

AGENDA

AGENDA OF THE WORK SESSIONS OF THE MAYOR AND COUNCIL OF THE CITY OF BISBEE, COUNTY OF COCHISE, STATE OF ARIZONA, TO BE HELD ON TUESDAY, OCTOBER 16, 2018, AT 5:01 PM IN THE COCHISE COUNTY BOARD OF SUPERVISORS HEARING ROOM, 1415 MELODY LANE, BUILDING G, BISBEE, ARIZONA.

THE MEETING WAS CALLED TO ORDER BY _____ AT _____ PM.

ROLL CALL

COUNCIL

Councilmember Anna Cline, Ward III
Councilmember Joan Hansen, Ward II
Councilmember Frank Davis, Ward I
Mayor David M. Smith
Councilmember Bill Higgins, Ward I
Councilmember Douglas Dunn, Ward II , Mayor Pro Tempore
Councilmember Gabe Lindstrom, Ward III

STAFF

Robert E. Smith, City Manager
Ashlee Coronado, City Clerk
Keri Bagley, Finance Director
Dan Duchon, Personnel Director
Dwayne Wallace, Operations Manager
Albert Echave, Police Chief
George Castillo, Fire Chief

CITY ATTORNEY

Britt Hanson

THE FOLLOWING ITEM WILL BE DISCUSSED AND/OR CONSIDERED AT THESE MEETINGS:

1. Presentation by Dan Jackson of Willdan of the proposed Sewer Rate Plan
Robert E. Smith, City Manager
2. Solar Presentation by Arizona State University.
David M. Smith, Mayor

ADJOURNMENT

Individuals with hearing disabilities can contact the City Clerk's Office (520) 432-6012 to request an Assisted Listening Device, at least 24 hours before the meeting.

Anyone needing special accommodation to attend this meeting should contact Ashlee Coronado at (520) 432-6012 at least twenty-four hours before the meeting.

Public documents referred to herein may be viewed during regular business hours at the City Clerk's Office at 1415 Melody Lane Bldg. G., Bisbee.

Pursuant to A.R.S. § 38-431.03(A) (3), the Council may vote to enter executive session at any point during this meeting for discussion or consultation for legal advice with its attorney(s), who may appear telephonically.



AGENDA ITEM NUMBER 1

MAYOR & COUNCIL WORK SESSION FOR October 16, 2018

DATE ACTION SUBMITTED: October 10, 2018

DISCUSSION/PRESENTATION ONLY

SUBJECT: PRESENTATION BY DAN JACKSON OF WILLDAN OF THE PROPOSED SEWER RATE PLAN

FROM: Robert Smith, City Manager

RECOMMENDATION: DISCUSSION ONLY

PROPOSED MOTION: WORK SESSION ONLY

DISCUSSION:

FISCAL IMPACT:

DEPARTMENT LINE ITEM ACCOUNT:

BALANCE IN LINE ITEM IF APPROVED:

Prepared by:


Ashlee Coronado
City Clerk

Reviewed by:


Robert Smith
City Manager

<div style="border: 1px solid white; padding: 5px; display: inline-block; margin: 0 auto; width: 80%;"> CITY OF BISBEE WASTEWATER COST OF SERVICE MODEL </div>											
EFFECTIVE DATE											
Current	Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27	

Proposed Rate Schedule Scenario: 2018 10 12 -- Scenario 1

Wastewater Rates -- Residential

Residential	\$ 47.60	\$ 47.60	\$ 47.60	\$ 47.60	\$ 49.03	\$ 50.50	\$ 52.01	\$ 53.05	\$ 54.12	\$ 55.20	\$ 55.20
Residential Outside	95.20	95.20	95.20	95.20	98.06	101.00	104.03	106.11	108.23	110.39	110.39
Low Income	28.57	28.57	28.57	28.57	29.43	30.31	31.22	31.84	32.48	33.13	33.13
Discounted Low Income	14.58	14.58	14.58	14.58	15.02	15.47	15.93	16.25	16.58	16.91	16.91

