

Utility Rate Study Update

**Neighborhood Advisory Commission
and Sustainability Commission**

August 2017



Tempe

Making waves in the desert



Guiding Principles

- We are reliant on limited resources
- Everyone is responsible to conserve
- Everyone pays their fair and proportionate share
- We must be transparent



Outreach Process - Completed

- Focus Groups (4) – feelings and emotions
- Water Conservation Working Group (2)
- Small group meetings with Mayor/Council(3)
- Public Meetings (2)
- HOA meetings upon request (1)
- Raintree pilot and Irrigation Efficiency Rebate program

Solid Waste



Focus Group Key Takeaways – Solid Waste

1 All fully accept cost increases are coming, but have mixed feelings about the program offerings; prefer new programs that lessen future rate increases

- 2
- Green waste bins receive significant interest
 - Same-day pickup receives muted interest overall
 - Save Money And Recycle Tempe (SMART) receives interest from curbside group
-

3 Recycling is highly valued by homeowners



Solid Waste Residential Study Objectives

Goal 40% Diversion by 2020



Green Organics
& Landscaping



Parks & Rec
Recreation



Pricing Parity
& Smart

- Expand Green Organics
 - Third Container
 - Drop Off (landscapers and residential)
- Pricing Parity for MultiFamily Accounts
- Save Money And Recycle Tempe (SMART)



SMART Pricing Model

- Priced By Container Size vs Single Rate for Everyone
 - **Opt-In** for Curbside Customers
 - Incentivizes Small Containers
 - Increases Diversion





Residential SMART Program Proposed Rates

<u>One Can, One Pick up:</u>	Container Size (Gallons)		
	96 or Shared 300 (Alley)	65	48
SFR Collection	\$14.31	\$14.31	\$14.31
SFR Disposal	\$10.78	\$7.30	\$5.39
Total SFR Bill	\$25.09	\$21.61	\$19.70
Dollar Change	\$1.49	(\$1.99)	(\$3.90)
Percentage Change	6.3%	-8.4%	-16.5%
Current Rate	\$23.60		

Water & Sewer



Focus Group Key Takeaways – Water



- 1** Generally open to and expect reasonable rate changes, but would like:
 - Equitable structure (SFR, irrigation users, multifamily, businesses, etc.)
 - Transparency in billing: a detailed and defensible breakdown of fees

- 2** Desire acknowledgement of existing vegetation (trees, gardens) and incentives that recognize value of vegetation to city

- 3** Would prefer a comprehensive, long-term water plan that details updates to infrastructure and provides rationale for periodic rate increases



Water and Sewer Study Objectives

- Single Family Residential
 - Inclining Block Structure Changes
 - Sewer Cap
- Flood Irrigation
 - 50% Program cost recovery



