



2024 PI Rate Study

Cedar Hills City Council Meeting

March 19, 2024

NOTES

- **Numbers are preliminary placeholders**
 - Intended to be revenue-neutral
 - Intended to meet minimum debt service coverage and state legislative requirements
- **Numbers will be adjusted moving forward**
 - Contractual agreements
 - Financial Trends
 - Feedback
- **Nothing is final**

BACKGROUND

- 2012 – Detailed Rate Study
 - Operations
 - Repair and replacement
 - Debt service
 - Depreciation
- 2016 – Rate Study Update
- 2023 to 2024 – PI Meters Installed

CEDAR HILLS CITY UTILITY RATE STUDY

PREPARED FOR:

CEDAR HILLS CITY



PREPARED BY:

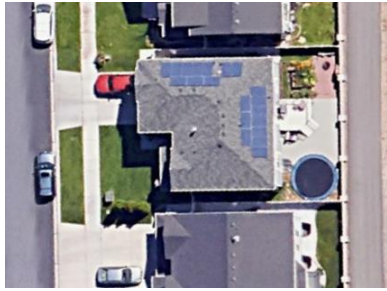
BOWEN, COLLINS & ASSOCIATES
154 EAST 14000 SOUTH
DRAPER, UTAH 84020



MAY 2012

PI RATES – PHILOSOPHICAL QUESTIONS

- How different should the monthly bill be for these two users?



20x as
much grass

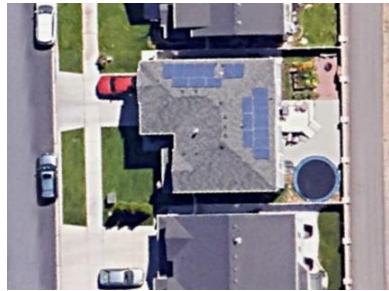


0.11 ac lot
0.04 ac of grass

1.07 ac lot
0.8 ac of grass

CURRENT RATES

\$35.38 per month



0.11 ac lot
0.04 ac of grass

20x as
much grass



2.2x the bill

\$77.93 per month



1.07 ac lot
0.8 ac of grass

QUESTIONS AND ANSWERS

- **Do lots of different sizes have the same meter size?**
 - Yes. With few exceptions, all residential lots have a $\frac{3}{4}$ " meter installed on the lateral coming off the main line.
- **Do larger lots require significantly more maintenance than smaller lots?**
 - Similar meter maintenance is required for varying lot sizes.
 - Large lots require more length of pipe per lot
 - Example: 500 feet of pipe can serve about 18 smaller (0.1-acre) lots or about 7 larger (0.7-acre) lots

QUESTIONS AND ANSWERS (CONT.)

- **Do larger lots require a higher water allocation?**
 - Yes. Larger lots require more water storage capacity, more pumping capacity, more pipeline capacity, and a higher water rights allocation paid through secondary water purchases.

PI RATES – CRITICAL OBJECTIVES

- Cover Costs (as determined in rate study)
- Distribute Costs Among Users
 - Meters are a tool to help us do this equitably
- Encourage conservation
- Comply with State mandates



PI RATES – STABLE VS. VARIABLE EXPENSES

- **Basis:** historic cost records and future needs

Expense Category	Annual Expense	Percent of Total
Stable Expenses	\$1,060,000	87%
Variable Expenses	\$152,000	13%
Total	\$1,212,000	100%

