

Carson City



Water and Sewer Rate Study

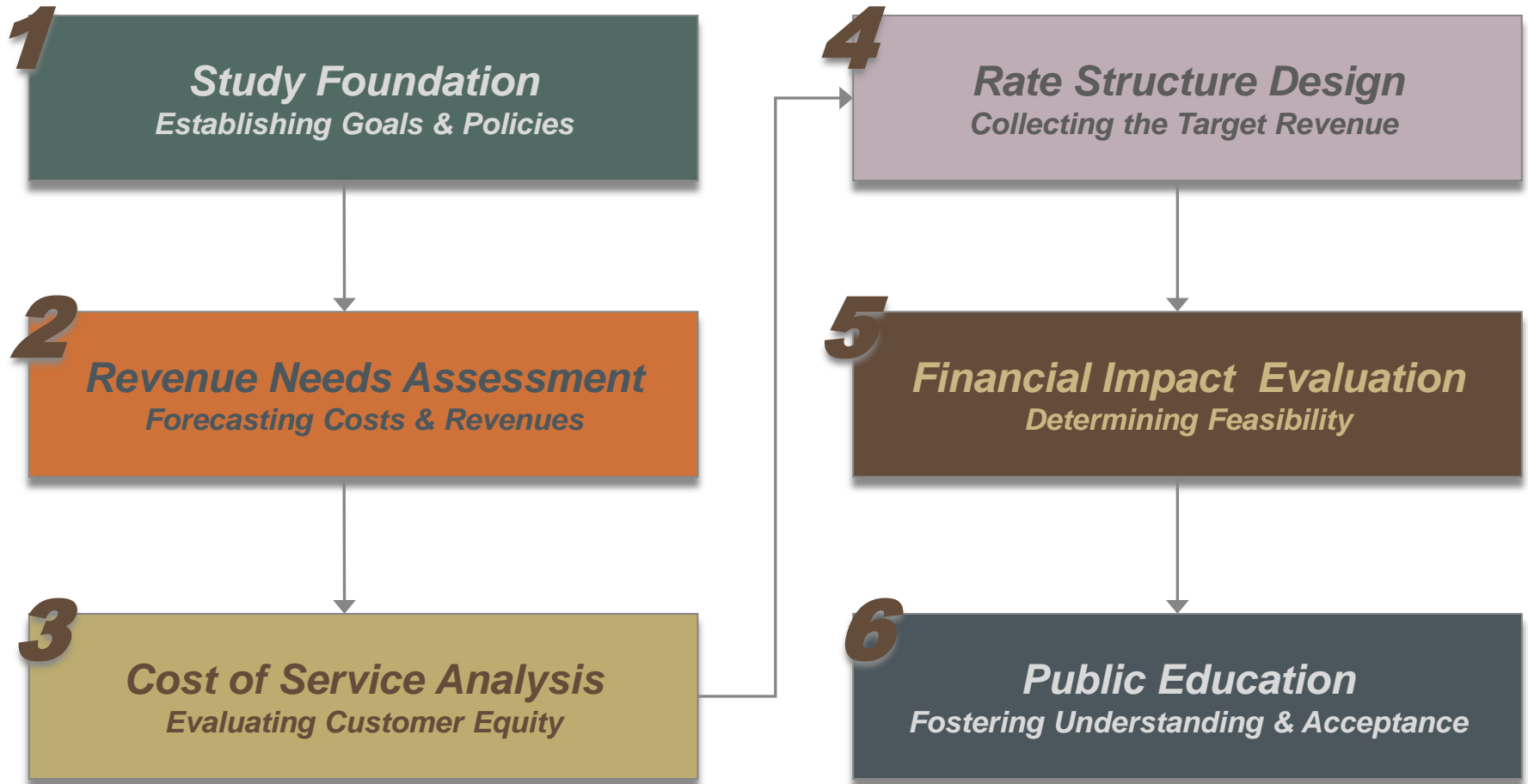
Preliminary Results

April 18, 2013

Agenda

- Study Overview
- Cost of Service
- Rate Design
- Financial Policies
- Revenue Requirements
- Connection Charges
- Requested Direction

Steps to a Successful Rate Study



Study Objectives

- Evaluate customer class cost recovery and alternative rate structures assuming revenue neutral utilities
- Assess baseline revenue requirements assuming existing water and sewer rate levels
- Provide informational revenue requirement scenarios for meeting future financial obligations
 - Incorporating appropriate financial policies
 - Executing the Capital Improvement Programs
- Update connection charges to reflect current and planned system investment

Major Findings

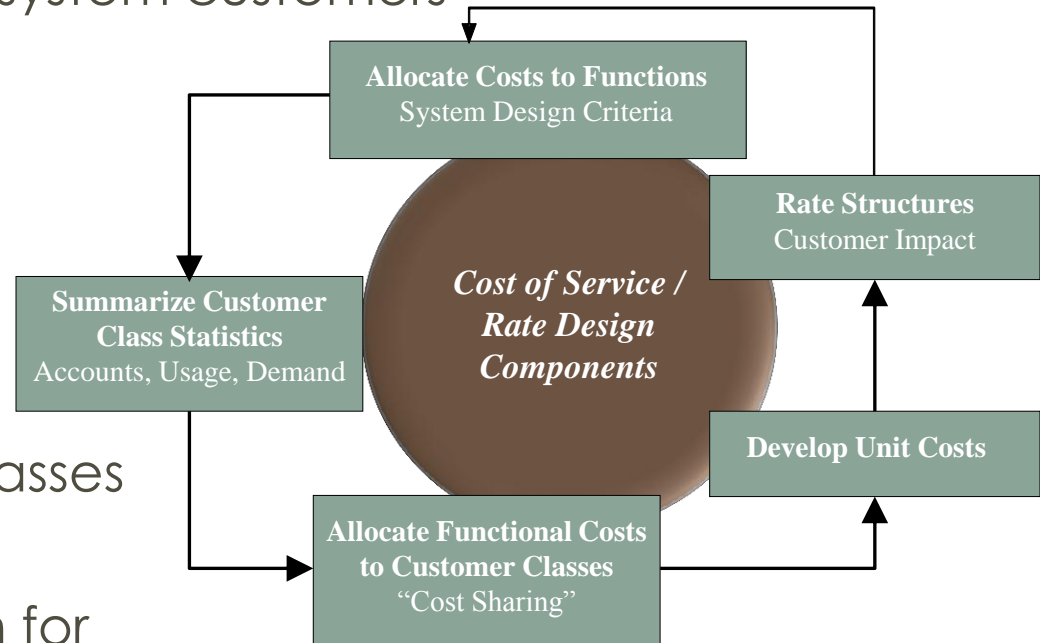
- Cost of service indicates subsidies among customer classes for both utilities
- Revised rate structures warranted to improve equity and achieve pricing objectives
- Connection charges significantly below indicated level of charges - previously reduced to promote economic development
- Baseline level of service can be maintained at existing rate levels for both utilities
- Future capital impacts require varying levels of rate increases for both utilities

COST OF SERVICE RESULTS

Under “Base” Scenario

Overview of Cost of Service

- Provides a defensible basis for assigning “cost shares” and establishing “equity” for system customers
 - Number of customers
 - Patterns of use
 - Level of service
 - Other
- Determines appropriate grouping of customer classes
- Serves as the foundation for rate structure designs



WATER UTILITY

Water: Rate Class Changes

Existing

RESIDENTIAL

Single Family
Duplex
Quasi-Residential
Senior Discount
Multifamily (condos)

COMMERCIAL

Multifamily (apartments)
Commercial
Federal
Municipal
State
State Prison

Proposed

RESIDENTIAL

Single Family
Duplex
Quasi-Residential
Senior Discount

MULTI-FAMILY RESIDENTIAL

Condos / Apartments

COMMERCIAL

Commercial
Federal
Municipal
State

LARGE COMMERCIAL

>2"Meter, > 3,500 Kgal/Mo

Water: Customer Statistics

	Monthly Water Usage (kgal/unit)			Peak Ratio	Number of Units
	Annual Average	Winter Average	Summer Average		
Single Family Residential	12.22	5.35	19.09	1.56	14,667
Multifamily Residential	4.42	3.66	5.18	1.17	6,665
Commercial	34.78	20.40	49.16	1.41	1,908
Large Commercial	7,212	6,572	7,852	1.09	1

- Difference in peak ratios warrants separation of classes
 - Single Family & Multifamily Residential
 - Commercial & Large Commercial

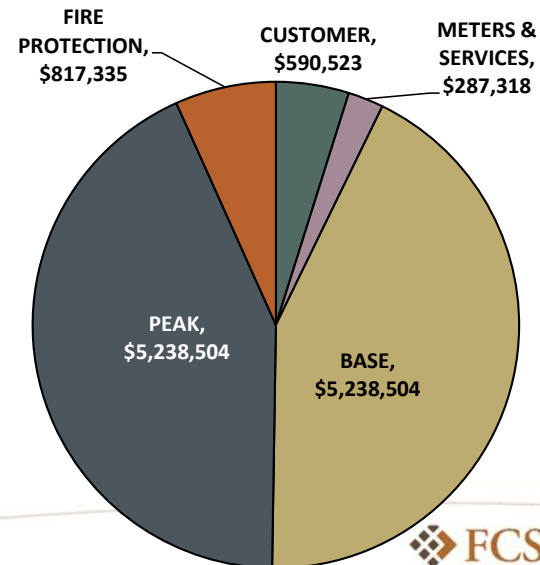
Water: Cost Allocations by Class

Functional Categories:	Customer	Meters & Services	Base Demand	Peak Demand	Fire Protection	Total
<i>Allocation Basis:</i>	<i>No. of Meters</i>	<i>No. of Meter Equiv. [a]</i>	<i>Annual Use</i>	<i>Summer Use [b]</i>	<i>Wtd Meter Equiv. [c]</i>	
Single Family Residential	86.1%	77.7%	63.4%	67.2%	54.5%	65.8%
Multifamily	2.3%	4.2%	10.5%	8.3%	7.4%	8.8%
Commercial	11.5%	18.0%	23.6%	22.6%	37.9%	23.4%
Large Commercial	0.0%	0.1%	2.6%	1.9%	0.3%	1.9%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

[a] Based on current meter ratios

[b] Summer period use [May-Oct]

[c] Current meter ratios weighted with fire flow requirements



Water: Cost of Service Results

Customer Classes	Revenue under Existing Rates	Cost of Service	Increase / (Decrease)	
Single Family Residential	\$ 7,064,430	\$ 8,024,480	13.6%	Combined Residential: 7.1%
Multifamily	1,426,132	1,070,068	-25.0%	
Commercial	3,340,273	2,841,264	-14.9%	Combined Commercial: -16.4%
Large Commercial	341,348	236,371	-30.8%	
TOTAL	\$ 12,172,184	\$ 12,172,184	0.0%	

- On a combined basis residential customers are paying less than cost of service and commercial customers are paying more than cost of service
- Within residential, multi-family is paying more than cost of service - lower usage per unit and lower peak demand
- Within commercial, large commercial is paying significantly more than cost of service – lower peak demands

Water: Phase-In Cost of Service

- Cost of service shifts are phased in over the 5-year study period to mitigate customer impacts

Customer Classes	Phase-In Cost of Service Shift					Cumulative
	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	
Single Family Residential	3.0%	2.8%	2.6%	2.4%	2.2%	13.6%
Multifamily	-5.6%	-5.6%	-5.6%	-5.6%	-5.6%	-25.0%
Commercial	-3.2%	-3.2%	-3.2%	-3.2%	-3.2%	-14.9%
Large Commercial	-7.1%	-7.1%	-7.1%	-7.1%	-7.1%	-30.8%
TOTAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Full Cost of Service

Water: Rate Structures

EXISTING

- **Class specific base charge by meter size, with 5 kgal usage allowance per month**
- **Class specific, three-tier increasing block volume charge**

PROPOSED

- **Eliminate allowance from base charge for all classes**
- **Revise SFR three-tier blocks to better align with usage patterns**
- **Revise MFR, commercial, large commercial tier blocks to class specific single block volume charge**

Water: Rate Structure Transition Plan

- Single Family Residential
 - Immediately revise blocks to better align with usage patterns (combine top 2 blocks)
 - Reduce allowance over 5-yr period, replacing with low use block (0 – 5 kgal)

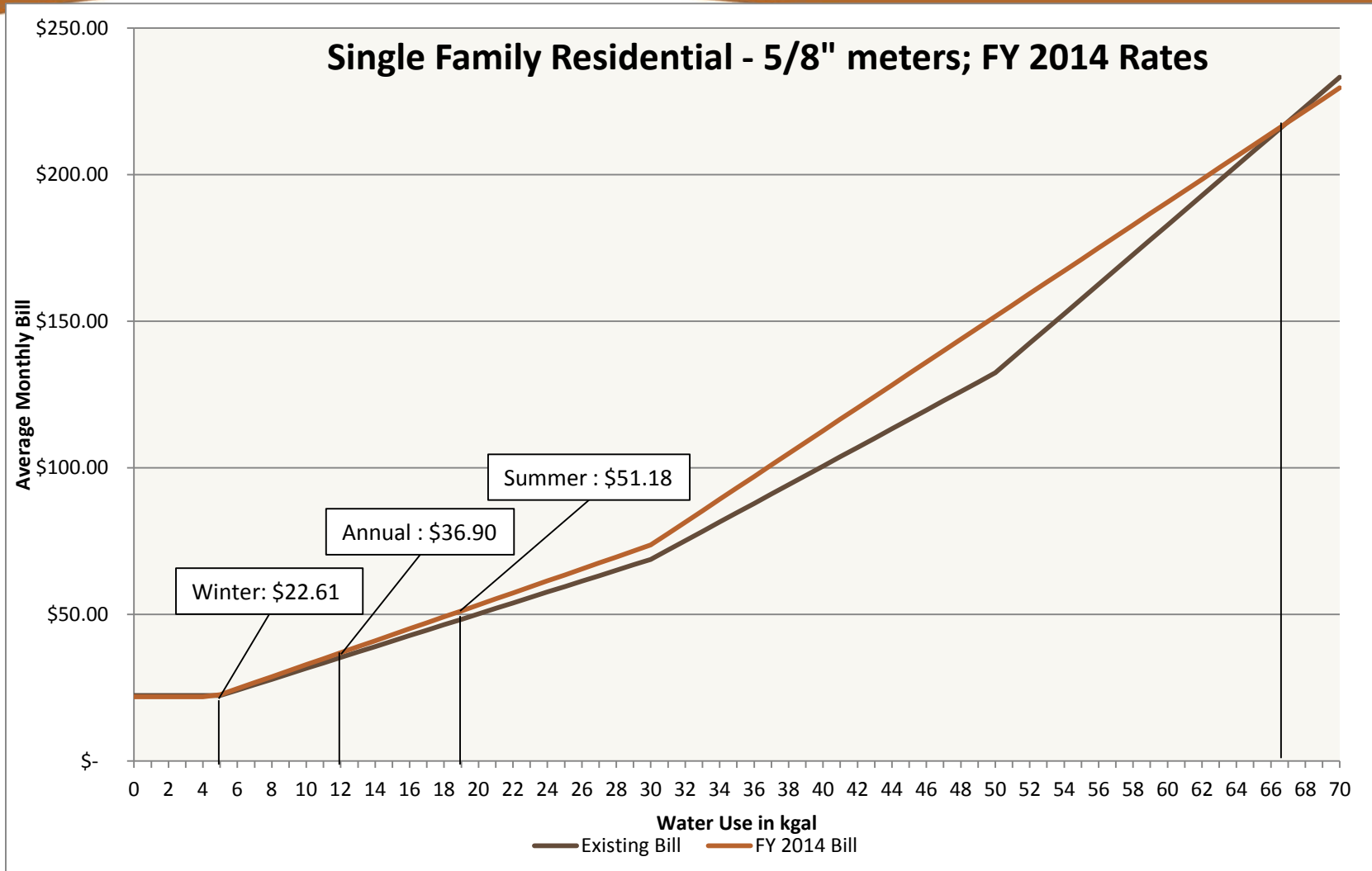
- Multifamily Residential & Commercial
 - Reduce allowance over 5-yr period
 - Condense three blocks to single block rate over 5-yr period

