

Water Conservation Rate Structure



City Council Work Session

March 29, 2022



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& ASSOCIATES

Table 9
Implementation Schedule, Measurement of Progress & Progress Report

New Conservation Practices	Implementation Timeline	Measurement of Progress	Progress Report
Annual Tracking of Water Conservation Progress	Ongoing	Per capita water use compared to 2015 (gallons per capita per day – GPCD)	2021 = 204 gcpd 2020 = 241 gpcd We continue track daily water use in the city.
Water Shortage and Drought Plan	Complete by 2022	Completion of report with associated recommendations	Will initiate this effort in Q2 of 2022.
Utility Bill Improvements	Begin in 2022	Implementation of conservation messaging	New bill went live to all customers in January 2022 (sample attached).
Continued Public Education Efforts	Ongoing	Overall reduction of citywide water consumption	Ongoing and including: social media outreach, website updates, etc.
Water Conservation Classes	Begin in 2022	Hold a class session per quarter for the next five years and incorporate online course offerings.	First “Water Conservation and Education” modules for K-12 public school teachers going live Q1 of 2022.
Localscapes Rebate	Begin in 2021	Number of landscapes on existing City and residential properties that include xeriscaping techniques	19 applications received in 2021. Currently planning for spring of 2022.
Flip Your Strip Rebate	Begin in 2021	Number of park strips converted/participating residents within annual period	84 applications received in 2021 Currently planning for spring of 2022.
Update City Ordinances Regarding Water Conservation	Complete by 2025	Present results to City Council in 2023	Pending.
Propose Additional City Ordinances Regarding Water Conservation to City Council	Complete by 2025	Present results to City Council through next five years	Pending.
Evaluation of Current Water Rate Structure to Further Incentivize Conservation	Complete in 2022	Completion of report with associated recommendations	Underway. Will be completed during Q1 and Q2 of 2022.
AWWA Water Audit Program	Complete by 2022	Completed audit score and record	2020 audit completed in Q4 of 2021. 2021 audit starts in Q1 of 2022.

HOW DO WATER RATES WORK?



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Components of Water Rates

- Base Rate (fixed monthly costs)
- Volumetric Rates (costs that change with use)

EXISTING SANDY WATER RATES AND EXAMPLE BILL

SANDY WATER RATES

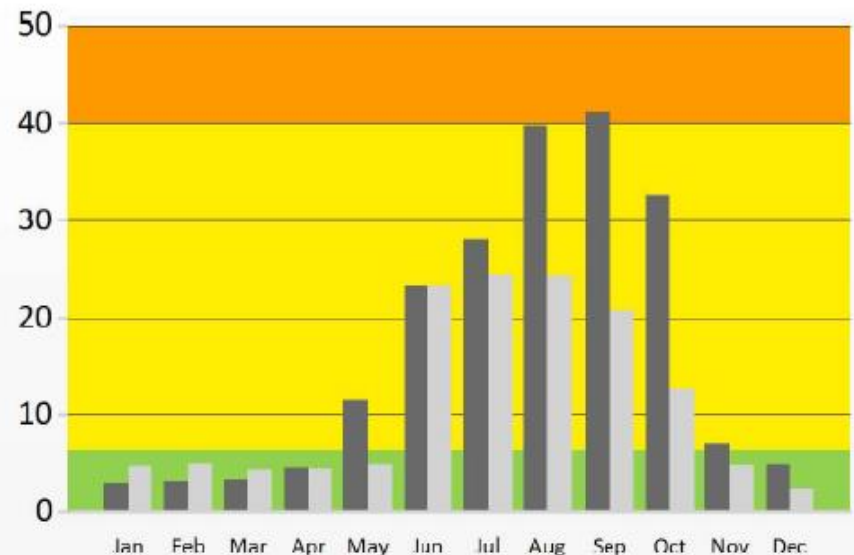
Base Rate - \$14.43 for a 3/4" meter
 Block 1 - \$1.64 per 1,000 gal. up to 6,000
 Block 2 - \$2.53 per 1,000 gal. from 6,001 to 40,000
 Block 3 - \$2.98 per 1,000 gal. from 40,001 to 80,000
 Block 4 - \$3.42 per 1,000 gal. over 80,000

YOUR METER INFORMATION

Serial Number	Meter Size	Billing Days	Previous Read	Current Read	Thousands of Gallons Used
0079753090	3/4"	17	1176089	1178407	2