RECOMMENDED BASE RATES

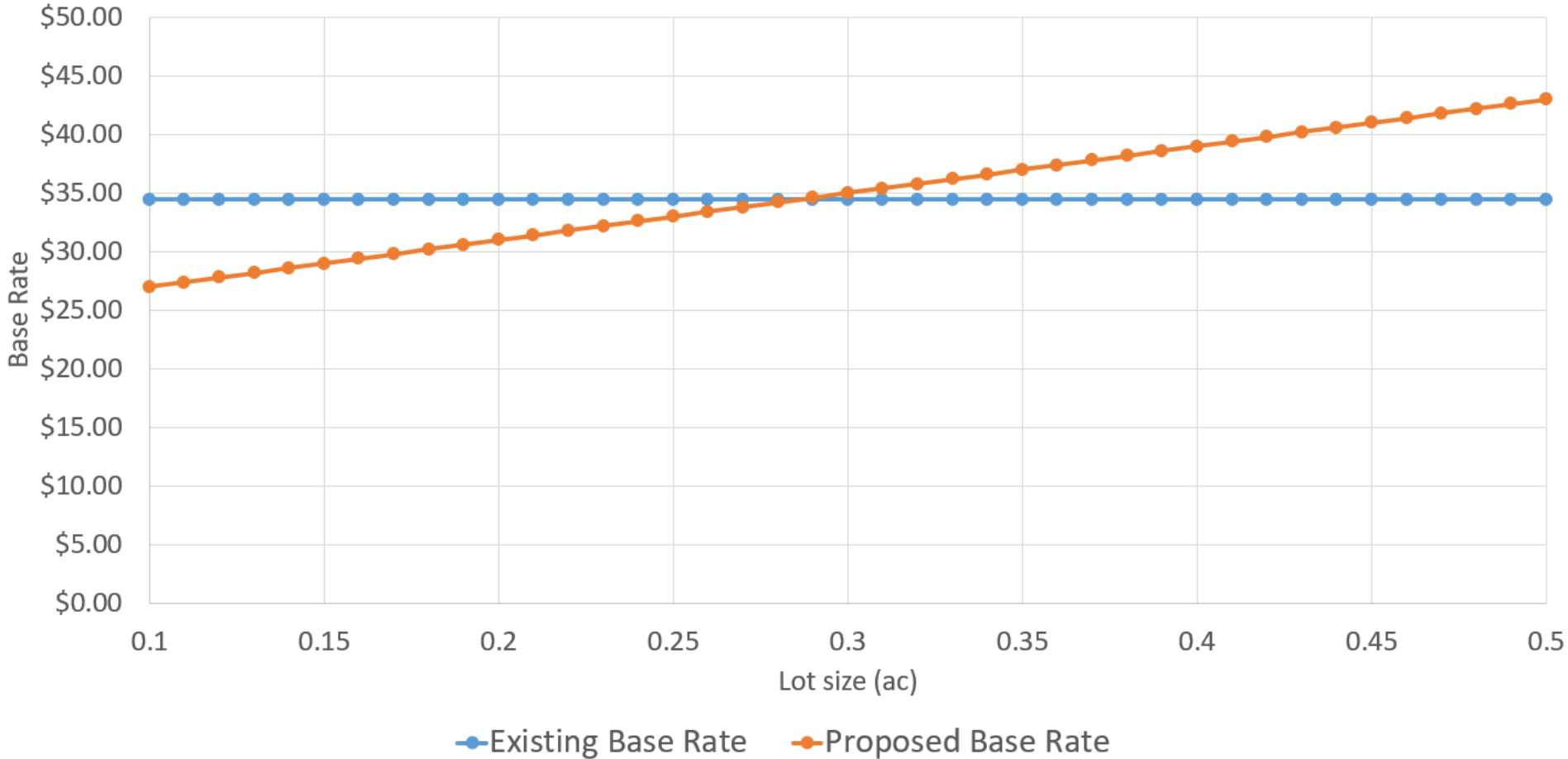
- Based on lot size
- Captures target revenue for stable expenses
- No base rate for City-owned properties

$$rb = \$23.00 + (\$40.00 * l)$$

rb = residential monthly base rate

l = lot size, acres

RECOMMENDED BASE RATES



PI RATES – TIERED ALLOTMENT APPROACH

- User is allotted a quantity of water (153 kgal/mo/irr-ac)
- Water used in excess of that quantity is billed at a higher rate

