

# Utility Rate Structures

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# AGENDA

## Quick Recap of Buckeye Utilities

- 8/14/25 Follow-Up Items
- Buckeye Utility Cost Driver Recap

## Rate Structures

- Public vs. Private Utilities
- History of Utility Rates
- How Rate Structures are Determined and Utilized
- Rate Cycles, Structures, and Amount Comparisons

## Discussion: Separate Service Area Rates

- Impacts & Considerations

# Follow-Up Items

- Wastewater Asset Management Projections
  - YOY increases: 8%
- Wastewater Supplies & Services \$1.8M increase between FY25 and FY26 included:
  - \$700k Debt Service (2a/2b Settlement)
  - Asset Management Expenses
    - Generator Replacements (\$600k)
    - Ongoing Manhole Rehabilitations (\$500k)

# Buckeye Utility Recap

Cost Drivers	Water	Wastewater
Personnel	\$8,537,400	\$5,725,100
Portfolio	\$5,016,000	-
Operations (supplies, services, chemicals, utilities, etc.)	\$37,656,300	\$9,194,800
Asset Management	\$5,402,300	\$4,843,000
Capital Improvement	\$69,835,600	\$34,727,200

# Public vs. Private Utilities

## Public Utilities

- Publicly owned
- Answers to ratepayers and elected officials
- Funding from rates and grants
- Doesn't make a profit

## Private Utilities

- Privately owned
- Answers to a commission not governed by voters
- Funding from rates
- Must make a profit
- Shareholder Returns

# Private Utility Pros & Cons



## Pros

- Access to Capital: can raise money from investors
- Larger company: Economies of scale, access to more resources
- No political interference: Operates outside of election cycles or politics



## Cons

- Profit: Rates also pay profit to investors/ shareholders
- Little to No Local Control: Residents have limited to no say, state commissioners regulate
- Accountability Gap: Decisions may prioritize financial performance over community needs

# Public Utility Pros & Cons

## Pros

- Local control: staff & officials accountable to ratepayers
- Enterprise fund: money can only go back into the service (no one to profit)
- Non-Profit Model: access to grants & low-interest loans
- Transparency: budgets, rates and policies set in public meetings

## Cons

- Funding limitations: must raise rates to fund needed activities; smaller economies of scale
- Public constraints: Political pressure from ratepayers can result in underinvestment of infrastructure
- Operational constraints: can face hiring freezes, budget restrictions

# History of Utility Rates

## Overview

Water utility rates reflect a complex interplay between infrastructure investments, public policy, environmental concerns, and economic pressures.

### A. Early Water Utility Models and Pricing (19th–early 20th century)

- Flat Rate Systems
- Private Companies
- Urbanization Effects

### B. Mid-20th Century Shifts

- **Metering and Usage-Based Pricing**
- Public Ownership
- Federal Investments

### C. Late 20th Century to Early 21st Century

- Infrastructure Aging
- Environmental Regulations
- **Gradualism in Rate Design**



# History of Utility Rates Continued



## Usage Base Design

### 1. Base Rates (Fixed Charges)

- Operations and System Maintenance
- Personnel Costs
- Meter Reading & Billing
- Debt Service: Repayment of loans for capital improvements
- Emergency Preparedness: Ensuring service continuity during outages or disasters

### 2. Usage Rates (Variable Charges)

- Water Treatment Costs: Chemicals and processes used to purify water
- Distribution Costs: Energy and wear-and-tear from delivering water to your home
- Tiered Pricing: Higher rates may apply as usage increases to encourage conservation

# Use & Determination of Rate Structures

- Rate structures can be used to:
  - Encourage Conservation
  - Further Drought Management Plans
  - Qualify for Federal Grant Funding
- Rate structures are developed by:
  - Analyzing system-wide usage
  - Calculating the impact of usage groups on the system

# Comparison City Utility Rate Cycles

City	Staff Recommended	Council Adopted
Surprise	5-Year	5-Year
Goodyear	5-Year	5-Year
Glendale	(W) 4-Year / (WW) 5-Year	(W) 4-Year / (WW) 5-Year
Peoria	4-Year	2-Year
Avondale	3-Year	3-Year
*Tempe	1-Year	1-Year

*\*Tempe reviews their rates annually and conducts a formal rate study every 2 years.*