- Large Commercial
 - Immediately eliminate usage allowance & move to single block rate

Proposed Single Family Water Rates

Meter Size	Existing Rates [a]		FY 2014 [b]		FY 2015 [c]		FY 2016 [d]		FY 2017 [e]		FY 2018	
5/8"	\$	22.05	\$	21.68	\$	21.68	\$	21.68	\$	21.68	\$	21.68
1"		33.60		32.98		32.98		32.98		32.98		32.98
1 1/2"		49.88		49.24		49.24		49.24		49.24		49.24
2"		61.43		61.26		61.26		61.26		61.26		61.26
3"		89.25		89.53		89.53		89.53		89.53		89.53
4"		117.60		117.80		117.80		117.80		117.80		117.80
6"		173.25		174.34		174.34		174.34		174.34		174.34
Volume Charge per kgal	0 - 5	\$ -	0 - 4	\$ -	0 - 3	\$ -	0 - 2	\$ -	0 - 1	\$ -		
	6 - 30	\$ 1.84	5 - 5	\$ 0.71	4 - 5	\$ 0.77	3 - 5	\$ 0.82	2 - 5	\$ 0.84	0 - 5	\$ 0.86
	31 - 50	\$ 3.15	6 - 30	\$ 2.02	6 - 30	\$ 2.08	6 - 30	\$ 2.13	6 - 30	\$ 2.15	6 - 30	\$ 2.17
	Over 50	\$ 4.99	Over 30	\$ 3.86	Over 30	\$ 3.92	Over 30	\$ 3.97	Over 30	\$ 3.99	Over 30	\$ 4.01
	[a] Base charge incl. 5 kgal		[b] Base charge incl. 4 kgal		[c] Base charge incl. 3 kgal		[d] Base charge incl. 2 kgal		[e] Base charge incl. 1 kgal			

Note: Rates before right-of-way toll



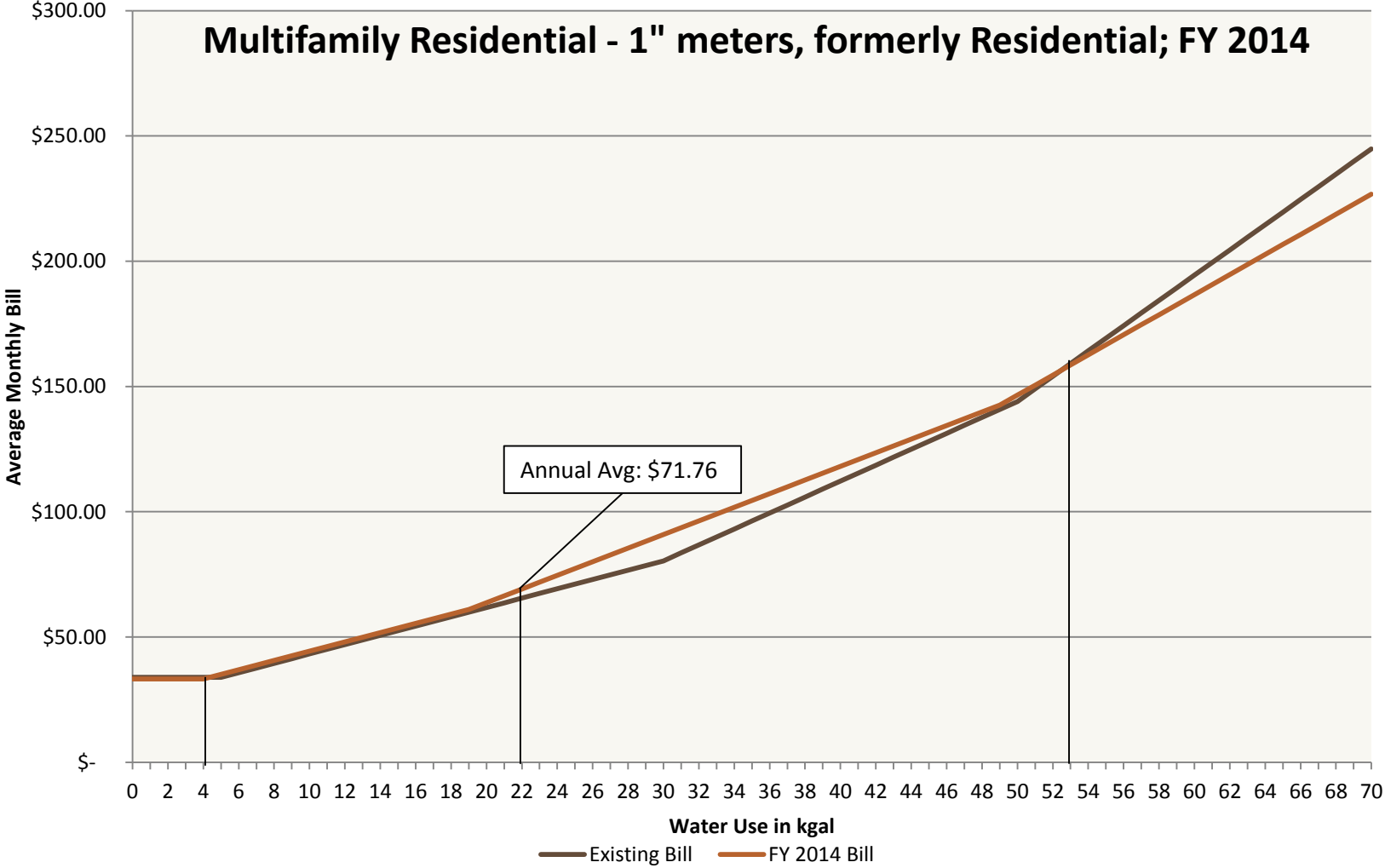
Customer Type	Current Class	Meter Size	Avg Use	Bill Impacts			
				Current Bill	2014 Bill	\$ Difference	% Difference
Low use	Residential	5/8"	4.67	\$ 22.27	\$ 22.61	\$ 0.34	1.5%
Avg use	Residential	5/8"	12.42	\$ 36.05	\$ 36.90	\$ 0.84	2.3%
High use	Residential	1"	99.33	\$ 392.66	\$ 354.04	\$ (38.63)	-9.8%

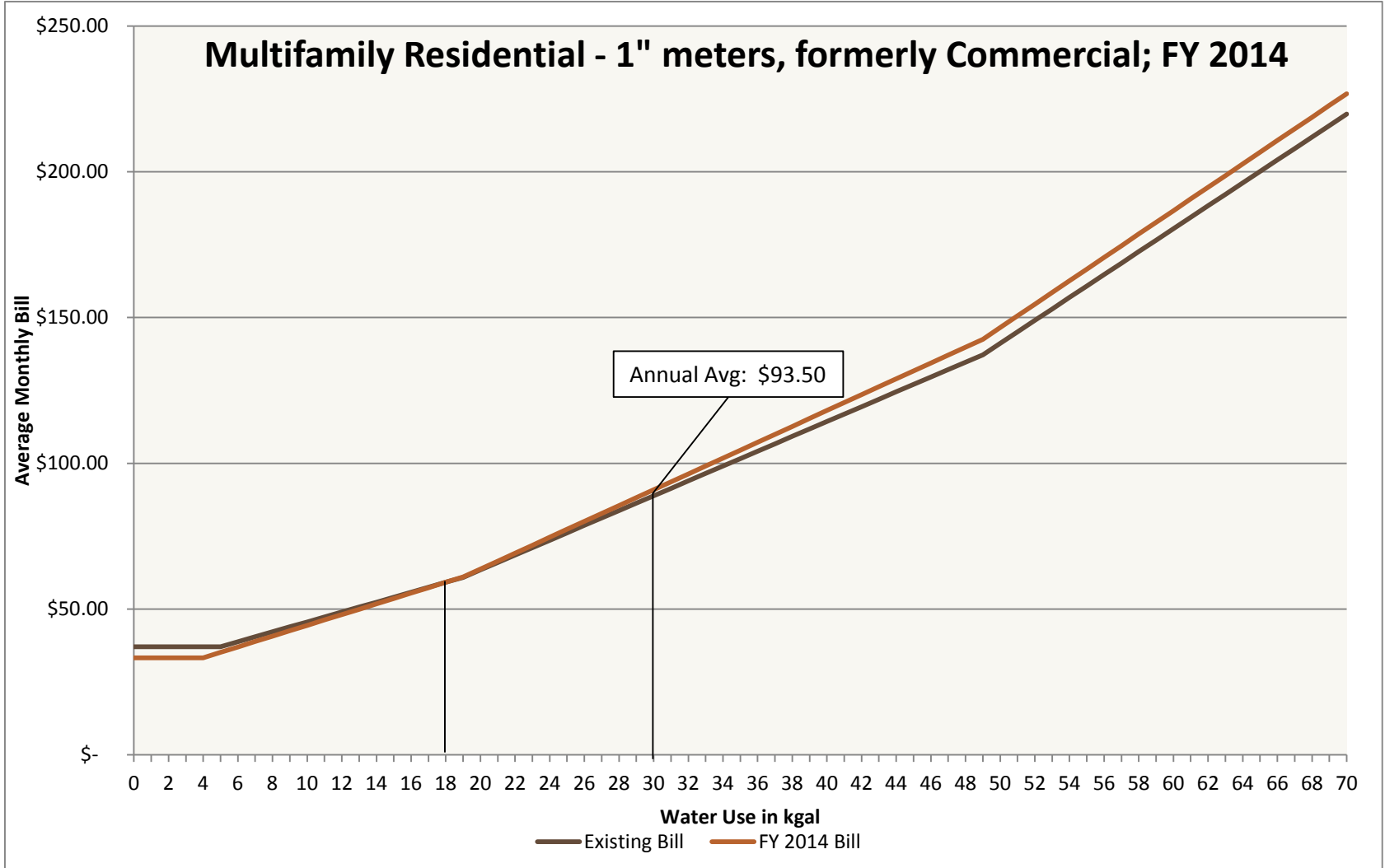
Proposed Multifamily Water Rates

Meter Size	Existing Rates [a]				FY 2014 [b]	FY 2015 [c]	FY 2016 [d]	FY 2017 [e]	FY 2018				
	Condominiums (Residential)		Apartments (Commercial)										
5/8"	\$	22.05	\$	24.15	\$	21.68	\$	21.68	\$	21.68	\$	21.68	
1"		33.60		36.75		32.98		32.98		32.98		32.98	
1 1/2"		49.88		54.86		49.24		49.24		49.24		49.24	
2"		61.43		68.25		61.26		61.26		61.26		61.26	
3"		89.25		99.75		89.53		89.53		89.53		89.53	
4"		117.60		131.25		117.80		117.80		117.80		117.80	
6"		173.25		194.25		174.34		174.34		174.34		174.34	
10"				483.00		433.50		433.50		433.50		433.50	
Volume Charge per kgal	0 - 5	\$ -	0 - 5	\$ -	0 - 4	\$ -	0 - 3	\$ -	0 - 2	\$ -	0 - 1	\$ -	\$ 2.45
	6 - 30	\$ 1.84	6 - 19	\$ 1.68	5 - 19	\$ 1.83	4 - 19	\$ 1.97	3 - 19	\$ 2.12	2 - 19	\$ 2.28	
	31 - 50	\$ 3.15	20 - 49	\$ 2.52	20 - 49	\$ 2.69	20 - 49	\$ 2.62	20 - 49	\$ 2.56	20 - 49	\$ 2.50	
	Over 50	\$ 4.99	Over 49	\$ 3.89	Over 49	\$ 3.97	Over 49	\$ 3.58	Over 49	\$ 3.20	Over 49	\$ 2.82	
[a] Base charge incl. 5 kgal					[b] Base charge incl. 4 kgal		[c] Base charge incl. 3 kgal		[d] Base charge incl. 2 kgal		[e] Base charge incl. 1 kgal		