Wastewater Rates -- Commercial

Small Retail	53.79	53.79	53.79	53.79	55.40	57.07	58.78	59.95	61.15	62.38	62.38
Small Restaurants	82.07	82.07	82.07	82.07	84.83	87.88	100.61	102.62	104.67	106.77	106.77
Bars & Restaurants	153.59	153.59	153.59	153.59	158.20	162.94	167.83	171.19	174.61	176.10	178.10
Hotels -- Per Room	28.58	28.58	28.58	28.58	29.44	30.32	31.23	31.85	32.49	33.14	33.14
Large Retail	238.12	238.12	238.12	238.12	245.26	252.62	260.20	265.40	270.71	276.13	276.13
Mixed Use	87.76	87.76	87.76	87.76	90.38	93.10	95.90	97.62	99.77	101.77	101.77
Schools	1,097.62	1,097.62	1,097.62	1,097.62	1,130.55	1,164.47	1,198.40	1,223.39	1,247.85	1,272.81	1,272.81



City of Bisbee

Wastewater Rate Study

And Long Term Financial Plan

City Council Presentation

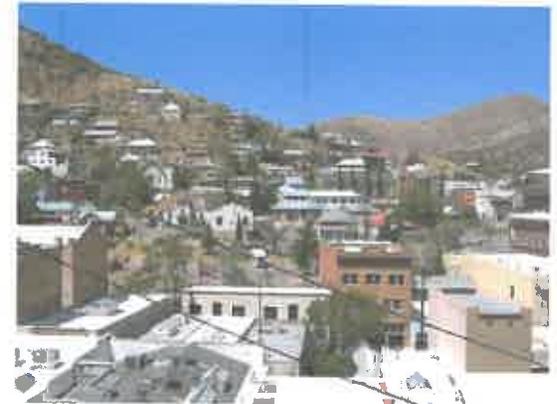


October 2018

Facts about Water and Wastewater Rates in the 21st Century



- Average utility has been increasing rates 5-6% every year
- Many reasons for rate increases are beyond a utility's control (inflation, environmental regulations, etc.)
- Cost of repairing and maintaining systems has increased significantly in recent years
- Conclusion: while still affordable, wastewater costs are going to be higher in the coming years



Introduction and Background



- Last comprehensive wastewater rate study and long-term financial forecast was completed in 2009
- Last wastewater rate adjustment was in 2013
- Purpose of 2018 rate study:
 - To forecast wastewater rates required to cover operating expenses, reserve contributions and debt service for a 10 year period
 - To ensure wastewater rates can fund \$7.6 million refinancing bond's debt service and coverage
 - To prepare financial letter for 2018 Wastewater Fund revenue bond issue

Wastewater Fund Preliminary Observations



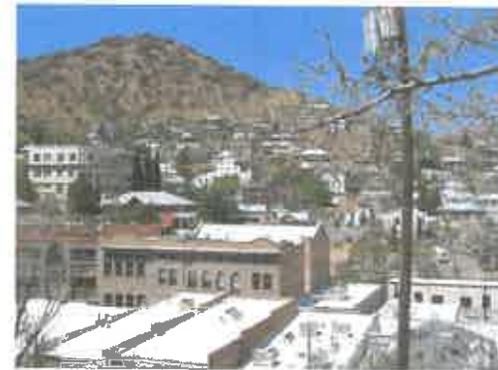
- Wastewater fund has been recovering significantly less than its costs over past decade – total **\$5.4 million**
- Reserve fund balances are currently depleting
- **New debt issued to refinance and retire existing debt is significantly benefiting wastewater fund and ratepayers by reducing annual cash requirements**



Benefits of 2018 Debt Restructuring



- Reduces annual cash requirements by \$600,000
- Eliminates net losses before capital contributions
- Allows for City to begin rebuilding its annual capital reserve for emergencies
- Allows City to postpone the need for rate increases for 3 more years
 - Without refunding immediate 10.0% increases for next two years would be required
- Opens opportunity for City to get grant funding from USDA/NADBank



