



# Wastewater Utility Rate Options April 16, 2019

City Council Chambers  
826 North Main Street  
Cottonwood, Arizona

# Topics

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- Options 1 – 5

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# Brief History

- Idea started in 1987
- All new collection and treatment system
- 1% sales tax was created to support the bonding process
  - Operations & maintenance
  - Construction
  - Improvements
- 1% sales tax wastewater subsidy sunset July 1, 2013
- Initial rate was \$6.75 monthly
- Nine increases in 32 years
- Last increase was 03/01/2016

# What's in The Rate Calculations

- 4 cost components
  - Administrative
  - Depreciation
  - Maintenance & Operations
  - Debt Service
- Capital Improvements not included

- Uses number of accounts:
  - Administrative costs
  - Debt Service Payment
- Uses 5,000 gallon annualized usage:
  - Depreciation Expense
  - Operations & Maintenance Costs
- Residential in not volume based

# Wastewater Rate Options 1 - 5

# Wastewater Rate Option 1 – No Funding Change

# Projected Financial Summary – No Funding

Category Description	Projected						
	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	\$2,581,073	\$2,606,386	\$2,632,335	\$2,658,685	\$2,685,010	\$2,711,777	\$2,737,533
Non-operating Revenues	55,433	105,616	106,132	106,596	105,944	106,072	106,186
Available Revenues	2,636,506	2,712,001	2,738,467	2,765,281	2,790,954	2,817,849	2,843,719
Operating & Administrative Expenses	2,088,445	2,181,086	2,278,370	2,385,142	2,491,611	2,602,987	2,719,499
Income / (Loss) from Operations	548,061	530,915	460,097	380,139	299,343	214,862	124,220
Debt Service & Coverage	356,905	357,175	357,368	357,599	358,514	358,283	357,608
Net of Debt Service	191,156	173,740	102,729	22,541	(59,171)	(143,422)	(233,388)
Other Financing Sources	3,709,743	0	0	0	0	0	0
Total Available for Capital Improvements	3,900,899	173,740	102,729	22,541	(59,171)	(143,422)	(233,388)
Total Capital Improvement Needs	3,384,878	870,065	2,513,933	2,035,055	2,113,366	1,715,080	1,770,584
Net Total	\$516,021	(\$696,325)	(\$2,411,204)	(\$2,012,514)	(\$2,172,537)	(\$1,858,502)	(\$2,003,972)

# Wastewater Rate Options 2 – Full Funding

POTENTIAL OPTIONS	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
<b>Full Funding</b>							
Administrative Rate	\$7.38	\$7.38	\$11.95	\$12.45	\$12.95	\$13.45	\$14.15
Depreciation Rate (per 1,000)	3.53	3.53	11.60	11.65	11.75	11.80	11.90
O&M Rate (per 1,000)	19.65	19.65	21.20	22.30	23.50	24.80	26.10
DS Rate	1.44	1.44	6.90	6.85	6.75	6.70	6.70
Proposed Monthly Residential Rate	\$32.00	\$32.00	\$51.65	\$53.25	\$54.95	\$56.75	\$58.85
Monthly \$ increase	\$0.00	\$0.00	\$19.65	\$1.60	\$1.70	\$1.80	\$2.10
Projected % Increase	0.00%	0.00%	61.41%	3.10%	3.19%	3.28%	3.70%

# Projected Financial Summary – Full Funding

Category Description	Projected						
	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	\$2,581,073	\$2,606,386	\$4,139,546	\$4,307,982	\$4,503,743	\$4,705,918	\$4,923,240
Non-operating Revenues	55,433	105,616	106,132	106,596	105,944	106,072	106,186
Available Revenues	2,636,506	2,712,001	4,245,678	4,414,578	4,609,687	4,811,990	5,029,426
Operating & Administrative Expenses	2,088,445	2,181,086	2,278,370	2,385,142	2,491,611	2,602,987	2,719,499
Income / (Loss) from Operations	548,061	530,915	1,967,308	2,029,436	2,118,076	2,209,003	2,309,927
Debt Service & Coverage	356,905	357,175	357,368	357,599	358,514	358,283	357,608
Net of Debt Service	191,156	173,740	1,609,940	1,671,838	1,759,562	1,850,719	1,952,319
Other Financing Sources	3,709,743	0	0	0	0	0	0
Total Available for Capital Improvements	3,900,899	173,740	1,609,940	1,671,838	1,759,562	1,850,719	1,952,319
Total Capital Improvement Needs	3,384,878	870,065	2,513,933	2,035,055	2,113,366	1,715,080	1,770,584
Net Total	\$516,021	(\$696,325)	(\$903,993)	(\$363,217)	(\$353,804)	\$135,639	\$181,735