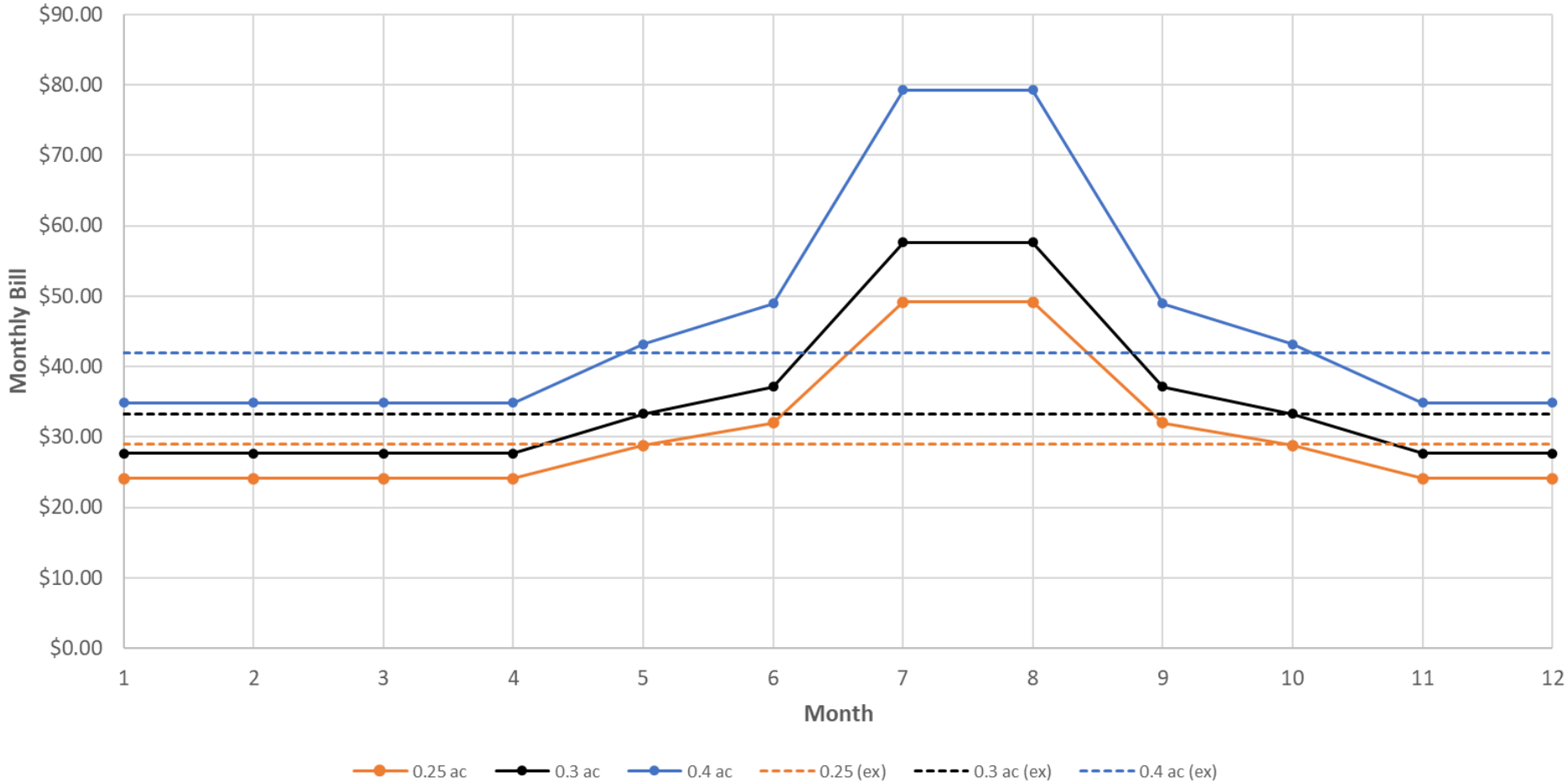
Tier	Percentage of Allotment Used	Cost per 1,000 gal
1	0% – 75%	\$0.30
2	76% – 100%	\$0.70
3	101% – 150%	\$1.15
4	150% – 200%	\$2.50
5	200% – 250%	\$3.10
6	250% or more	\$3.95