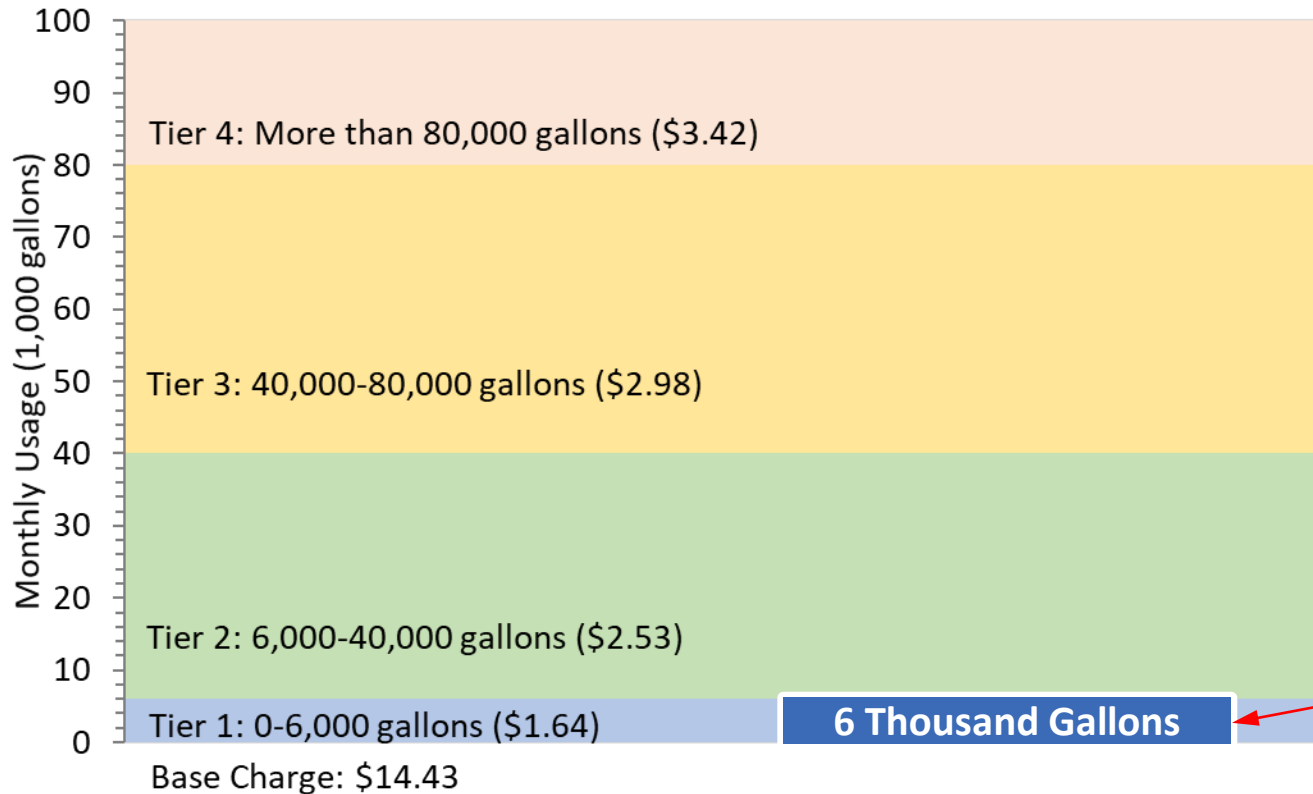
Average Gallons per Day: 136

YOUR WATER USAGE IN THOUSAND GALLONS



How Volumetric Rates Work

Example 6,000 Gallon Bill



Tier 1: $\$1.64 \times 6 = \9.84

Base Charge = \$14.43

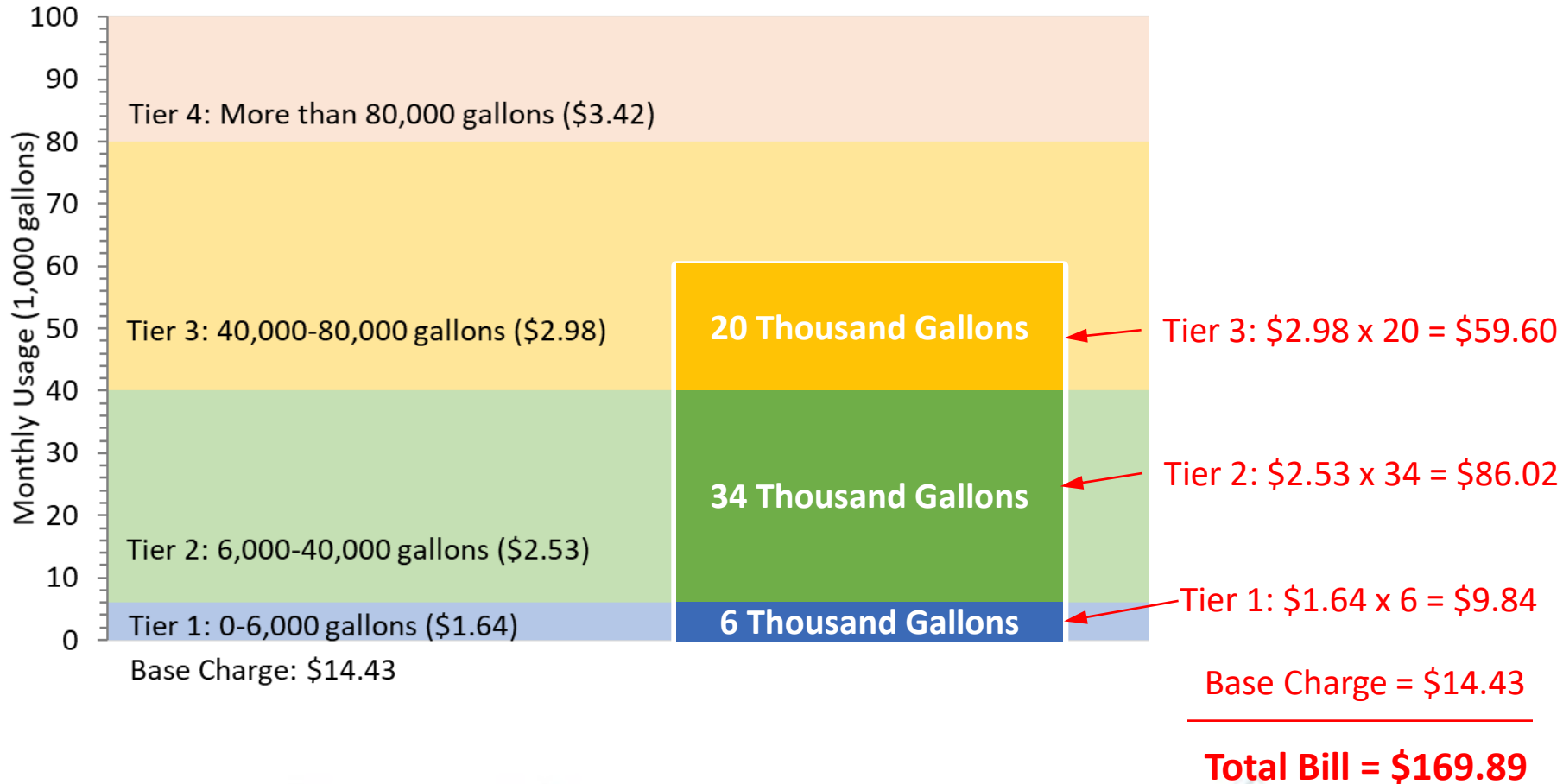
Total Bill = \$24.27



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How Volumetric Rates Work

Example 60,000 Gallon Bill



POTENTIAL CONSERVATION RATE STRUCTURE



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Conservation Rate Structure Process

Staff

- Staff and consultants develop 3 rates scenarios

PUAB

- Presentation of 3 scenarios at Feb. 17 meeting. Revise one scenario for presentation to public.

