

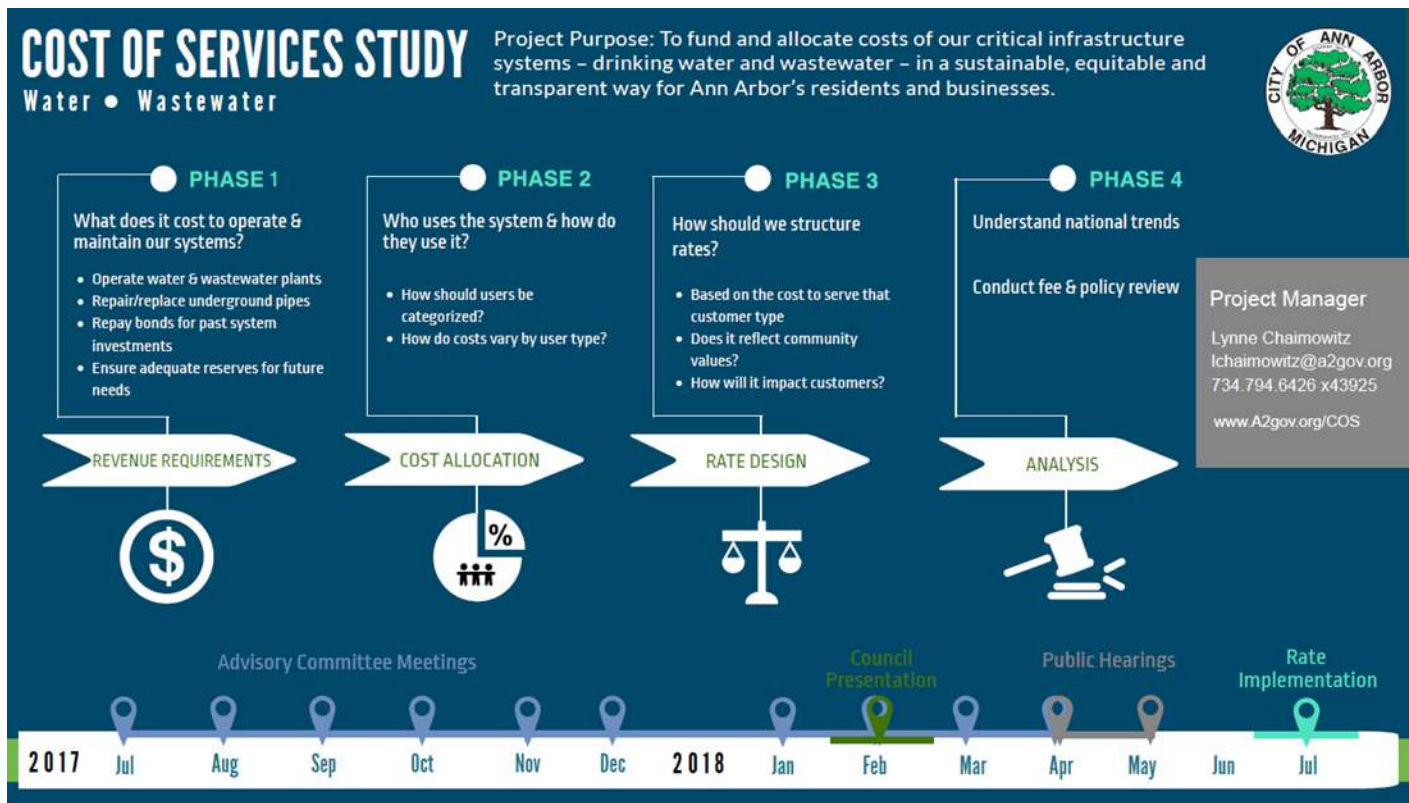
**Ann Arbor Water and Wastewater
Cost of Service Study and Rate Analysis
Advisory Committee Meeting Summary
Wednesday, October 25, 2017 – 4:00 p.m. to 6:00 p.m.**



1. Participant List – See Attachment #1

2. Welcome – Lynne Chaimowitz

- a. Lynne introduced the infographic that provides an overview of this project. We are in Phase 3 and Phase 4.



3. Introductions, Agenda Review and Desired Outcomes – Teresa Newman

- a. The participants introduced themselves and Teresa provided a reminder of the parking lot where topics that are not on the agenda today will be placed and covered at a subsequent meeting.

4. Affordability and Multifamily Class Recap – Andy Baker

- a. Affordability Findings
 - i. Three profiles of customers with affordability challenges
 - 1. Small household with fixed income – 1-2 person household

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2. Large household with low income – 5+ person household with minimal outdoor water usage
3. Multifamily with low income tenants
- ii. Non-Rate Revenue Options for Affordability (Affordability measures outside of the rate structure)
 1. Existing Barrier Busters Program – funded through donations on the utility bill.
 2. Potential Expansion:
 - a. Expansion of funding through current Barrier Busters Program
- iii. Multifamily – Final Data Sources
 1. 2,414 unique accounts were identified and validated. Sources include:
 - a. TRAKiT Rental Permits
 - i. Dataset excludes units that aren't rented (condos & dorms)
 - b. U of M Records
 - i. Small dataset -staff individually identified multifamily accounts
 - c. Land Use & Building Type Overlay
 - i. Filled in the missing information
 - ii. Reviewed by staff to validate
 2. Multifamily Customer Characteristics
 - a. There is a difference between how multifamily and commercial accounts place demands on the system.
 - b. It is anticipated that the definition of multifamily will be residential usage with 5 or more units. Mixed use properties may remain classified as commercial. If all units are residential it would be classified as multifamily.
 3. Multifamily Next Steps
 - a. Cost of Service Implications
 - b. Rate Design Considerations
 - c. Implementation if approved
 - i. Class definition
 - ii. Process for application/exceptions



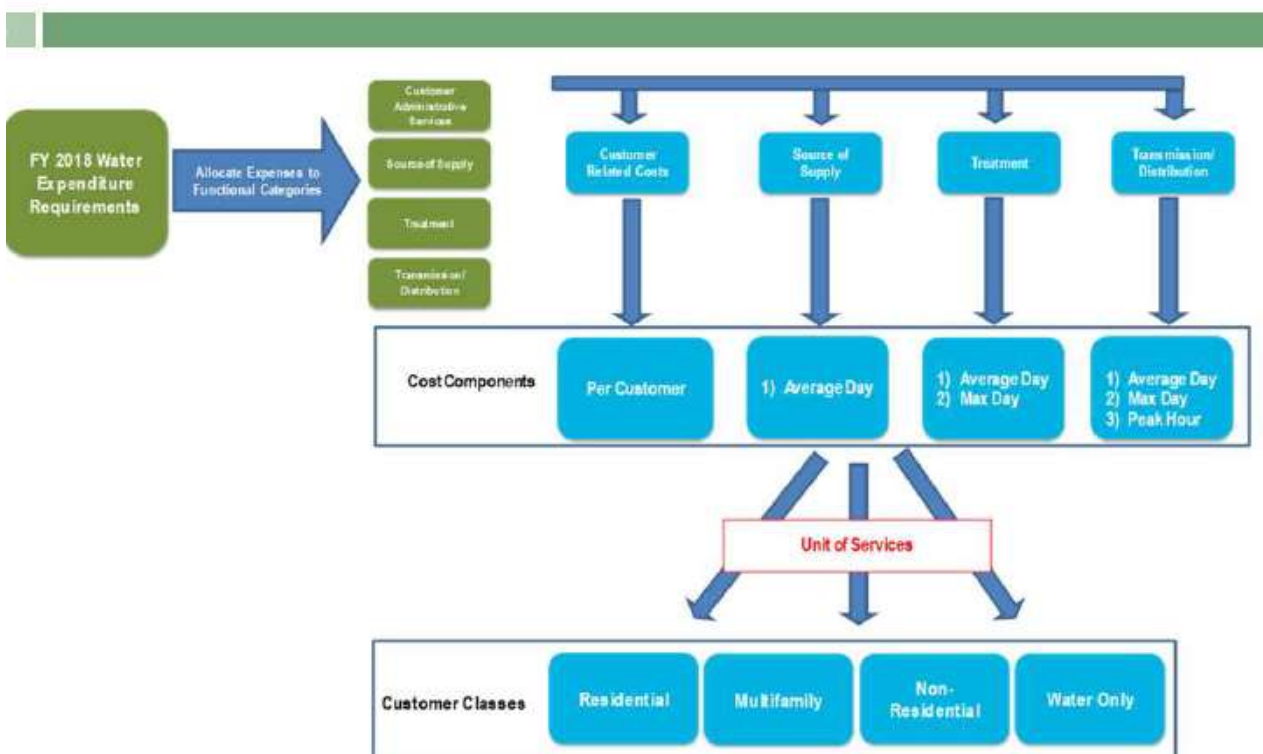
4. Q/A:

- a. Q: Can you provide more specific information on condos? A: A set of units that are separately metered would be residential class. (1 meter serving up to 4 units).
- b. Q: How do the legal challenges apply to proposed changes to the rate design? A: The basis to provide a nexus to cost to serve.
- c. Q: How do we reduce the burden on those that can't afford it? A: By allocating costs to the usage characteristics with the right usage levels for the customer classes.

5. Final Cost of Service Allocation Results – Kyle Stevens

a. Water Cost Allocation Framework

Water Cost Allocation Framework



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b. Water Customer Classes

i. Previous classes:

1. Residential
2. Commercial
3. Water Only (no indoor usage)

ii. Proposed classes:

1. Single Family (Residential)
2. Multifamily
3. Non-Residential
4. Water Only

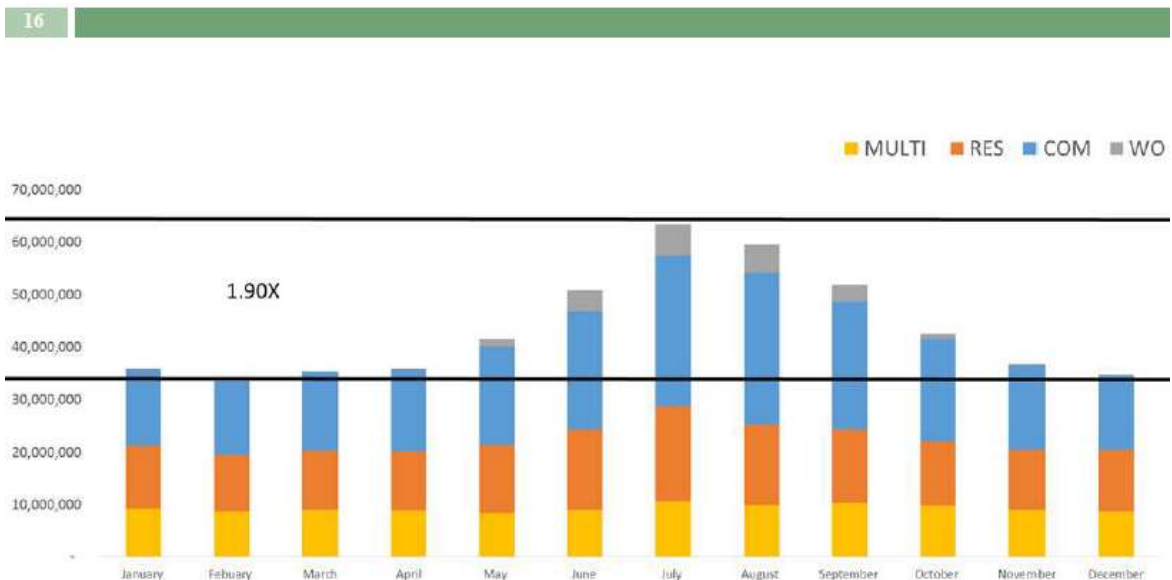
iii. Water System Allocation by Functions