Note: Rates before right-of-way toll

Multifamily Residential - 1" meters, formerly Residential; FY 2014

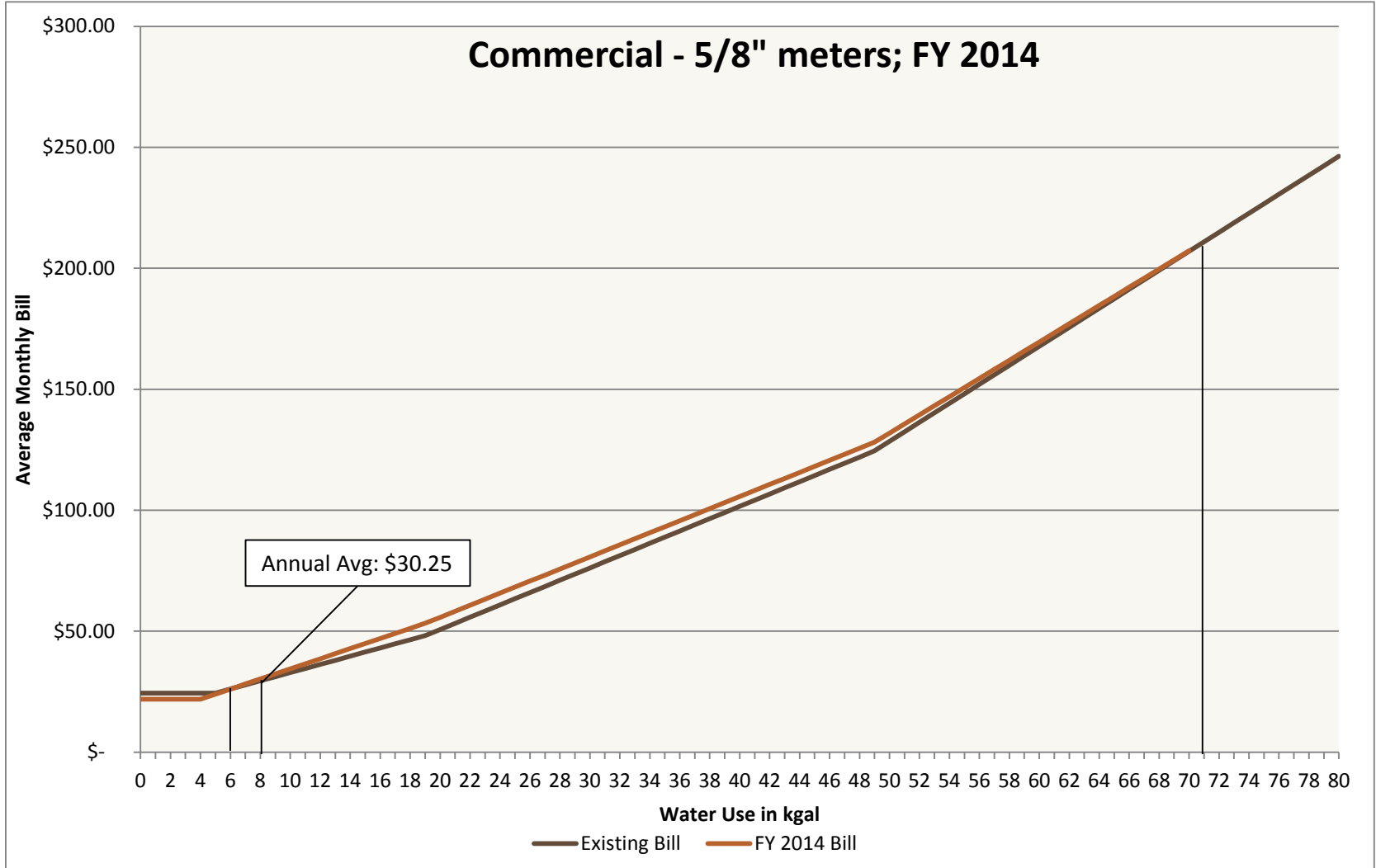


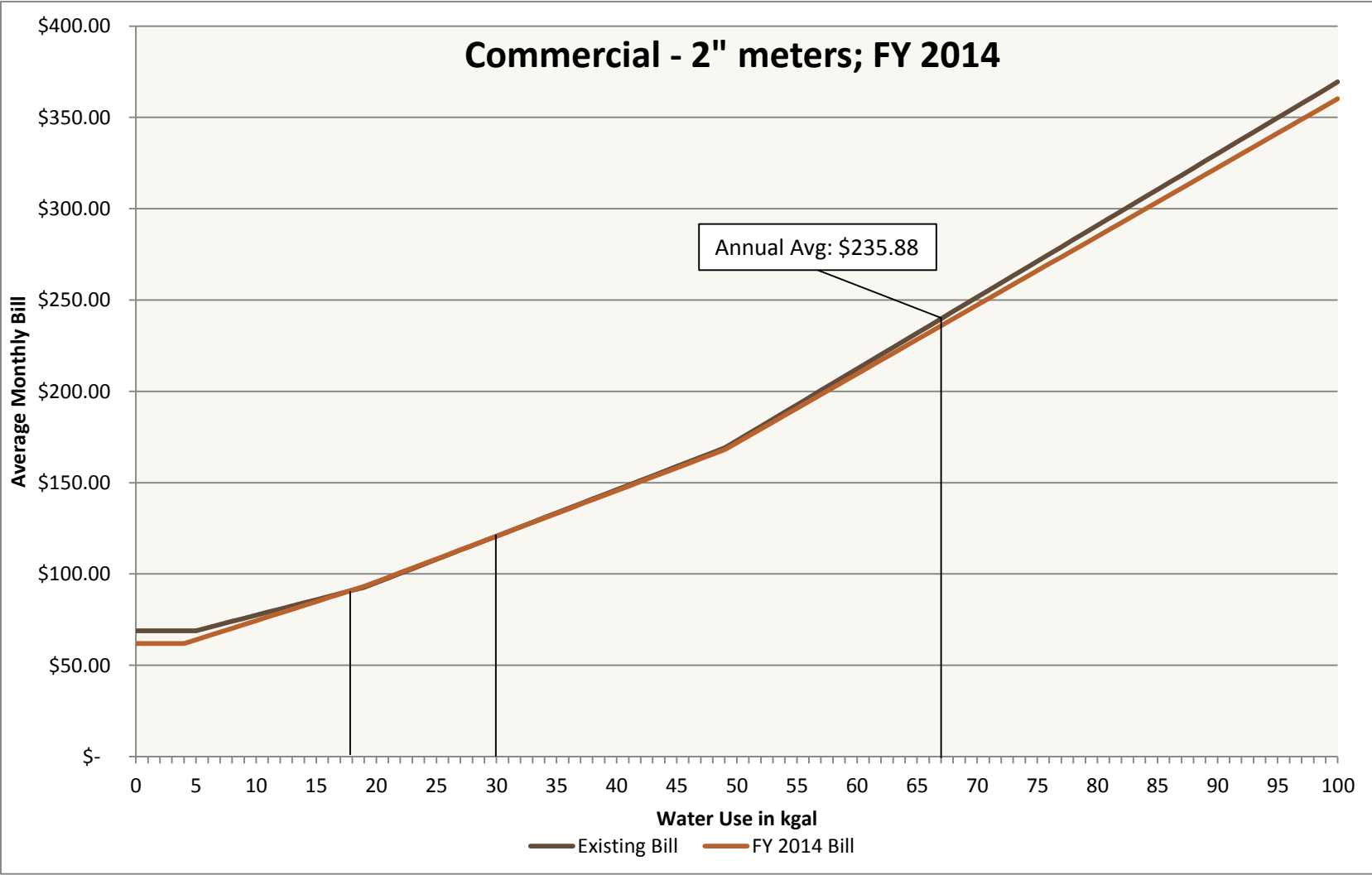


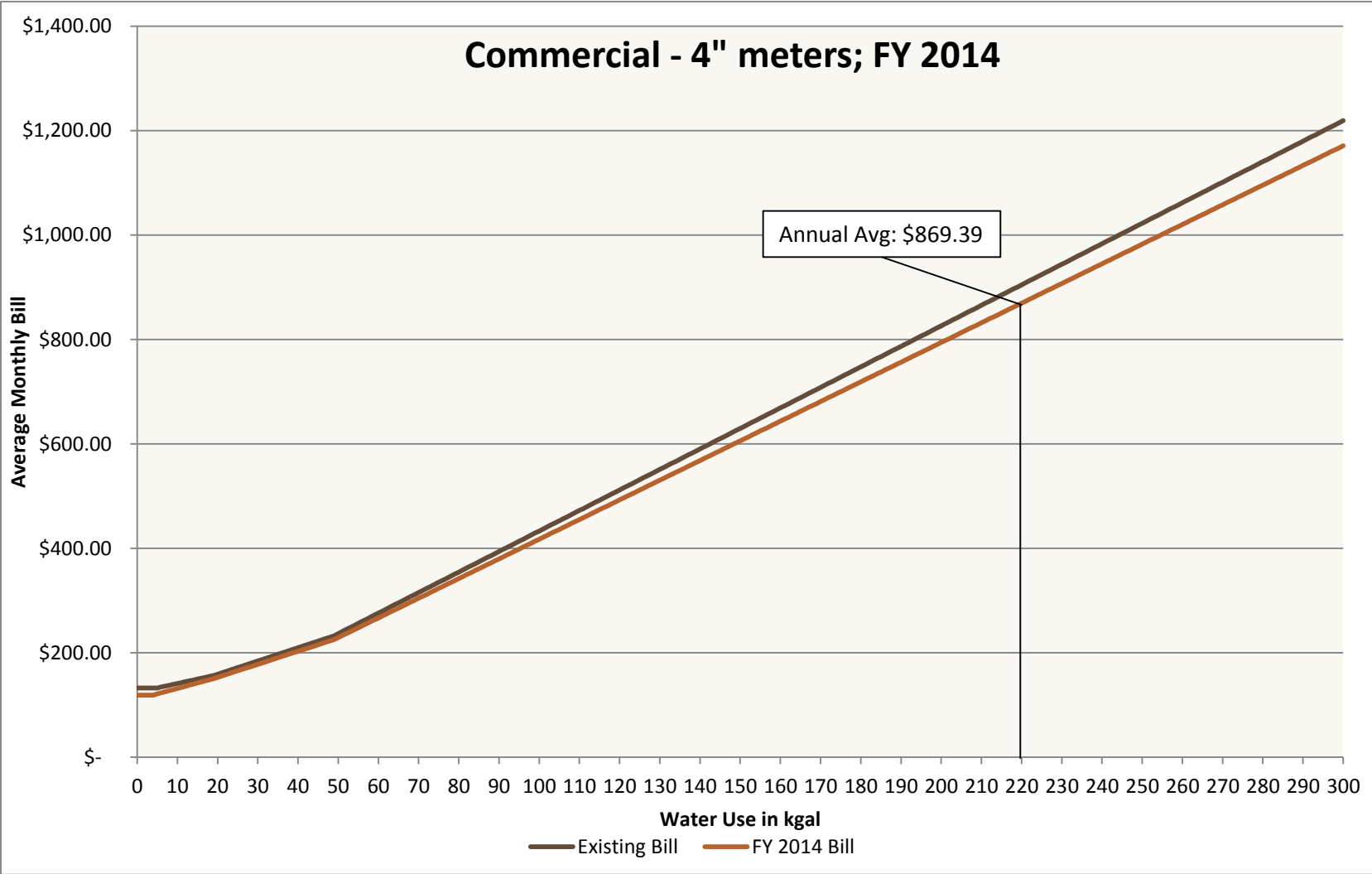
Proposed Commercial Water Rates

Meter Size	Existing Rates [a]		FY 2014 [b]		FY 2015 [c]		FY 2016 [d]		FY 2017 [e]		FY 2018
5/8"	\$	24.15	\$	21.68	\$	21.68	\$	21.68	\$	21.68	\$ 21.68
1"		36.75		32.98		32.98		32.98		32.98	32.98
1 1/2"		54.86		49.24		49.24		49.24		49.24	49.24
2"		68.25		61.26		61.26		61.26		61.26	61.26
3"		99.75		89.53		89.53		89.53		89.53	89.53
4"		131.25		117.80		117.80		117.80		117.80	117.80
6"		194.25		174.34		174.34		174.34		174.34	174.34
10"		483.00		433.50		433.50		433.50		433.50	433.50
Volume Charge per kgal	0 - 5	\$ -	0 - 4	\$ -	0 - 3	\$ -	0 - 2	\$ -	0 - 1	\$ -	\$ 2.47
	6 - 19	\$ 1.68	5 - 19	\$ 2.07	4 - 19	\$ 2.17	3 - 19	\$ 2.27	2 - 19	\$ 2.37	
	20 - 49	\$ 2.52	20 - 49	\$ 2.47	20 - 49	\$ 2.47	20 - 49	\$ 2.47	20 - 49	\$ 2.47	
	Over 49	\$ 3.89	Over 49	\$ 3.73	Over 49	\$ 3.42	Over 49	\$ 3.11	Over 49	\$ 2.79	
	[a] Base charge incl. 5 kgal		[b] Base charge incl. 4 kgal		[c] Base charge incl. 3 kgal		[d] Base charge incl. 2 kgal		[e] Base charge incl. 1 kgal		

Note: Rates before right-of-way toll







Proposed Large Commercial Water Rates

Meter Size	Existing Rates [a]		FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
5/8"	\$	24.15					
1"		36.75					
1 1/2"		54.86					
2"		68.25	61.26	61.26	61.26	61.26	61.26
3"		99.75	89.53	89.53	89.53	89.53	89.53
4"		131.25	117.80	117.80	117.80	117.80	117.80
6"		194.25	174.34	174.34	174.34	174.34	174.34
10"		483.00	433.50	433.50	433.50	433.50	433.50
Volume Charge per kgal	0 - 5	\$ -	\$ 3.60	\$ 3.34	\$ 3.10	\$ 2.88	\$ 2.67
	6 - 19	\$ 1.68					
	20 - 49	\$ 2.52					
	Over 49	\$ 3.89					

[a] Base charge incl. 5 kgal

Note: Rates before right-of-way toll

				Bill Impacts			
Current Class	New Class	Meter Size	Avg Use	Current Bill	2014 Bill	\$ Difference	% Difference
Commercial	Large Commercial	10"	7211.83	\$ 28,730.00	\$ 26,660.06	\$ (2,069.94)	-7.2%

SEWER UTILITY

Sewer: Rate Class Changes

Existing

RESIDENTIAL

Quasi-Residential
Senior Discount
Single Family
Multifamily

Proposed

FLAT RATE

Single Family Residential
Multifamily Residential

COMMERCIAL

Commercial (low/high)
Federal (low)
Municipal (low)
State (low/high)
Commercial Laundry (low)
Motel w/Dining (low/high)
State Prison (high)
Wholesale Bakery (low/high)
Restaurant (low/high)
Mortuary (high)

LOW STRENGTH

≤ 300 mg/l BOD / TSS

HIGH STRENGTH

> 300 mg/l BOD / TSS

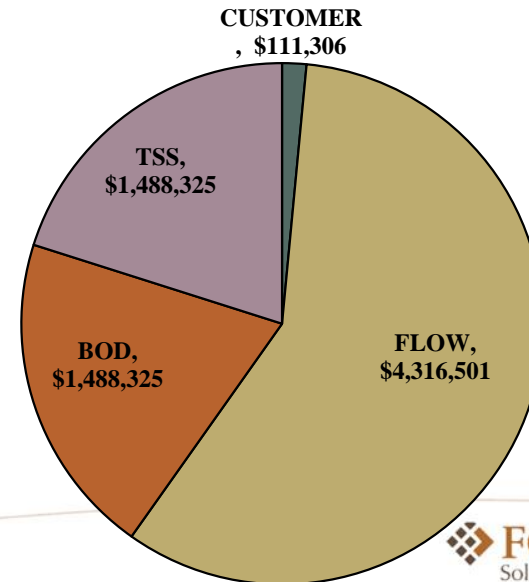
Sewer: Customer Statistics

	Annual Avg Sewer Flow (kgal/unit)	Number of Units
Single Family Residential	5.35	14,000
Multifamily Residential	3.66	7,129
Low-Strength Commercial	21.19	1,147
High-Strength Commercial	102.59	216