Public Town Hall

- Presentation of preferred scenario at public open house Feb. 28. Gather feedback.

PUAB

- Incorporation of public comments into revised scenario and presentation on Mar. 17

City Council

- Presentation to City Council of recommended scenario (Scenario D) on March 29

Overall Conclusions/Recommendations from Rate Structure Process ("What are we trying to accomplish and why?")



Conservation

Conservation is important to the City's long-term water supply strategy. Rates should encourage the wise use of water.



Fairness

Rates should fairly allocate costs based on how people are using water.



Affordability

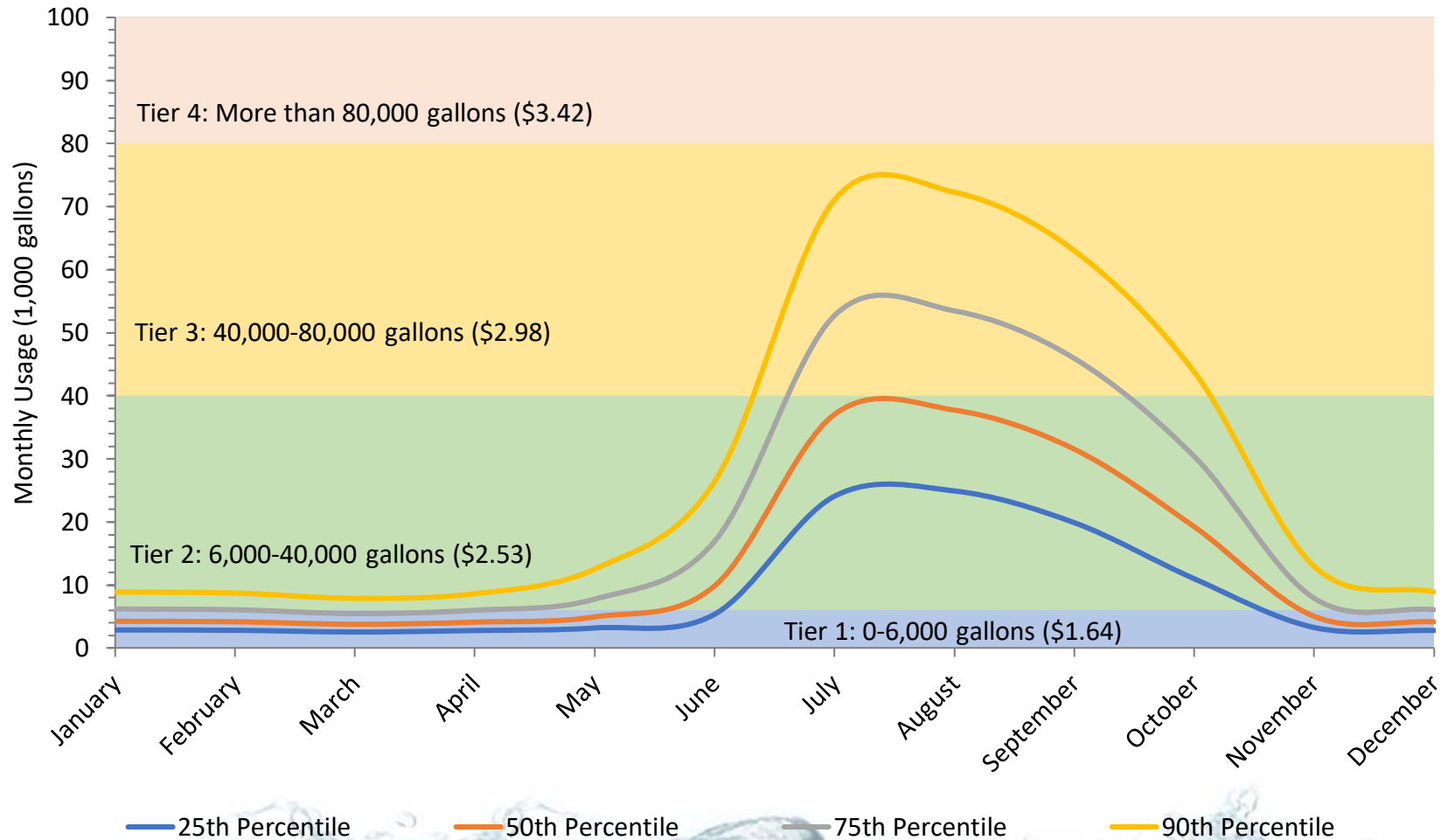
Rates need to be affordable for essential uses and should provide adequate water in lower tiers for responsible landscaping.

Conservation: How Do We Compare?