# Wastewater Rate Options 3 & 4

POTENTIAL OPTIONS	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
<b>3 Year Option</b>							
Administrative Rate	\$7.38	\$7.38	\$11.95	\$12.45	\$12.95	\$13.45	\$14.15
Depreciation Rate (per 1,000)	3.53	3.53	0.00	5.65	11.75	11.80	11.90
O&M Rate (per 1,000)	19.65	19.65	21.20	22.30	23.50	24.80	26.10
DS Rate	1.44	1.44	6.90	6.85	6.75	6.70	6.70
Proposed Monthly Residential Rate	\$32.00	\$32.00	\$40.05	\$47.25	\$54.95	\$56.75	\$58.85
Monthly \$ increase	\$0.00	\$0.00	\$8.05	\$7.20	\$7.70	\$1.80	\$2.10
Projected % Increase	0.00%	0.00%	25.16%	17.98%	16.30%	3.28%	3.70%
<b>4 Year Option</b>							
Administrative Rate	\$7.38	\$7.38	\$11.95	\$12.45	\$12.95	\$13.45	\$14.15
Depreciation Rate (per 1,000)	3.53	3.53	0.00	3.95	7.95	11.80	11.90
O&M Rate (per 1,000)	19.65	19.65	21.20	22.30	23.50	24.80	26.10
DS Rate	1.44	1.44	6.90	6.85	6.75	6.70	6.70
Proposed Monthly Residential Rate	\$32.00	\$32.00	\$40.05	\$45.55	\$51.15	\$56.75	\$58.85
Monthly \$ increase	\$0.00	\$0.00	\$8.05	\$5.50	\$5.60	\$5.60	\$2.10
Projected % Increase	0.00%	0.00%	25.16%	13.73%	12.29%	10.95%	3.70%

# Wastewater Rate Option 5

POTENTIAL OPTIONS	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
5 Year Option							
Administrative Rate	\$7.38	\$7.38	\$11.95	\$12.45	\$12.95	\$13.45	\$14.15
Depreciation Rate (per 1,000)	\$3.53	\$3.53	0.00	1.55	5.55	9.40	11.90
O&M Rate (per 1,000)	\$19.65	\$19.65	21.20	22.30	23.50	24.80	26.10
DS Rate	\$1.44	\$1.44	4.50	6.85	6.75	6.70	6.70
Proposed Monthly Residential Rate	\$32.00	\$32.00	\$37.65	\$43.15	\$48.75	\$54.35	\$58.85
Monthly \$ increase	\$0.00	\$0.00	\$5.65	\$5.50	\$5.60	\$5.60	\$4.50
Projected % Increase	0.00%	0.00%	17.66%	14.61%	12.98%	11.49%	8.28%

# Projected Financial Summary – 3 Year Option

Category Description	Projected						
	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	\$2,581,073	\$2,606,386	\$3,136,513	\$3,779,223	\$4,482,635	\$4,678,983	\$4,900,761
Non-operating Revenues	55,433	105,616	106,132	106,596	105,944	106,072	106,186
Available Revenues	2,636,506	2,712,001	3,242,645	3,885,819	4,588,579	4,785,055	5,006,947
Operating & Administrative Expenses	2,088,445	2,181,086	2,278,370	2,385,142	2,491,611	2,602,987	2,719,499
Income / (Loss) from Operations	548,061	530,915	964,275	1,500,677	2,096,968	2,182,068	2,287,448
Debt Service & Coverage	356,905	357,175	357,368	357,599	358,514	358,283	357,608
Net of Debt Service	191,156	173,740	606,907	1,143,079	1,738,454	1,823,784	1,929,840
Other Financing Sources	3,709,743	0	0	0	0	0	0
Total Available for Capital Improvements	3,900,899	173,740	606,907	1,143,079	1,738,454	1,823,784	1,929,840
Total Capital Improvement Needs	3,384,878	870,065	2,513,933	2,035,055	2,113,366	1,715,080	1,770,584
Net Total	\$516,021	(\$696,325)	(\$1,907,026)	(\$891,976)	(\$374,912)	\$108,704	\$159,256