City of Bisbee Wastewater Current Fee Structure



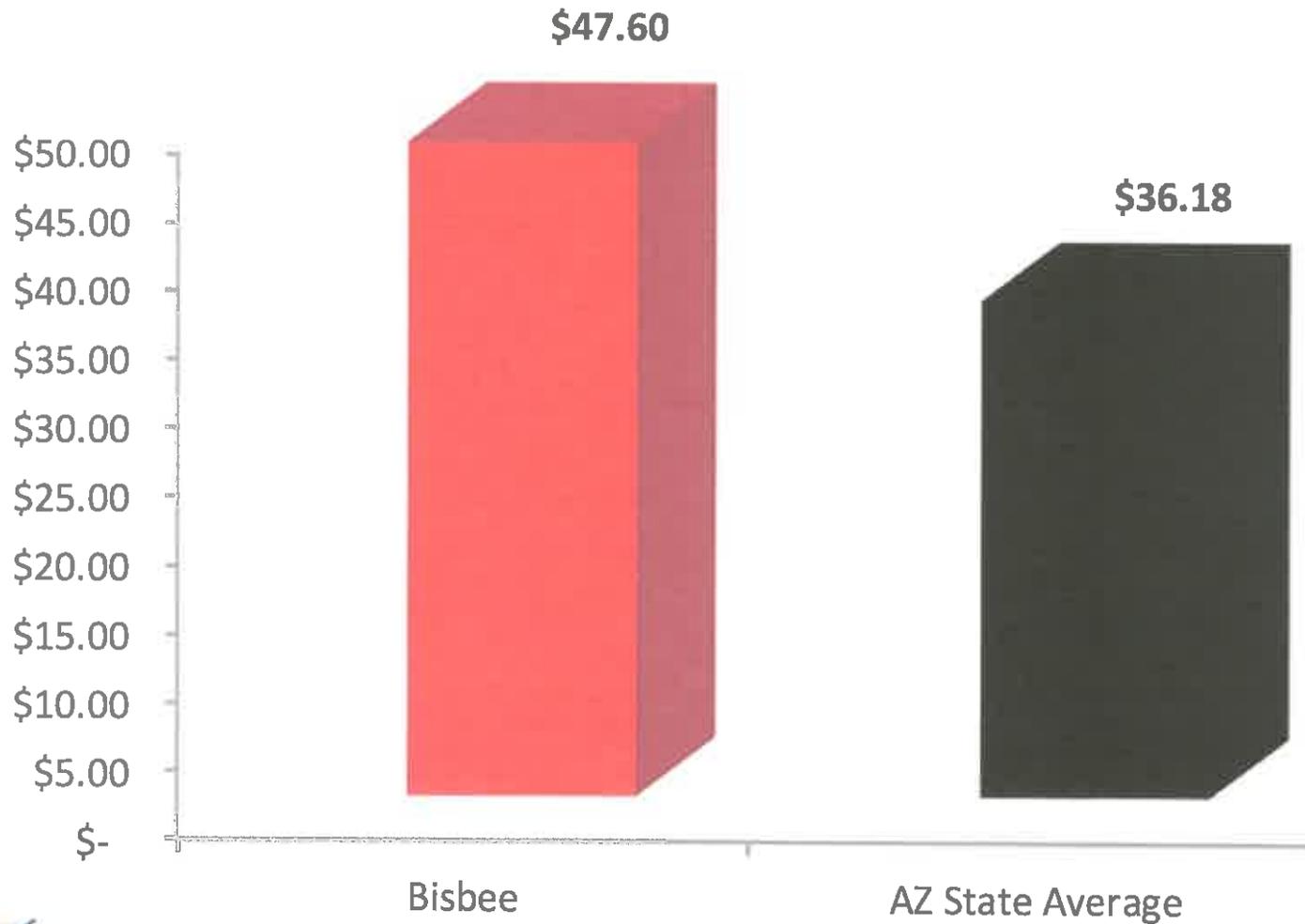
Residential Monthly Charges

	<u>Fixed Fee</u>
Residential	\$ 47.60
Low Income	28.57
Discounted Low Income	14.58