Single Family Residential

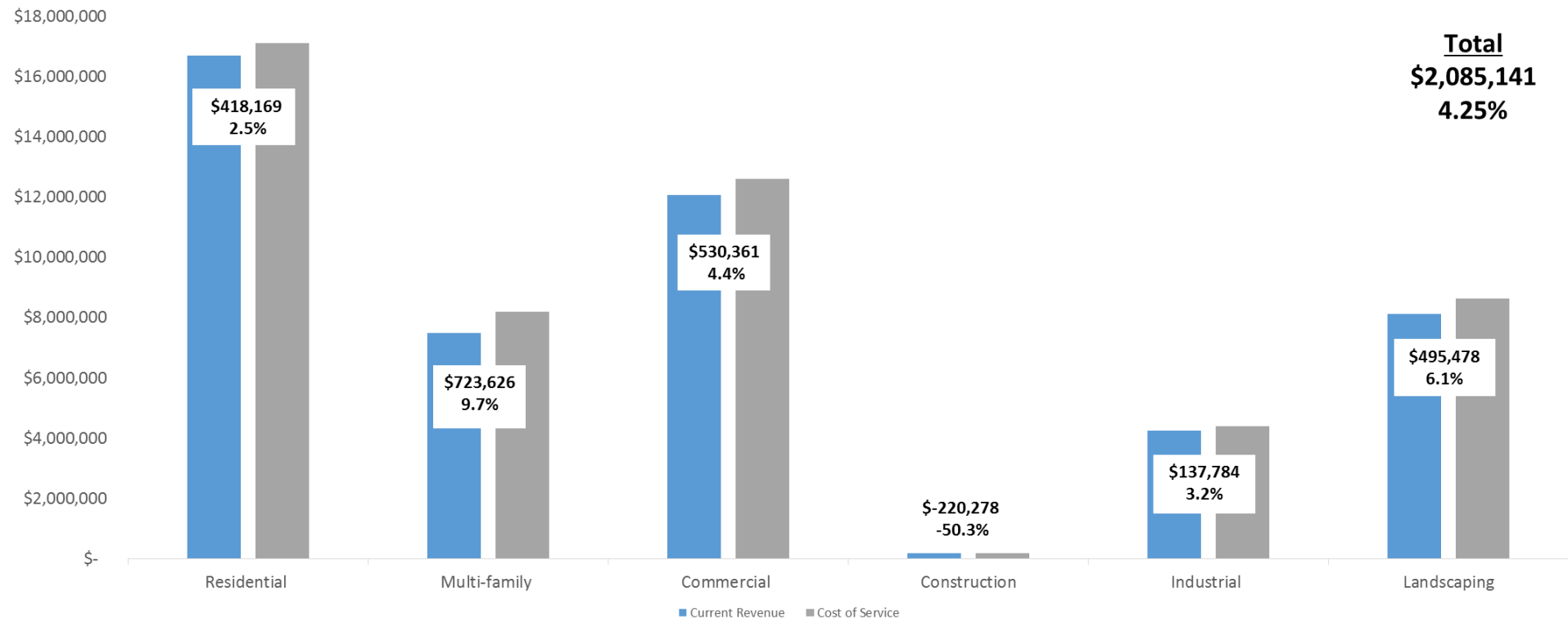


Flood Irrigation

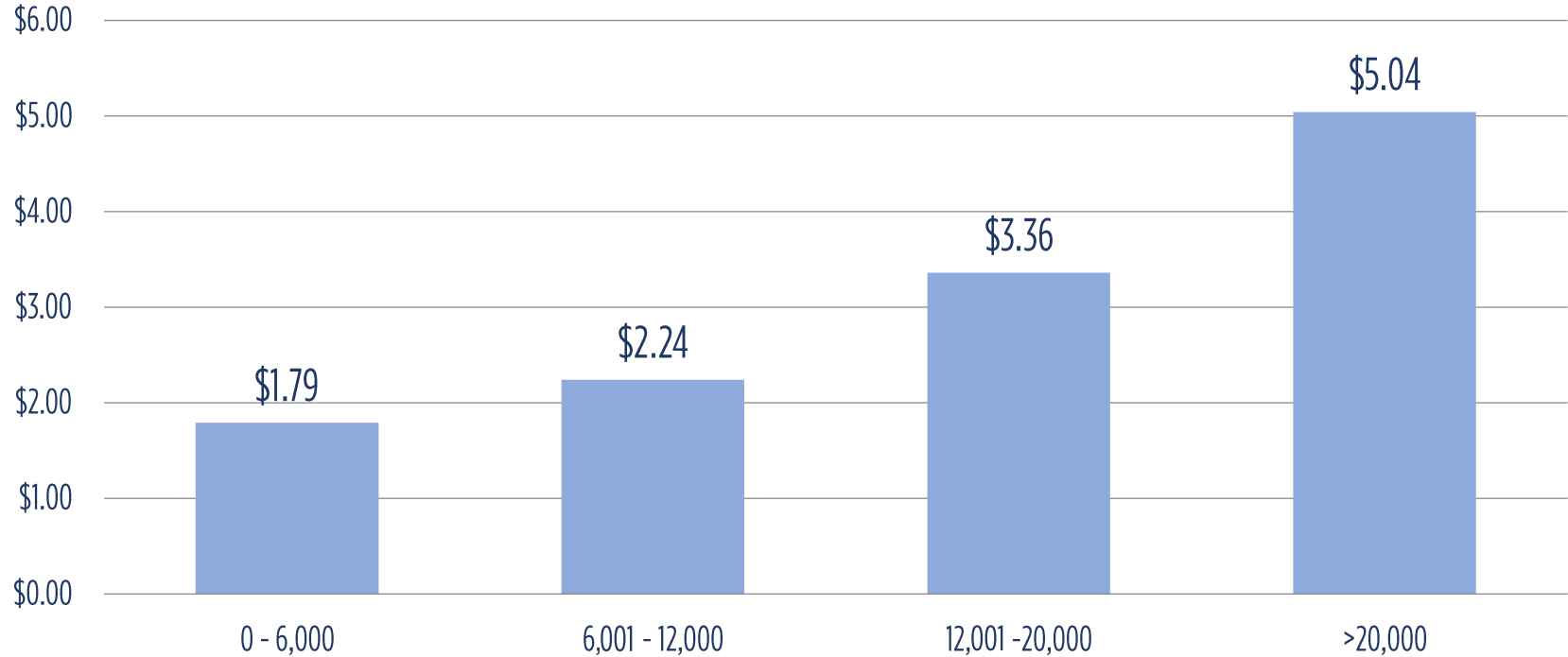


Inclining Block Structure Changes

Water Cost of Service Results



Existing SFR Rate Structure



■ 2016 Tier Rates