Multifamily is ~70% of Single Family contributed flow

Sewer: Cost Allocations by Class

Functional Categories:	Customer	Flow	BOD	TSS	Total
<i>Allocation Basis:</i>	<i>No. of Meters</i>	<i>Total Flow</i>	<i>Weighted Volume</i>	<i>Weighted Volume</i>	
Single Family Residential	88.6%	50.6%	36.5%	44.0%	47.0%
Multifamily Residential	2.6%	17.8%	12.8%	15.4%	16.1%
Low-Strength Commercial	7.5%	16.6%	17.9%	14.4%	16.3%
High-Strength Commercial	1.4%	15.1%	32.7%	26.2%	20.7%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%



Sewer: Cost of Service Results

Customer Classes	Revenue under Existing Rates	Cost of Service	Increase / (Decrease)	
Single Family Residential	\$ 3,965,692	\$ 3,490,001	-12.0%	Combined Residential: -8.0%
Multifamily Residential	1,119,818	1,186,658	6.0%	
Low-Strength Commercial	1,150,504	1,202,114	4.5%	Combined Commercial: 17.6%
High-Strength Commercial	1,168,442	1,525,684	30.6%	
TOTAL	\$ 7,404,456	\$ 7,404,456	0.0%	

- On a combined basis, residential is paying more than cost of service and commercial is paying less than cost of service
- Within residential, SFR is subsidizing MFR – realignment of assumed sewer contribution
- Within commercial, high strength class is paying significantly less than cost of service – realignment of strength loads

Sewer: Phase-In Cost of Service

- Cost of service shifts are phased in over the 5-year study period to mitigate customer impacts

Customer Classes	Phase-In Cost of Service Shift					Cumulative
	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	
Single Family Residential	-2.2%	-2.3%	-2.5%	-2.7%	-2.9%	-12.0%
Multifamily Residential	1.2%	1.2%	1.2%	1.2%	1.2%	6.0%
Low-Strength Commercial	0.9%	0.9%	0.9%	0.9%	0.9%	4.5%
High-Strength Commercial	5.5%	5.5%	5.5%	5.5%	5.5%	30.6%
TOTAL	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Full Cost of Service

Sewer: Rate Structures

EXISTING

- **Monthly fixed capitalization charge (same for all classes)**
- **Class-specific, single-block volume charge**
 - Variable capitalization charge
 - User charge (Strength related)

PROPOSED

- **Residential:**
 - Revise from volume-based to class-specific flat rates per dwelling unit
- **Non-Residential:**
 - Set monthly fixed charge equal to SFR flat rate
 - Consolidate volume rates by strength category

Sewer: Rate Structure Transition Plan

- Impact of recommended rate structure change
 - Immediate alignment of non-residential base rate with SFR flat rate materially impacts commercial customers with relatively low volume / strength

- Proposed transition plan
 - Gradually transition from current base charge to SFR flat rate over study period

Sewer: Proposed FY 2014 Rates

Existing

Proposed FY 2014

RESIDENTIAL Volume-Based Rates

\$8.32 base + \$3.34 volume

RESIDENTIAL Flat Rates

Single Family Residential \$23.27

Multifamily Residential \$13.24

COMMERCIAL – Class Based Rates

**\$8.32 base – all classes
plus...**

COMMERCIAL – Strength Based Rates

**\$10.84 base – all classes
plus...**

Commercial Class	Strength	Volume
Commercial Federal Municipal State	Low/high Low Low Low/high	\$3.34
Commercial Laundry	Low	\$3.17
Motel w/Dining State Prison	Low/high High	\$4.31
Wholesale Bakery	Low/high	\$6.44
Restaurant	Low/high	\$5.53
Mortuary	High	\$6.57

LOW STRENGTH

\$3.47 volume

or ... HIGH STRENGTH

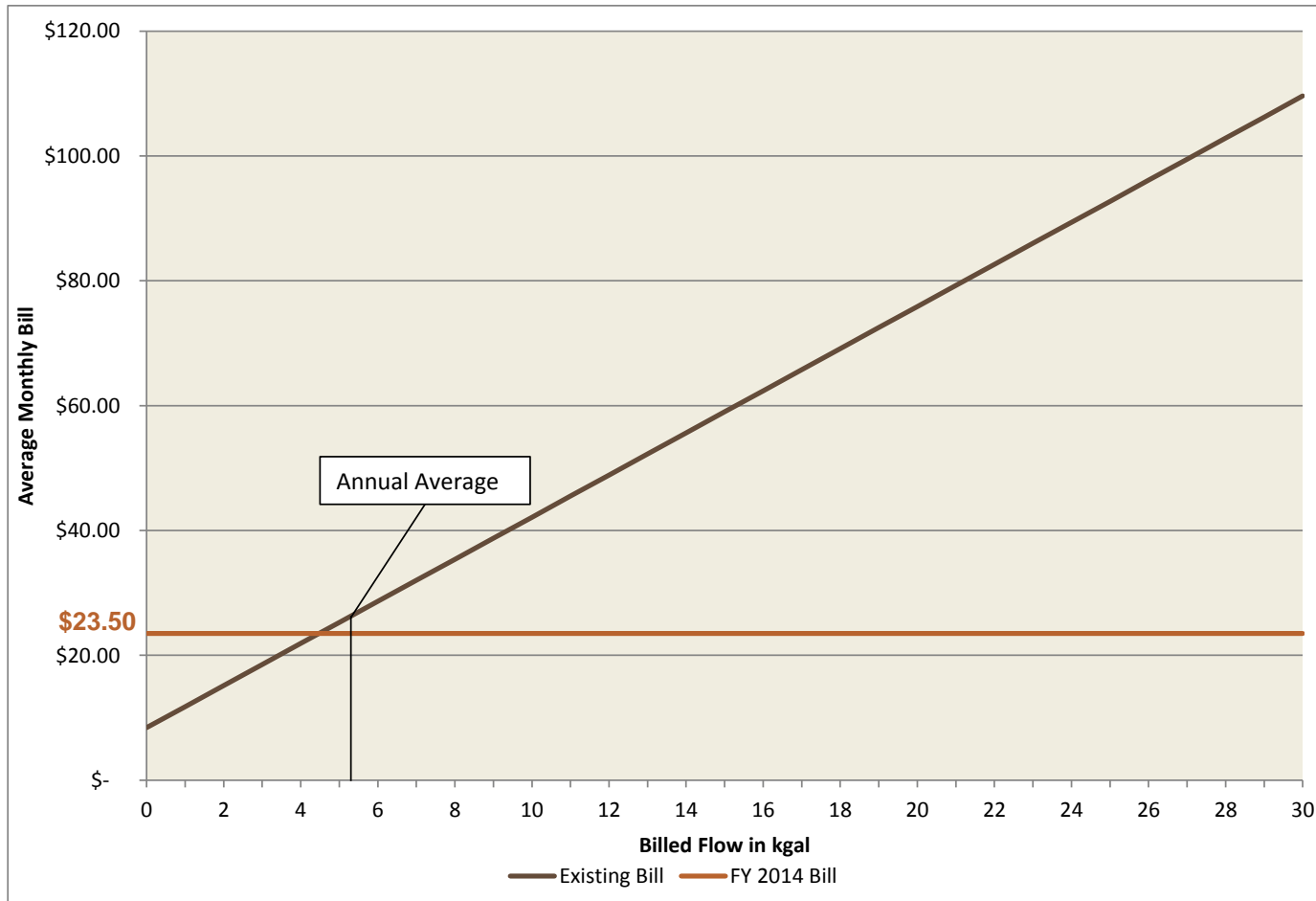
\$4.53 volume

Sewer: Proposed Rate Schedule

Customer Class	FY 2014 Rates	FY 2015 Rates	FY 2016 Rates	FY 2017 Rates	FY 2018 Rates
Flat Rates					
Single Family Residential	\$ 23.27	\$ 22.73	\$ 22.16	\$ 21.56	\$ 20.94
Multifamily Residential	\$ 13.24	\$ 13.40	\$ 13.55	\$ 13.71	\$ 13.87
Metered Rates					
Low-Strength Commercial					
Base Charge	\$ 10.84	\$ 13.37	\$ 15.89	\$ 18.42	\$ 20.94
Volume Charge	\$ 3.47	\$ 3.38	\$ 3.30	\$ 3.22	\$ 3.13
High-Strength Commercial					
Base Charge	\$ 10.84	\$ 13.37	\$ 15.89	\$ 18.42	\$ 20.94
Volume Charge	\$ 4.53	\$ 4.76	\$ 5.00	\$ 5.26	\$ 5.53

Note: Rates before right-of-way toll

Single Family Sewer Bill Impacts: FY 2014



Customer Type	Avg Use	Bill Impacts			
		Current Bill	2014 Bill	\$ Difference	% Difference
Low use	3.00	\$ 18.52	\$ 23.50	\$ 4.98	26.9%
Medium use	8.00	\$ 35.39	\$ 23.50	\$ (11.89)	-33.6%
High use	47.75	\$ 169.48	\$ 23.50	\$ (145.98)	-86.1%

Combined Single Family Bill Impacts FY 2014

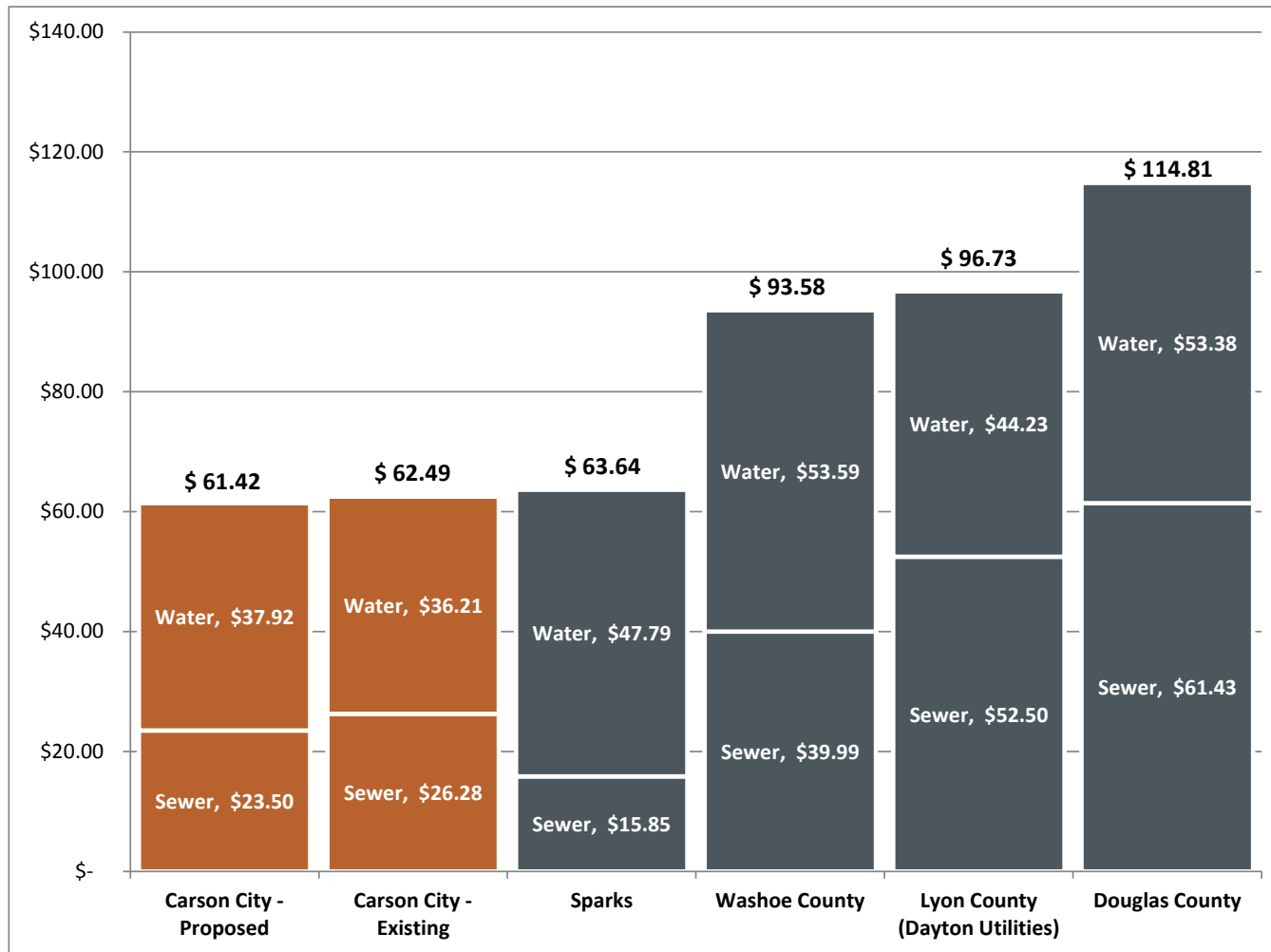
Customer Classes	Revenue Under Existing Rates	Revenue Under 2014 Phase-In	Cost of Service Shift
Single Family Residential			
Water	\$ 7,064,430	\$ 7,274,604	3.0%
Sewer	\$ 3,965,692	\$ 3,878,456	-2.2%
Combined	\$ 11,030,122	\$ 11,153,060	1.1%

Average Monthly Bill	Existing Rates	2014 Rates	\$ Bill Impact	% Bill Impact
Water [a]	\$ 36.21	\$ 37.92	\$ 1.71	4.7%
Sewer [b]	\$ 26.28	\$ 23.50	\$ (2.78)	-10.6%
Combined	\$ 62.49	\$ 61.42	\$ (1.07)	-1.7%

[a] Assumes 5/8" meter with average monthly use of 12,500 gallons; includes right-of-way toll

[b] Assumes winter monthly average of 5,300 gallons; includes right-of-way toll

Comparison of Combined Rates



Assumes 12,500 gallons/month water use; all sewer rates are flat rates other than Carson City Existing; Includes right-of-way toll where applicable