Commercial Monthly Charges

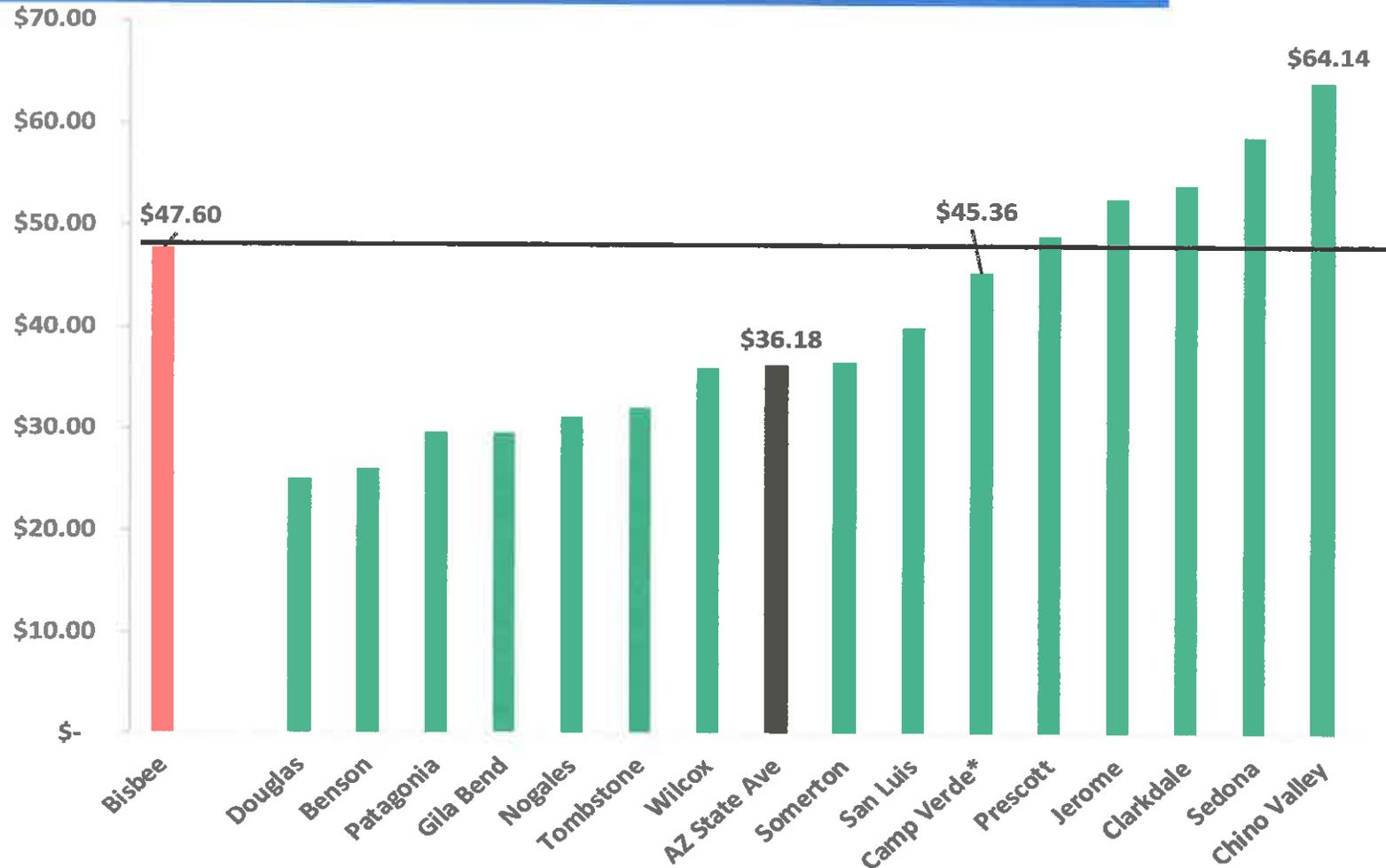
Small Retail	\$ 53.79
Small Restaruant	92.07
Bars & Restaruant	153.59
Hotels & Motels - Per Room	28.58
Large Retail	238.12

Average Monthly WW Charges Volume Gallons = 5,000



Comparison of Monthly WW Charges

*Fixtures = 18; Volume Gallons = 5,000



Wastewater Active Accounts/Units TY 2019



Residential	2,725
Small Retail	135
Small Restaurants	16
Bars & Restaurants	14
1/ Hotels & Motels	379
2/ Large Retail	27
Low Income	124
Discounted Low Income	83
Mixed Use	70
Schools	4
	4
Total Accounts/Rooms	3,577