Monthly SFR Tier Sizing

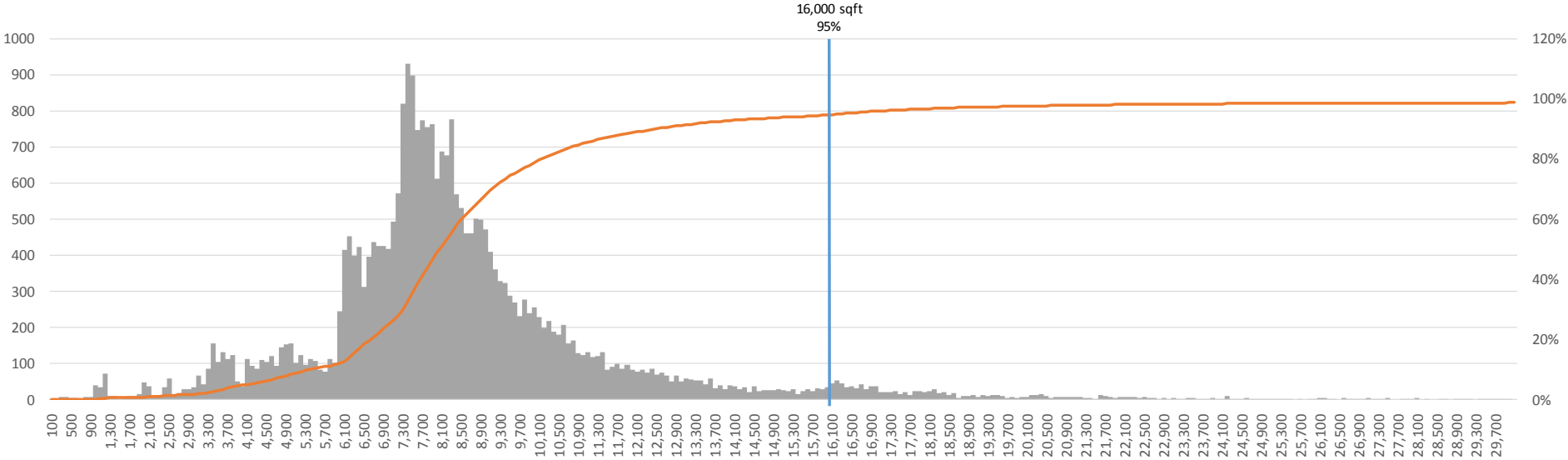
Tier 1



Tier 2



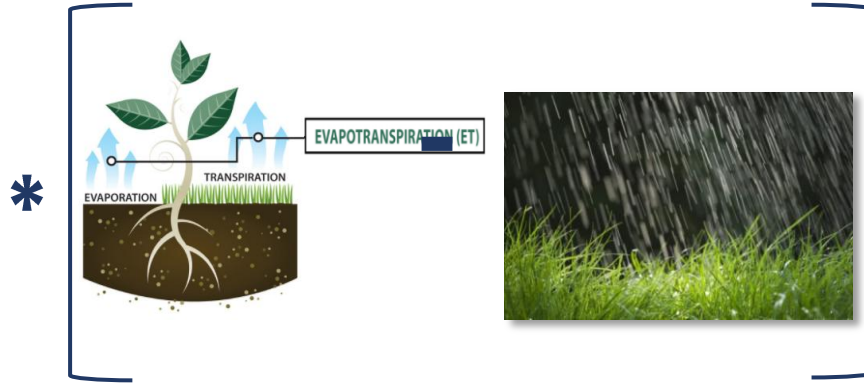
Single Family Parcel Distribution



How to Calculate Irrigation Requirements for the Median Parcel (8,000 sqft) Tier 3



Parcel Size: 8,000
Landscape Area: 2,000



Evapotranspiration: 81 Inches



Beneficial Rainfall: 4 Inches

Crop Type



Irrigation System
Efficiency: 70%

= 8,000 GAL

How to Calculate Irrigation Requirements for a Larger Parcel (16,000 sqft) Tier 4