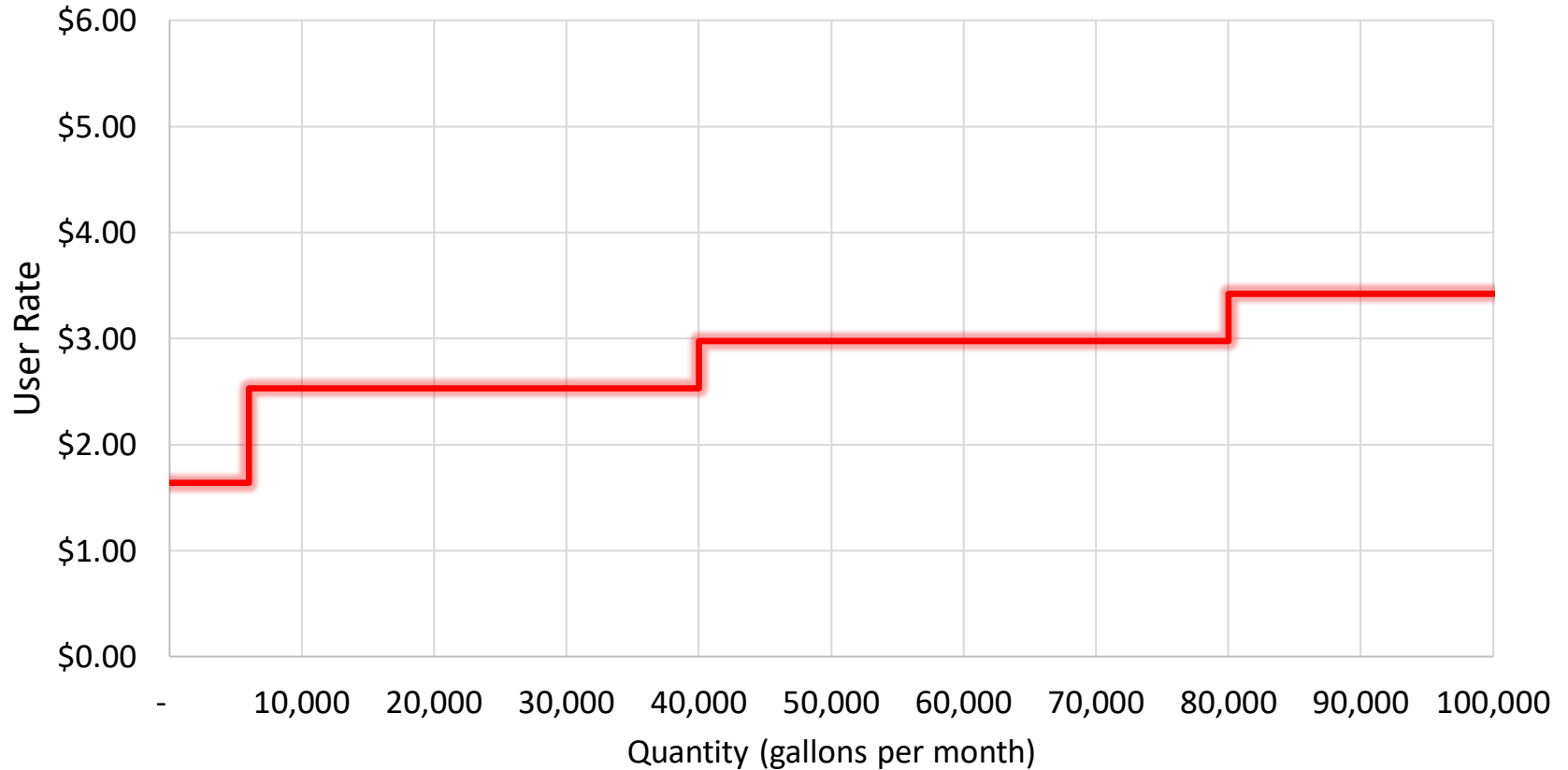
City:	Base Rate	Tier 1 (Thou. Gal.)	Tier 2 (Thou. Gal.)	Tier 3 (Thou. Gal.)	Tier 4 (Thou. Gal.)	Tier 5 (Thou. Gal.)
Sandy	\$14.43	0-6 (\$1.64)	6-40 (\$2.53)	40-80 (\$2.98)	80+ (\$3.42)	
S. Jordan	\$30.00	0-6 (\$2.00)	6-17 (\$2.25)	17-42 (\$2.50)	42-74 (\$2.75)	74+ (\$3.00)
Draper	\$20.25	0-5 (\$2.05)	5-20 (\$3.46)	20-50 (\$3.71)	50-100 (\$3.95)	100+ (\$4.21)
W. Jordan	\$20.00	0-7 (\$2.25)	7-25 (\$3.65)	25-50 (\$3.85)	50-100 (\$4.10)	100+ (\$4.75)
Kearns	\$12.08	0-10 (\$2.42)	10-25 (\$3.04)	25-45 (\$4.13)	45+ (\$5.90)	
SLC	\$9.28	0-7 (\$1.37)	7-22 (\$1.87)	22-45 (\$2.59)	45+ (\$2.76)	
WVC	\$13.00	0-7 (\$1.77)	7-15 (\$1.90)	15+ (\$2.05)		
JVWCD	\$3.00	0-9 (\$2.07)	9-23 (\$2.92)	23-53 (\$3.92)	53+ (\$4.83)	
Las Vegas	\$13.92	0-7 (\$1.40)	7-14 (\$2.50)	14-27 (\$3.71)	27+ (\$5.51)	
Denver	\$17.22	0-6 (\$2.44)	6-21 (\$4.39)	21+ (\$5.86)		