WATER ALLOTMENT

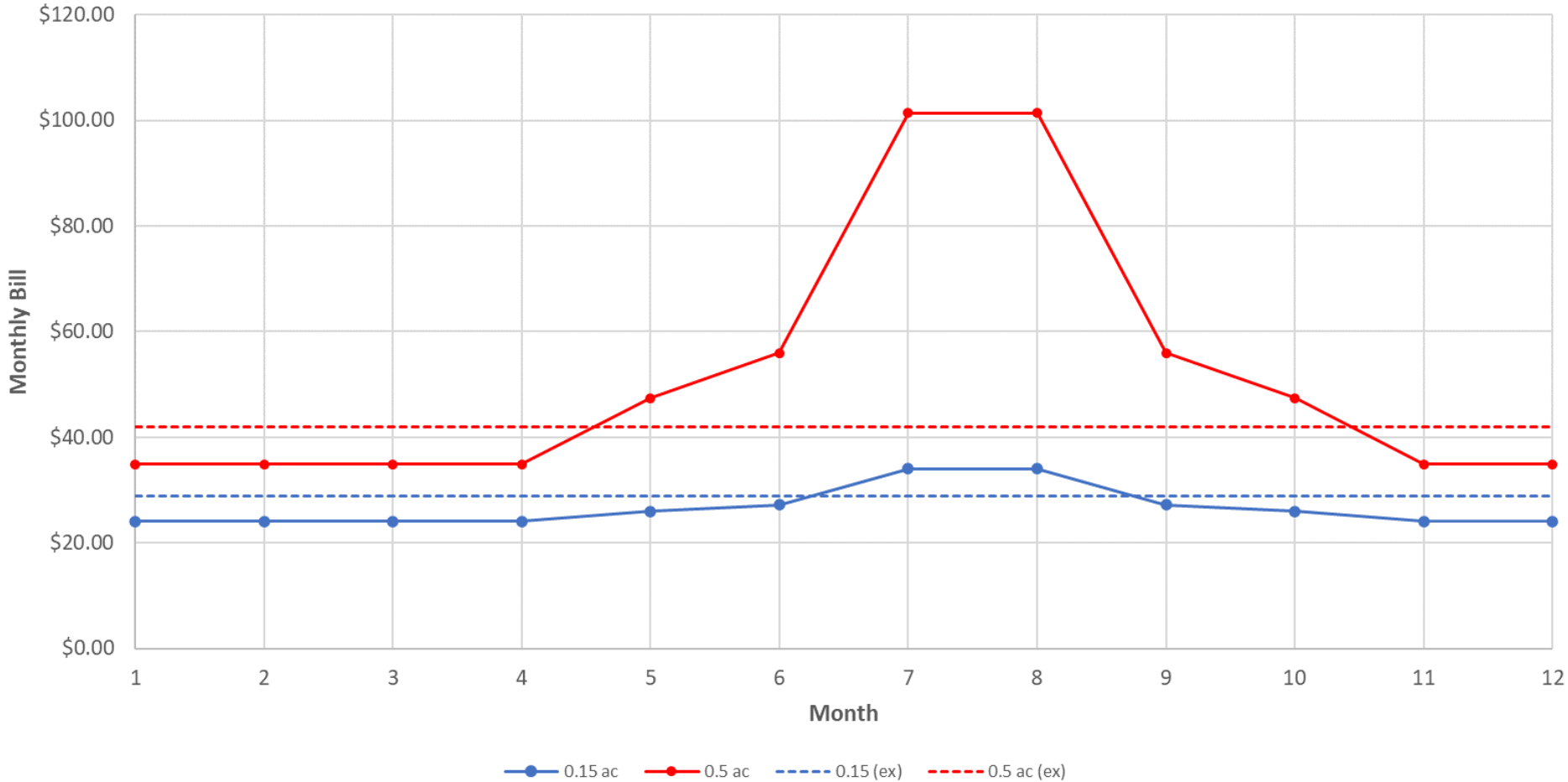
- Based on 31 inches of watering depth per year
- Based on research and data from nearby communities
- Includes an allowance for watering inefficiencies (overspray, wind, etc.)