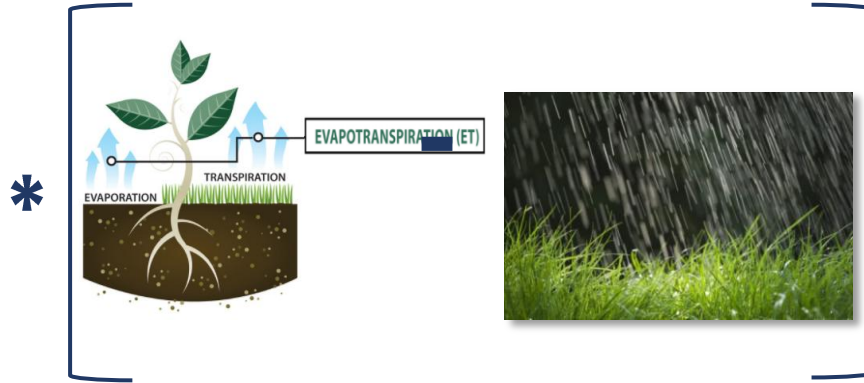
Crop Type



Irrigation System
Efficiency: 70%



Parcel Size: 16,000
Landscape Area: 6,500

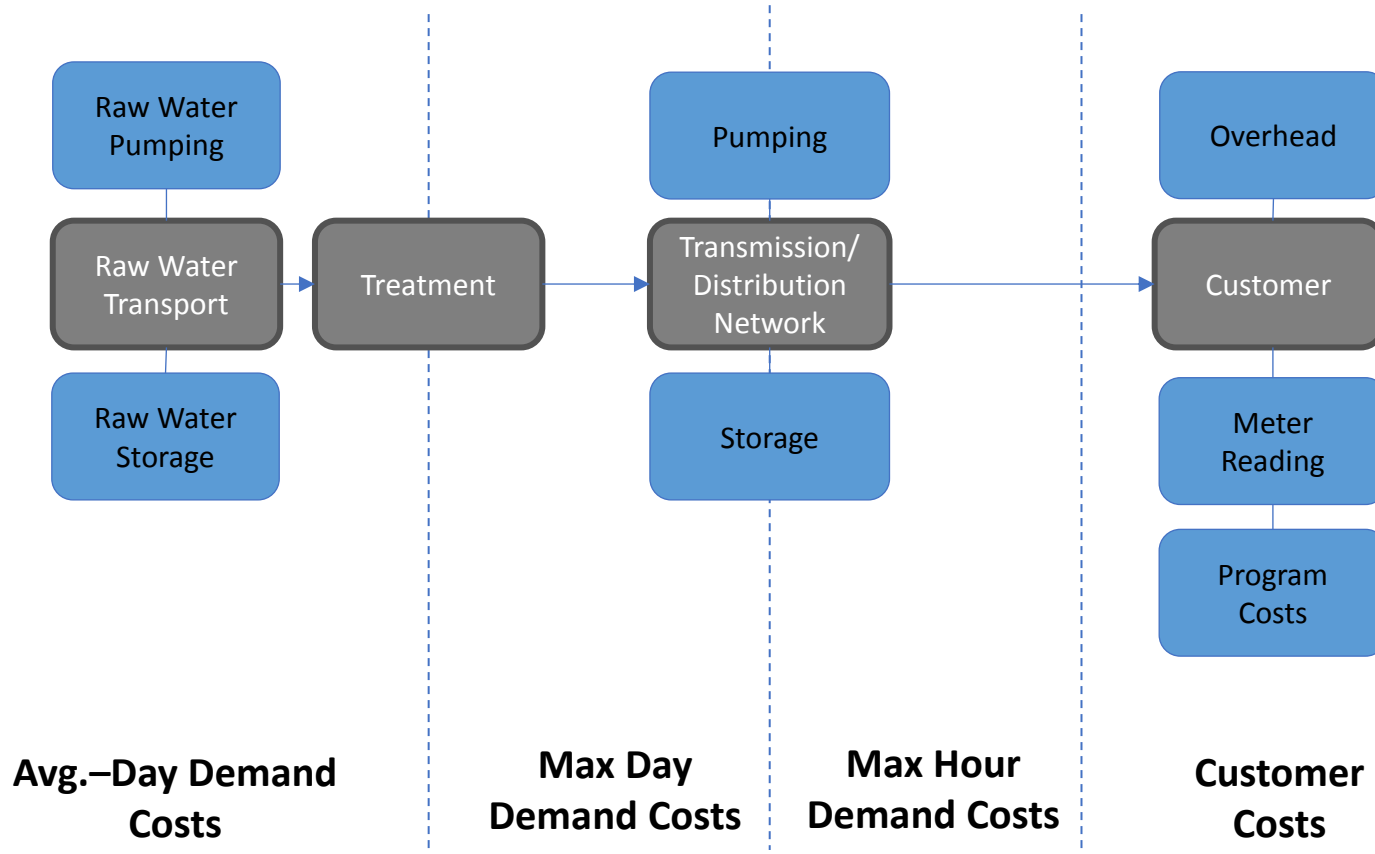