FINANCIAL POLICIES

Financial Policies

- Provide a means to manage risk and preserve a utility's financial integrity
- Establish the foundation for financial performance and measurement
- Facilitate an appropriate segregation of resources, ensuring that they are used for their intended purposes
- Improve ability to weather financial disruptions; allowing rates to be less conservatively set
- Identify needs-based uses for cash reserves
- Help to stabilize rates over time
- Provides credit worthiness for future debt

Financial Policies

Description / Objective

Recommendation

Operating Reserve

Provide sufficient cash flow (working capital) to meet daily operating expenses

**Operating account balance equal to:
Water – 60-90 days of O&M expense
Sewer – 30-45 days of O&M expense**

Capital Contingency Reserve

Provide a source of funding for emergency repairs, unanticipated capital expenditures and project cost overruns

Minimum balance in the capital account equal to 2% of system fixed assets (“nested” with system reinvestment, connection charges, transfers from operating and other capital resources)

System Reinvestment Funding

Maintain rate stability in support of ongoing system integrity; charge customers commensurate with use of system assets

Annually fund from rates an amount equal to annual depreciation expense; phase-in funding over study period

Debt Management

Balance debt and equity financing of capital to maintain credit worthiness; promote equity between existing & future ratepayers

Maintain debt to equity ratio of about 50/50; Debt finance no more than 75% of CIP within 5-year rolling period

Current ratios:

Water: 59% debt to 41% equity

Sewer: 24% debt to 76% equity

Combined: 45% debt to 55% equity

Debt Service Coverage

Ensure compliance with existing loan / bond covenants; maintain credit worthiness

Maintain net revenues of utilities to be at least 1.0 times total debt service, in compliance with covenants

“Nested” with system reinvestment funding

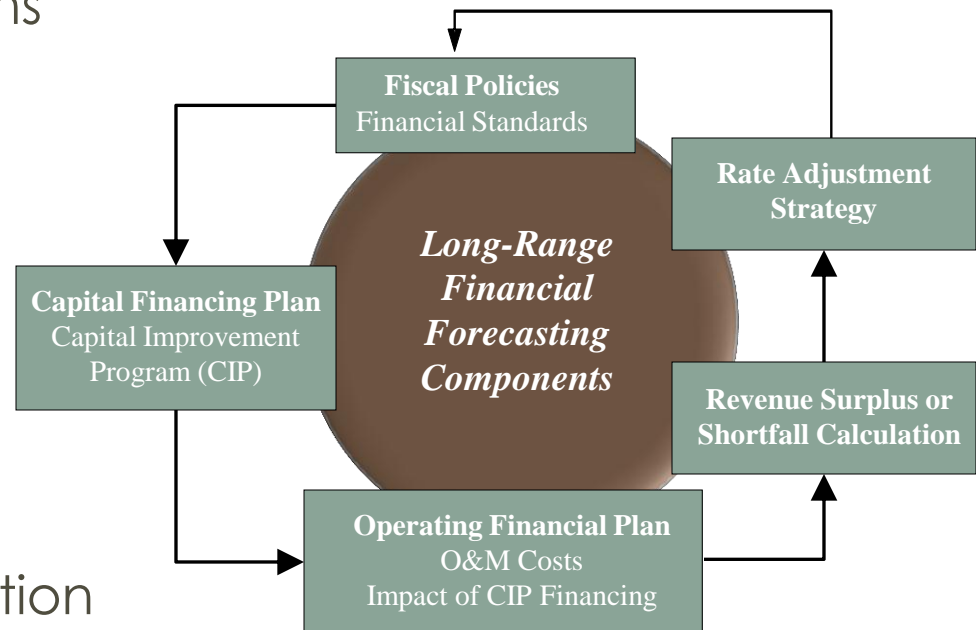
REVENUE REQUIREMENTS

Overview of Revenue Requirements

- Multi-year financial plan that determines the amount of revenue necessary each year over the study period to meet all utility financial obligations

- Financial policy impacts
- Capital program impacts
- Operating / maintenance costs

- Evaluates sufficiency of current rates
- Develops rate implementation strategy
- Determines amount of revenue to be recovered from rates



Key Assumptions

- General cost escalation: 2.5%
- Construction cost escalation: 3.0%
- Labor cost escalation: 2.0%
- Benefits cost escalation: 3.0%
- Other revenue escalation: 3.0%
- Interest earnings on cash balances: 0.5%
- Customer growth: maintain current levels

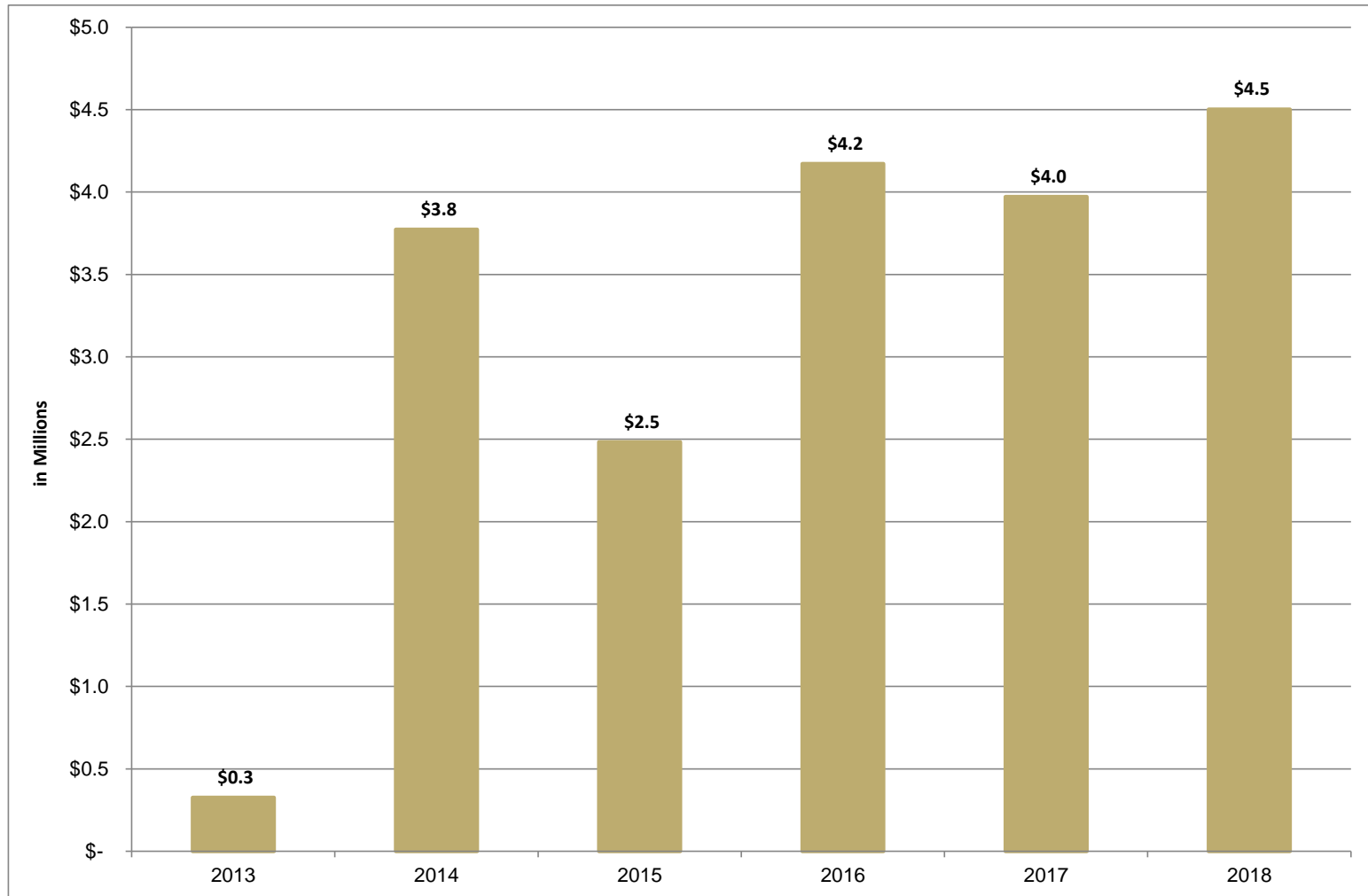
- Douglas County (Minden) Water purchase forecast:
 - Low: ~ 870,000 kgal (minimum); High: ~1.1 million kgal
 - Rate: \$0.67 increasing to \$0.81 over study period

Revenue Requirement Scenarios

	Base	Scenario A	Scenario B	Scenario C
Current O&M and Debt	Fully Funded			
Capital Improvement Program (CIP)	None	Full		
Capital Reserve Target	None	2% of fixed assets		
System Reinvestment	None		10-yr phase-in	5-yr phase-in

WATER UTILITY

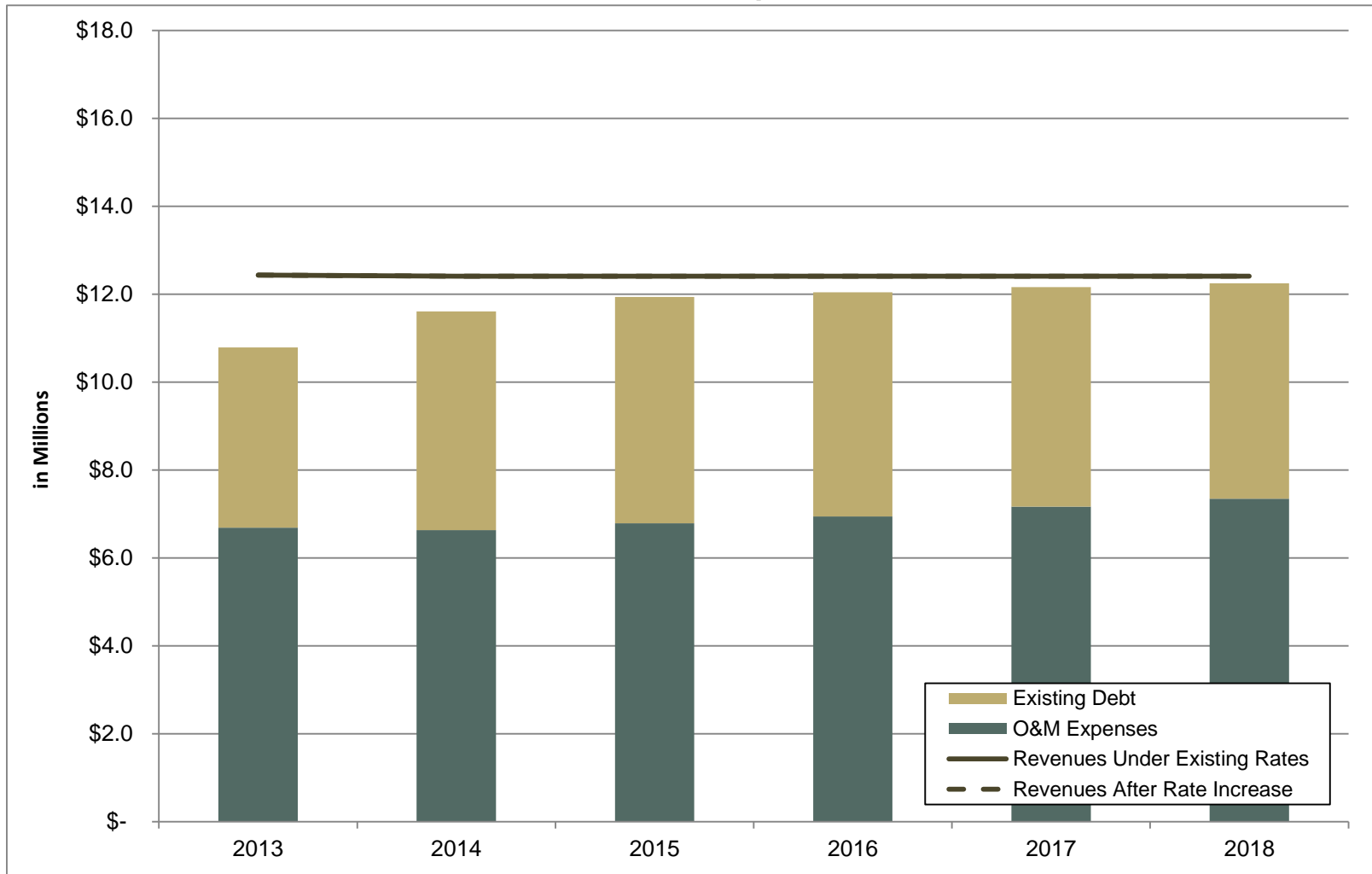
Water: Capital Program



Water: Capital Funding Plan

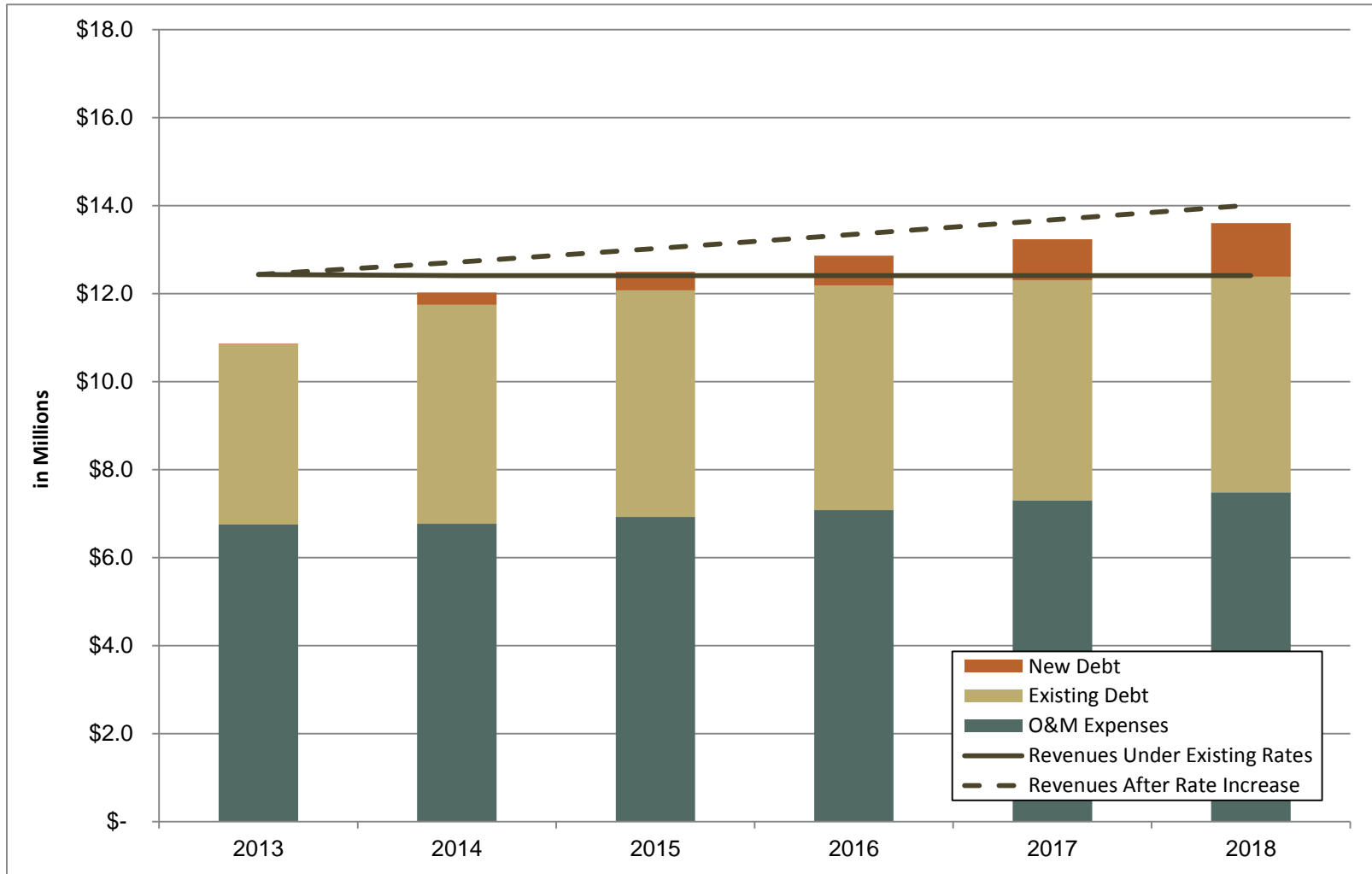
- Base: No capital improvement program (CIP)
- Scenario A: Full CIP - no system reinvestment funding (SRF) = 91% debt funded
- Scenario B: Full CIP - SRF over 10 years = 84% debt funded
- Scenario C: Full CIP - SRF over 5 years = 64% debt funded