# Projected Financial Summary – 4 Year Option

Category Description	Projected						
	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	\$2,581,073	\$2,606,386	\$3,136,513	\$3,580,697	\$4,107,005	\$4,637,294	\$4,850,758
Non-operating Revenues	55,433	105,616	106,132	106,596	105,944	106,072	106,186
Available Revenues	2,636,506	2,712,001	3,242,645	3,687,293	4,212,949	4,743,366	4,956,944
Operating & Administrative Expenses	2,088,445	2,181,086	2,278,370	2,385,142	2,491,611	2,602,987	2,719,499
Income / (Loss) from Operations	548,061	530,915	964,275	1,302,151	1,721,338	2,140,379	2,237,445
Debt Service & Coverage	356,905	357,175	357,368	357,599	358,514	358,283	357,608
Net of Debt Service	191,156	173,740	606,907	944,553	1,362,824	1,782,095	1,879,837
Other Financing Sources	3,709,743	0	0	0	0	0	0
Total Available for Capital Improvements	3,900,899	173,740	606,907	944,553	1,362,824	1,782,095	1,879,837
Total Capital Improvement Needs	3,384,878	870,065	2,513,933	2,035,055	2,113,366	1,715,080	1,770,584
Net Total	\$516,021	(\$696,325)	(\$1,907,026)	(\$1,090,502)	(\$750,542)	\$67,015	\$109,253

# Projected Financial Summary – 5 Year Option

CATEGORY DESCRIPTION	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
Operating Revenues	\$2,581,073	\$2,607,367	\$2,977,862	\$3,438,727	\$3,955,183	\$4,481,342	\$4,914,918
Non-operating Revenues	55,433	105,616	106,132	106,596	105,944	106,072	106,186
Available Revenues	2,636,506	2,712,982	3,083,994	3,545,323	4,061,127	4,587,414	5,021,104
Operating & Administrative Expenses	2,088,445	2,181,086	2,278,370	2,385,142	2,491,611	2,602,987	2,719,499
Income / (Loss) from Operations	548,061	531,896	805,624	1,160,181	1,569,516	1,984,427	2,301,605
Debt Service & Coverage	356,905	357,175	357,368	357,599	358,514	358,283	357,608
Net of Debt Service	191,156	174,721	448,256	802,583	1,211,002	1,626,143	1,943,997
Other Financing Sources	3,709,743	0	0	0	0	0	0
Total Available for Capital Improvements	3,900,899	174,721	448,256	802,583	1,211,002	1,626,143	1,943,997
Total Capital Improvement Needs	3,384,878	870,065	2,513,933	2,035,055	2,113,366	1,715,080	1,770,584
Net Total	\$516,021	(\$695,344)	(\$2,065,677)	(\$1,232,472)	(\$902,364)	(\$88,937)	\$173,413

# Capital Improvements

ACCOUNT DESCRIPTION	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
Investment Expense	\$1,011	\$1,065	\$1,133	\$1,055	\$1,066	\$1,080	\$1,084
Impact/Capacity Fee Study	12,000	0	0	0	0	0	0
Wastewater Master Plan	22,124	0	0	0	0	0	0
Furnishings, Vehicles & Equipment	50,000	130,000	50,000	50,000	50,000	50,000	50,000
Lift Station Odor Control System	0	55,000	0	0	0	0	7,500
WWTP Headworks	0	0	0	50,000	0	0	0
Parshall Flume Replacement	0	0	110,000	0	0	0	0
Mingus WWTP Generator Replacement	0	0	0	100,000	0	0	12,000
Sewer Cleaning/Camera Repair/Relining Ongoing	90,000	90,000	90,000	90,000	90,000	90,000	90,000
Riverfront WWTP - Construction	3,209,743	0	0	0	0	0	0
Lift Station Refurbishing Program	0	310,000	290,000	345,000	320,000	325,000	305,000
Reclaimed Water Pump System Upgrade	0	55,000	285,000	125,000	75,000	45,000	0
Reclaimed Waterline Riverfront to Kids park	0	75,000	250,000	350,000	0	0	0
UV Lamp Ecoray Replacement	0	0	27,300	0	27,300	0	30,000
Quartz Module Duron Replacement	0	54,000	0	54,000	0	54,000	0
WWTP Upgrades	0	50,000	50,000	50,000	50,000	50,000	50,000
Reclaimed Vault Screening	0	0	125,500	0	0	0	0
Aeration Blowers/Diffuser Piping Replacement	0	0	780,000	500,000	400,000	400,000	400,000
WWTP Centrifuge	0	0	0	110,000	990,000	700,000	700,000
Basin Roof Repair	0	50,000	365,000	100,000	0	0	0
Force Main Rehabiltation	0	0	0	0	0	0	125,000
Clarifier Inspection and Repair	0	0	90,000	110,000	110,000	0	0
<b>Total Capital Improvements</b>	<b>\$3,384,878</b>	<b>\$870,065</b>	<b>\$2,513,933</b>	<b>\$2,035,055</b>	<b>\$2,113,366</b>	<b>\$1,715,080</b>	<b>\$1,770,584</b>