Evapotranspiration: 81 Inches

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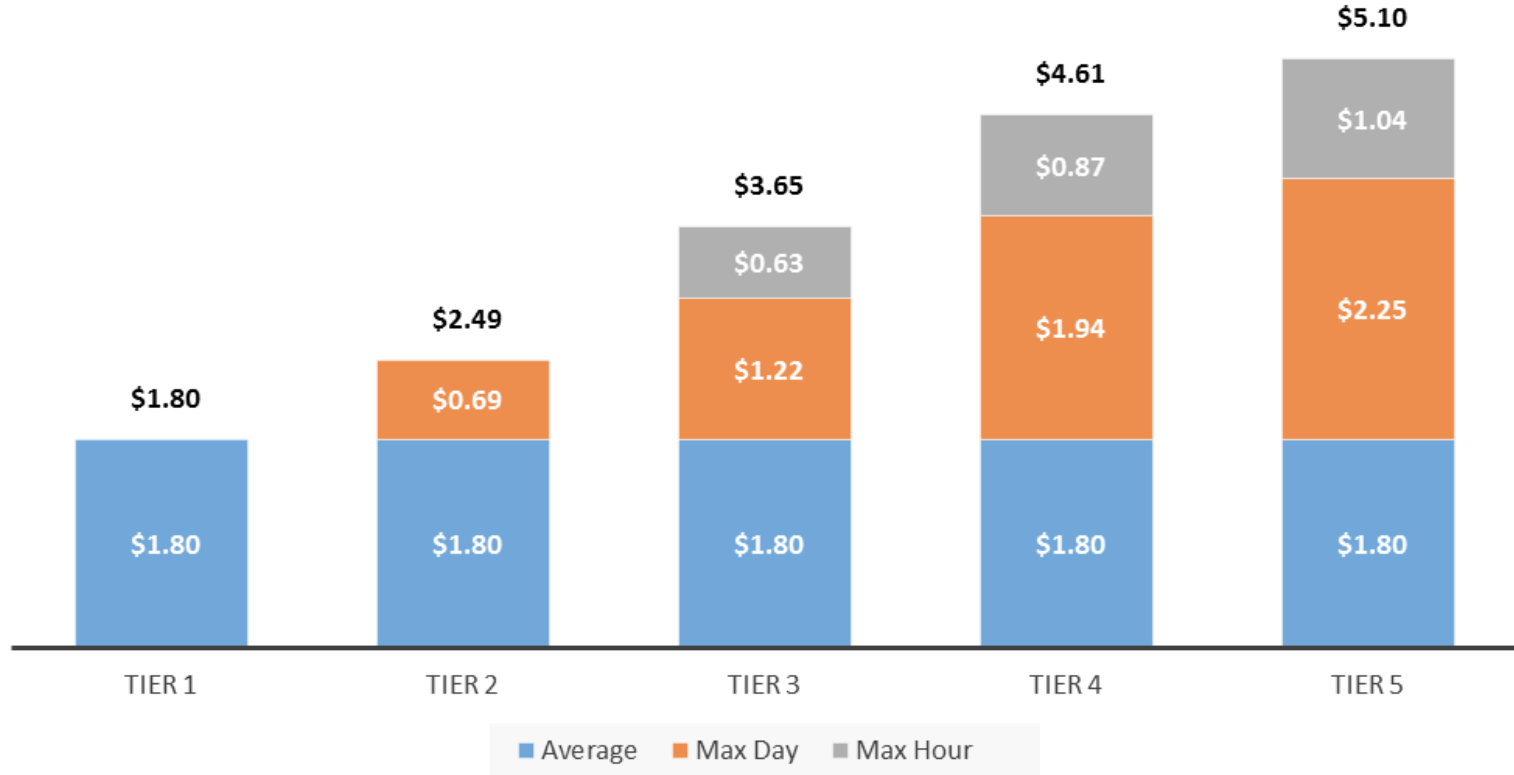
= 28,000 GAL

