

City of Prescott

Arizona

Water and Wastewater Financial Plan and Rate Study Update

January 22, 2019

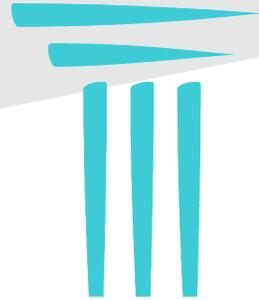
Presented by Andrew Rheem



AGENDA

- Water Fund
 - › Objectives
 - › Financial plan and capital projects
 - › Rate Alternatives and Bill Impacts
- Wastewater Fund
 - › Objectives
 - › Financial plan and capital projects
 - › Rate Alternatives and Bill Impacts
- Typical Monthly Water and Wastewater Bills
- Survey Comparison
- Discussion





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Water Fund



WATER RATE OBJECTIVES

- Leveling of rate adjustments avoiding sharp annual changes
- Continue the present conservation/water-use efficiency oriented pricing structure that has proven to be effective
- Provide a stable source of revenue as the City providing funding for planned water capital projects
- Evaluate Aquifer protection fee, Alternative water fee and Outside City rate multipliers
- Maintain customer class cost of service rate recovery



MAJOR WATER FUND CAPITAL PROJECTS

- FY19-FY23 total \$90.9M in capital before inflation
 - › \$94.9M after inflation
- Intermediate and Chino Booster Pump Stations - \$22.6M in FY19-FY21
- Chino Valley Production Well No. 1 through 5 Rehabilitation - \$10.6M in FY19-FY22
- Zone 16 Virginia Pump Station, Haisley Tank and Haisley Road Piping - \$5.7M in FY19-FY20
- Zone 56 Tank and Pipeline, Zone 7 Booster Station - \$5.3M in FY19-FY22
- Mingus Pump Station, Tank and Pipeline upscale - \$5.3M in FY 19-FY21
- Airport Well No. 5 - \$2.3M in FY19-FY20
- Airport Well No. 6 - \$2.5M in FY20-FY21
- Upsize water mains from Zone 27 tank to Zone 24 tank - \$3.2M in FY19-FY21
- Zone 30 Booster Pump Station at Hidden Valley - \$2.2M in FY21
- Various water main replacements - \$12.0M in FY19-FY23



WATER RATE ALTERNATIVES

- All alternatives maintain Aquifer Protection Fee at current levels and recover customer class cost of service and annual revenue needs
 - › Adjust Outside City multiplier from 40% to 30%
 - › Maintain Chino Valley multiplier at 30%
- Alternative 1 – Included in November 2018 Presentation
 - › Increases base charge by meter size
 - › Increases volume rates by customer class
 - Water allocations by tier unchanged
 - Increased volume rates by tier
 - › Alternative Water Surcharge remains at current levels of \$0.89 per kgal
- Alternative 2 – Included in November 2018 Presentation
 - › No increase to base charge by meter size
 - › Increases volume rates by customer class
 - Water allocations by tier unchanged
 - Increased volume rates by tier including higher Tier 2, 3 and 4 rates
 - › Alternative Water Surcharge remains at current levels of \$0.89 per kgal
- Alternative 3 – Developed since the November 2018 Presentation
 - › Increases base charge by meter size same as Alt. 1
 - › Increases volume rates by customer class
 - Water allocations by tier unchanged
 - Increased volume rates by tier
 - › Alternative Water Surcharge eliminated and incorporated in tiered rates



ALTERNATIVE WATER FEE BACKGROUND AND HISTORY

- Established in 1982 as uniform rate per 1,000 gallons to fund City's Central Arizona Project (CAP) costs
 - › Was referred to as “Central Arizona Project Charge”
 - › Renamed the “Alternative Water Fee” in the 1990's following City selling water rights in CAP
- Fee has been used to:
 - › Purchase Willow and Watson Lake water rights
 - › Explore other alternative water sources
 - › Fund water conservation program
 - › Pay portion of Big Chino Water Ranch including City portion of Comprehensive Agreement No. 1 (with SRP and Prescott Valley)
 - › Fund drilling and water production facilities near Airport