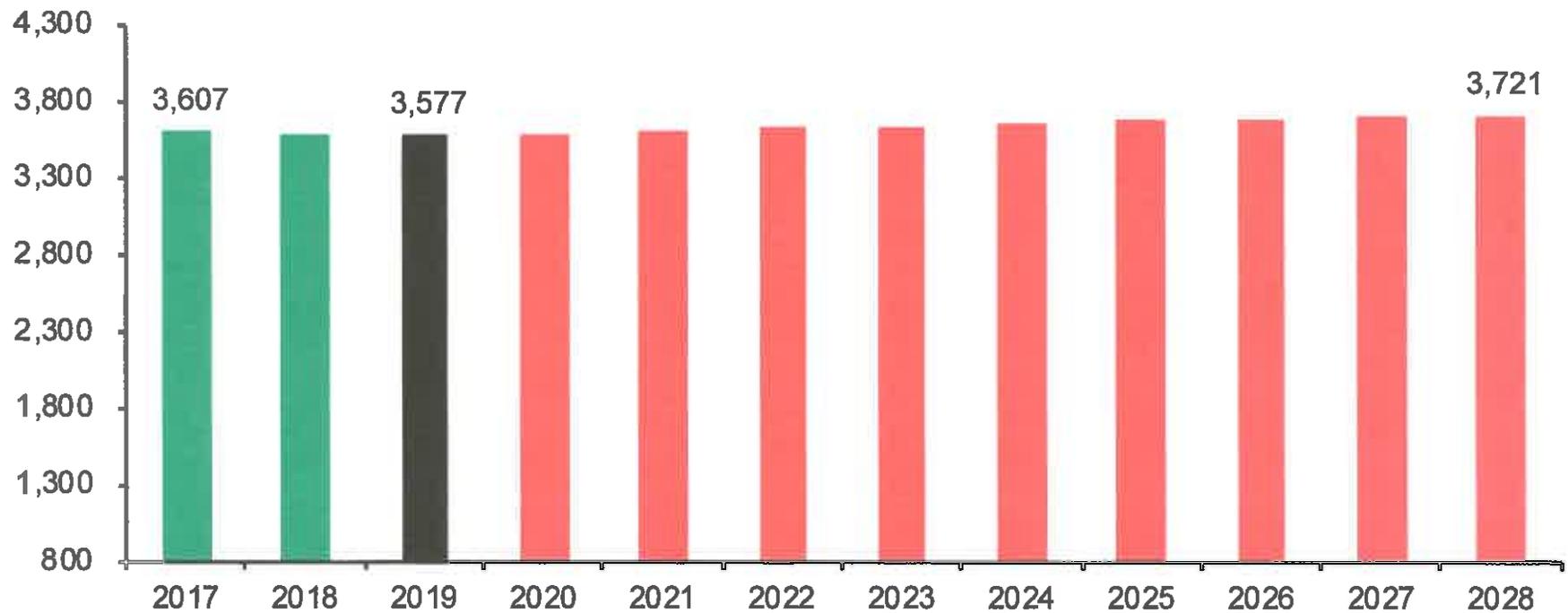
1/ Includes Best Value Inn (66 rooms)