Existing and Recommended Monthly Residential Bills by Lot Size

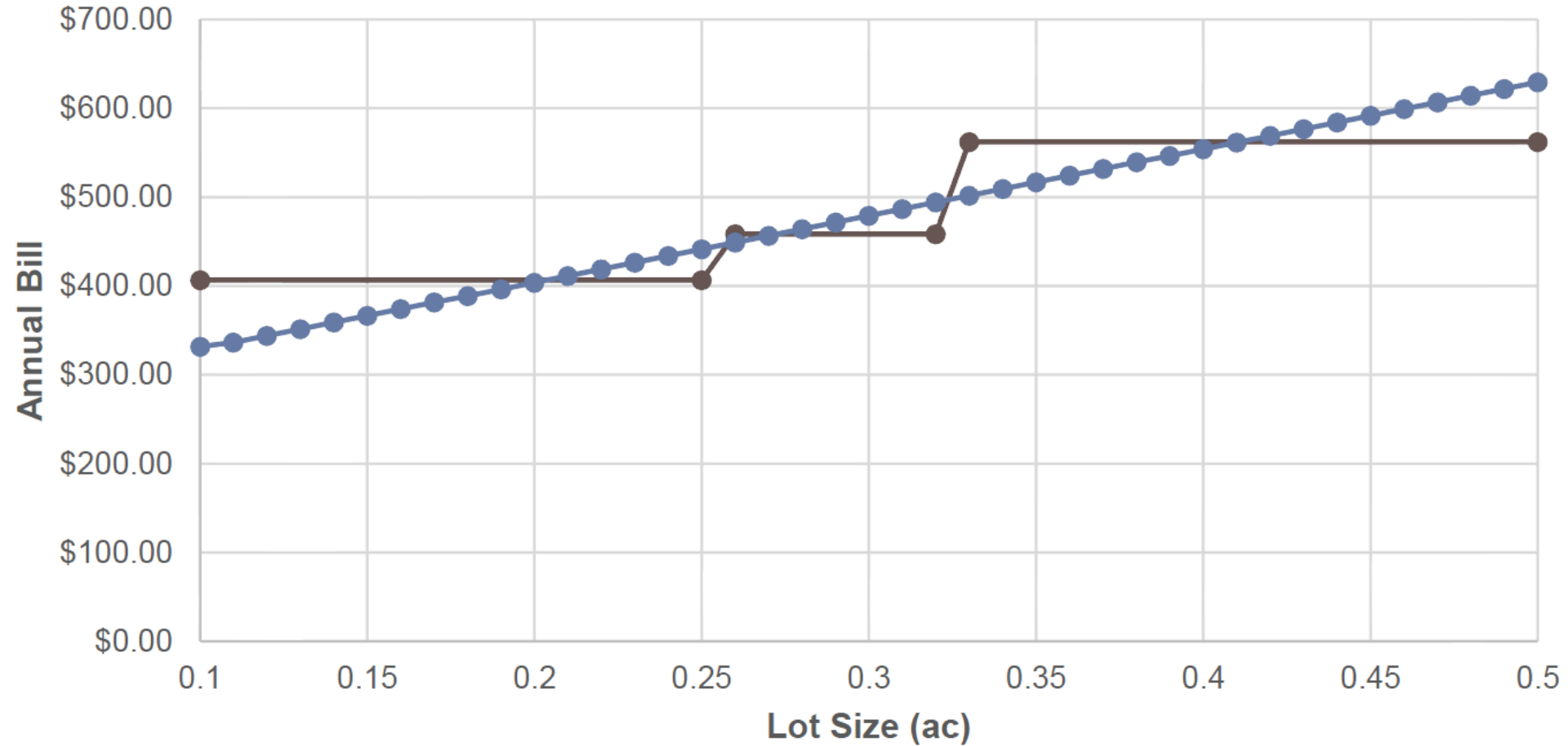


Existing and Recommended Monthly Residential Bills by Lot Size



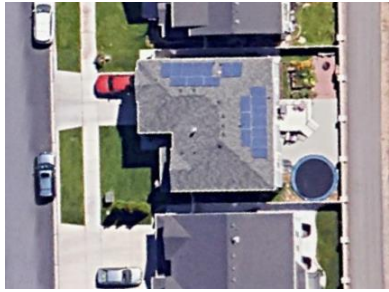
IMPACT ON CUSTOMER BILLS

Lot Size (ac)	Current Annual Bill	Projected Annual Bill - Responsible Use	Difference
0.15	\$347.16	\$318.89	-\$28.27
0.25	\$347.16	\$364.30	\$17.14
0.3	\$399.00	\$422.07	\$23.07
0.4	\$502.80	\$551.87	\$49.07
0.5	\$502.80	\$618.65	\$115.85



RECOMMENDED BASE RATES

\$27.40 per month



0.11 ac lot
0.04 ac of grass

20x as
much grass



**2.4x the
charge**

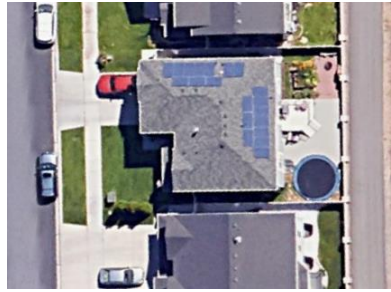
\$65.80 per month



1.07 ac lot
0.8 ac of grass