WATER RATE ALTERNATIVES 1 AND 3

Description	Alt 1	Alt 3
Generate sufficient annual revenues	Yes	Yes
Maintains current Aquifer Protection Fee	Yes	Yes
Phases to Customer Class Cost of Service by FY 2022-23	Yes	Yes
Reduces Outside City Multiplier to 1.30 times inside City rates	Yes	Yes
Increases Base Charge Annually	Yes	Yes
Maintains current Alternative Water volume Surcharge	Yes	No
Eliminates Alternative Water volume Surcharge	No	Yes
Increases revenue recovered through Tier 2, 3 and 4 Use	No	Yes



PROPOSED WATER BASE CHARGE

Meter Size	Current	4/1/2019		1/1/2020		1/1/2021		1/1/2022		1/1/2023	
		Alt 1	Alt 3								
5/8"	\$13.69	\$14.10	\$14.10	\$14.52	\$14.52	\$14.96	\$14.96	\$15.26	\$15.26	\$15.56	\$15.56
3/4"	14.43	14.86	14.86	15.31	15.31	15.77	15.77	16.09	16.09	16.41	16.41
1"	16.34	16.83	16.83	17.34	17.34	17.86	17.86	18.22	18.22	18.58	18.58
1 1/2"	20.09	20.69	20.69	21.31	21.31	21.95	21.95	22.39	22.39	22.84	22.84
2"	26.53	27.33	27.33	28.15	28.15	28.99	28.99	29.57	29.57	30.16	30.16
3"	39.47	40.65	40.65	41.87	41.87	43.13	43.13	43.99	43.99	44.87	44.87
4"	57.94	59.68	59.68	61.47	61.47	63.31	63.31	64.58	64.58	65.87	65.87
6"	104.10	107.22	107.22	110.44	110.44	113.75	113.75	116.03	116.03	118.35	118.35
8"	159.61	164.40	164.40	169.33	169.33	174.41	174.41	177.90	177.90	181.46	181.46
Percent Change		3%	3%	3%	3%	3%	3%	2%	2%	2%	2%



PROPOSED AQUIFER PROTECTION FEE – ALTERNATIVES 1 AND 3

Meter Size	Current	4/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023
5/8"	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72	\$0.72
3/4"	1.08	1.08	1.08	1.08	1.08	1.08
1"	1.20	1.20	1.20	1.20	1.20	1.20
1 1/2"	2.40	2.40	2.40	2.40	2.40	2.40
2"	3.84	3.84	3.84	3.84	3.84	3.84
3"	7.20	7.20	7.20	7.20	7.20	7.20
4"	12.00	12.00	12.00	12.00	12.00	12.00
6"	24.00	24.00	24.00	24.00	24.00	24.00
8"	38.40	38.40	38.40	38.40	38.40	38.40
Percent Change		0%	0%	0%	0%	0%



ALTERNATIVE 1 AND 3 – VOLUME RATES

Customer Class	Tier Width (1) Start to End Gallons		4/1/2019		1/1/2020		1/1/2021		1/1/2022		1/1/2023		
			Current	Alt 1	Alt 3	Alt 1	Alt 3						
Inside City													
Single Family													
Tier 1	0	3,000	\$3.24	\$3.36	\$4.00	\$3.49	\$4.13	\$3.63	\$4.26	\$3.72	\$4.35	\$3.81	\$4.44
Tier 2	3,001	10,000	4.86	5.05	6.00	5.24	6.20	5.44	6.39	5.58	6.53	5.72	6.66
Tier 3	10,001	20,000	7.29	7.57	9.00	7.86	9.29	8.16	9.59	8.36	9.79	8.57	9.99
Tier 4	Over	20,001	14.58	15.14	18.00	15.72	18.59	16.32	19.17	16.73	19.58	17.15	19.98
Multi-Family													
Tier 1	0	1,700	\$2.93	\$3.07	\$3.66	\$3.21	\$3.80	\$3.36	\$3.95	\$3.46	\$4.05	\$3.56	\$4.18
Tier 2	1,701	5,000	4.40	4.61	5.49	4.82	5.70	5.04	5.93	5.19	6.08	5.34	6.27
Tier 3	5,001	10,000	6.59	6.90	8.24	7.22	8.55	7.55	8.89	7.78	9.11	8.01	9.41
Tier 4	Over	10,001	13.19	13.81	16.47	14.45	17.10	15.11	17.78	15.56	18.23	16.02	18.81
Non-Residential													
Tier 1	0	6,000	\$3.54	\$3.68	\$4.27	\$3.82	\$4.41	\$3.97	\$4.56	\$4.08	\$4.67	\$4.18	\$4.76
Tier 2	6,001	28,000	5.31	5.52	6.41	5.74	6.62	5.96	6.84	6.11	7.01	6.27	7.14
Tier 3	28,001	60,000	7.97	8.29	9.61	8.61	9.92	8.95	10.26	9.18	10.51	9.41	10.71
Tier 4	Over	60,001	15.93	16.56	19.22	17.21	19.85	17.88	20.52	18.34	21.02	18.81	21.42
Alt. Water Surcharge			\$0.89	\$0.89	\$0.00	\$0.89	\$0.00	\$0.89	\$0.00	\$0.89	\$0.00	\$0.89	\$0.00