2/ Includes Border Patrol Facilities

Actual and Forecast Total Wastewater Accounts/Units



0.5% Annual Growth Estimate

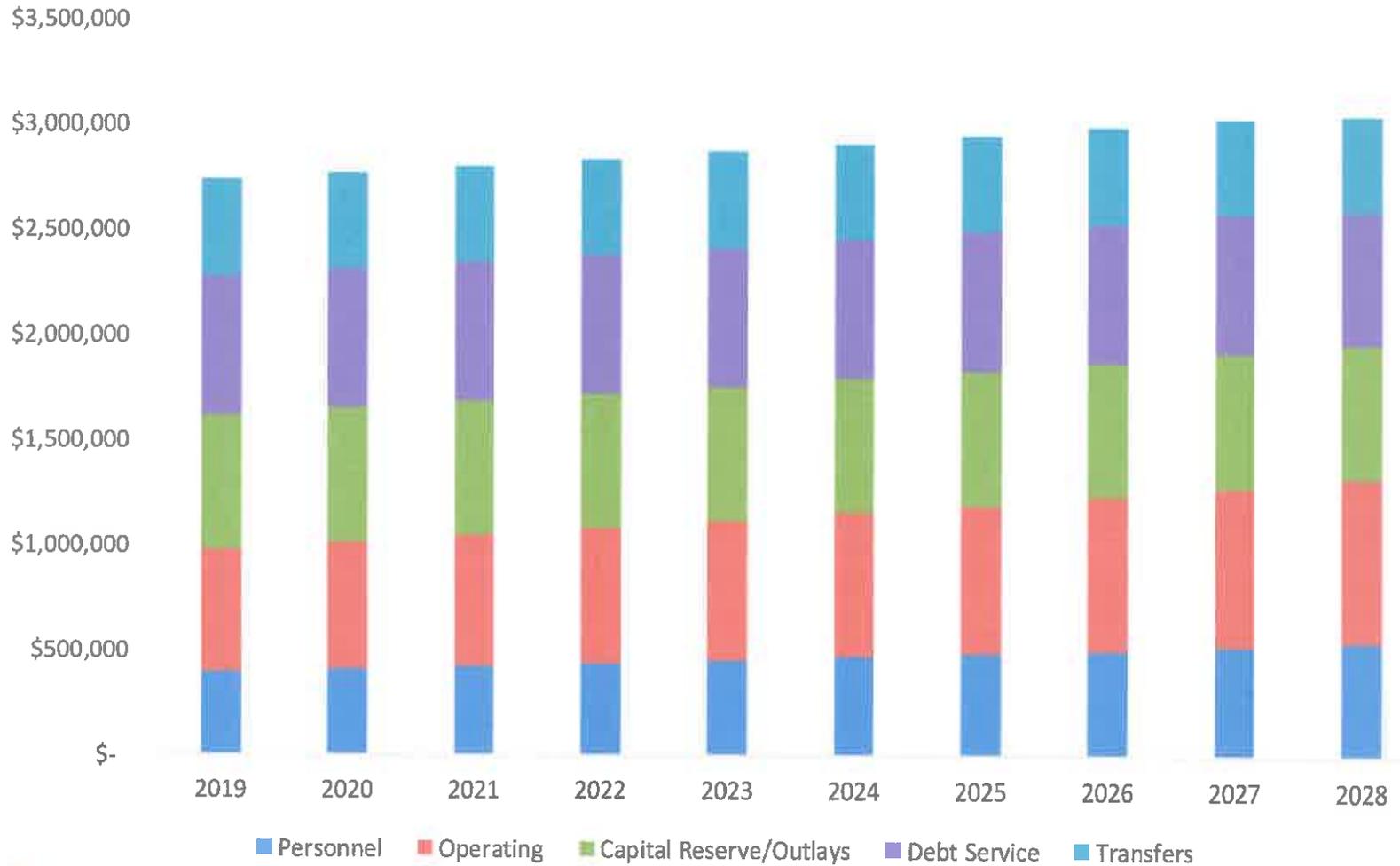


Water and Wastewater Utility 10 Year Cost of Service Forecast



- Most expenses expected to increase 3.0% per year; some expenses increase at higher rates
- Bad debts expense is estimated to be \$160,000 which is equivalent to **\$3.65 per month per residential customer**
- \$640,000 annual capital reserve is set aside per terms of 2018 bond for catastrophic failure or unplanned capital projects
- No increase in General Fund transfers
- No additional wastewater long-term debt after issuing 2018 bond

Forecast Wastewater Cost of Service FY 2019 – FY 2028



Forecast Wastewater Cost of Service FY 2019 – FY 2023



	Personnel	Operations	Capital Reserve/Outlays	Debt Service	Transfers	Total
2019	\$ 395,171	\$ 585,029	\$ 640,000	\$ 660,261	\$ 462,215	\$ 2,742,675
2020	408,837	603,994	640,000	660,067	462,215	2,775,113
2021	423,057	623,614	640,000	659,806	462,215	2,808,693
2022	437,861	643,916	640,000	660,170	462,215	2,844,163
2023	453,278	664,927	640,000	660,121	462,215	2,880,541
2024	469,340	686,675	640,000	659,657	462,215	2,917,887
2025	486,080	709,191	640,000	659,781	462,215	2,957,267
2026	503,536	732,505	640,000	659,454	462,215	2,997,711
2027	521,746	756,651	640,000	659,677	462,215	3,040,288
2028	540,749	781,664	640,000	628,506	462,215	3,053,135