# Multi Year Financial Impact

## Without Capital Improvements

Different Options	PROJECTED							Multi Year Fiscal Impact
	2018	2019	2020	2021	2022	2023	2024	
No Funding	3,900,899	173,740	102,729	22,541	(59,171)	(143,422)	(233,388)	\$3,763,929
Full Funding	\$3,900,899	\$173,740	\$1,609,940	\$1,671,838	\$1,759,562	\$1,850,719	\$1,952,319	\$12,919,018
3 Year Option	\$3,900,899	\$173,740	\$606,907	\$1,143,079	\$1,738,454	\$1,823,784	\$1,929,840	\$11,316,704
4 Year Option	\$3,900,899	\$173,740	\$606,907	\$944,553	\$1,362,824	\$1,782,095	\$1,879,837	\$10,650,856
5 Year Option	\$3,900,899	\$174,721	\$448,256	\$802,583	\$1,211,002	\$1,626,143	\$1,943,997	\$10,107,602

## With Capital Improvements

Different Options	PROJECTED							Multi Year Fiscal Impact
	2018	2019	2020	2021	2022	2023	2024	
No Funding	\$516,021	(\$696,325)	(\$2,411,204)	(\$2,012,514)	(\$2,172,537)	(\$1,858,502)	(\$2,003,972)	(\$10,639,032)
Full Funding	\$516,021	(\$696,325)	(\$903,993)	(\$363,217)	(\$353,804)	\$135,639	\$181,735	(\$1,483,943)
3 Year Option	\$516,021	(\$696,325)	(\$1,907,026)	(\$891,976)	(\$374,912)	\$108,704	\$159,256	(\$3,086,257)
4 Year Option	\$516,021	(\$696,325)	(\$1,907,026)	(\$1,090,502)	(\$750,542)	\$67,015	\$109,253	(\$3,752,105)
5 Year Option	\$516,021	(\$695,344)	(\$2,065,677)	(\$1,232,472)	(\$902,364)	(\$88,937)	\$173,413	(\$4,295,359)

# Multi Year Fee Impact

Different Options	PROJECTED						
	2018	2019	2020	2021	2022	2023	2024
<b>No Funding</b>	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00
Monthly Increase		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Full Funding</b>	\$32.00	\$32.00	\$51.65	\$53.25	\$54.95	\$56.75	\$56.75
Monthly Increase		\$0.00	\$19.65	\$1.60	\$1.70	\$1.80	\$0.00
<b>3 Year Option</b>	\$32.00	\$32.00	\$40.05	\$47.25	\$54.95	\$56.75	\$58.85
Monthly Increase		\$0.00	\$8.05	\$7.20	\$7.70	\$1.80	\$2.10
<b>4 Year Option</b>	\$32.00	\$32.00	\$40.05	\$45.55	\$51.15	\$56.75	\$58.85
Monthly Increase		\$0.00	\$8.05	\$5.50	\$5.60	\$5.60	\$2.10
<b>5 Year Option</b>	\$32.00	\$32.00	\$37.65	\$43.15	\$48.75	\$54.35	\$58.85
Monthly Increase		\$0.00	\$5.65	\$5.50	\$5.60	\$5.60	\$4.50

# Rate Comparisons

# Wastewater Residential Rate Comparisons

Source: Communities websites & personal contacts

1. Municipal Water is privately owned - Camp Verde Water System, Inc. & Verde Lakes Water System & Wastewater, Camp Verde Sanitation District collects property taxes to offset O&M and capital improvements
2. Part of Chino is supplied by Prescott water at 30% above the Prescott cost.
3. Wastewater is provided by the No. Gila County Sanitary District-collects \$0.60 per \$100 of secondary assessed value
4. Prescott Valley Sewer is a combination of a fixed monthly cost plus usage. Base is \$5.07 plus \$4.54 per each 1,000 gallons
5. Water is operated by Arizona Water Company
6. Cottonwood Water provides water services, wastewater is provided by VSF Wastewater Co.

Community	Notes	2016 Census Population	7,500 gallons wastewater	
			Inside	Outside
<b>Cottonwood</b>		<b>11,990</b>	<b>\$32.00</b>	<b>\$32.00</b>
Camp Verde	1	11,238	\$50.00	\$50.00
Chino Valley		11,250	\$62.14	\$62.14
Chino Valley / Prescott	2		\$79.02	\$79.02
Clarkdale		4,272	\$54.00	\$54.00
Flagstaff		71,459	\$37.50	\$41.25
Payson	3	15,476	\$21.80	\$21.80
Prescott		42,513	\$62.87	\$67.75
Prescott Valley	4	43,132	\$39.12	\$39.12
Sedona	5	10,397	\$61.11	\$61.11
Show Low		11,096	\$32.62	\$32.62
Verde Santa Fe	6		\$43.24	\$43.24
Wickenburg		7,115	\$30.36	\$30.36
Williams		3,159	\$45.00	\$45.00
Winslow		9,754	\$51.33	\$102.66
Average			\$48.13	\$51.88

# Questions