Water: Revenue Requirement – Base



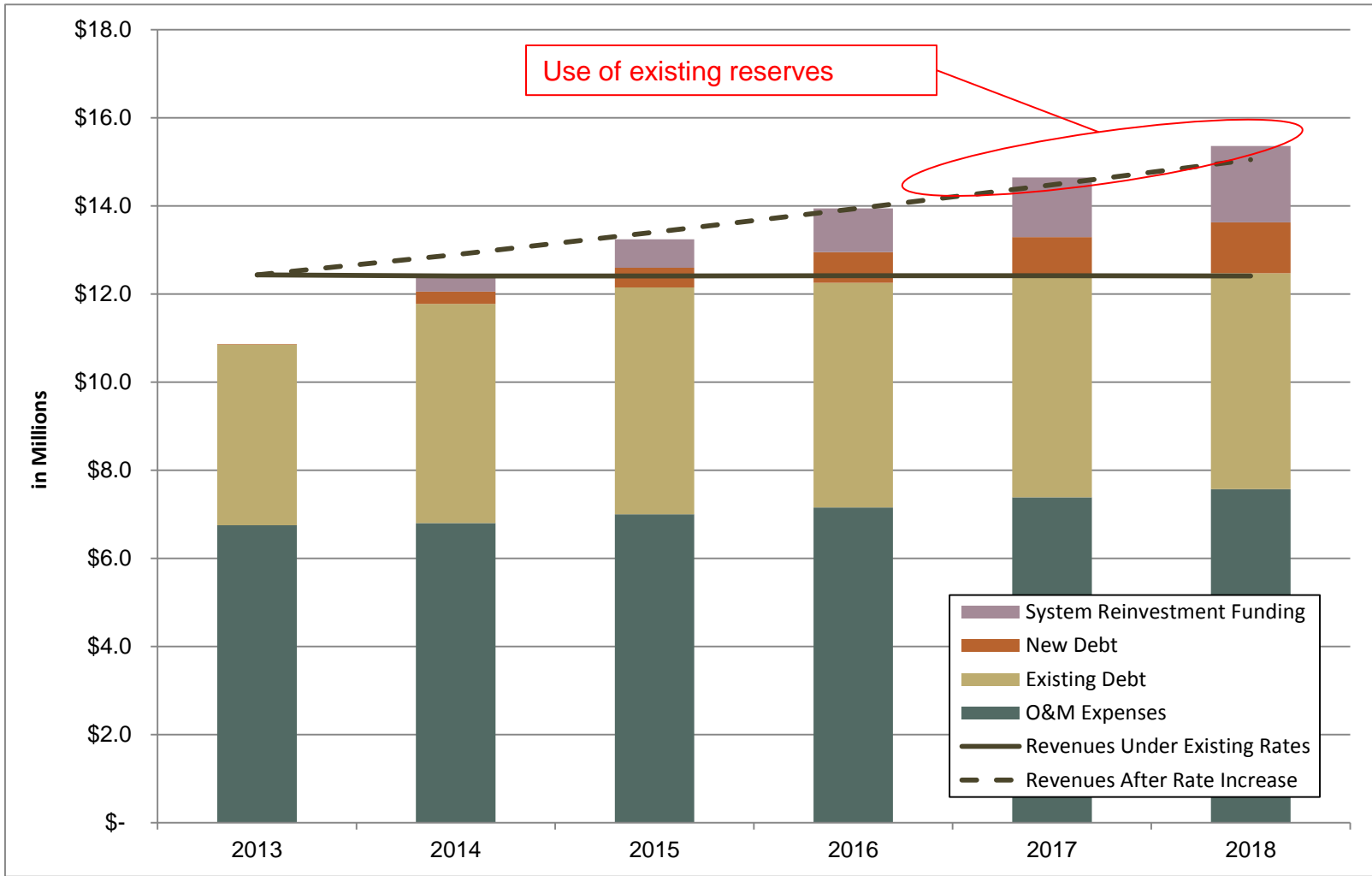
Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		0.00%	0.00%	0.00%	0.00%	0.00%

Water: Revenue Requirement – Scenario A



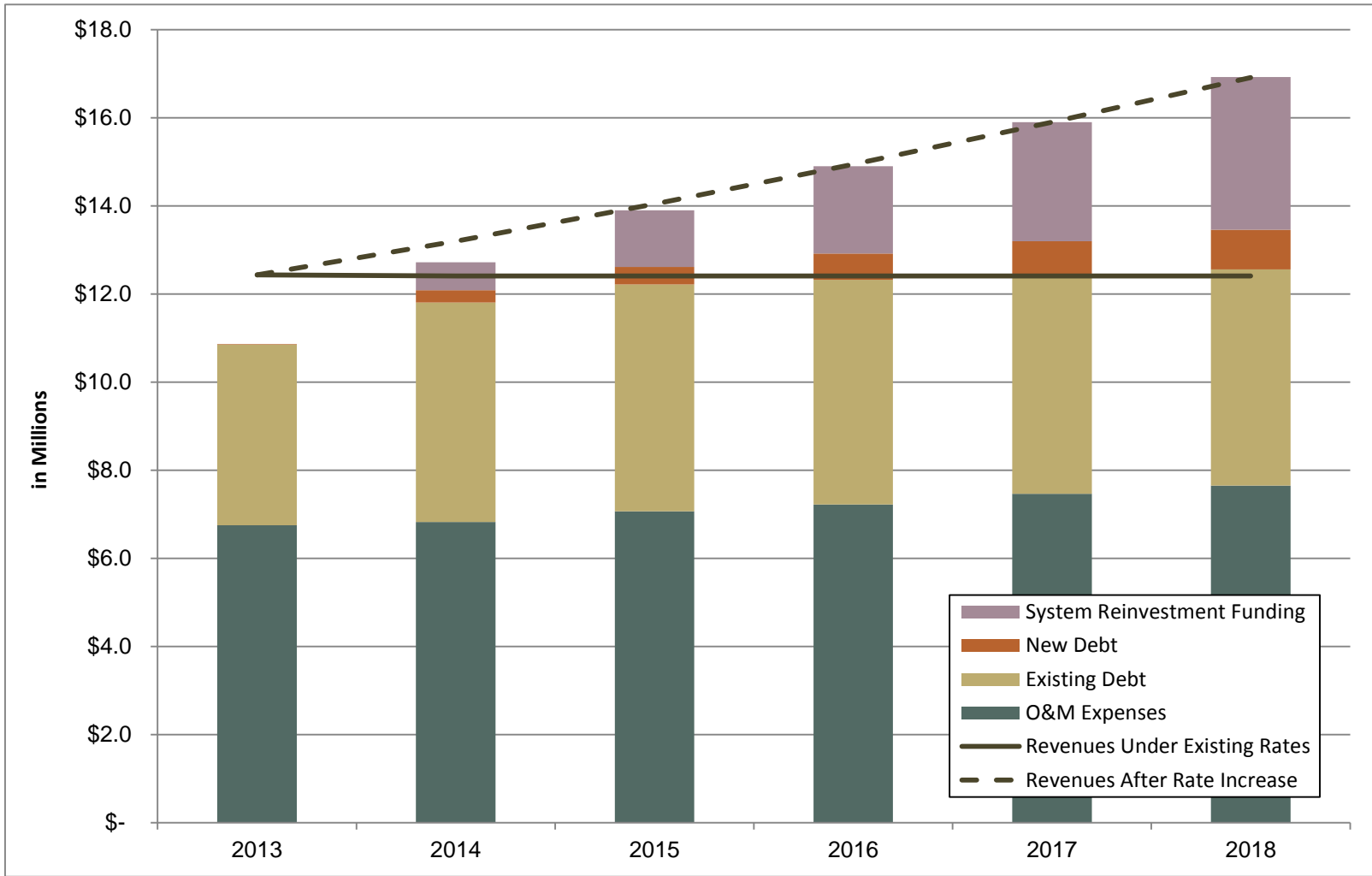
Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		2.50%	2.50%	2.50%	2.50%	2.50%

Water: Revenue Requirement – Scenario B



Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		4.00%	4.00%	4.00%	4.00%	4.00%

Water: Revenue Requirement – Scenario C



Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		6.50%	6.50%	6.50%	6.50%	6.50%



Water: Revenue Requirement Summary

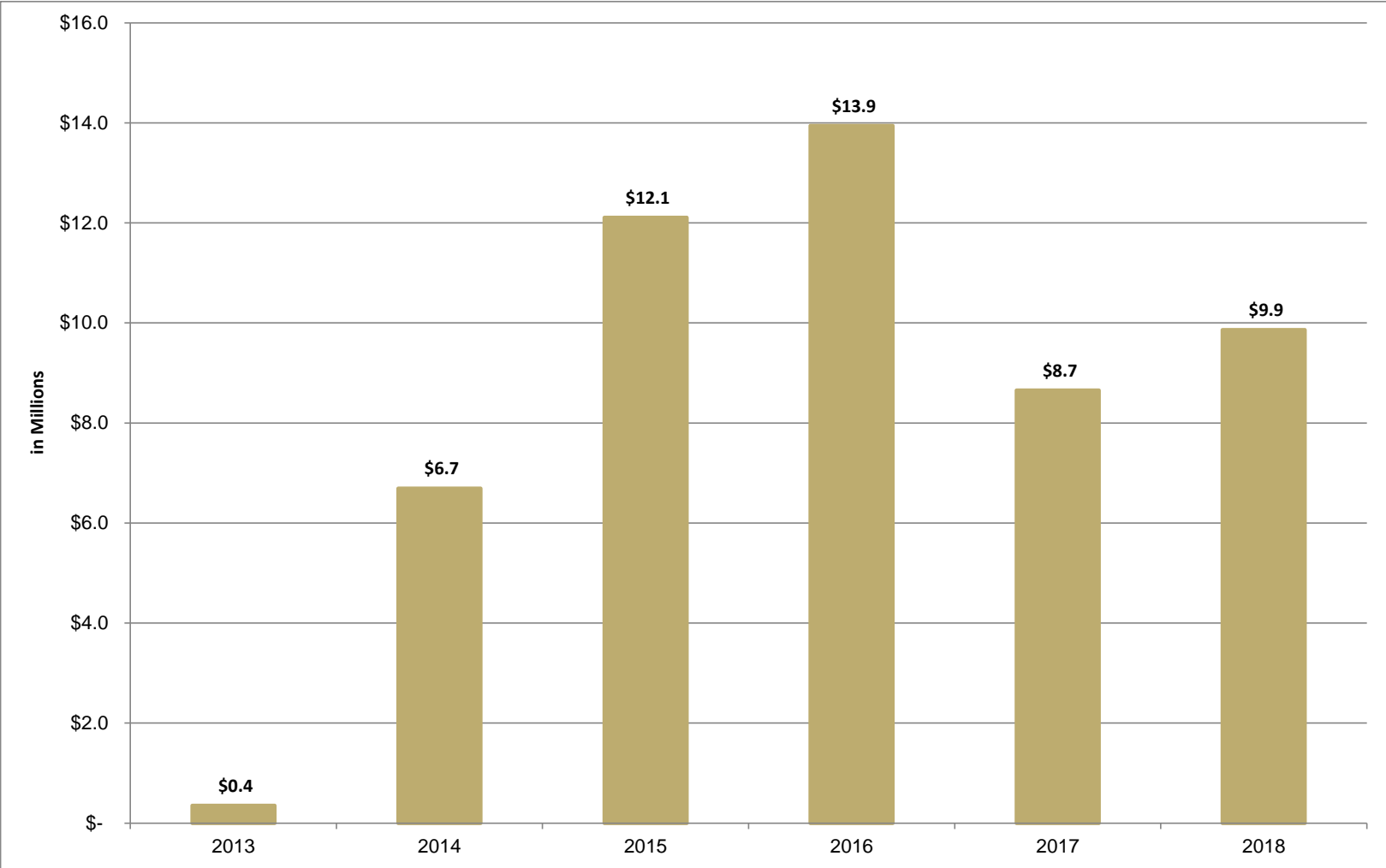
	Base	Scenario A	Scenario B	Scenario C
Current O&M and Debt	Fully Funded			
CIP	None	Full		
Capital Reserve Target	None	2% of fixed assets (\$2.4 million)		
System Reinvestment	None		10-yr phase-in	5-yr phase-in

	Results			
% of CIP Debt Financed	N/A	91%	84%	64%
Ending Capital Fund Balance	\$3.8 million	\$2.8 million	\$4.2 million	\$5.9 million
Ending Debt-to-Equity	30% / 70%	40% / 60%	39% / 61%	35% / 65%
Rate Increases (per year)	0% (\$0 /mo/yr)	2.5% (\$0.98 /mo/yr)	4.0% (\$1.61 /mo/yr)	6.25% (\$2.54 /mo/yr)