1. Average Day Demand Costs – \$13M
2. Max Day Demand Costs – \$9.9 M
3. Peak Hour Demand Costs – \$5.7M
4. Customer Costs (overhead, meter readings, program costs) – \$2.9M

iv. Water Customer Usage

1. Peaking Factors for max day and max hour are 1.90.

Water Customer Usage



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- v. Water Cost of Service Analysis Results
 - 1. Single Family - \$5.6M currently collected; cost to serve is \$7.5M. Rates should be designed to recover cost of service.
 - 2. Multifamily – \$5.8M currently collected; cost to serve is \$3.4M.
 - 3. Commercial – \$8.6M currently collected; cost to serve is \$7.7M.
 - 4. Water Only – \$4.1M currently collected; cost to serve is \$5.4M. Outdoor costs must be recovered in the rate design.

c. Draft Water Rate Design

- i. Fixed Charges - recommendation
 - 1. Identified customer cost
 - 2. Meter replacement cost
 - 3. 5% of average day cost
 - 4. Consolidation of Residential and Non-Residential fixed fees
 - a. Customer related cost = \$2.9M (may be refined pending final review with City staff)
 - b. Meter replacement cost = \$1.3M
 - c. 5% of average day cost (readiness to serve) = \$679K
 - 5. 5/8 meter Example:

Fixed Charges

Cost Component	Annual Cost		5/8 Meter Example
Customer Related	\$2,900,490		\$13.34
Meter Replacement	\$1,334,425	+	\$7.00
5% of Average Day Cost	\$679,056	+	\$4.76
			\$25.10

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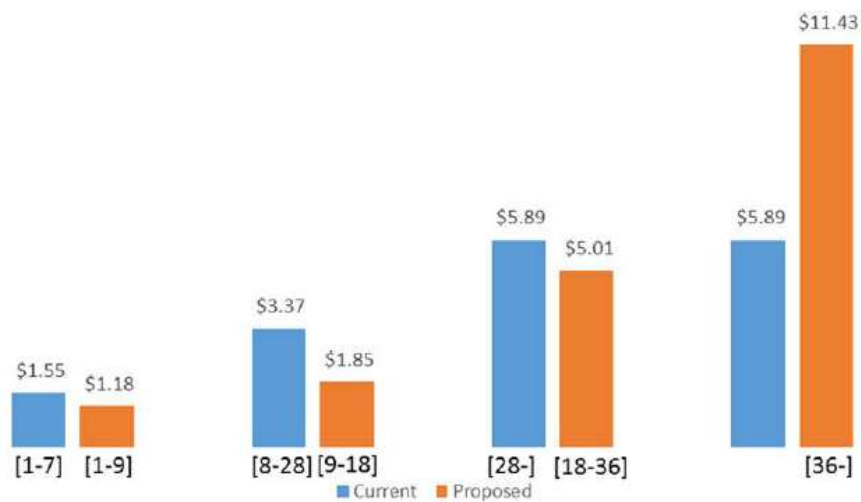
6. Ann Arbor has the second lowest fixed charge compared to 20 other cities with major universities. The proposed change would place Ann Arbor at the ninth lowest fixed charge. That being said, Stantec will look at alternative levels of cost recovery in the fixed charge due to the impact to low volume users.
- ii. Volumetric Charges
 1. Single Family (Residential)
 - a. Proposed Tier Sizing
 - i. Tier 1 = up to 9 CCF – “Base Tier” with minimum cost of service.
 - ii. Tier 2 = 9-18 CCF – “Family Tier”.
 - iii. Tier 3 = 18-36 CCF – “Efficient Irrigation Tier”
 - iv. Tier 4 = over 36 CCF
 - b. Single Family Pricing
 - i. February is the lowest demand month.
 - ii. July is highest demand month.
 - iii. Revenue requirement will be recovered based on demand by tier.
 - iv. As tiers peak the system more, max day and max hour costs increase. Allocation is based on max day/max hour.
 - v. New 4th tier reflects cost of service
 - c. Tier pricing based on cost allocation results



Single Family (Pricing)



Single Family (Pricing Cont)



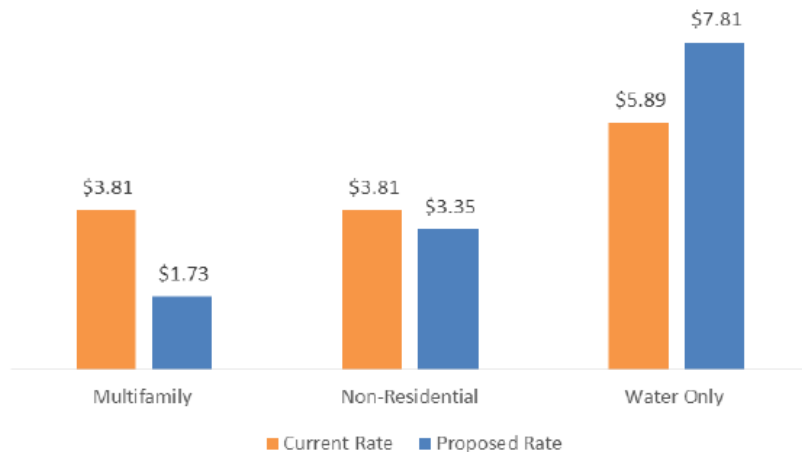


- 2. Non-Single Family (uniform or flat rate cost structure)
 - a. Multifamily customer class
 - b. Commercial consolidation
 - c. Uniform-Volumetric rate based on cost to serve

Non-Single Family Volumetric

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- Uniform rates updated based on COSA results
- Multifamily Rate
- Consolidated Non-Residential Class



- 3. Q&A:
 - a. Q: Why not do a tiered rate for multifamily? A: It is difficult to determine the number of units and break it down fairly.
 - b. Q: Is the cost of providing the water during peak hour a greater cost to the utility? A: The data shows the residential class and water only are the ones using the water during peak times. Investments are made to provide for peak demand, of that capacity, a significant amount is supplied during summer demands. Capital investment is also included in the cost of service analysis.

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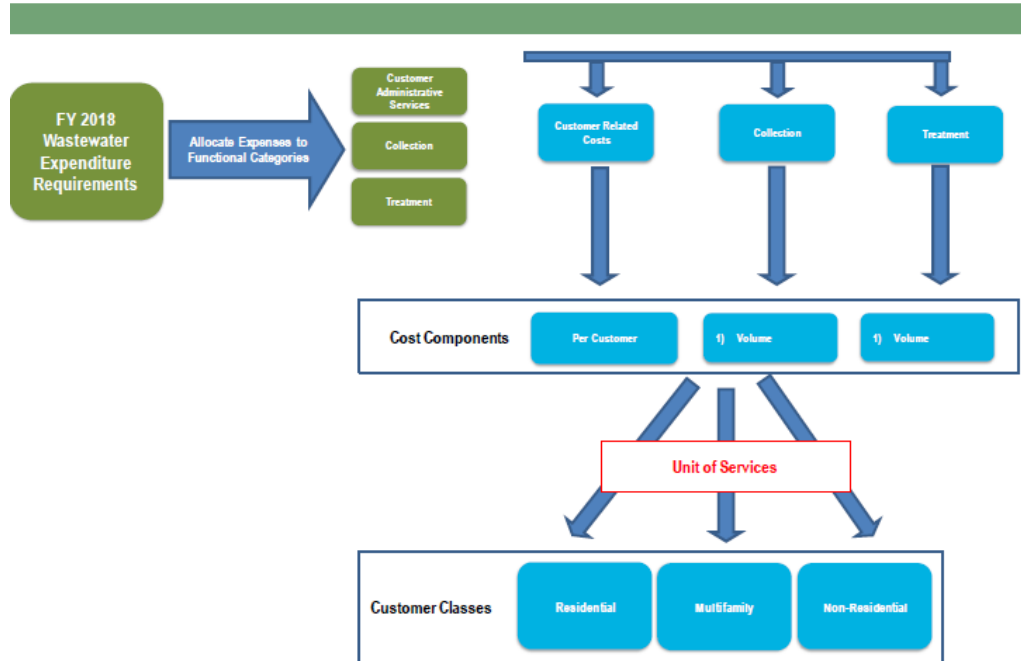


- c. Q: Has any thought gone into pricing the usage during peak season separately? A: Recognizing that demands come in the summer, the inclining blocks do address the seasonal demands.
- d. Q: What would a Dining Hall be classified if a Dorm is multifamily? A: This is a discussion to be addressed during implementation.
- e. Q: How does this proposed rate design address affordability? A: Allocating cost to actual demand does make a difference. It may not be an immediate impact but will make a difference over time in the multifamily class. The ability to quantify impact to small and medium households is very important to addressing affordability.
- f. Q: Will there be other ways to lower minimum costs? Example: irrigation restrictions. A: We are designing a rate structure to meet the revenue requirement to meet the needs of a system that was designed for peak demand. As customers conserve water, unit prices will go up in the near-term to meet the annual revenue requirement. However, cost efficiencies can be attained through reducing cost in borrowing through lower interest charges and revenue funded capital investments (versus borrowing). Moreover, conservation does benefit the system in the long run by allowing us to reduce the size of future facilities to meet lower peak demands.
- g. Comment: Appreciate what has been done to address low-income affordability needs. Low income housing includes utility costs in the rent, this design would positively impact low-income multifamily households.



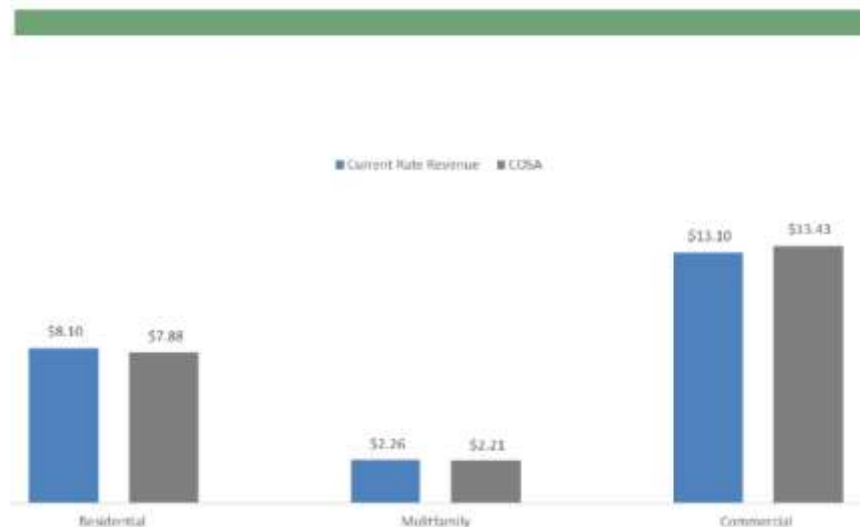
d. Sewer
 i. Cost Allocation Framework

Sewer Cost Allocation Framework



ii. Cost of Service Analysis Results

COSA Results (\$M)



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iii. Fixed Charges

1. Customer related = \$609K (may be refined pending final review with City staff)
2. 5% of Average Day Demand Cost = \$363K
3. Show chart with example for 5/8 meter
4. Meter charges proposed vs. current

Fixed Charges (Quarterly)

Meter Size	Proposed	Current
5/8	\$ 11.79	\$ 10.13
3/4	\$ 13.55	\$ 14.90
1	\$ 17.06	\$ 27.27
1.5	\$ 25.85	\$ 55.80
2	\$ 36.40	\$ 87.30
3	\$ 64.52	\$ 175.50
4	\$ 96.15	\$ 277.20
6	\$ 184.03	\$ 551.70
8	\$ 289.48	\$ 1,102.50
10	\$ 412.50	\$ 1,764.00

iv. Volumetric Charges:

	Calculated	Current
Volume Revenue Requirement	\$ 21,299,190	
Unit of Service HCF	4,715,735	
Rate Per HCF	\$ 4.52	\$ 4.58
Change	-1.38%	

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- e. Rate Impacts – Water and Sewer
 - i. Single Family Bill Impact Table

CCF	Gallons	Agg. %	Current	Proposed	\$ Chg	% Chg
			FY 17	FY 18		
0	0	3.2%	\$20.26	\$36.89	\$16.63	82.1%
5	3,740	23.2%	\$50.91	\$65.44	\$14.53	28.5%
10	7,480	51.9%	\$90.66	\$96.67	\$6.01	6.6%
15	11,220	77.2%	\$130.41	\$134.89	\$4.48	3.4%
20	14,960	89.5%	\$170.16	\$182.59	\$12.43	7.3%
30	22,440	96.6%	\$274.86	\$303.67	\$28.81	10.5%

- ii. Multifamily Bill Impact Table

2" Meter MF Bill Calculations						
CCF	Gallons	Agg. %	Current MF	Proposed MF	\$ Chg	% Chg
0	-	4.9%	\$174.60	\$103.38	-\$71.22	-40.8%
10	7,480	37.8%	\$258.50	\$165.85	-\$92.65	-35.8%
20	14,960	58.2%	\$342.40	\$228.31	-\$114.09	-33.3%
30	22,440	71.5%	\$426.30	\$290.78	-\$135.52	-31.8%
40	29,920	81.3%	\$510.20	\$353.24	-\$156.96	-30.8%
50	37,400	88.0%	\$594.10	\$415.71	-\$178.39	-30.0%
100	74,800	97.4%	\$1,013.60	\$728.04	-\$285.56	-28.2%
250	187,000	99.9%	\$2,272.10	\$1,665.04	-\$607.06	-26.7%
500	374,000	100.0%	\$4,369.60	\$3,226.69	-\$1,142.91	-26.2%

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iii. Commercial (Non-residential) Bill Impact Table

2" Meter Com Bill Calculations						
CCF	Gallons	Agg. %	Current Com	Proposed Com	\$ Chg	% Chg
0	-	13.0%	\$174.60	\$103.38	-\$71.22	-40.8%
5	3,740	44.9%	\$216.55	\$142.73	-\$73.82	-34.1%
10	7,480	59.5%	\$258.50	\$182.08	-\$76.42	-29.6%
20	14,960	75.5%	\$342.40	\$260.78	-\$81.62	-23.8%
30	22,440	83.5%	\$426.30	\$339.48	-\$86.82	-20.4%
40	29,920	88.5%	\$510.20	\$418.18	-\$92.02	-18.0%
50	37,400	91.5%	\$594.10	\$496.88	-\$97.22	-16.4%
100	74,800	97.6%	\$1,013.60	\$890.38	-\$123.22	-12.2%

iv. Water Only Bill Impact Table

2" Meter Water Only Bill Calculations						
CCF	Gallons	Agg. %	Current Water Only	Proposed Water Only	\$ Chg	% Chg
-	-	61.8%	\$87.30	\$66.99	-\$20.31	-23.3%
5	3,740	72.5%	\$116.75	\$106.04	-\$10.71	-9.2%
10	7,480	77.5%	\$146.20	\$145.09	-\$1.11	-0.8%
15	11,220	83.1%	\$175.65	\$184.14	\$8.49	4.8%
20	14,960	86.7%	\$205.10	\$223.19	\$18.09	8.8%
25	18,700	89.5%	\$234.55	\$262.24	\$27.69	11.8%
30	22,440	91.5%	\$264.00	\$301.29	\$37.29	14.1%

v. Q/A:

1. Q: What is typical usage for multifamily? A: Average usage per meter is 480 CCF but there is no "typical".
2. Q: Have you done a sensitivity analysis on how users may change their meters to adjust to new classifications? A: It is expensive to change meters and that is not expected to occur. Commercial customers may look at whether a water only meter may be more advantageous. The meter is sized when it connects to the system, not sure of the policy to revisit meter sizes. Commercial meters are sized based on type of business and anticipated usage.
3. Q: Is it true that for those that want more equitable rates for multifamily, the percentage change is relatively flat? Will the savings be similar if it

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was fairly passed on, regardless of the size of building? A: Impact ranges could be done for each meter size to show how they differ.

4. Q: How are single family households impacted? Can we provide examples of each class/tier to show the impacts? A: We can prepare comparisons.
5. Q: Can you play with the CCFs per tier to see how classes are impacted? A: There are consequences because the tiers are designed based on cost to serve. However, Stantec will look at potential modifications to the initial recommended tier sizes.
6. Q: The fixed cost recovery charge only recovers 9% now. Is that because of the rate design being used now or because there is no investment in the system? A: It is based on the current rate design.
7. Comment: It would be intriguing to discuss capacity/peak need and educating the residents.
8. Comment: Would like a chart that shows annual revenue requirement by class.
9. Comment: Predicting tough sledding ahead to add the 4th tier back in the design. An area of refinement could be to identify residential households with up to 4 units.
10. Comment: Can we identify specific classes that fit into Tier 4 by %. A: Stantec will quantify this and look at potential modifications to the tier sizing and subsequent cost of service that may affect the level of the rate.

6. Closing Comments:

- a. The Advisory Committee Members were asked to weigh in on how they are feeling about the process thus far.
 - i. Jack – Is impressed by the Stantec Team – feeling pretty good.
 - ii. Garrett – Is a little more clear, not clear on Long-term Capital Improvement Projects and would like to see the relationship between capital investment and day to day costs.
 - iii. Jim A. - Great work and looking for the impact to customers.
 - iv. Joan - Want to see how this impacts families of different sizes. Still curious and would like more info about Barrier Buster funds.
 1. Andy Baker wondered if Barrier Buster is preferred or should something else be explored?

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7. Next Meeting, Action Items, Parking Lot Items – Teresa Newman, Project Innovations

- a. The next meeting is on Monday, November 20.
- b. Topics will include: specific bill impacts, more multifamily and commercial account comparisons/impacts, potential modifications and alternatives, comparison of cost by class.

ATTACHMENT #1 – Participant List

Last Name	First Name	Organization Representing
Adams	Jim	U of M
Allen	Crystal	City of Ann Arbor
Baker	Andy	Stantec
Beam	Jonathan	U of M
Burnham	Andy	Stantec
Cederquist	Jack	Orchard Hills/Maplewood Homeowners
Chaimowitz	Lynne	City of Ann Arbor
Diephuis	David	Resident
Doughty	Joan	Community Action Network
Elias	Abigail	City of Ann Arbor
Gudeman	Augusta	U of M
Hall	Jennifer	Ann Arbor Housing Commission (AAHC)
Kenzie	Earl	City of Ann Arbor
Maciejewski	Molly	City of Ann Arbor
Newman	Teresa	Project Innovations
Praschan	Marti	City of Ann Arbor
Rechtien	Matt	City of Ann Arbor
Scott	Garrett	Iroquois/East Stadium Neighborhood Association
Slotten	Cresson	City of Ann Arbor
Steglitz	Brian	City of Ann Arbor
Stevens	Kyle	Stantec
Treemore	Lara	Wayne State University (for Carol Miller)
Van Ermen	Mariah	U of M
Wingle	Aimee	City of Ann Arbor

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ATTACHMENT #2 – Presentation Slides

CITY OF ANN ARBOR WATER & SEWER RATE STUDY ADVISORY COMMITTEE DISCUSSION

10.25.2017



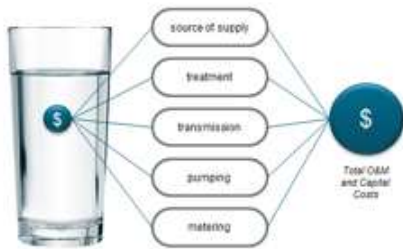
Agenda

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- Affordability & Multifamily Recap
- Final Cost of Service Allocation Results
 - Water
 - Sewer
- Preliminary Rate Design
 - Water
 - Sewer
- Next Meeting Stakeholder Meeting
 - Monday, November 20, 2017

Rate Study Process to Keep in Mind

3



Revenue Requirements

- Operating Costs
- Capital Costs
- Financial Policies
 - Debt Coverage
 - Reserves

Cost Allocation

- Define Classes of Users
- Fair & Equitable
- Comparison to Current Revenue Recovery

Rate Design

- Evaluate Objectives
 - Affordability
 - Conservation
- Identify Structures
- Customer Impacts

Analysis

- Fee & Policy Review
- Adjustment Drivers
- National Trends
- Local Practices

4

Affordability & Multifamily Recap

- Affordability customer characteristics and how they compare
- Presentation of finalized multifamily data
- How this data is used in the study & next steps
- Questions and Answer (10 minutes)

Affordability Findings

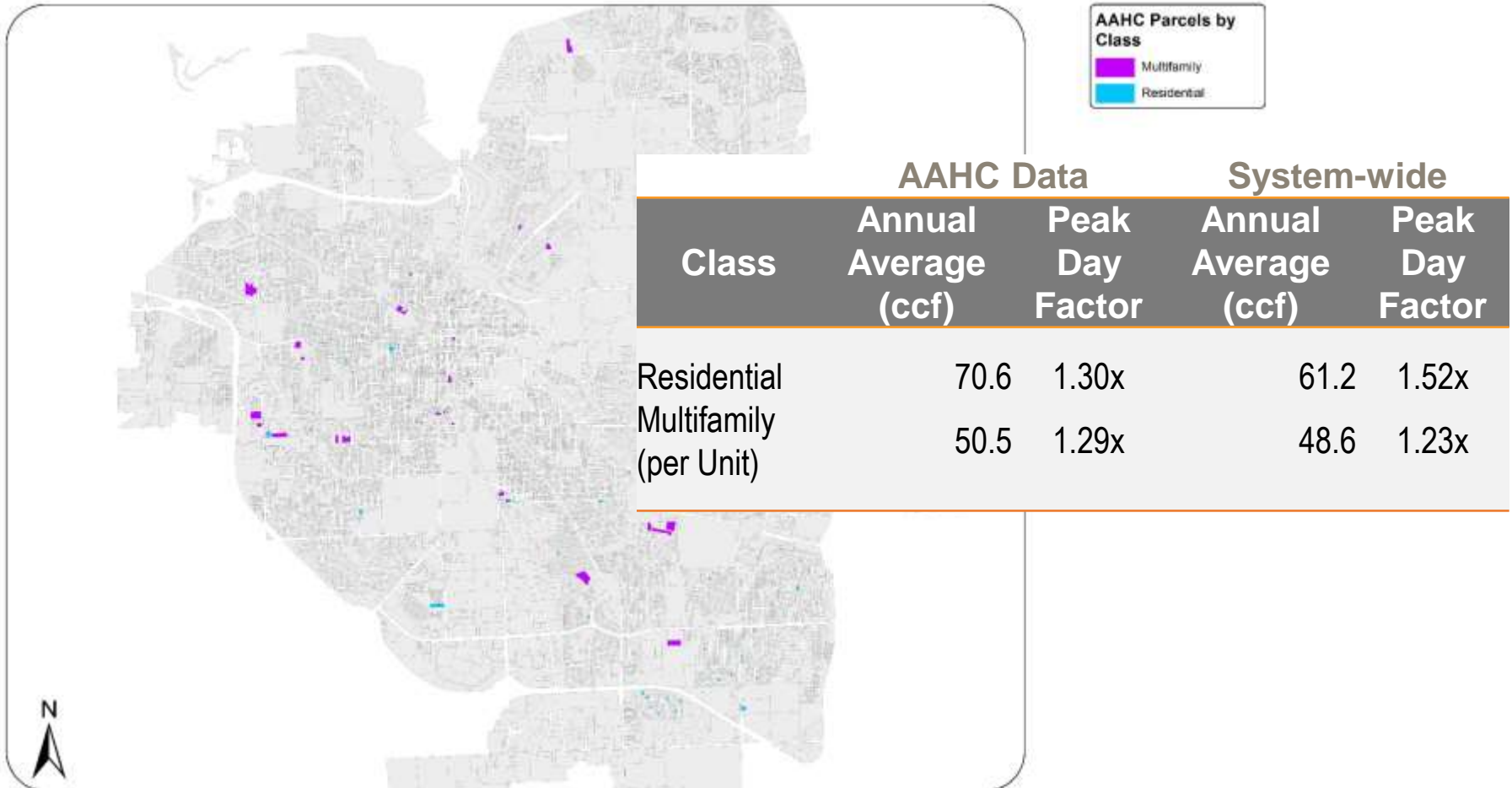
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Three profiles of customers with affordability challenges:

- Small household fixed income
- Large household low income
- Multifamily low income tenants

Affordability Findings

6



Use of Findings in Rate Design

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Small Single Family:
1-2 person household,
minimal outdoor use (1.3x Peaking)

Large Single Family:
5+ person household,
minimal outdoor use (1.3x Peaking)

Multifamily:
Same characteristics as multifamily class

- ❑ Tier 1 allocation based on Small Single Family
- ❑ Tier 2 allocation based on Large Single Family
- ❑ Multifamily to be compared to burden if it were left embedded in Commercial

Multifamily – Final Data Sources

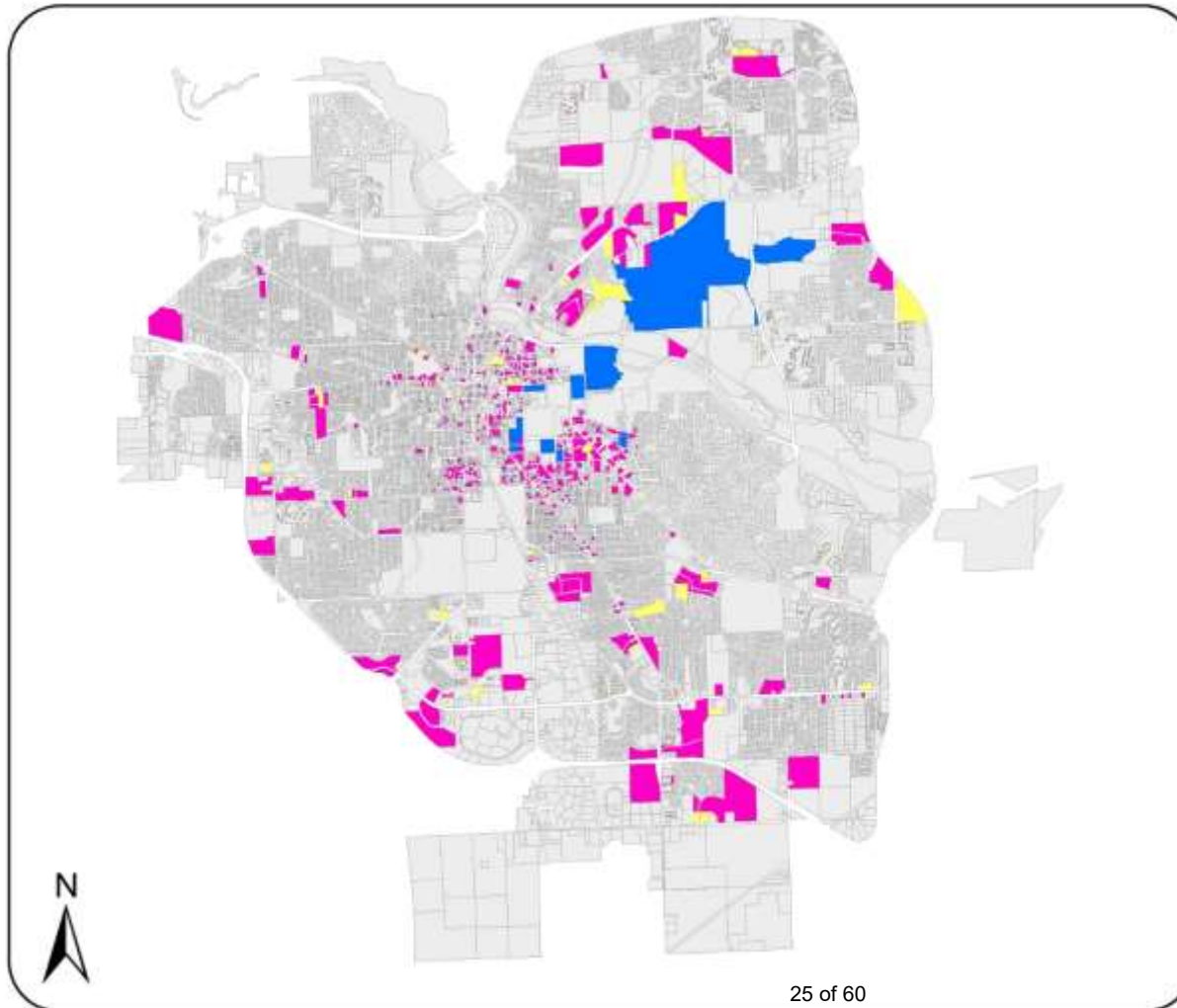
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Data Source	Unique LocationID	Unique Parcels
TRAKiT Rental Permits	1,807	854
U of M Records	119	14
Land Use & Building Type Overlay	488	431
Total	2,414	1,299

- TRAKiT Rental Permits
 - Confirmed as residential-use
 - Dataset excludes units that aren't rented (condos & dorms)
- U of M Records
 - Small dataset – staff individually identified multifamily accounts
- Land Use & Building Type Overlay
 - Captures accounts missed by other methods
 - Reviewed by staff to validate

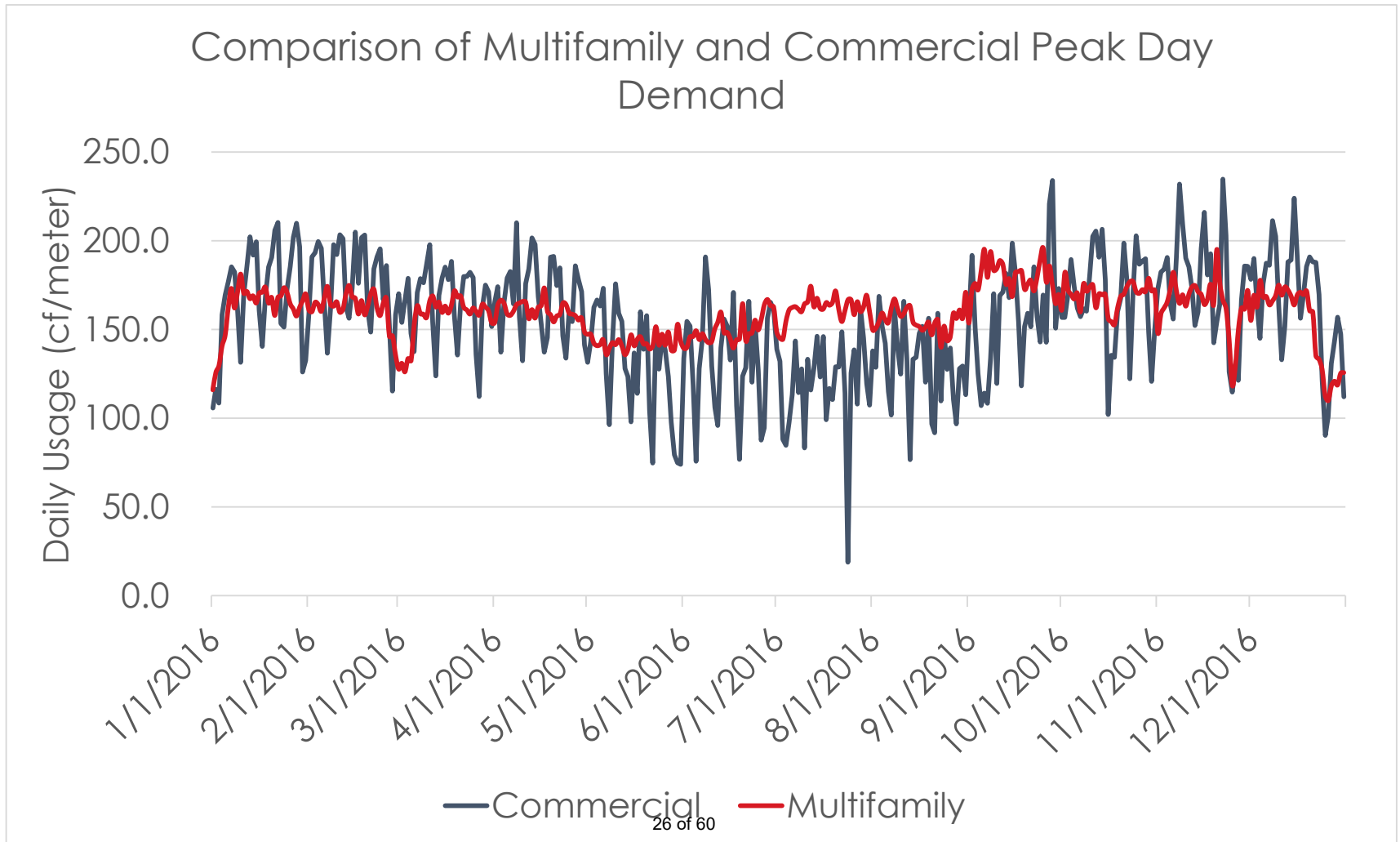
Multifamily – Final Data Sources

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- MF Parcels from TRAKiT
- MF Parcels from UofM
- MF Parcels from Overlay

Multifamily – Customer Characteristics



Multifamily – Next Steps

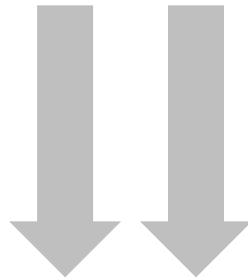
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- Cost of Service Implications (stay tuned!)
- Rate Design Considerations
- Implementation (if ultimately approved)
 - Class Definition
 - Process for application/exceptions

