 2017	Projected FY 2018	Projected FY 2019
City Rate Increase (%)	8.0%	10.0%	10.0%
Suburban Rate Increase (%)	7.5%	n/a	n/a
Typical City Residential Monthly Bill Increase (\$)¹	\$2.18	\$2.94	\$3.23
Ending Operating Cash Days (Target=180)	\$11,371,578 343	\$8,715,371 261	\$6,949,143 202
Total Cash (Operating, RR&R) Days	\$20,363,000 615	\$17,707,000 530	\$15,941,000 463
DS Coverage (Senior) -1.25 Target -1.10 Required	1.43x	1.48x	1.58x
DS Coverage (Total) -1.15 Target -1.00 Required	1.34x	1.41x	1.51x

¹Based on billed volume of 4,500 gallons per month.

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Proposed FY 2017 Sewer Rates

Description	Existing FY 2016	Projected FY 2017
Retail Sewer Rate (per 1,000 gallons)		
-Sewer Utilization Charge	\$5.26	\$5.68
-Sewer Maintenance Charge	\$0.79	\$0.85
-Total Retail Sewer Rate	\$6.05	\$6.53
Suburban Sewer Rate (per 1,000 gallons)		
-Suburban Customers	\$3.17	\$3.41
-Steelton Customers	\$1.96	\$2.11

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Sewer Rate Components

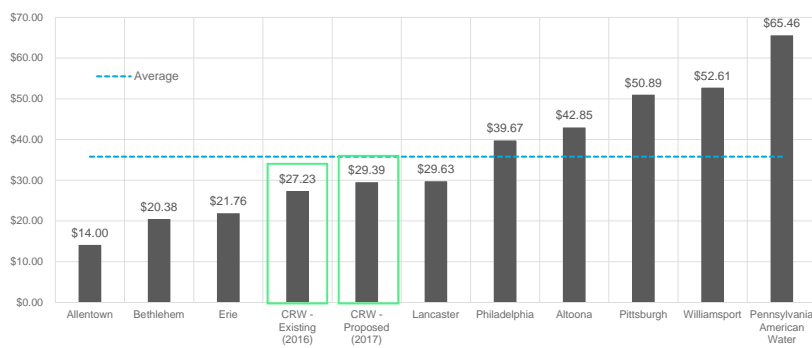
Description	City of Harrisburg	Suburban	Steelton
Treatment	\$2.40	\$2.40	\$2.40
Conveyance	\$1.50	\$1.50	n/a
Collection	\$3.49	n/a	n/a
Municipal Agreement Adj.	\$0.00	\$0.29	\$0.15
Prior Year True-Up	\$0.00	-\$0.78	-\$0.44
Use of Fund Balance	-\$0.86	\$0.00	\$0.00
Sewer Rate (per 1,000 gal.)	\$6.53	\$3.41	\$2.11

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City Residential Sewer Bill Comparison

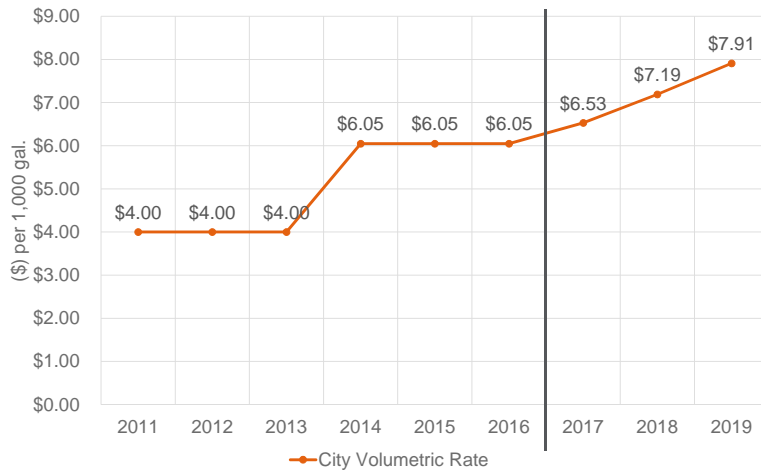
Based on billed volume of 4,500 gallons per month.



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Historical and Projected City Sewer Rates



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