Conservation: Existing Usage Characteristics

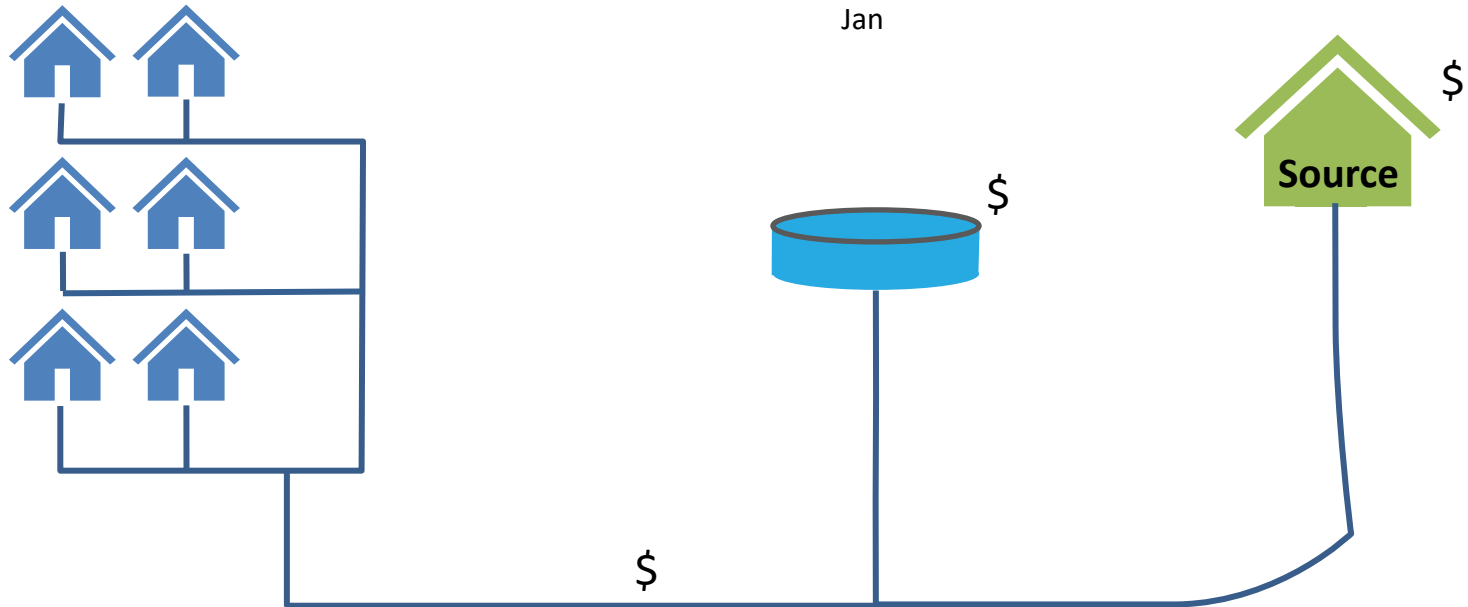


Fairness and Affordability: Cost of Service

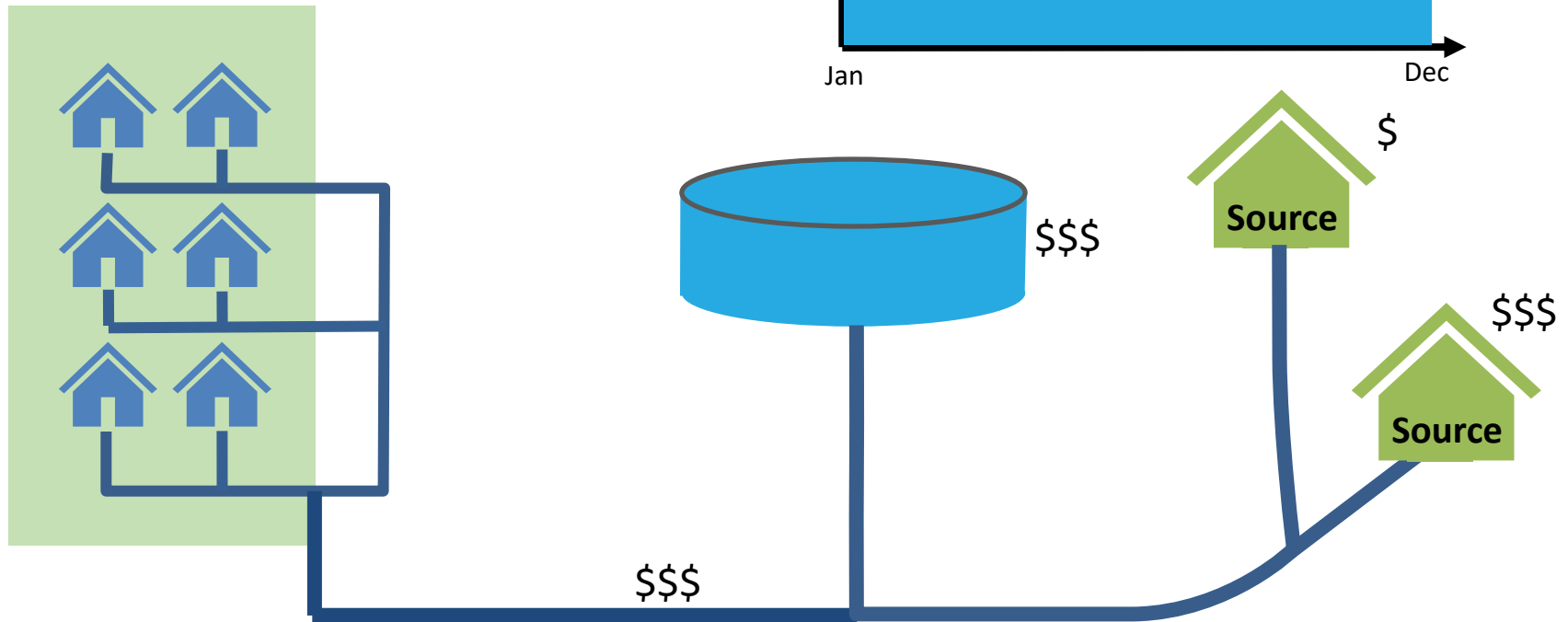


— Sandy (Existing)