Includes annual debt service for 2018 bond issue and \$160k bad debts expense

City of Bisbee Long-Term Wastewater Rate Plan



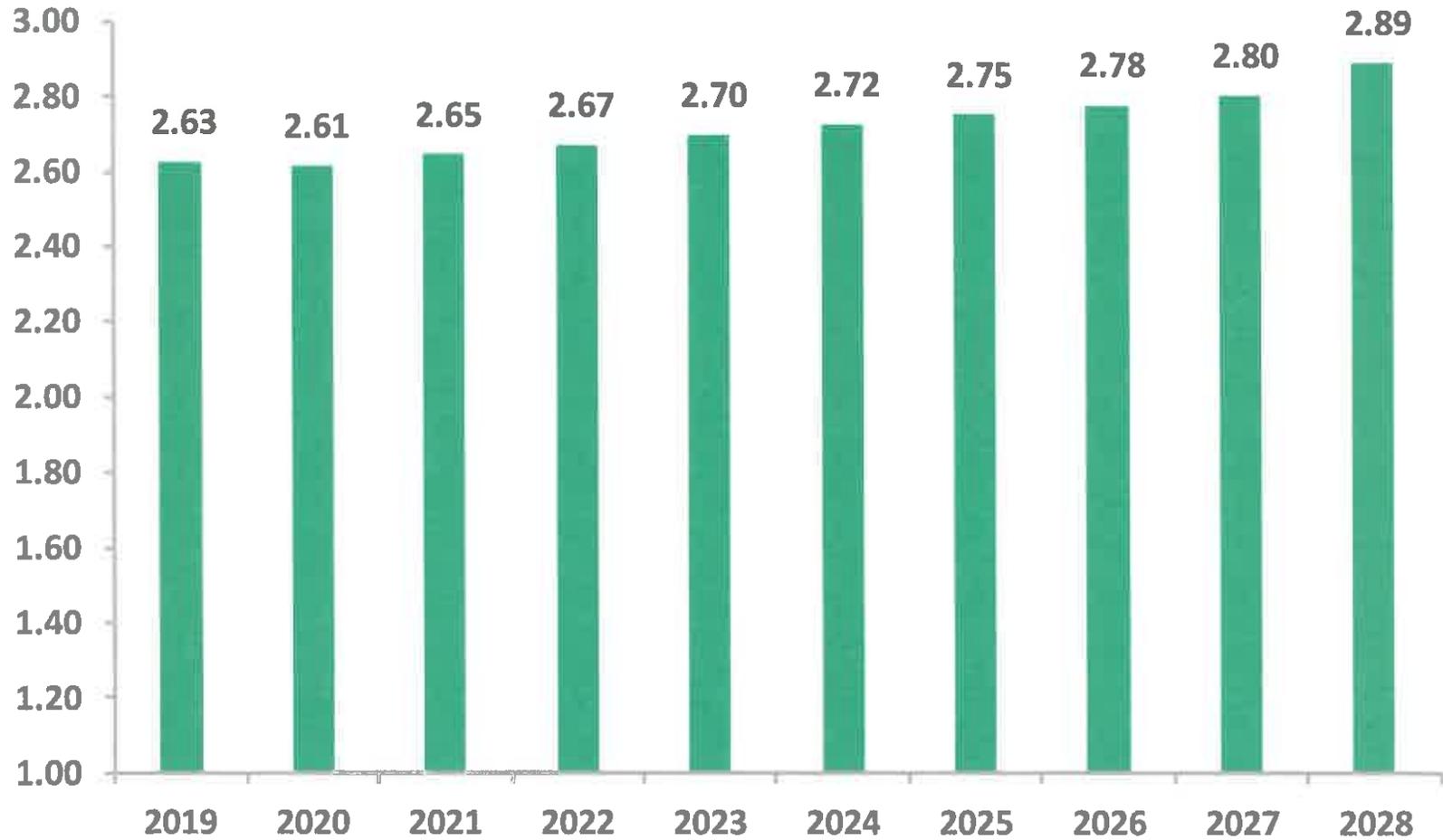
	Current	Effective									
		Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27
<u>Residential Monthly Charges</u>											
Percent Adjustment		0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	0.00%
Residential	\$ 47.60	\$ 47.60	\$ 47.60	\$ 47.60	\$ 49.03	\$ 50.50	\$ 52.01	\$ 53.05	\$ 54.12	\$ 55.20	\$ 55.20
Low Income	28.57	28.57	28.57	28.57	29.43	30.31	31.22	31.84	32.48	33.13	33.13
Discounted Low Incom	14.58	14.58	14.58	14.58	15.02	15.47	15.93	16.25	16.58	16.91	16.91