RECOMMENDED JULY USAGE RATES (RESPONSIBLE USE)

\$8.50 (July)



0.11 ac lot
0.04 ac of grass

20x as
much grass



**17x the
charge**

\$145.80 (July)



1.07 ac lot
0.8 ac of grass

RECOMMENDED JULY TOTAL BILL

\$35.90



0.11 ac lot
0.04 ac of grass

20x as
much grass



5.9x the bill

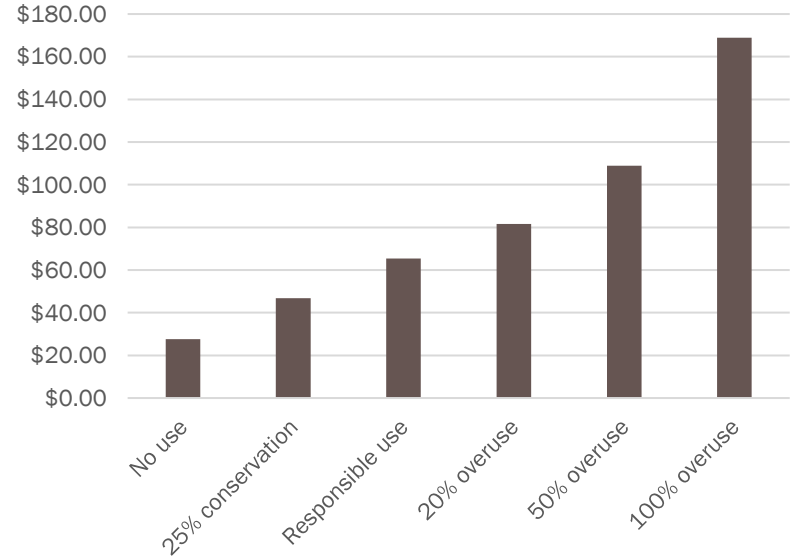
\$211.60



1.07 ac lot
0.8 ac of grass

OVERUSE AND CONSERVATION

- Case study: July water bills for a homeowner with a 0.33 acre lot
 - No use at all: \$27.66
 - 25% conservation: \$46.76
 - Responsible use: \$65.37
 - 20% overuse: \$81.67
 - 50% overuse: \$108.96
 - 100% overuse: \$168.91



QUESTIONS AND DISCUSSION

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