(1) Multi-Family tier allocations are provided per dwelling unit. Non-residential customer tier allocations increase by meter size. 5/8" x 3/4" (smallest meter size) are summarized in this table.

ADDITIONAL VOLUME RATES ALTERNATIVES 1 AND 3

Customer Class	Current FY 2018-19	Proposed Volume Rate - (per 1,000 gallons)				
		4/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023
Construction/Hydrant	\$4.78	\$4.92	\$5.06	\$5.20	\$5.30	\$5.43
Coin Operated Water	3.43	3.83	4.23	4.63	4.90	5.27



(1) Multi-Family tier allocations are provided per dwelling unit. Non-residential customer tier allocations increase by meter size. 5/8" x 3/4" (smallest meter size) are summarized in this table.

RESIDENTIAL CUSTOMER MONTHLY BILL IMPACTS - WATER

Volume (kgal)	4/1/2019			1/1/2023	
	Current	Alt 1	Alt 3	Alt 1	Alt 3
3	\$26.80	\$27.57	\$26.82	\$30.38	\$29.60
5	38.30	39.45	38.82	43.60	42.92
10	67.05	69.15	68.82	76.65	76.22
20	148.85	153.75	158.82	171.25	176.12
30	303.55	314.05	338.82	351.65	375.92



Wastewater Fund



WASTEWATER RATE OBJECTIVES

- Leveling of rate adjustments avoiding sharp annual changes
- Provide a stable source of revenue as the City providing funding for planned wastewater capital projects and debt service
- Maintain customer class cost of service rate recovery
- Review treated effluent rate



MAJOR WASTEWATER FUND CAPITAL PROJECTS

- FY19-FY23 total \$63.0M in capital before inflation
 - › \$67.4M after inflation
- Sundog Trunk Main Phase B and C - \$9.7M in FY19-FY21
- Airport Trunk Main - \$9.9M in FY19-FY20
- Centralization SR89 Lift Station - \$2.9M in FY19-FY20
- Willow Creek Trunk - \$3.2M in FY21-FY22
- Hassayampa Trunk Main - \$4.0M in FY22
- Airport WRF Phase II - \$18.8M in FY23
- Various Main Replacements - \$4.2M in FY19-FY23



PROPOSED WASTEWATER MSC AND VOLUME RATES

Description	Current	4/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023
Annual % Increase in Revenue-Rates		3%	3%	4%	4%	4%
Monthly Service Charge						
Residential	\$21.47	\$21.47	\$21.47	\$21.47	\$21.47	\$21.47
Nonresidential (General)	21.47	21.47	21.47	21.47	21.47	21.47
Volume Rates per 1,000 gallons						
Residential	\$5.52	\$5.86	\$6.21	\$6.70	\$7.20	\$7.72
Nonresidential (General)	6.17	6.36	6.55	6.82	7.09	7.38
Septage Hauler	100.00	100.19	100.39	100.67	100.95	101.25



TREATED EFFLUENT RATE

- Water produced at City WWTP and WRF sold for irrigation, Industrial, and non-potable uses
- Contracted customer rates are limited to inflation
- Non-contract customer rates are not limited by contract
 - › Recommend phasing to 60% of the average potable water rate by 2023
 - Current is 37% of average volume rate

Description	Current	4/1/2019	1/1/2020	1/1/2021	1/1/2022	1/1/2023
Non-Contract Effluent Rate (\$ per AF)	\$783	\$880	\$977	\$1,073	\$1,170	\$1,267



RESIDENTIAL CUSTOMER MONTHLY BILLS - WASTEWATER

Use kgal	Current	Proposed 3/1/2019	Proposed 1/1/2023
3	38.03	39.05	44.63
5	49.07	50.78	60.07
7	60.11	62.50	75.51