Current Debt-to-Equity: 59% / 41%

SEWER UTILITY

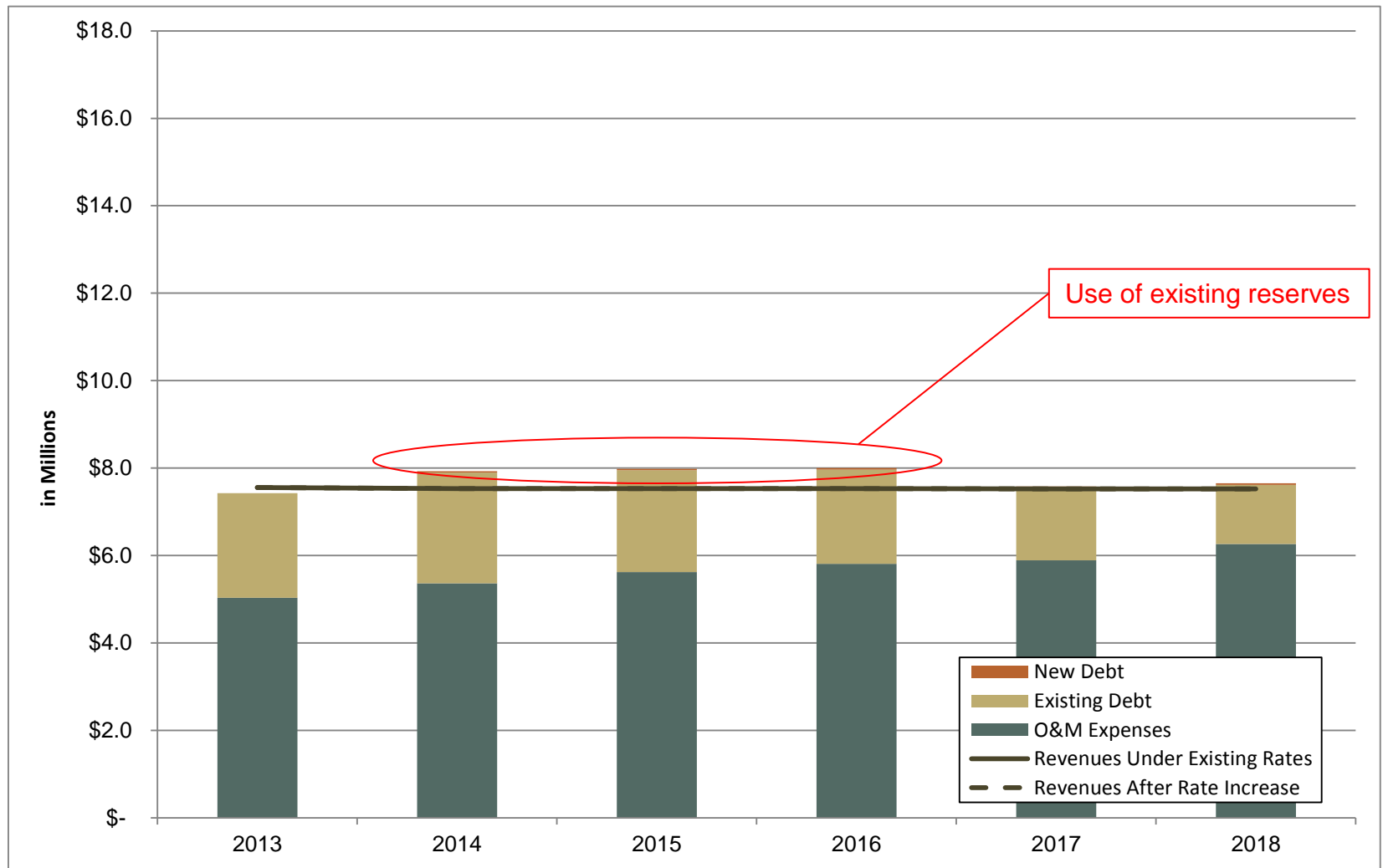
Sewer: Capital Program



Sewer: Capital Funding Plan

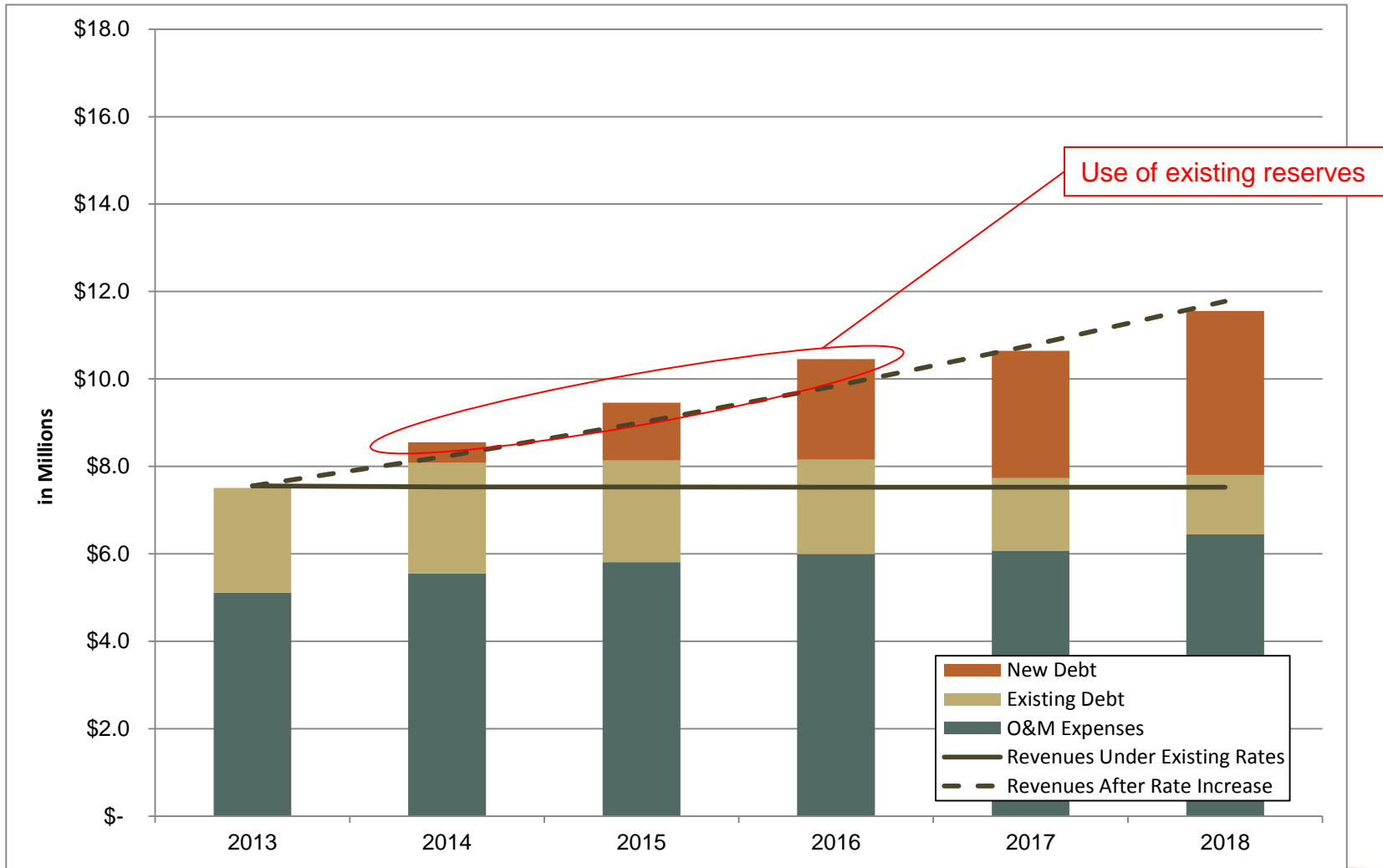
- Base: No capital improvement program (CIP)
- Scenario A: Full CIP – no system reinvestment funding (SRF) = 99% debt funded
- Scenario B: Full CIP – SRF over 10 years = 95% debt funded
- Scenario C: Full CIP – SRF over 5 years = 88% debt funded

Sewer: Revenue Requirement – Base



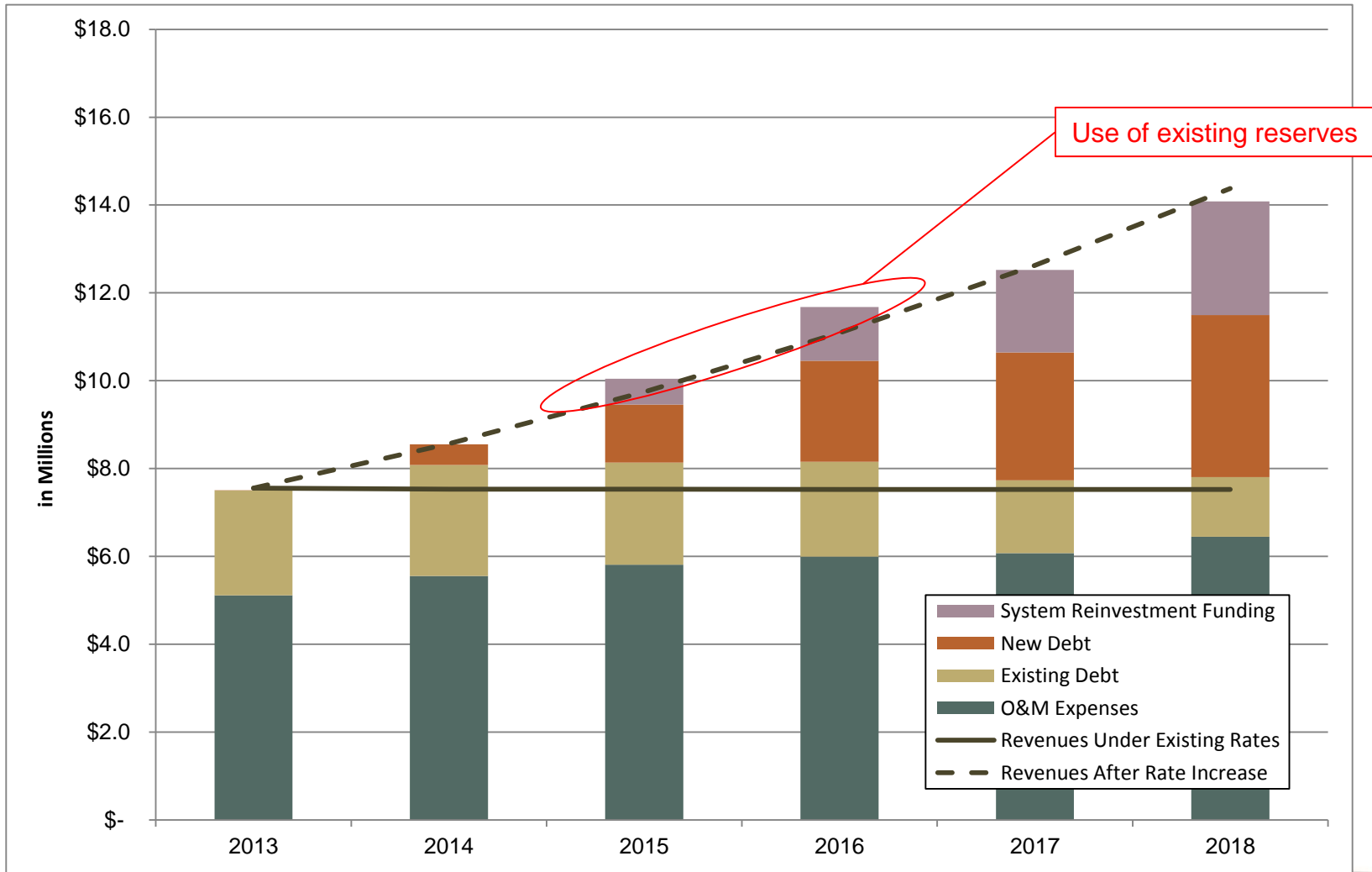
Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		0.00%	0.00%	0.00%	0.00%	0.00%

Sewer: Revenue Requirement – Scenario A



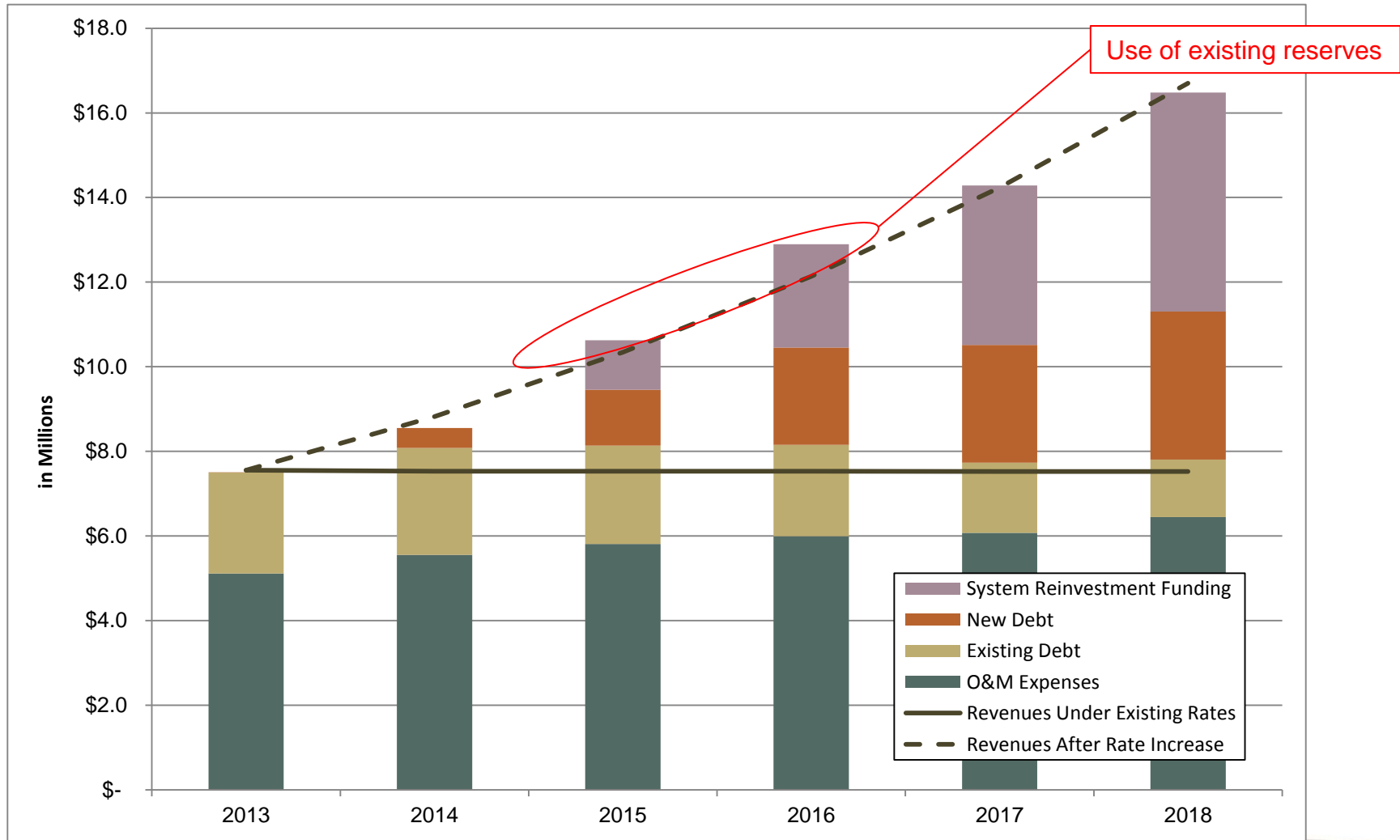
Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		9.50%	9.50%	9.50%	9.50%	9.50%