Customer Classifications

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Current Customer Classes



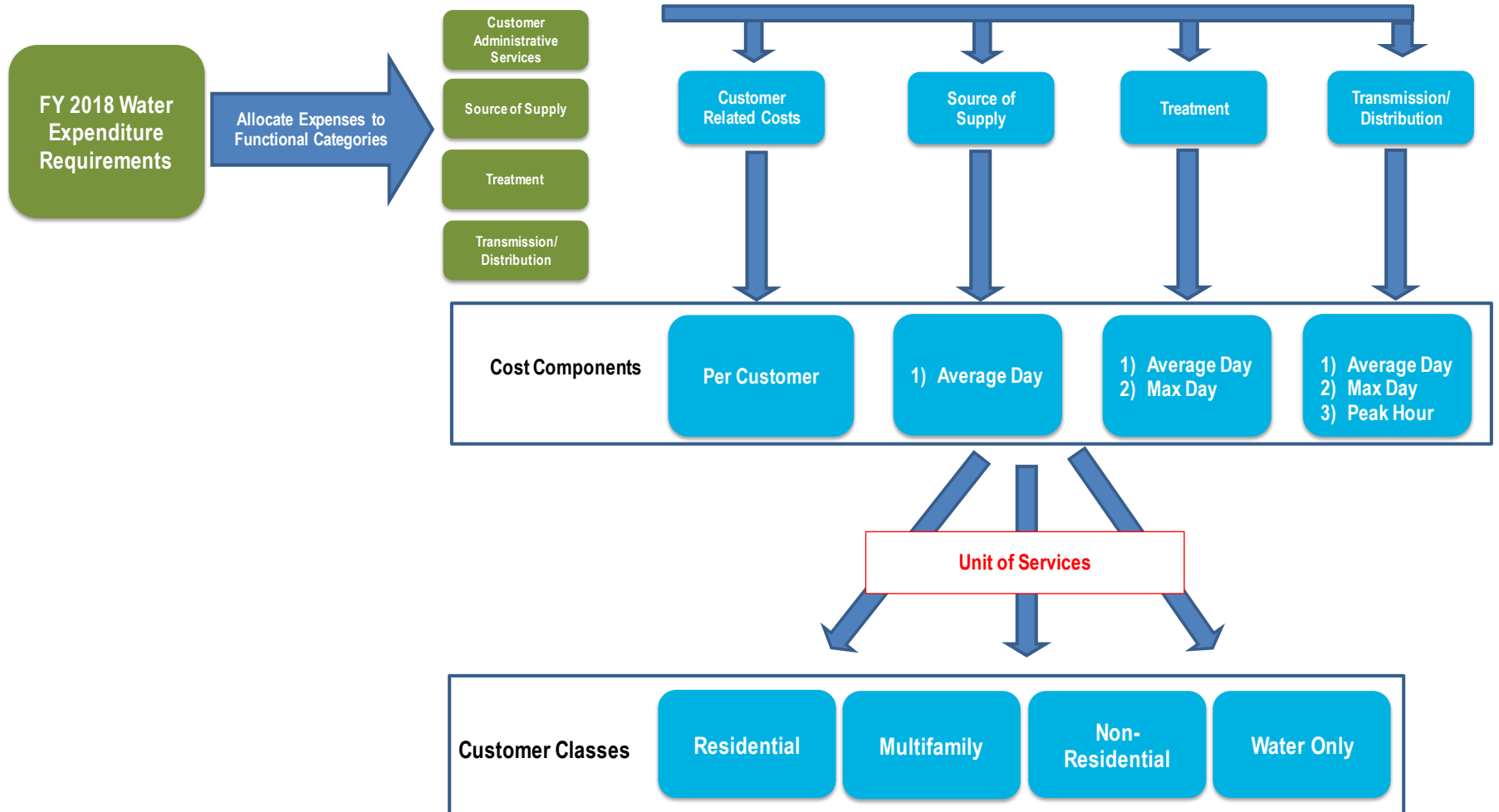
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Cost of Service Allocation Results

WATER

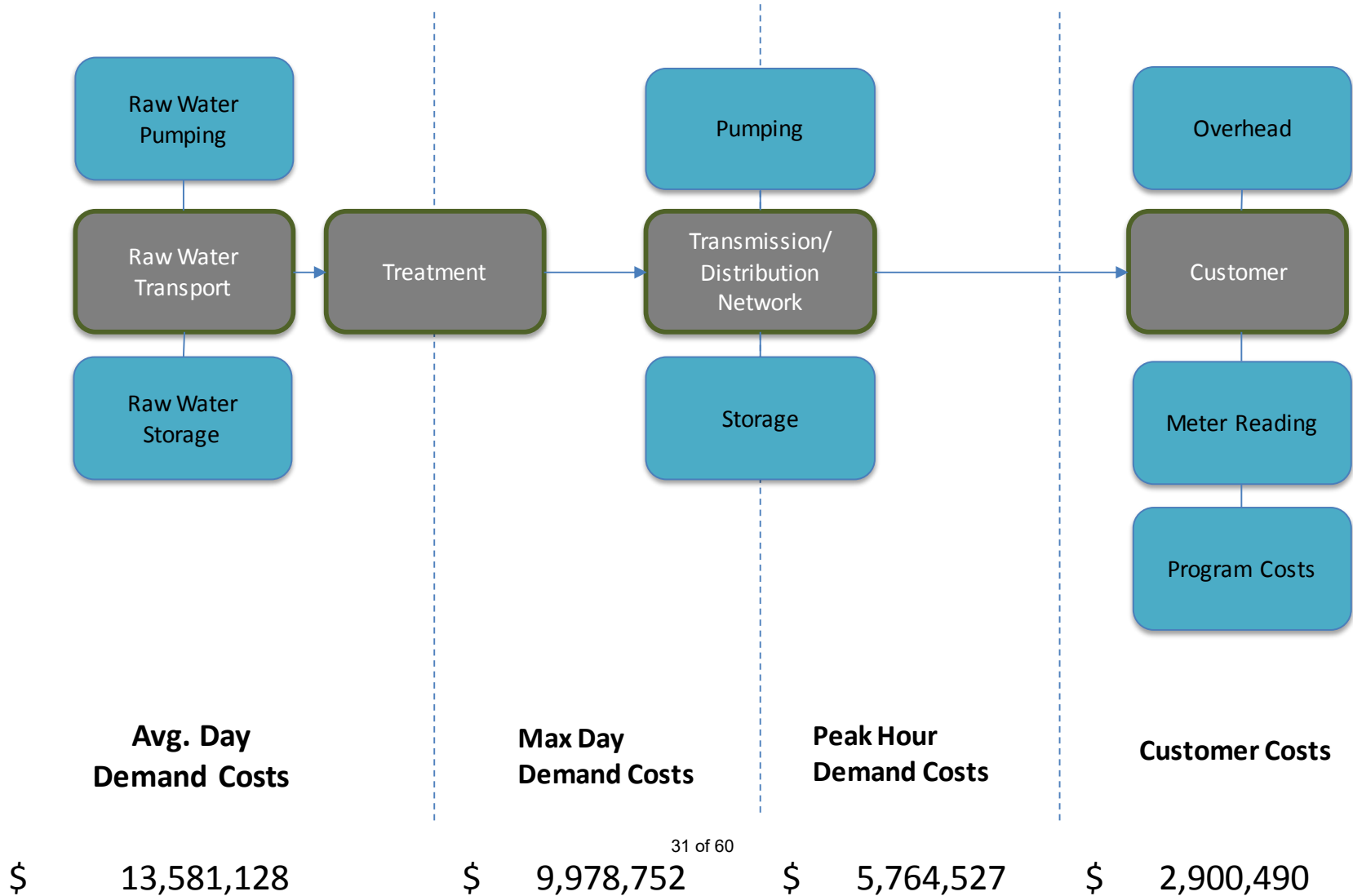
Water Cost Allocation Framework

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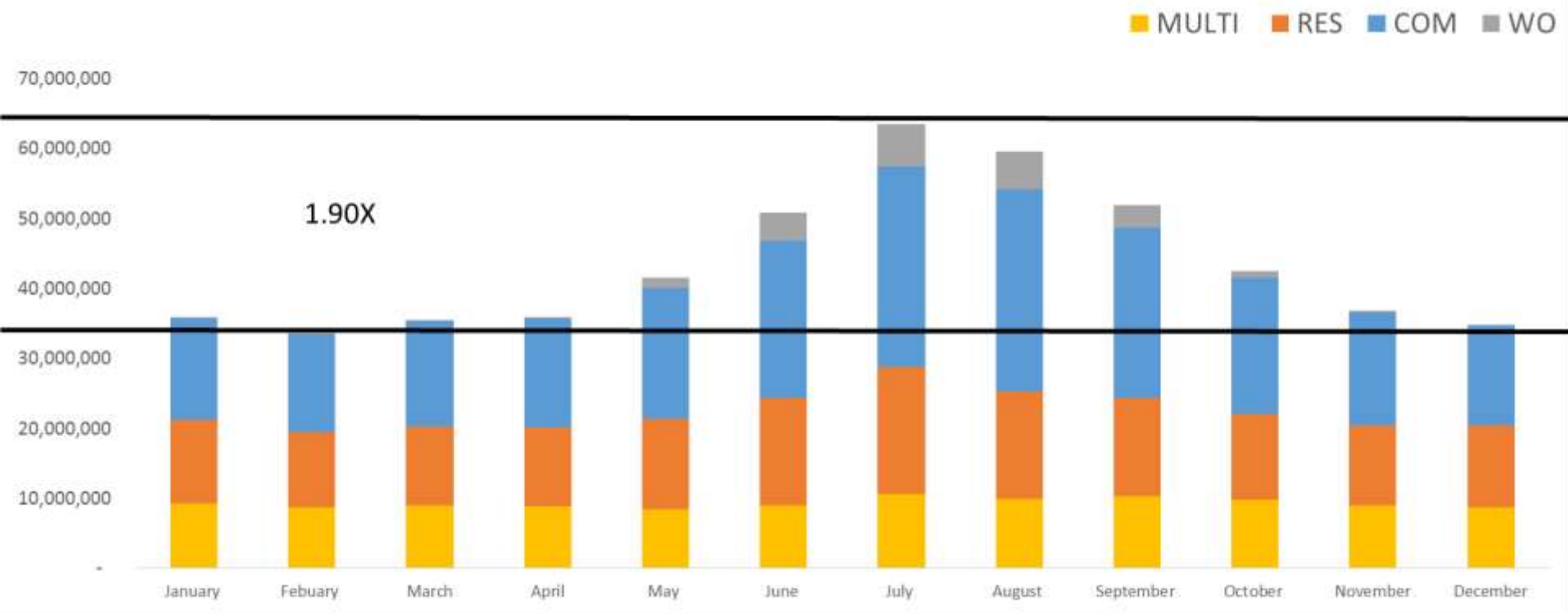
Water System Functions