# Residential Water Base Rate Comparison

Meter Size	**Avondale	Tempe	Glendale	*Goodyear	Peoria	Buckeye	Surprise
¾"	\$10.54	\$13.60	\$16.80	\$20.87	\$21.98	\$32.94	\$30.26
1"	\$16.23	\$20.10	\$23.90	\$28.86	\$26.87	\$32.94	\$39.34
1.5"	\$30.22	\$41.85	\$44.60	\$46.66	\$44.93	\$32.94	\$99.87
2"	\$47.82	\$79.40	\$80.00	\$75.53	\$64.65	\$32.94	\$160.37
3"	\$87.51	\$118.95	\$137.00		\$117.30	\$32.94	\$323.77
4"	\$144.16	\$277.65	\$235.00		\$176.47	\$32.94	\$514.40
6"	\$284.52	\$800.35	\$466.00		\$340.73	\$32.94	\$998.67
8"	\$453.16	\$1,241.50	\$994.00		\$537.95	\$32.94	\$1,613.00
10"	\$650.45	\$1,858.75	\$1,475.00		\$537.95		

*\*Goodyear has separate rates for customers inside and outside city limits. We are listing their rates for customers inside city limits.*

*\*\*Avondale has a 7.5% treatment fee applied to the overall bill, and a 6.2% resource fee applied to the overall bill.*

# Residential Water Usage Rate Comparison

Goodyear	
0 – 6,000 gallons	\$2.42
6,001 – 12,000 gallons	\$4.81
12,001 – 30,000 gallons	\$7.23
30,001+ gallons	\$11.60
CAP Fee (per 1,000 gallons)	\$1.55

Glendale	
0 – 6,000 gallons	\$3.35
7,000 – 15,000 gallons	\$4.20
16,001 – 30,000 gallons	\$5.87
31,000+ gallons	\$7.69

Tempe	
0 – 8,000 gallons	\$3.16
8,001 – 16,000 gallons	\$5.17
16,001 – 36,000 gallons	\$6.62
36,001+ gallons	\$7.88

Avondale	
0 – 6,000 gallons	\$2.03
6,000 – 15,000 gallons	\$3.56
15,000+ gallons	\$5.09

# Res. Water Usage Rate Comps. Continued

Peoria	
1,000 – 4,000 gallons	\$1.58
5,000 – 10,000 gallons	\$4.22
11,000 – 20,000 gallons	\$6.00
20,000+ gallons	\$6.64
CAP Fee (per 1,000 gallons)	\$1.55

Buckeye	
0 – 6,000 gallons	\$3.93
6,001 – 10,000 gallons	\$4.91
10,001 – 15,000 gallons	\$6.14
15,001 – 30,000 gallons	\$7.68
30,001+ gallons	\$9.59

Surprise	
0 – 10,000 gallons	\$2.49
10,001 – 20,000 gallons	\$4.91
20,001 – 30,000 gallons	\$5.71
30,000+ gallons	\$6.85

# Residential Sewer Base Comparison

Meter Size	Avondale	Tempe	Glendale	Goodyear	Peoria	Buckeye	Surprise
¾"	\$9.16	\$12.50		\$27.29	\$11.46		
1"	\$13.76	\$19.25		\$41.87	\$11.46		
1.5"	\$24.91	\$42.00		\$51.59	\$27.44		
2"	\$39.42	\$81.30		\$100.23	\$41.19		
3"	\$71.36	\$122.70			\$77.92		
4"	\$116.92	\$288.70			\$119.16		
6"	\$229.02	\$835.60			\$233.72		
8"	\$341.88	\$1,297.10			\$371.24		
10"		\$1,942.90					
Flat Fee			\$12.70			\$28.86	\$27.32

# Residential Sewer Usage Rate Comparison

## Avondale

Per 1,000 gallons	\$4.53
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## Tempe

Per 1,000 gallons	\$2.48
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## Glendale

Per 1,000 gallons	\$4.90
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## Goodyear

Per 1,000 gallons	\$7.47
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## Peoria

Per 1,000 gallons	\$2.50
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## Buckeye

Per 1,000 gallons	\$2.00
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# Commercial Water Base Rate Comparison