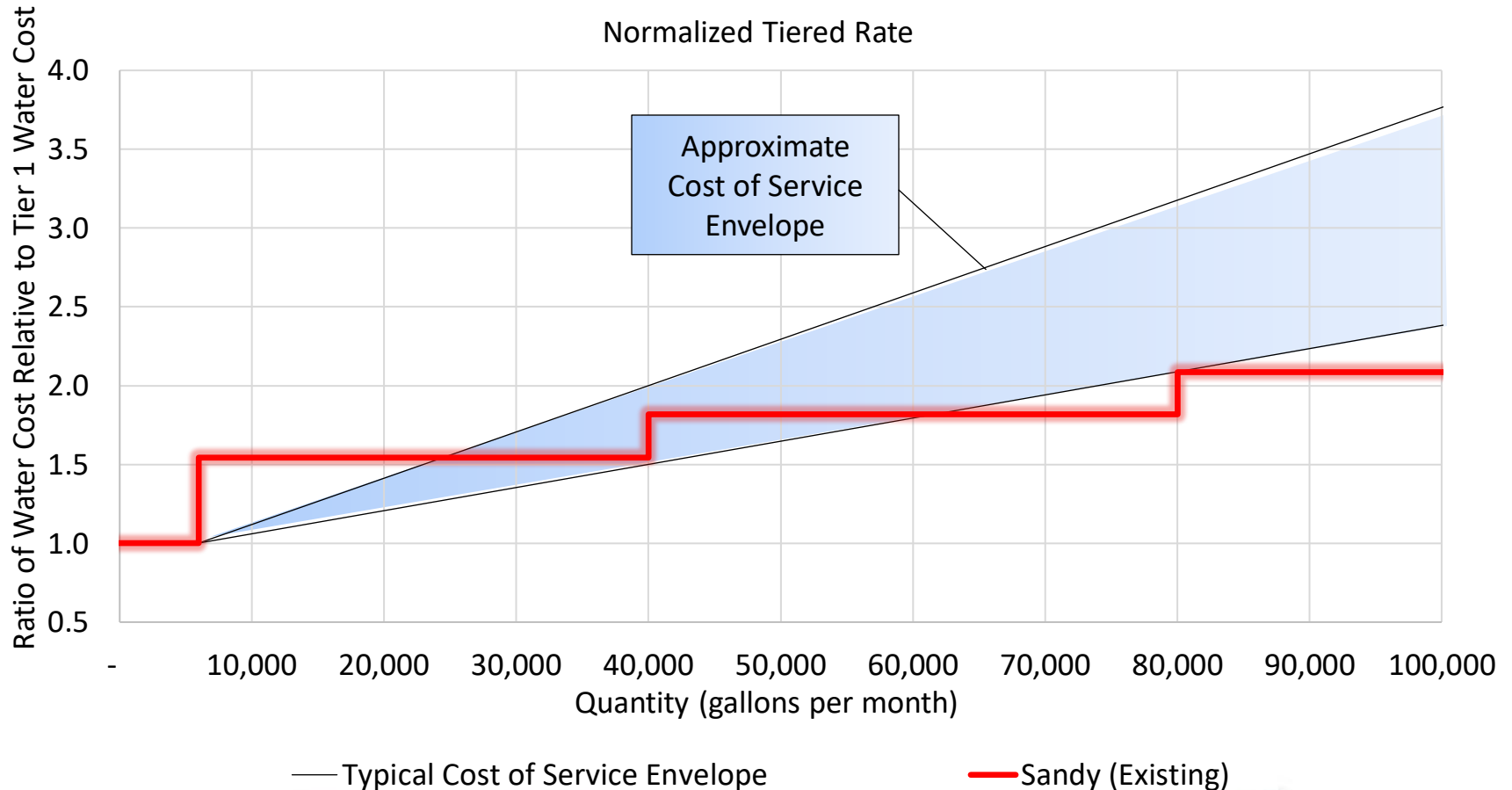
Hypothetical System – Indoor Use Only



Actual System – With Outdoor Peak Use



Fairness and Affordability: Cost of Service



Recommended Conservation Rates

Scenario:	Base Rate	Tier 1 (Thou. Gal.)	Tier 2 (Thou. Gal.)	Tier 3 (Thou. Gal.)	Tier 4 (Thou. Gal.)	Tier 5 (Thou. Gal.)
Existing	\$14.43	0-6 (\$1.64)	6-40 (\$2.53)	40-80 (\$2.98)	80+ (\$3.42)	
D	\$14.43	0-6 (\$1.64)	6- 25 (\$2.31)	25-50 (\$2.98)	50-75 (\$3.82)	75+ (\$5.08)

Shrink down Tiers 2, 3, and 4:

- Provide increased incentive for conservation while still allocating sufficient water for responsible landscaping

Recommended Conservation Rates

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Reduce Tier 2 rate:

- Improve affordability and provide reward for those who are successfully conserving
- Bring costs better in line with cost of service