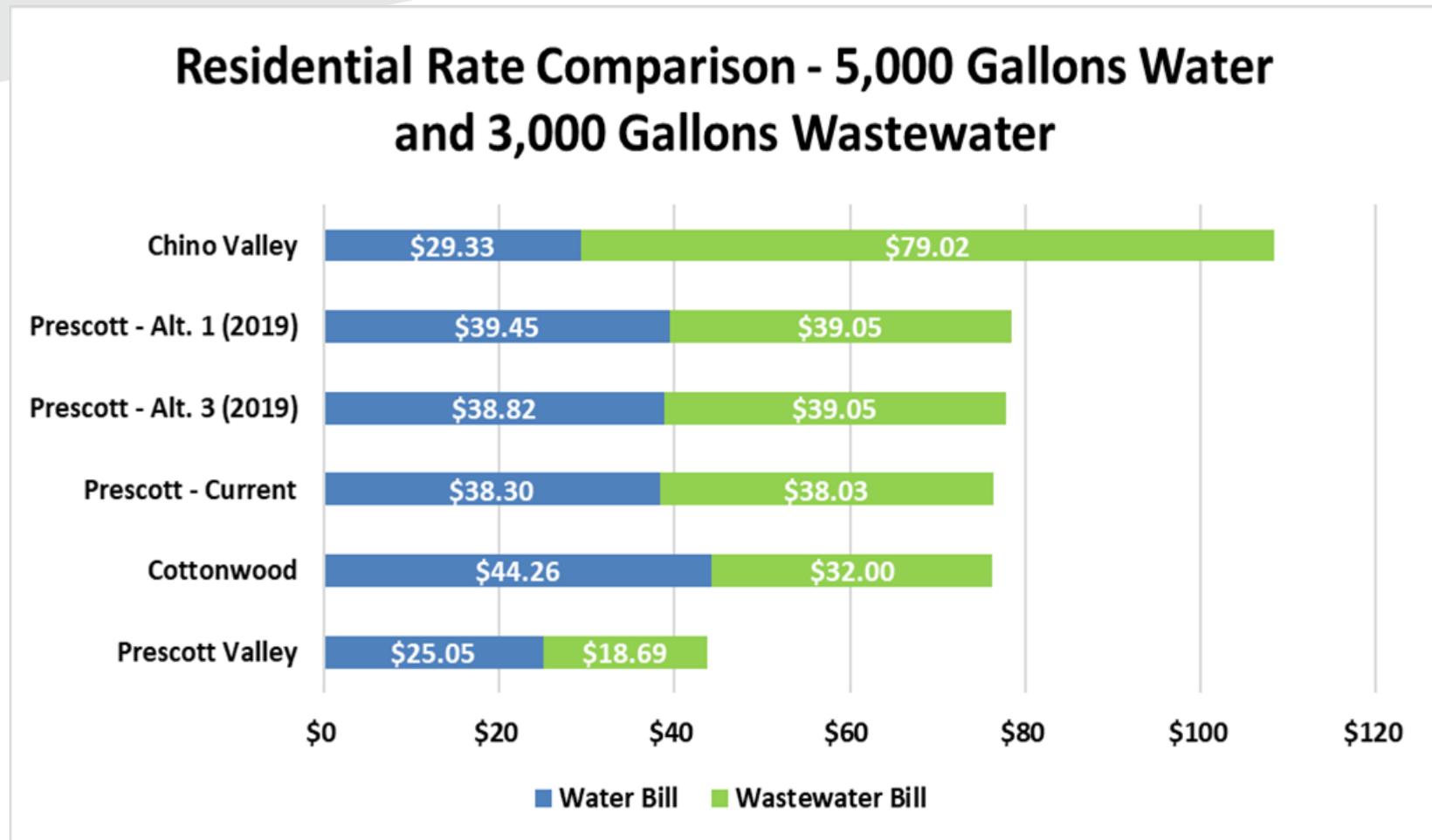


WATER AND WASTEWATER TYPICAL RESIDENTIAL MONTHLY BILL (1)



(1) 5/8-inch water meter using 5,000 gallons per month for water and 3,000 in the winter period for wastewater volume.

RESIDENTIAL WATER AND WASTEWATER BILL COMPARISONS



Discussion





Thank you!

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