Meter Size	**Avondale	Tempe	Glendale	*Goodyear	Peoria	Buckeye	Surprise
¾"	\$10.54	\$13.60	\$12.90	\$20.87	\$21.98	\$34.35	\$30.26
1"	\$16.23	\$20.10	\$23.90	\$28.86	\$26.87	\$107.90	\$39.34
1.5"	\$30.22	\$41.85	\$44.60	\$46.66	\$44.93	\$107.90	\$99.87
2"	\$47.82	\$79.40	\$80.00	\$75.53	\$64.65	\$287.80	\$160.37
3"	\$87.51	\$118.95	\$137.00	\$87.42	\$117.30	\$287.80	\$323.77
4"	\$144.16	\$277.65	\$235.00	\$142.55	\$176.47	\$539.63	\$514.40
6"	\$284.52	\$800.35	\$466.00	\$270.53	\$340.73	\$899.38	\$998.67
8"	\$453.16	\$1,241.50	\$994.00	\$270.53	\$537.95	\$1,798.75	\$1,613.00
10"	\$650.45	\$1,858.75	\$1,475.00		\$537.95		

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# Commercial Water Usage Rate Comparison

Avondale (per 1,000g)	
All Non-Residential	\$3.09
Buckeye (per 1,000g)	
Comm. & Multi-Family	\$2.51
Peoria	
1,000 – 10,000 gallons	\$1.58
11,000 – 50,000 gallons	\$4.22
50,000+ gallons	\$6.00
Surprise	
0 – 10,000 gallons	\$2.49
10,001 – 20,000 gallons	\$4.91
20,001 – 30,000 gallons	\$5.71
20,000+ gallons	\$6.85

Tempe (per 1,000g)	
Commercial	\$4.03
Construction	\$5.35
Multi-Family	\$3.53
Industrial	\$3.96

Goodyear	
0 – 40,000 gallons	\$5.70
40,001 – 100,000 gallons	\$9.12
100,001+ gallons	\$11.82
CAP Fee (per 1,000 gallons)	\$1.55

Glendale	
Summer	\$4.43
Winter	\$3.43

# Commercial Sewer Base Rate Comparison

Meter Size	Avondale	Tempe	Glendale	*Goodyear	Peoria	Buckeye	Surprise
¾"	\$9.16	\$12.50		\$27.29	\$11.46	\$19.12	
1"	\$13.76	\$19.25		\$41.87	\$14.86	\$60.06	
1.5"	\$24.91	\$42.00		\$51.59	\$27.44	\$60.06	
2"	\$39.42	\$81.30		\$100.23	\$41.19	\$160.19	
3"	\$71.36	\$122.70		\$132.31	\$77.92	\$160.19	
4"	\$116.92	\$288.70		\$175.40	\$119.16	\$300.36	
6"	\$229.02	\$835.60		\$434.55	\$233.72	\$500.59	
8"	\$341.88	\$1,297.10		\$434.55	\$371.24	\$1,001.18	
10"		\$1,942.90					

# Commercial Sewer Base Rate Continued

Surprise	
Multi-Family (per unit)	\$24
RV Resort (per unit/space)	\$13.75
Commercial	\$2.90

Glendale	
Mobile Homes, Apartments, Office Buildings, Casinos	\$16.51
All Other	\$12.70

# Commercial Sewer Usage Rate Comparison

Glendale (per 1,000g)	
Car Wash	\$4.20
Non-Profit Club, Office Building, Schools, Churches, Government, Child Care Center	\$4.59
Retail/Wholesale, Warehouse, Light Manufacturing, Laundromat, Gas Station, Conv. Market	\$4.65
Townhouse, Condo, Mobile Home, Apartments, Multi-Family, Duplex	\$4.90
Hospital, Convalescent Home, Labs, Clinics, Dentists, Veterinarians	\$4.98
Repair Shop, Gas Station (full service), Auto Steam Cleaning	\$4.99
Hotel w/o Restaurant, Service Business	\$5.03
Bar w/o Restaurant, Take Out Restaurant	\$5.51
Office Building	\$5.97
Mobile Home (mass meter outside), Apartments (outside)	\$6.36
Market w/Meat & Produce, Mortuaries	\$9.59
Restaurants, Bakeries, Food Manufacturing, Shopping Center, Conv. Market w/Rest., Arena	\$9.74
Casino	\$12.66

# Commercial Sewer Usage Rate Comps. Continued

Avondale (per 1,000g)		Tempe (per 1,000g)		Goodyear (per 1,000g)	
All Non-Residential	\$4.53	Commercial Low	\$3.54	All Non-Residential	\$7.47
Buckeye (per 1,000g)		Commercial High	\$5.49	Peoria (per 1,000g)	
Comm. & Multi-Family	\$2.51	Multi-Family	\$3.26	All Usage	\$2.50
		Industrial	\$3.05		
		TSS & COD unit cost/pound	\$3.17		
Surprise (per 1,000g)					
Car Wash, Government, Laundromats, Prof. Office,, Schools, Parks & Rec, Storage/Warehouse, Other				\$2.43 - \$2.93	
Bars w/o Dining, Church, Garage & Service Stations, Garden/Nursery, HOA Comm. Facilities, Hospitals, Convalescent & Assisted Living, Hotel, Medical Offices, Retail/Wholesale				\$3.14 - \$3.67	
Restaurants & Bakeries, Mixed Use Retail, Industrial/Manufacturing, Grocery Retail/Wholesale,				\$6.53 - \$6.84	
Funeral Home				\$7.14	