SFR Rate Tier Pricing Criteria

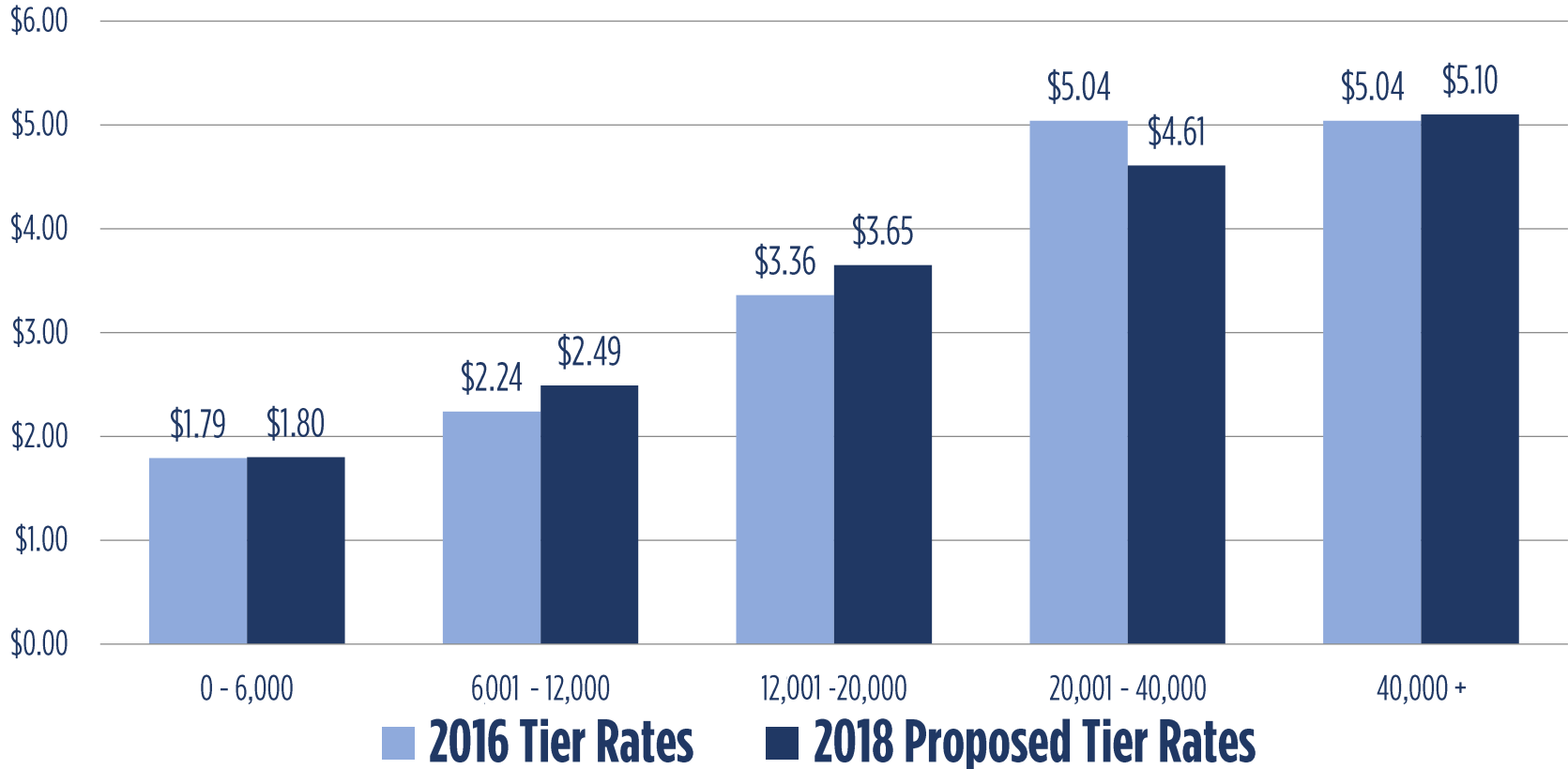




Proposed SFR Tier Pricing



Proposed SFR Rate Structure





Average Residential Combined Bill

	Current	Proposed
Water (10,000 GAL)	\$ 31.20	\$ 32.26
Sewer (7,000 GAL)	\$ 23.18	\$ 23.18
Sanitation (96 Gallon Container)	\$ 23.60	\$ 25.09
Total	\$ 77.98	\$ 80.53
		\$ 2.55
		3.27%



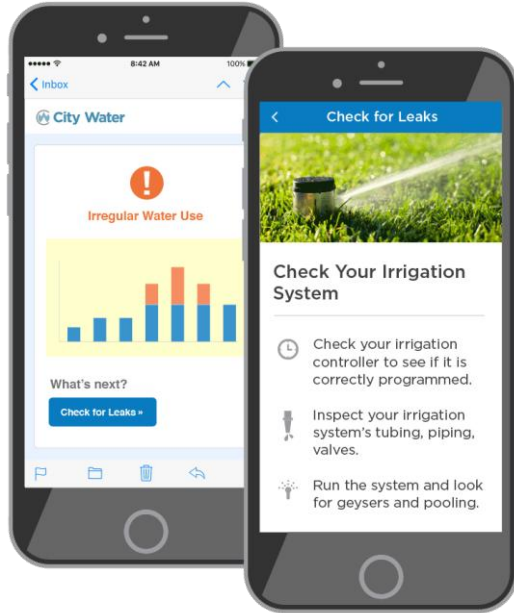
Large Residential Combined Bill

	Current	Proposed
Water (50,000 GAL)	\$ 213.76	\$ 209.64
Sewer (28,000 GAL / 12,000 Gal*)	\$ 61.82	\$ 32.38
Sanitation (96 Gallon Container)	\$ 23.60	\$ 25.09
Total	\$ 299.18	\$ 267.11
		\$ (32.07)
		-10.72%

*Proposed structure Caps Sewer bill calculation at 12,000 Gallons



Customer Portal Implementation



- Promotes transparency through online access to info.
- Empowers customers to better understand and manage water use
 - Historical consumption
 - Social comparisons
- Water conservation
 - Water saving tools and techniques
 - Leak resolution
- Improved communication
 - Targeted messaging
 - Send automated alerts, reminders, and notifications
- Payment Options