Sewer: Revenue Requirement – Scenario B



Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		14.00%	14.00%	14.00%	14.00%	14.00%

Sewer: Revenue Requirement – Scenario C



Revenue Adjustment	FYE	2014	2015	2016	2017	2018
Annual Rate Adjustment		17.50%	17.50%	17.50%	17.50%	17.50%

Sewer: Revenue Requirement Summary

	Base	Scenario A	Scenario B	Scenario C
Current O&M and Debt	Fully Funded			
CIP	None	Full		
Capital Reserve Target	None	2% of fixed assets (\$2.8 million)		
System Reinvestment	None		10-yr phase-in	5-yr phase-in

	Results			
% of CIP Debt Financed	N/A	99%	96%	89%
Ending Capital Fund Balance	None	\$0.6 million	\$5.7 million	\$8.3 million
Ending Debt-to-Equity	8% / 92%	46% / 54%	43% / 57%	40% / 60%
Rate Increases (per year)	0% (\$0 /mo/yr)	9.5% (\$3.02 /mo/yr)	14% (\$4.86 /mo/yr)	17.5% (\$6.52 /mo/yr)

Current Debt-to-Equity: 24% / 76%

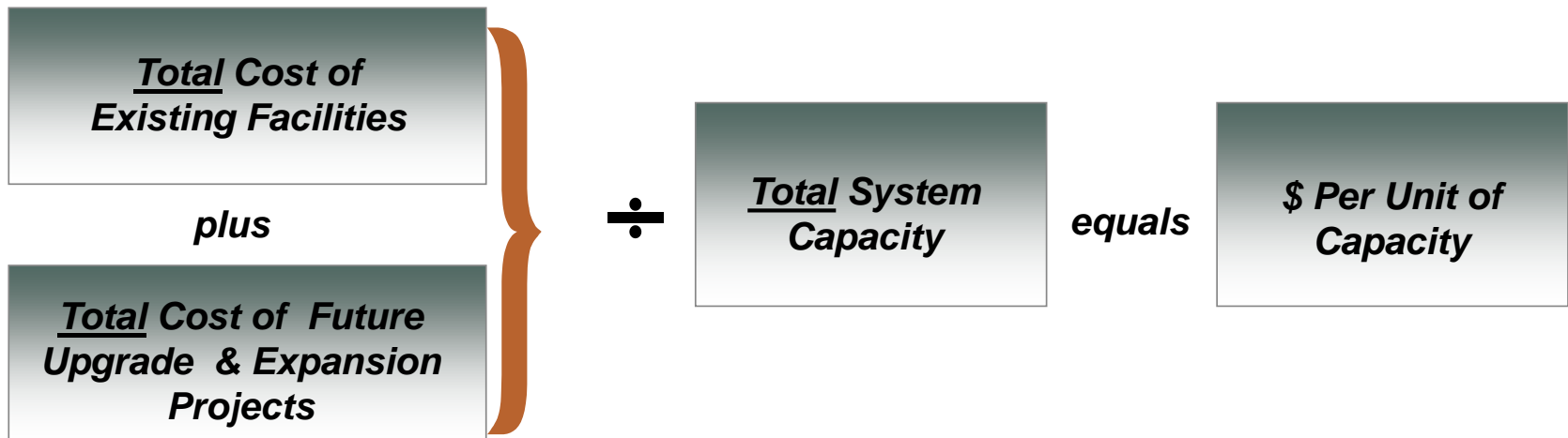
Sewer: Impact of Sales Tax Funding

- Option to have \$12 million in debt financed by a 1/8¢ sales tax for infrastructure
- Debt would be issued in FY 2014 for use in FY 2014 & 2015
- Lowers rate increase 1.5% - 2.0%, depending on scenario
 - Average residential bill savings of \$0.06 - \$0.10/mo/yr
- Improves debt-to-equity ratio (57% - 70% debt financed CIP) to between 36% / 64% & 29% / 71%

CONNECTION CHARGES

Proposed Connection Charge Methodology

- New development pays a proportionate share of existing and future facilities
- Assumes existing and future customers are equal beneficiaries of both existing and future facilities



Water: Connection Charge Results

Water Equivalent Residential Customer (WERC)	WERC [a]	Previous Charge [b]	Existing Charge
Single Family Residence	1.00	\$ 4,543	\$ 454
Duplex (each living unit)	1.00	4,543	454
Apartment (each living unit)	0.50	2,272	227
Mobile Home Individual lot	1.00	4,543	454
Mobile Home Park (each pad)	0.50	2,272	227
All others, per WERC	1.00	4,543	454

[a] Each WERC is equal to 550 gallons, per 12.02.030

[b] Policy direction as of 10/1/09 to reduce charge to promote economic development

Meter Size	Meter Equivalency Factors [a]	Proposed Charge
5/8-inch	1.00	\$ 2,198
1-inch	2.50	5,494
1 1/2-inch	5.00	10,988
2-inch	8.00	17,580
3-inch	16.00	35,161
4-inch	25.00	54,938
8-inch	50.00	109,877
10-inch	115.00	252,717

[a] AWWA meter capacity equivalent ratios

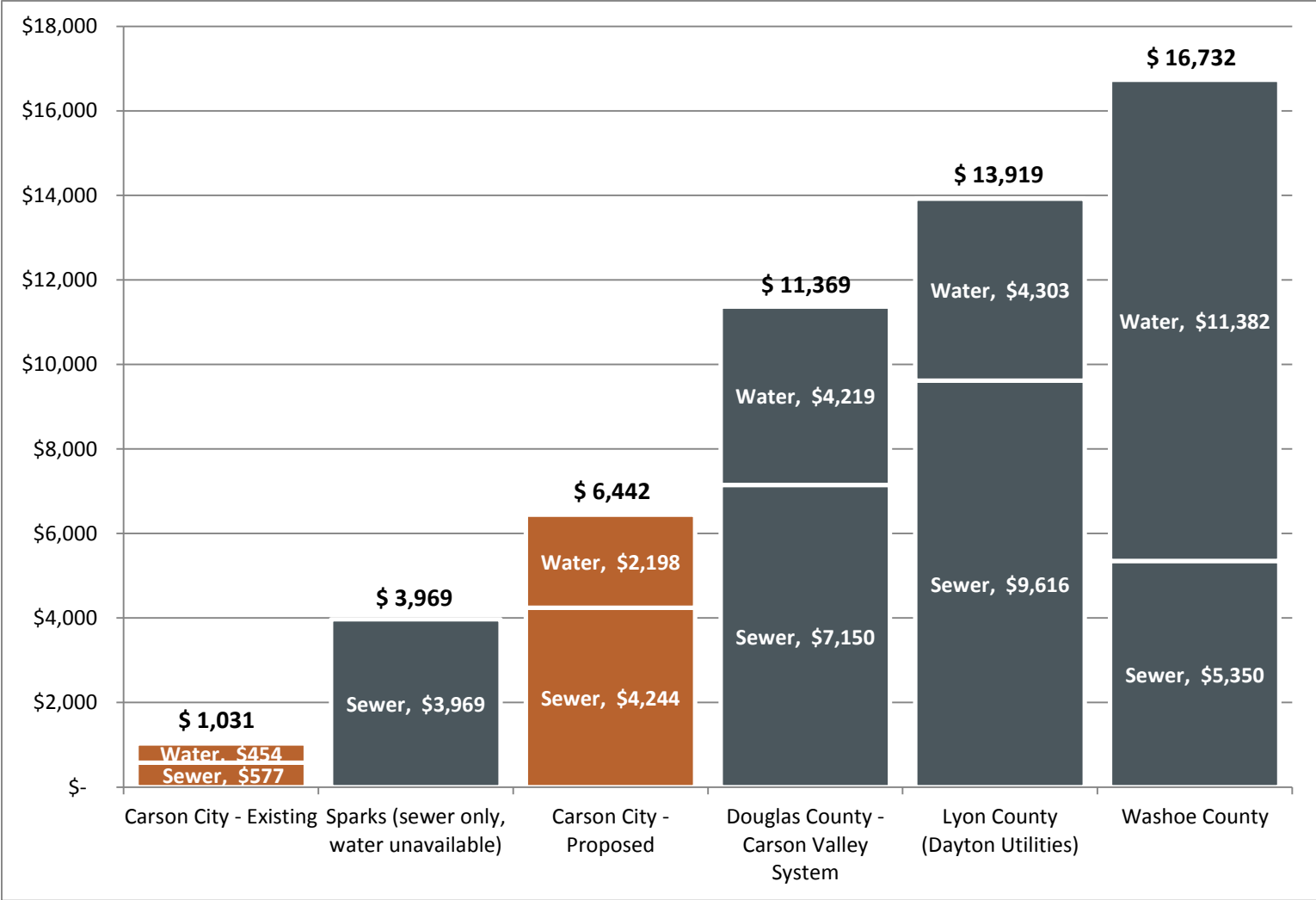
Sewer: Connection Charge Results

Sewer Equivalent Residential Customer (SERC)	SERC [a]	Previous Charge [b]	Existing Charge	Proposed Charge
Single Family Residence	1.00	\$ 5,770	\$ 577	\$ 4,244
Duplex (each living unit)	1.00	5,770	577	4,244
Apartment (each living unit)	0.50	2,885	289	2,122
Mobile Home Individual lot	1.00	5,770	577	4,244
Mobile Home Park (each pad)	0.50	2,885	289	2,122
All others, per WERC	1.00	5,770	577	4,244

[a] Each SERC is equal to 250 gallons per day, per 12.03.030

[b] Policy direction as of 10/1/09 to reduce charge to promote economic development

Connection Charge Comparison



Summary

- Direction for finalizing study:
 - Rate structure change
 - Preferred revenue requirement scenario
 - Level of connection charges

SUPPLEMENTAL SLIDES

Water Connection Charges

Existing Cost Basis

PLANT-IN-SERVICE

		Notes
Utility Capital Assets	\$ 111,415,573	Original cost of plant-in-service as of FYE 2012
less: Contributed Capital	(25,375,181)	Grants and Other Contributed Capital as of FYE 2012
plus: Interest on Non-Contributed Plant	35,757,409	Interest on assets up to a maximum 10-year period
Existing Cash Balances	\$ 1,929,337	Cash Balances as of FYE 2012
less: Debt Principal Outstanding	<u>(64,741,224)</u>	Debt Principal Outstanding as of FYE 2012
less: Net Debt Principal Outstanding	\$ (62,811,887)	Debt principal outstanding, net of cash reserves
TOTAL EXISTING COST BASIS	\$ 58,985,913	

Future Cost Basis

CAPITAL IMPROVEMENT PLAN

		Notes
Total Future Projects	\$ 325,000	Total CIP (FYE 2013 through FYE 2018)
less: Identified Repair & Replacement Projects	9,935,390	R&R projects are not eligible for Connection Charge
less: Contributed Future Upgrade & Expansion Assets	<u>(125,000)</u>	Not eligible for recovery through Connection Charge
TOTAL FUTURE COST BASIS	\$ 10,135,390	

Customer Base

	WERC	Notes
Existing Water Equivalent Residential Customers (WERC)	22,290	Connected WERC as of FYE 2012
Future WERC (Incremental)	9,164	Projected Incremental WERC
TOTAL CUSTOMER BASE	31,454	Total System Capacity WERC

Resulting Charge

	Total	Notes
Existing Cost Basis	\$ 58,985,913	
Future Cost Basis	<u>10,135,390</u>	
Total Cost Basis	\$ 69,121,303	
Total Customer Base	31,454	
TOTAL CHARGE PER WERC	\$ 2,198	Maximum Allowable Charge per WERC

Sewer Connection Charges

Existing Cost Basis

PLANT-IN-SERVICE

		Notes
Utility Capital Assets	\$ 119,970,303	Original cost of plant-in-service as of FYE 2012
less: Contributed Capital	(19,941,142)	Grants and Other Contributed Capital as of FYE 2012
plus: Interest on Non-Contributed Plant	58,313,407	Interest on assets up to a maximum 10-year period
Existing Cash Balances	\$ 2,266,785	Cash Balances as of FYE 2012
less: Debt Principal Outstanding	<u>(16,988,171)</u>	Debt Principal Outstanding as of FYE 2012
less: Net Debt Principal Outstanding	\$ (14,721,386)	Debt principal outstanding, net of cash reserves
TOTAL EXISTING COST BASIS	\$ 143,621,182	

Future Cost Basis

CAPITAL IMPROVEMENT PLAN

		Notes
Total Future Projects	\$ 860,000	Total CIP (FYE 2013 through FYE 2018)
less: Identified Repair & Replacement Projects	163,000	R&R projects are not eligible for Connection Charge
less: Contributed Future Upgrade & Expansion Assets	<u>(347,349)</u>	Not eligible for recovery through Connection Charge
TOTAL FUTURE COST BASIS	\$ 675,651	

Customer Base

	SERC	Notes
Existing Sewer Equivalent Residential Customers (SERC)	19,632	Connected SERC as of FYE 2012
Future SERC (Incremental)	14,367	Projected Incremental SERC
TOTAL CUSTOMER BASE	33,999	Total System Capacity SERC

Resulting Charge

	Total	Notes
Existing Cost Basis	\$ 143,621,182	
Future Cost Basis	<u>675,651</u>	
Total Cost Basis	\$ 144,296,833	
Total Customer Base	33,999	
TOTAL CHARGE PER SERC	\$ 4,244	Maximum Allowable Charge per SERC