# Potable Landscaping Base Rate Comparison

Meter Size	**Avondale	Tempe	Glendale	*Goodyear	Peoria	Buckeye	Surprise
¾"	\$10.54	\$13.60		\$20.87	\$21.98	\$26.60	\$30.26
1"	\$16.23	\$20.10		\$28.86	\$26.87	\$83.56	\$39.34
1.5"	\$30.22	\$41.85		\$46.66	\$44.93	\$83.56	\$99.87
2"	\$47.82	\$79.40		\$75.53	\$64.65	\$222.87	\$160.37
3"	\$87.51	\$118.95		\$87.42	\$117.30	\$222.87	\$323.77
4"	\$144.16	\$277.65		\$142.55	\$176.47	\$417.59	\$514.40
6"	\$284.52	\$800.35		\$270.53	\$340.73	\$696.48	\$998.67
8"	\$453.16	\$1,241.50		\$270.53	\$537.95	\$1,392.95	\$1,613.00
10"	\$650.45	\$1,858.75			\$537.95		

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*\*\*Avondale has a 7.5% treatment fee applied to the overall bill, and a 6.2% resource fee applied to the overall bill.*

# Potable Landscaping Usage Rate Comparison

Peoria	
1,000 – 50,000 gallons	\$1.94
50,000+ gallons	\$6.00

Buckeye	
0 – 10,000 gallons	\$6.61
10,001+ gallons	\$7.93

Surprise	
0 – 10,000 gallons	\$2.49
10,001 – 20,000 gallons	\$4.91
20,001 – 30,000 gallons	\$5.71
20,000+ gallons	\$6.85

Tempe	
Per 1,000 gallons	\$5.37

Avondale	Tier 1 - \$2.03	Tier 2 - \$3.56	Tier 3 - \$5.09
¾"	1,000 – 12,000	13,000 – 24,000	25,000+
1"	1,000 – 21,000	22,000 – 42,000	43,000+
1 ½"	1,000 – 40,000	41,000 – 80,000	81,000+
2"	1,000 – 64,000	65,000 – 128,000	129,000+
3"	1,000 – 120,000	121,000 – 240,000	241,000+
4"	1,000 – 200,000	201,000 – 400,000	401,000+
6"	1,000 – 400,000	401,000 – 800,000	801,000+
8"	1,000 – 640,000	641,000 – 1,280,000	1,281,000+

# Non-Potable Landscape Comparison

Meter Size	Avondale	Tempe	Glendale	Goodyear	Peoria	Buckeye	Surprise
¾"				\$27.29	\$21.98	\$19.12	\$30.26
1"				\$41.87	\$26.87	\$60.06	\$39.34
1.5"				\$51.59	\$44.93	\$60.06	\$99.87
2"				\$100.23	\$64.65	\$60.06	\$160.37
3"				\$132.31	\$117.30	\$160.19	\$323.77
4"				\$175.40	\$176.47	\$160.19	\$514.40
6"				\$434.55	\$340.73	\$300.36	\$998.67
8"				\$434.55	\$537.95	\$500.59	\$1,613.00
10"					\$537.95	\$1,001.18	
Usage Per 1,000 Gallons				\$3.29	\$1.94	\$3.30	\$2.08

# Discussion – Separate Service Areas Rates

## Should Separate Service Areas Have Separate Rates?

### Pros:

- Individualized recoupment of costs per system
- In the short term, possible lower rates: operation of newer systems is lower

### Cons:

- Economy of scale benefits greatly reduced: fewer customers to share in costs
- Inability to hedge against fluctuating rates
- Administrative complexity: separate rates, budgets, finances, overhead
- Operational complexities: assignment of resources
- Cost allocation challenges
- Over the long term, higher rates as system ages

# Next Time

## Water Utility Rates

- Forecasted Expenses
  - Operational Cost Drivers
  - Capital Improvement Projects
- Rate Approaches/Options
- Recommendations
  - Rates
  - Escalation Rate

# QUESTIONS