Recommended Conservation Rates

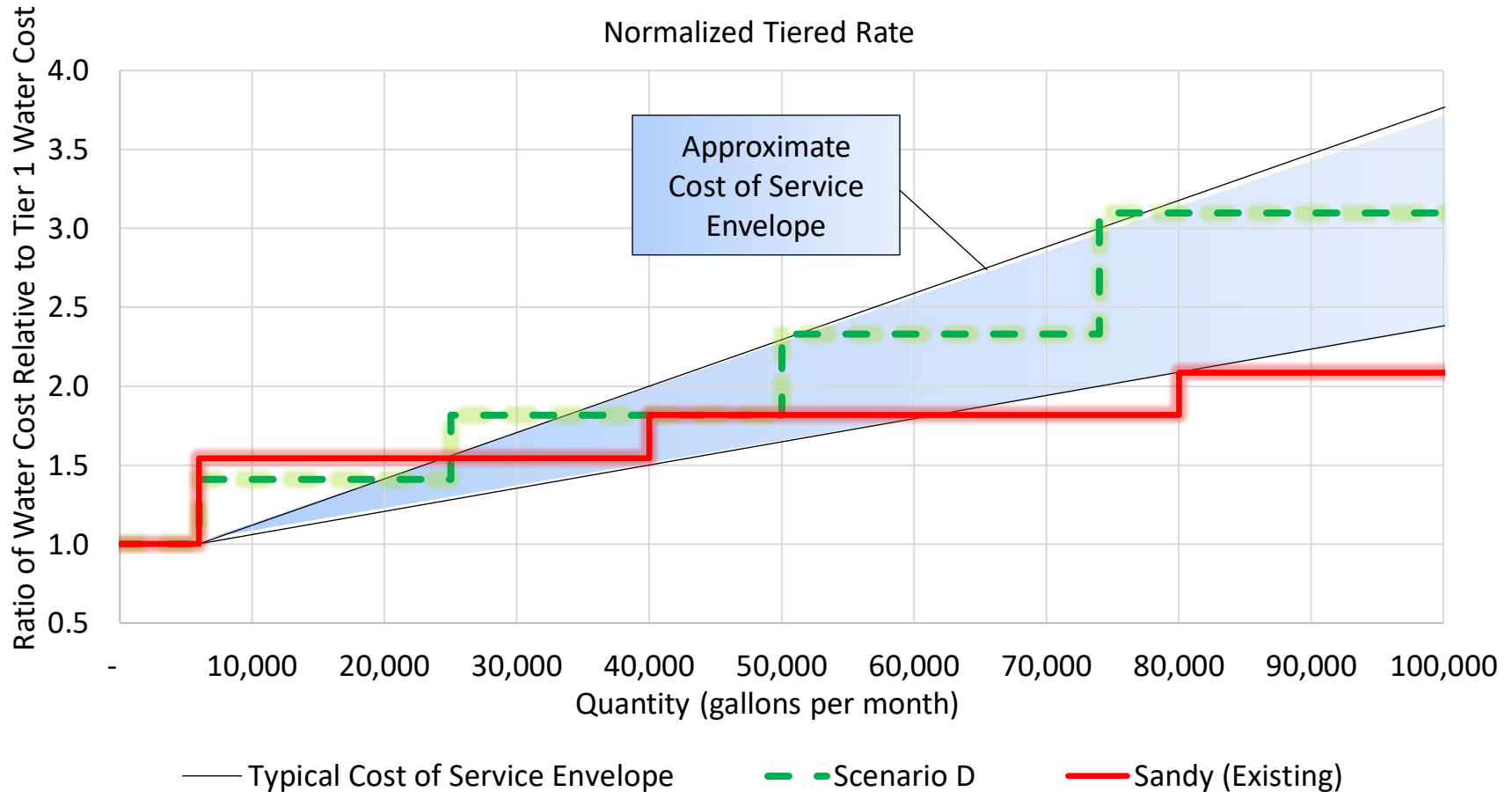
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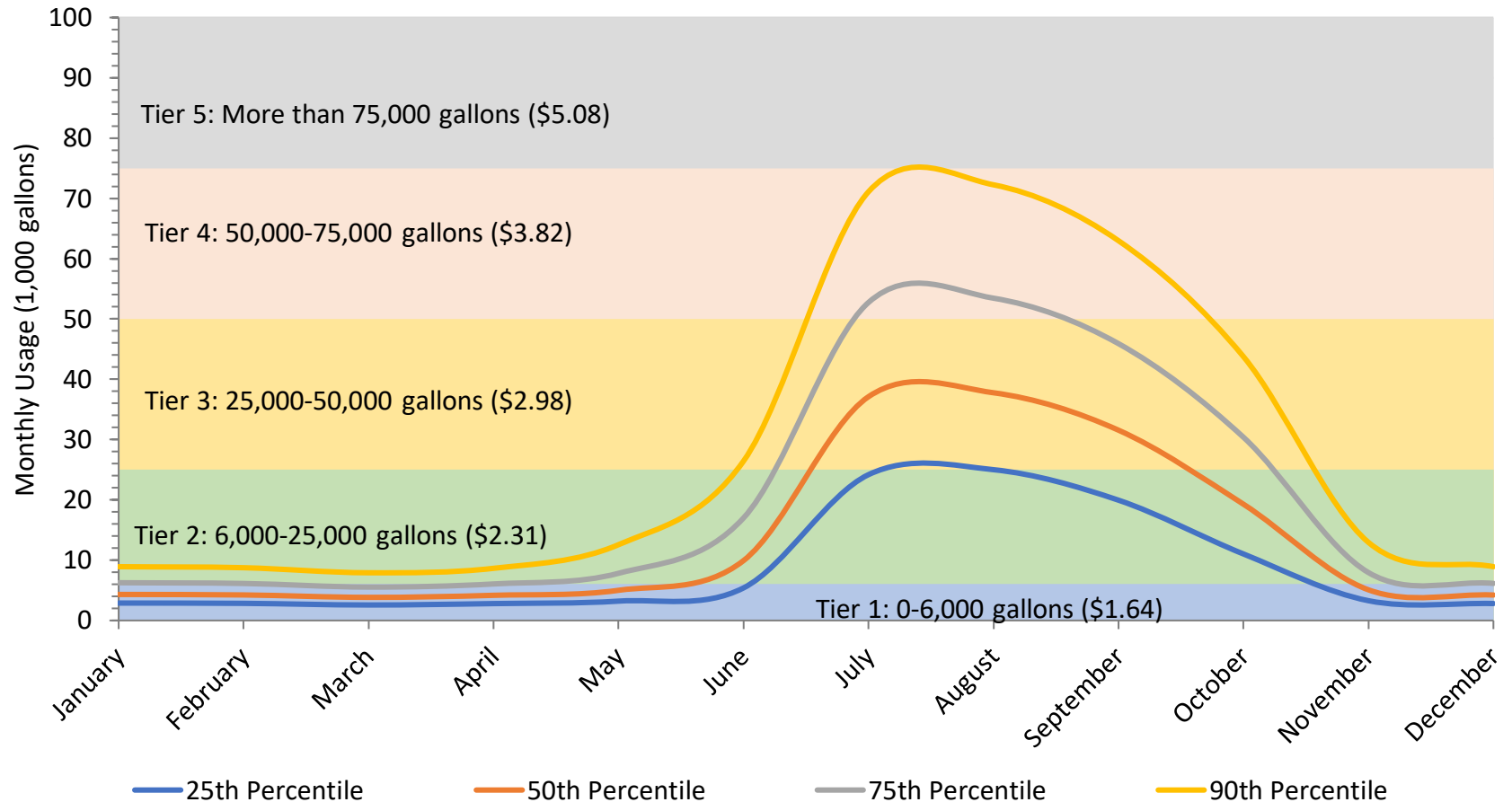
Increase Tier 4 rate and add a Tier 5:

- Strongly encourage conservation for those with the highest water use
- Bring costs better in line with cost of service

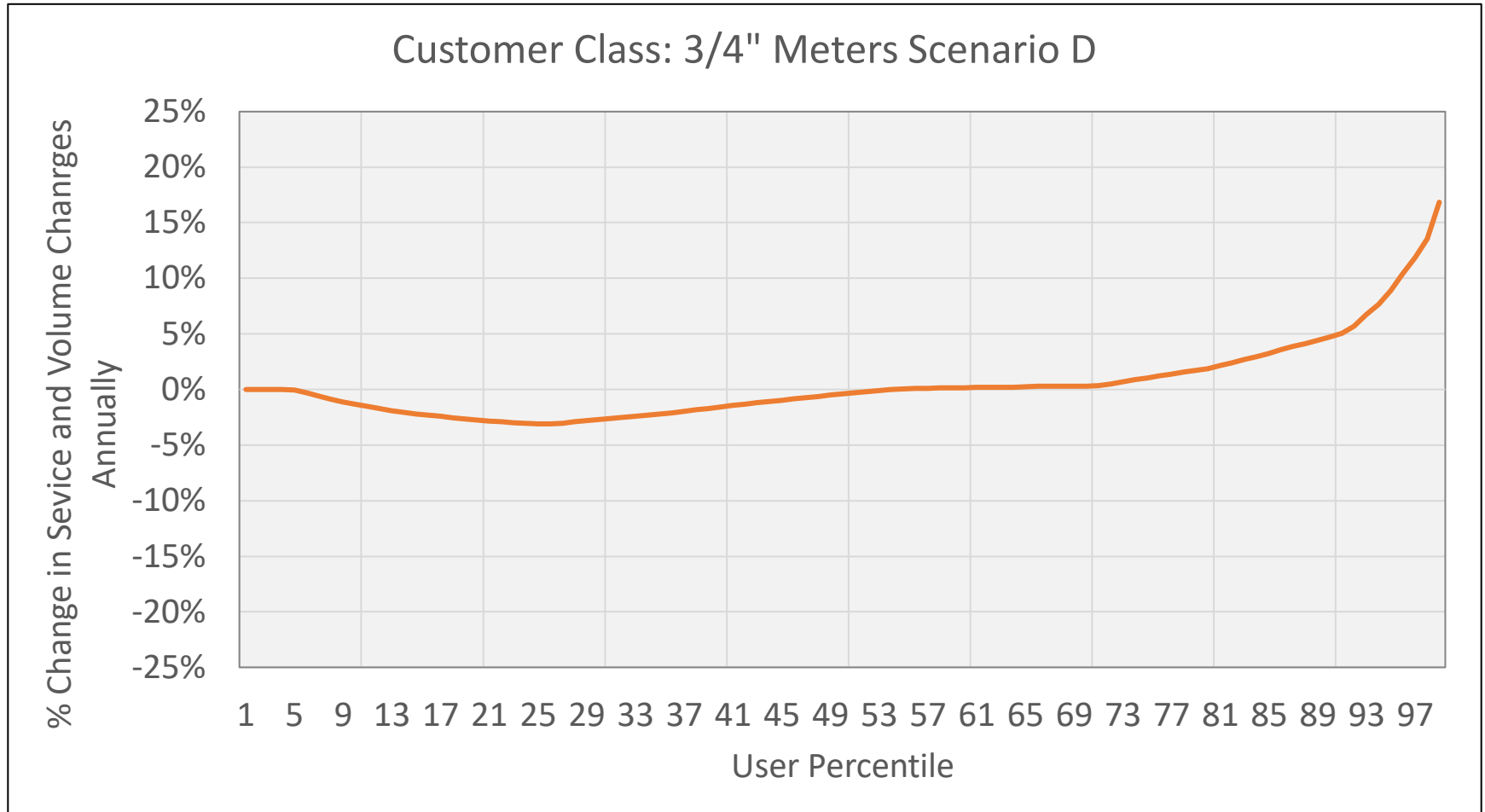
Scenario D: Tier Comparison



Scenario D: Usage Characteristics



Scenario D: Which Users Are Affected?



How Would This Affect Customer Bills?

On Average

	Low User 8,800 gal/mo	Average User 13,900 gal/mo	High User 20,400 gal/mo	Very High User 36,000 gal/mo
Existing Average Bill	\$33.00/mo	\$44.97/mo	\$62.00/mo	\$106.08/mo
Scenario D Average Bill	\$31.98/mo	\$44.78/mo	\$62.65/mo	\$115.53/mo
Difference	-\$1.03/mo	-\$0.18/mo	\$0.65/mo	\$9.45/mo

In July or August (typically the peak month)

	Low User 25,000 gal/mo	Average User 37,700 gal/mo	High User 53,400 gal/mo	Very High User 87,500 gal/mo
Existing Peak Bill	\$72.21	\$104.55	\$150.31	\$255.21
Scenario D Peak Bill	\$68.04	\$106.10	\$155.76	\$301.76
Difference	-\$4.17	\$1.55	\$5.45	\$46.55

How Would This Affect Sandy City Revenue?

	Percent Change in Annual Revenue
Impact to Revenue (At Current Water Use)	+2%
Impact to Revenue (With Expected Conservation)	Between -1% and +1%



Questions?

Scenario:	Base Rate	Tier 1 (Thou. Gal.)	Tier 2 (Thou. Gal.)	Tier 3 (Thou. Gal.)	Tier 4 (Thou. Gal.)	Tier 5 (Thou. Gal.)
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