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Water Customer Usage

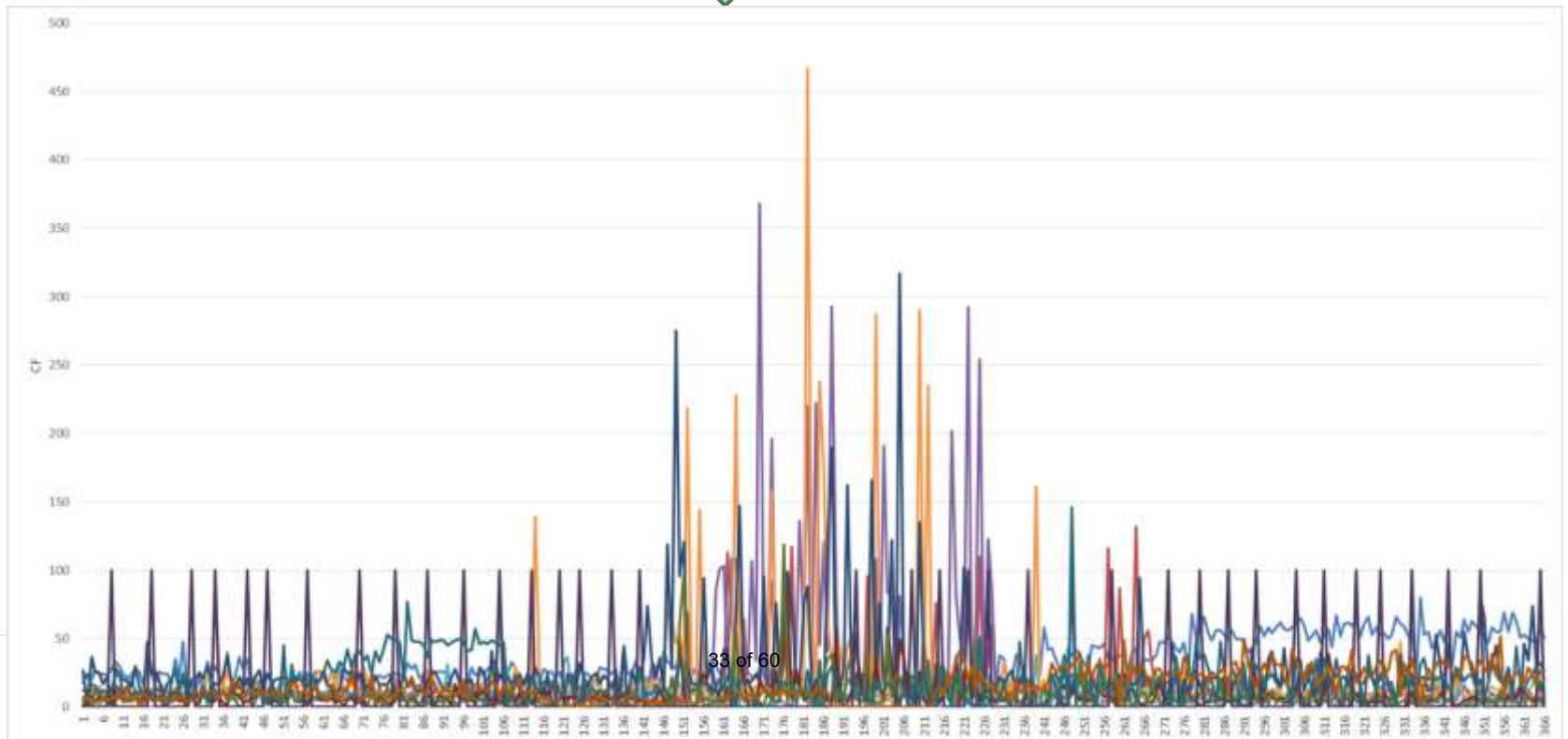
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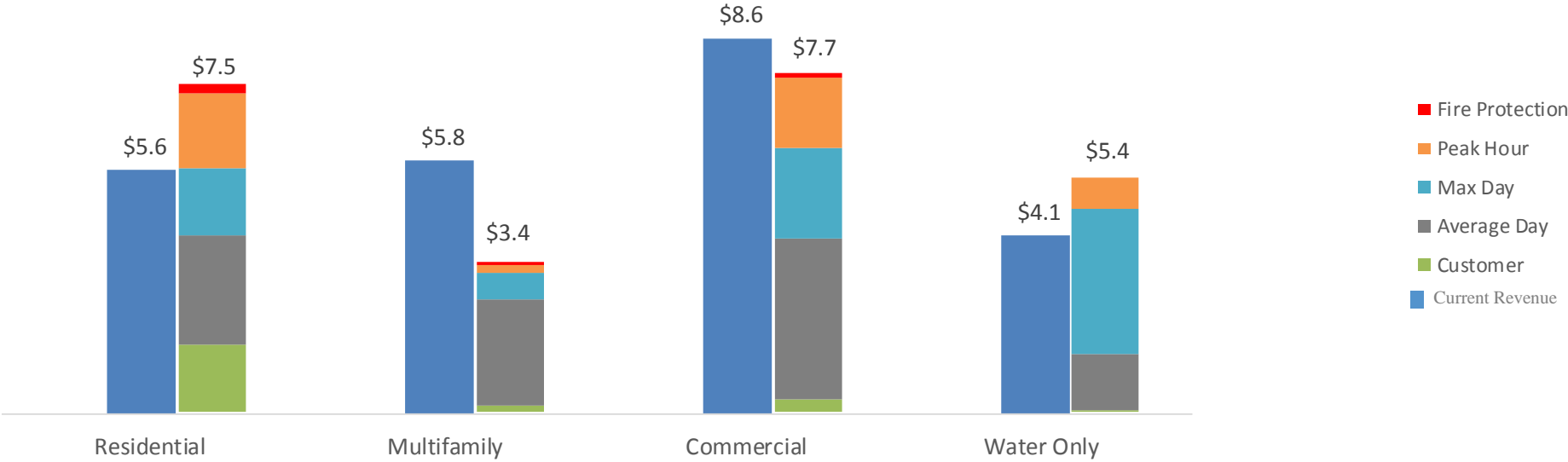
Customer Classifications

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Automated Meter Infrastructure (AMI)



Water COSA Results (\$M)



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Rate Design

WATER

Water Rate Design

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- Fixed Charges
 - Identified customer cost
 - Meter replacement cost
 - 5% of average day cost
 - Consolidation of Residential and Non-Residential fixed fees
- Volumetric Charges
 - Residential structure tied to cost
 - Uniform rate updated to COSA results

Fixed Charges

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Cost Component	Annual Cost		5/8 Meter Example
Customer Related	\$2,900,490		\$13.34
Meter Replacement	\$1,334,425	+	\$7.00
5% of Average Day Cost	\$679,056	+	\$4.76
			\$25.10

Fixed Charge Survey

22



Fixed Charges (Quarterly)

23

Meter Size	Proposed	Current
5/8	\$ 25.10	\$ 10.13
3/4	\$ 28.16	\$ 14.90
1	\$ 33.86	\$ 27.27
1.5	\$ 49.41	\$ 55.80
2	\$ 66.98	\$ 87.30
3	\$ 155.49	\$ 175.50
4	\$ 209.35	\$ 277.20
6	\$ 334.17	\$ 551.70
8	\$ 496.47	\$ 1,102.50
10	\$ 671.47	\$ 1,764.00

Volumetric Rates

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- Single Family
 - Tier sizing
 - Tier pricing based on cost allocation results
- Non-Single Family
 - Multifamily customer class
 - Commercial consolidation
 - Uniform-Volumetric rate based on cost to serve

Current Volumetric Rates

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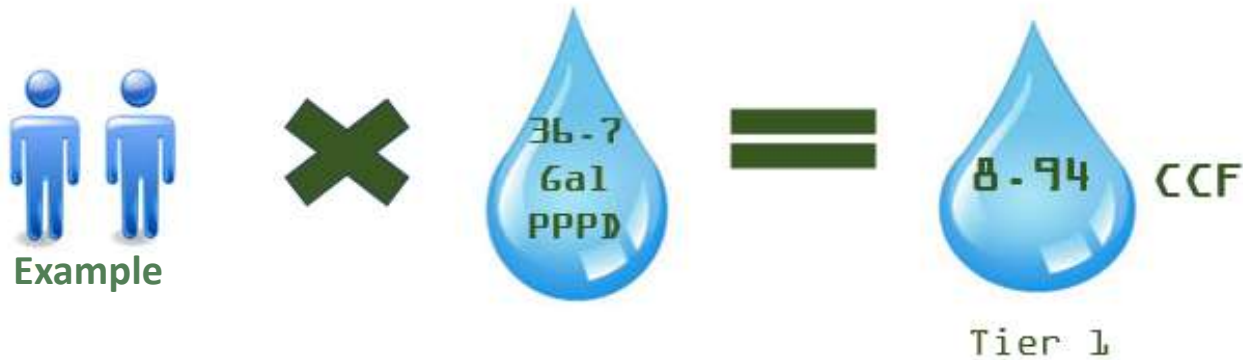
CCF	Residential 1	Residential 2
1-7	\$1.55	\$1.55
8-28	\$3.37	\$3.37
29-	\$5.89	\$3.37

	Commercial	Water Only
Tier 1	\$3.81	\$5.89
Tier 2	\$7.26	
Tier 3	\$12.44	

Volumetric Tier Sizing (Base Tier)

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- Tier 1 (Available to all users)



Tier 1 = 9 CCF



Volumetric Tier Sizing (Family Tier)

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- Tier 2 (Capture use for larger than average household size)



Example



Tier 2 = 9 CCF

Tier 2



9-18 CCF per month

Volumetric Tier Sizing (Efficient Irrigation)

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How to Calculate Irrigation Requirements for the Average Parcel (10,890 ft²) Tier 3