Timeline of Next Steps

- Neighborhood Advisory Commission – August 5
- Sustainability Commission – August 21
- Council WSS – September 7
- Public meetings – September 23 and 27
- Council adoption of rates – November
- Rates become effective January 1, 2018

Questions Discussion

SFR Bill Impacts (90% of Bills)



Residential 5/8" Meter Water & Sewer Bill Calculations							
Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current FY 17	Proposed FY 18	\$ Chg	% Chg
0	10,230	3.3%	3.3%	\$21.80	\$21.80	\$0.00	0.0%
1,000	14,586	4.7%	8.1%	\$24.88	\$24.89	\$0.01	0.0%
2,000	20,206	6.6%	14.7%	\$27.96	\$27.98	\$0.02	0.1%
3,000	23,191	7.6%	22.2%	\$31.03	\$31.06	\$0.03	0.1%
4,000	23,842	7.8%	30.0%	\$34.11	\$34.15	\$0.04	0.1%
5,000	23,024	7.5%	37.5%	\$37.19	\$37.24	\$0.05	0.1%
6,000	20,737	6.8%	44.2%	\$40.27	\$40.33	\$0.06	0.1%
7,000	18,643	6.1%	50.3%	\$43.80	\$44.11	\$0.31	0.7%
8,000	16,730	5.4%	55.7%	\$47.32	\$47.88	\$0.56	1.2%
9,000	14,677	4.8%	60.5%	\$50.85	\$51.66	\$0.81	1.6%
10,000	13,040	4.2%	64.8%	\$54.38	\$55.44	\$1.06	1.9%
11,000	11,286	3.7%	68.4%	\$57.91	\$59.22	\$1.31	2.3%
12,000	10,057	3.3%	71.7%	\$61.44	\$63.00	\$1.56	2.5%
13,000	9,057	2.9%	74.7%	\$66.08	\$67.93	\$1.85	2.8%
14,000	8,031	2.6%	77.3%	\$70.73	\$72.87	\$2.14	3.0%
15,000	7,288	2.4%	79.6%	\$75.38	\$77.81	\$2.43	3.2%
16,000	6,251	2.0%	81.7%	\$80.03	\$82.75	\$2.72	3.4%
17,000	5,748	1.9%	83.5%	\$84.68	\$87.69	\$3.01	3.6%
18,000	4,992	1.6%	85.2%	\$89.32	\$91.52	\$2.20	2.5%
19,000	4,517	1.5%	86.6%	\$93.97	\$95.17	\$1.20	1.3%
20,000	4,131	1.3%	88.0%	\$98.62	\$98.82	\$0.20	0.2%
21,000	3,569	1.2%	89.2%	\$104.95	\$103.43	-\$1.52	-1.4%
22,000	3,233	1.1%	90.2%	\$111.28	\$108.04	-\$3.24	-2.9%



SFR Bill Impacts (Top 10% of Bills)

Residential 5/8" Meter Water & Sewer Bill Calculations							
Monthly Use (Gal)	# of Bills	% of Bills	Agg. %	Current FY 17	Proposed FY 18	\$ Chg	% Chg
23,000	3,038	1.0%	91.2%	\$117.60	\$112.65	-\$4.95	-4.2%
24,000	2,589	0.8%	92.0%	\$123.93	\$117.26	-\$6.67	-5.4%
25,000	2,405	0.8%	92.8%	\$130.26	\$121.87	-\$8.39	-6.4%
26,000	2,087	0.7%	93.5%	\$136.59	\$126.48	-\$10.11	-7.4%
27,000	1,923	0.6%	94.1%	\$142.92	\$131.09	-\$11.83	-8.3%
28,000	1,649	0.5%	94.7%	\$149.24	\$135.70	-\$13.54	-9.1%
29,000	1,566	0.5%	95.2%	\$155.57	\$140.31	-\$15.26	-9.8%
30,000	1,357	0.4%	95.6%	\$161.90	\$144.92	-\$16.98	-10.5%
40,000	487	0.2%	98.2%	\$225.18	\$191.02	-\$34.16	-15.2%
50,000	198	0.1%	99.2%	\$288.46	\$242.02	-\$46.44	-16.1%
100,000	10	0.0%	100.0%	\$604.86	\$497.02	-\$107.84	-17.8%