Parcel Size: 10,890
Landscape Area: 2,723



Evapotranspiration: 32 Inches

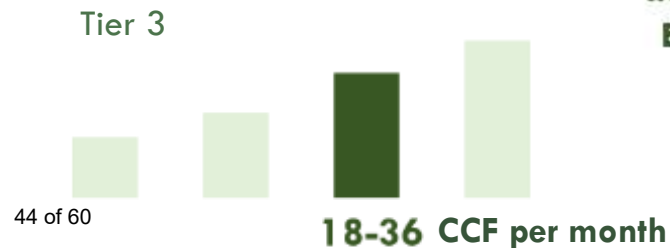
Beneficial Rainfall: 3.6 Inches

Crop Type



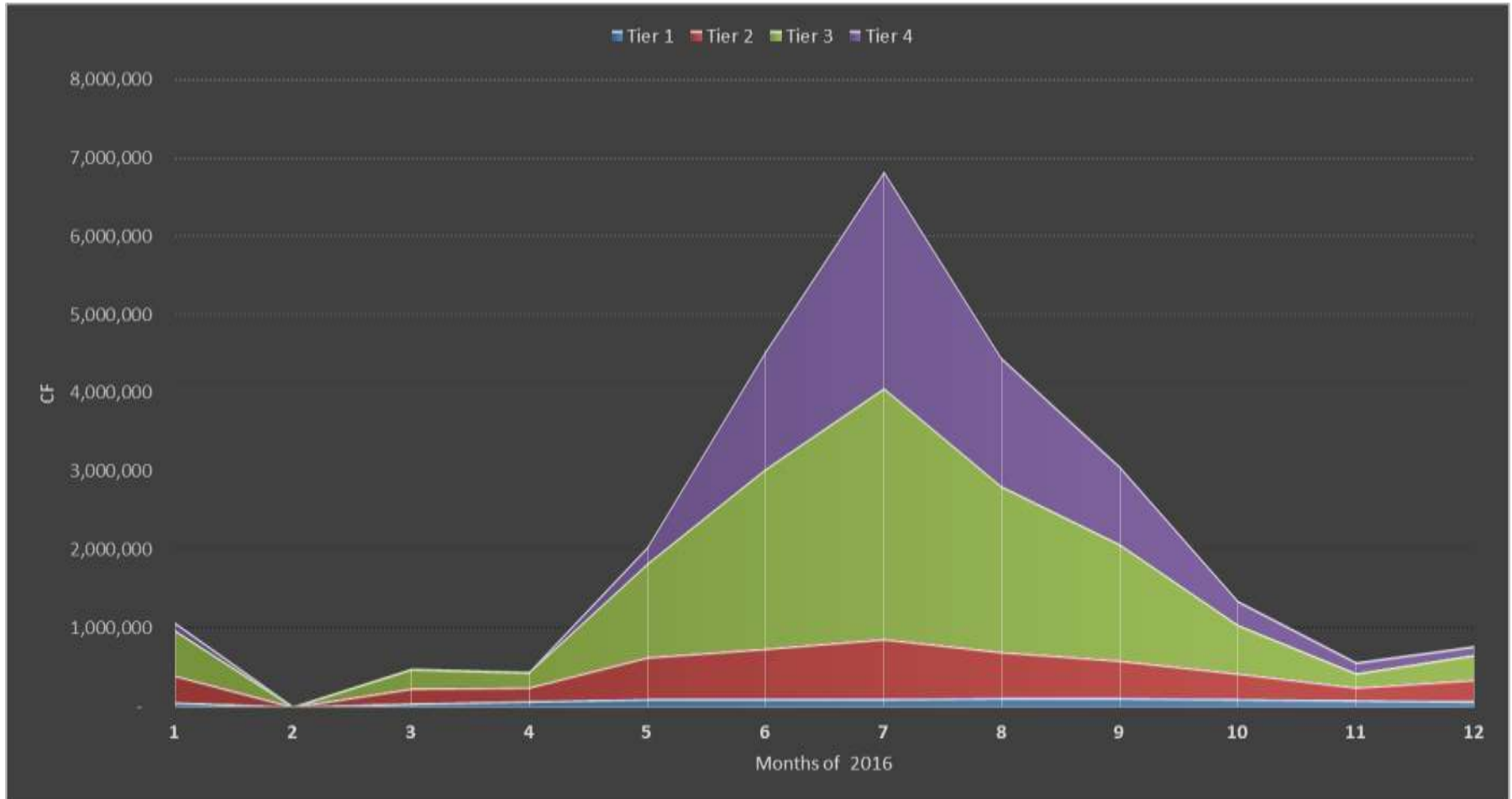
Irrigation System
Efficiency: 70%

Tier 3 = 18 CCF



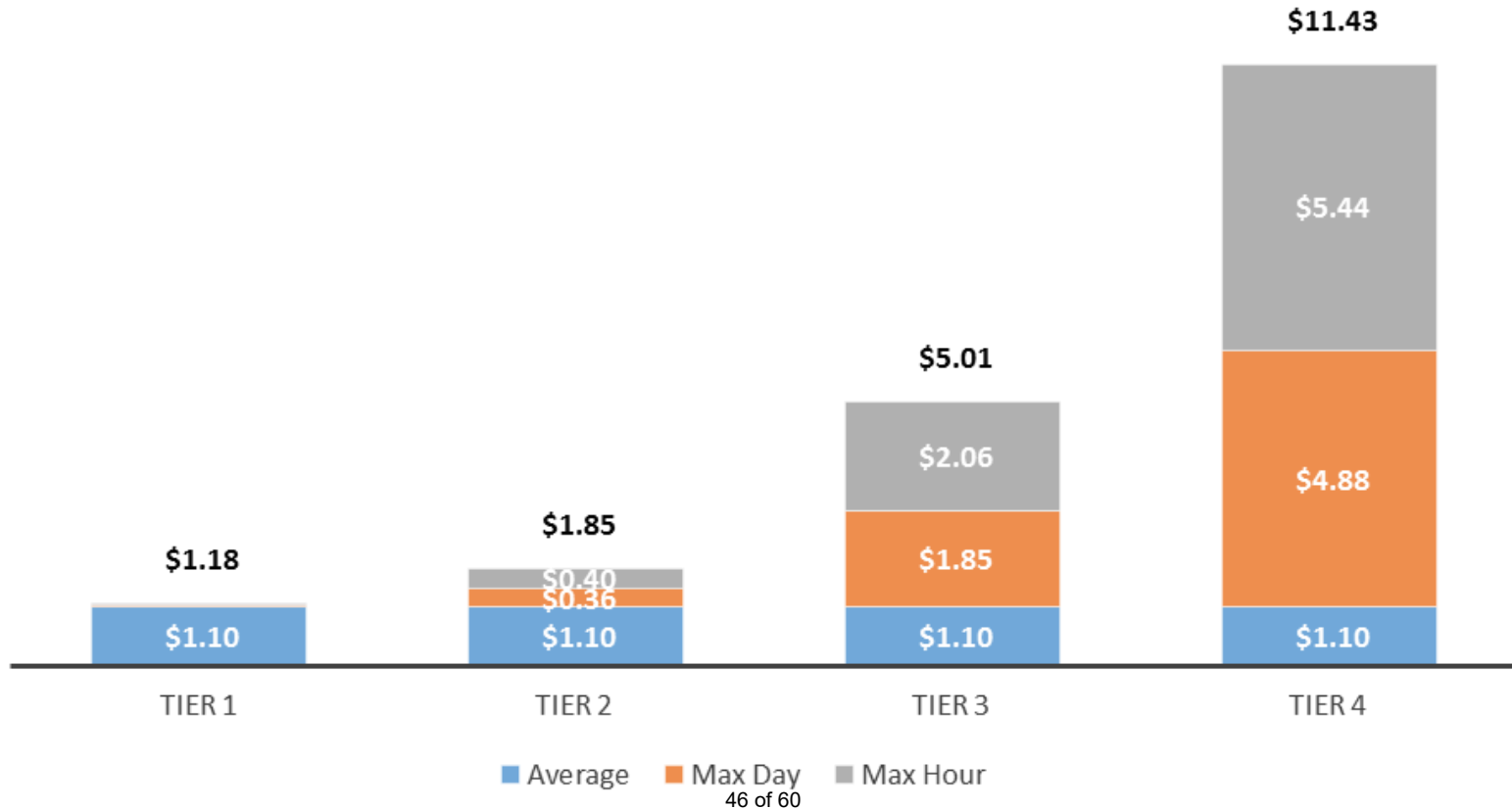
Single Family (Pricing)

29



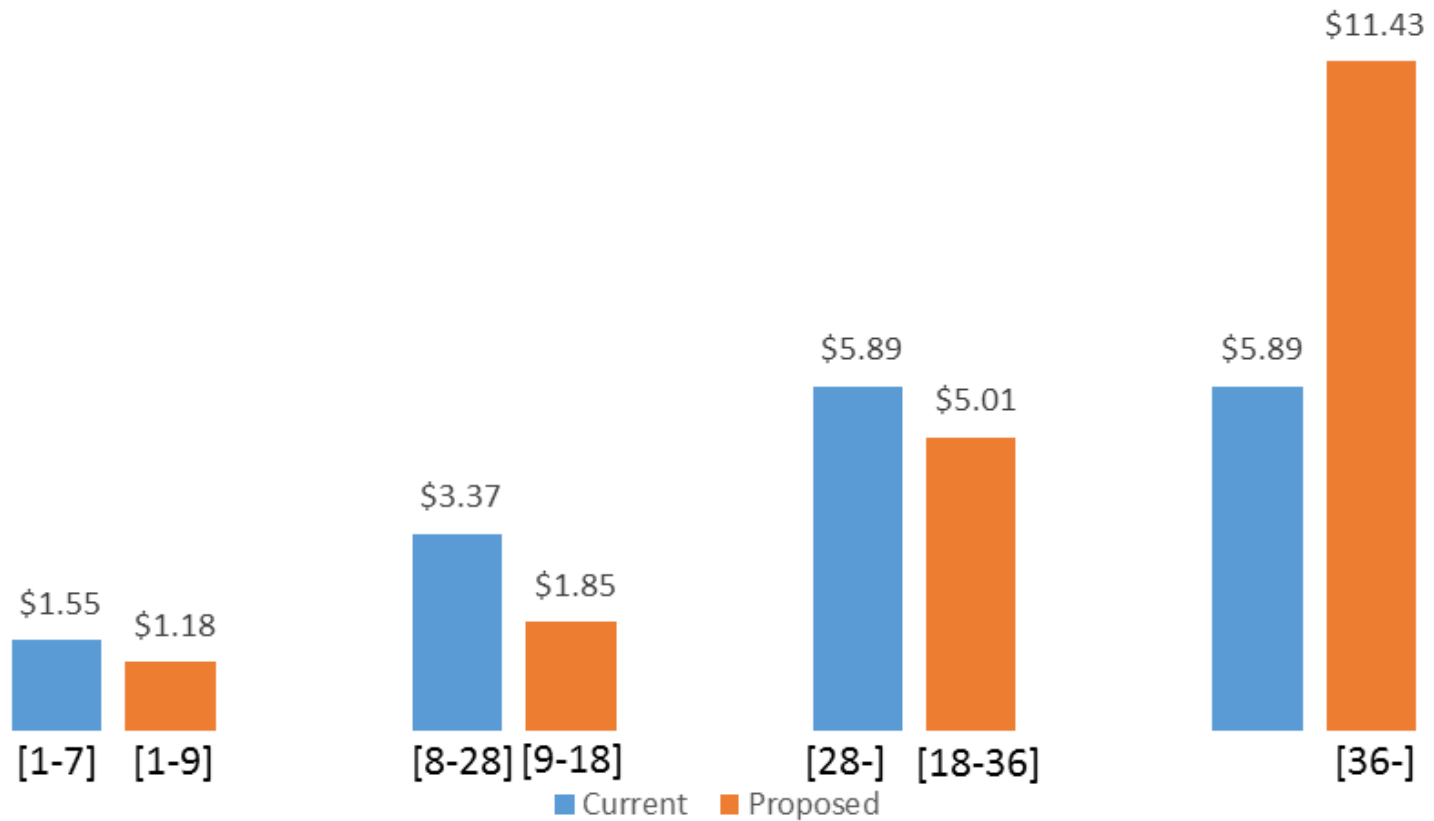
Single Family (Pricing)

30



Single Family (Pricing Cont)

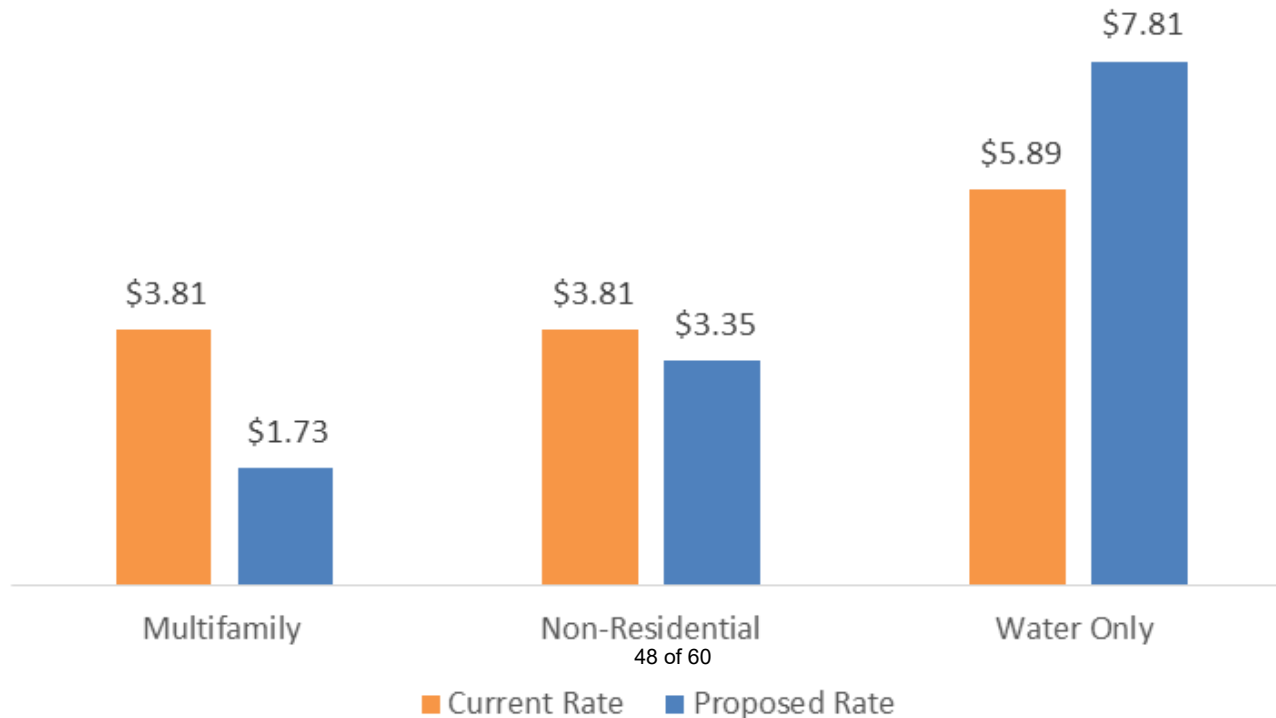
31



Non-Single Family Volumetric

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- Uniform rates updated based on COSA results
- Multifamily Rate
- Consolidated Non-Residential Class



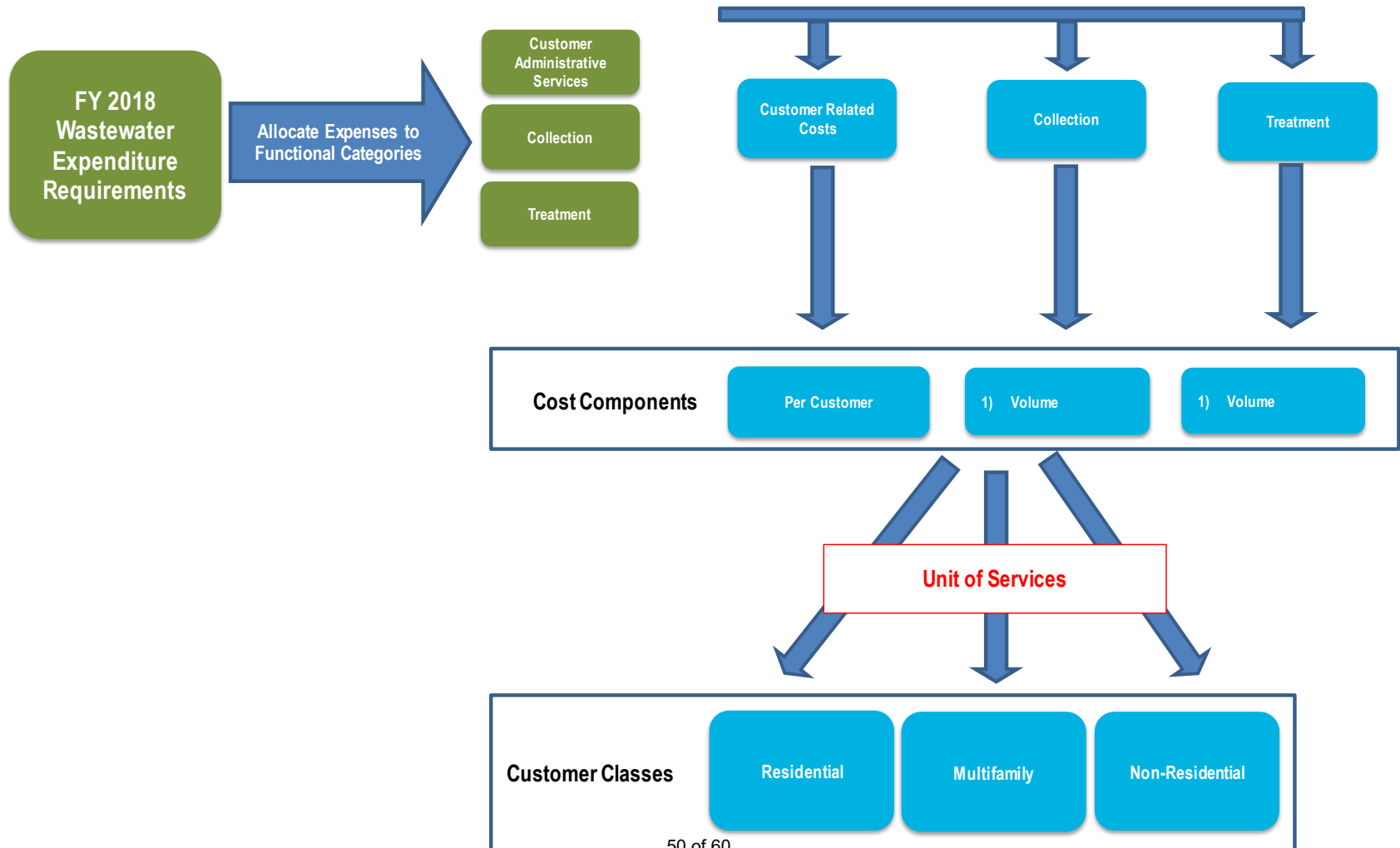
33

Cost of Service Allocation Results

Sewer

Sewer Cost Allocation Framework

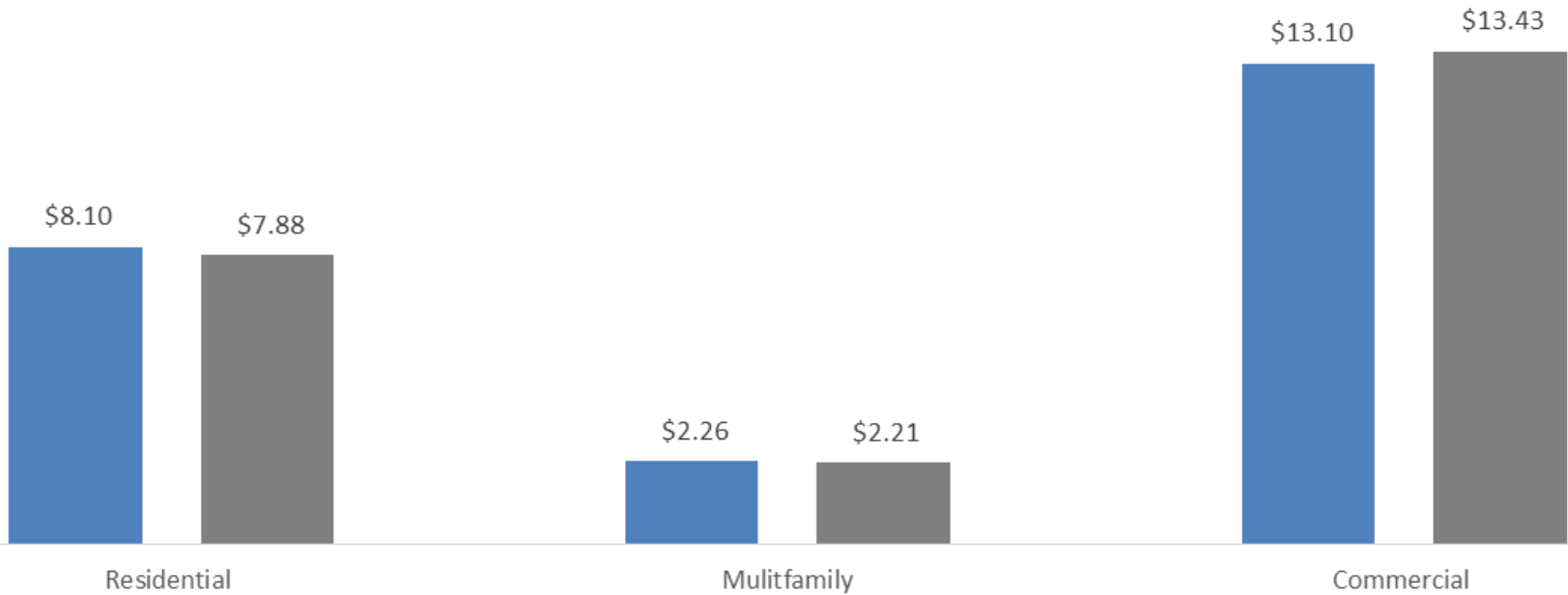
34



COSA Results (\$M)

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■ Current Rate Revenue ■ COSA



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Rate Design

Sewer

Fixed Charges

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Cost Component	Annual Cost	5/8 Meter Example
Customer Related	\$608,735	\$8.28
5% of Average Day Cost	\$363,337	\$3.51
		\$11.79

Fixed Charges (Quarterly)

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Meter Size	Proposed	Current
5/8	\$ 11.79	\$ 10.13
3/4	\$ 13.55	\$ 14.90
1	\$ 17.06	\$ 27.27
1.5	\$ 25.85	\$ 55.80
2	\$ 36.40	\$ 87.30
3	\$ 64.52	\$ 175.50
4	\$ 96.15	\$ 277.20
6	\$ 184.03	\$ 551.70
8	\$ 289.48	\$ 1,102.50
10	\$ 412.50	\$ 1,764.00

Volumetric Rate

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	Calculated	Current
Volume Revenue Requirement	\$ 21,299,190	
Unit of Service HCF	4,715,735	
Rate Per HCF	\$ 4.52	\$ 4.58
Change	-1.38%	

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Rate Impacts

Single Family Bill Impacts

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CCF	Gallons	Agg. %	Current FY 17	Proposed FY 18	\$ Chg	% Chg
0	0	3.2%	\$20.26	\$36.89	\$16.63	82.1%
5	3,740	23.2%	\$50.91	\$65.44	\$14.53	28.5%
10	7,480	51.9%	\$90.66	\$96.67	\$6.01	6.6%
15	11,220	77.2%	\$130.41	\$134.89	\$4.48	3.4%
20	14,960	89.5%	\$170.16	\$182.59	\$12.43	7.3%
30	22,440	96.6%	\$274.86	\$303.67	\$28.81	10.5%

Multi-Family Bill Impacts

2" Meter MF Bill Calculations						
CCF	Gallons	Agg. %	Current MF	Proposed MF	\$ Chg	% Chg
0	-	4.9%	\$174.60	\$103.38	-\$71.22	-40.8%
10	7,480	37.8%	\$258.50	\$165.85	-\$92.65	-35.8%
20	14,960	58.2%	\$342.40	\$228.31	-\$114.09	-33.3%
30	22,440	71.5%	\$426.30	\$290.78	-\$135.52	-31.8%
40	29,920	81.3%	\$510.20	\$353.24	-\$156.96	-30.8%
50	37,400	88.0%	\$594.10	\$415.71	-\$178.39	-30.0%
100	74,800	97.4%	\$1,013.60	\$728.04	-\$285.56	-28.2%
250	187,000	99.9%	\$2,272.10	\$1,665.04	-\$607.06	-26.7%
500	374,000	100.0%	\$4,369.60	\$3,226.69	-\$1,142.91	-26.2%

Commercial Bill Impacts

2" Meter Com Bill Calculations						
CCF	Gallons	Agg. %	Current Com	Proposed Com	\$ Chg	% Chg
0	-	13.0%	\$174.60	\$103.38	-\$71.22	-40.8%
5	3,740	44.9%	\$216.55	\$142.73	-\$73.82	-34.1%
10	7,480	59.5%	\$258.50	\$182.08	-\$76.42	-29.6%
20	14,960	75.5%	\$342.40	\$260.78	-\$81.62	-23.8%
30	22,440	83.5%	\$426.30	\$339.48	-\$86.82	-20.4%
40	29,920	88.5%	\$510.20	\$418.18	-\$92.02	-18.0%
50	37,400	91.5%	\$594.10	\$496.88	-\$97.22	-16.4%
100	74,800	97.6%	\$1,013.60	\$890.38	-\$123.22	-12.2%

Water Only Bill Impacts

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2" Meter Water Only Bill Calculations						
CCF	Gallons	Agg. %	Current Water Only	Proposed Water Only	\$ Chg	% Chg
-	-	61.8%	\$87.30	\$66.99	-\$20.31	-23.3%
5	3,740	72.5%	\$116.75	\$106.04	-\$10.71	-9.2%
10	7,480	77.5%	\$146.20	\$145.09	-\$1.11	-0.8%
15	11,220	83.1%	\$175.65	\$184.14	\$8.49	4.8%
20	14,960	86.7%	\$205.10	\$223.19	\$18.09	8.8%
25	18,700	89.5%	\$234.55	\$262.24	\$27.69	11.8%
30	22,440	91.5%	\$264.00	\$301.29	\$37.29	14.1%