City of Bisbee Long-Term Wastewater Rate Plan



	Current	Effective									
		Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27
<u>Commercial Monthly Charges</u>											
Percent Adjustment		0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	0.00%
Small Retail	\$ 53.79	\$ 53.79	\$ 53.79	\$ 53.79	\$ 55.40	\$ 57.07	\$ 58.78	\$ 59.95	\$ 61.15	\$ 62.38	\$ 62.38
Small Restaurants	92.07	92.07	92.07	92.07	94.83	97.68	100.61	102.62	104.67	106.77	106.77
Bars & Restaurants	153.59	153.59	153.59	153.59	158.20	162.94	167.83	171.19	174.61	178.10	178.10
Hotels -- Per Room	28.58	28.58	28.58	28.58	29.44	30.32	31.23	31.85	32.49	33.14	33.14
Large Retail	238.12	238.12	238.12	238.12	245.26	252.62	260.20	265.40	270.71	276.13	276.13

Annual Debt Service Coverage FY 2019 – FY 2028



Presentation Summary

How Will Rate Plan Benefit City?



- Will enable City to cover all costs of providing wastewater service
- Will ensure financial health of wastewater utility
- Will enable City to make \$640,000 annual contribution to capital reserve to cover catastrophic events and fund unplanned CIP projects
- Will enable City to fund the debt service on 2018 refinancing WW bond issue and maintain adequate debt service coverage



Questions?

CITY OF BISBEE											
WASTEWATER COST OF SERVICE MODEL											
EFFECTIVE DATE											
Current	Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27	

Proposed Rate Schedule Scenario: 2018 10 12 -- Scenario 1

Wastewater Rates -- Residential

Residential	\$ 47.60	\$ 47.60	\$ 47.60	\$ 47.60	\$ 49.03	\$ 50.60	\$ 52.01	\$ 53.05	\$ 54.12	\$ 55.20	\$ 55.20
Residential Outside	95.20	95.20	95.20	95.20	98.06	101.00	104.03	106.11	108.23	110.39	110.39
Low Income	28.57	28.57	28.57	28.57	29.43	30.31	31.22	31.84	32.48	33.13	33.13
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Wastewater Rates -- Commercial

Small Retail	53.79	53.79	53.79	53.79	55.40	57.07	58.76	59.95	61.15	62.38	62.38
Small Restaurants	92.07	92.07	92.07	92.07	94.83	97.68	100.61	102.62	104.67	106.77	106.77
Bars & Restaurants	153.59	153.59	153.59	153.59	158.20	162.94	167.83	171.19	174.61	178.10	178.10
Hotels -- Per Room	28.58	28.58	28.58	28.58	29.44	30.32	31.23	31.85	32.49	33.14	33.14
Large Retail	238.12	238.12	238.12	238.12	245.26	252.62	260.20	265.40	270.71	276.13	276.13
Mixed Use	87.76	87.76	87.76	87.76	90.39	93.10	95.90	97.82	99.77	101.77	101.77
Schools	1,097.62	1,097.62	1,097.62	1,097.62	1,130.55	1,164.47	1,199.40	1,223.39	1,247.85	1,272.81	1,272.81



City of Bisbee

Ten Year Rate Analysis and Pro Forma

Fiscal Years 2019-2028



Utility System

Water

Wastewater

Wastewater

Comprehensive Utility

Customer Class

JAB C

Inputs

Net Revenues Available for Contingency

Debt Service

Total Revenues

Debt Coverage

Sewer Projections

Future Debt Term: 25

Sewer Future Bond Issues

	Alternative		Proposed	
1		\$		\$
2		\$		\$
3		\$		\$
4		\$		\$
5		\$		\$
6		\$		\$
7		\$		\$
8		\$		\$
9		\$		\$
10		\$		\$
11		\$		\$
12		\$		\$
13		\$		\$
14		\$		\$
15		\$		\$
16		\$		\$
17		\$		\$
18		\$		\$
19		\$		\$
20		\$		\$
21		\$		\$
22		\$		\$
23		\$		\$
24		\$		\$
25		\$		\$

Sewer Future Bond Issues

MASTER CONTROL

1		X
2		X
3		X
4		X
5		X
6		X
7		X
8		X
9		X
10		X
11		X
12		X
13		X
14		X
15		X
16		X
17		X
18		X
19		X
20		X
21		X
22		X
23		X
24		X
25		X

Sewer Rate Adjustments

Residential Charge										
Commercial Charge										

**CITY OF BISBEE
WASTEWATER COST OF SERVICE MODEL**

Current 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028

Model Summary		Scenario: 2018 10 12 -- Scenario 1										
		Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
1	Total Accounts		3,577	3,593	3,609	3,625	3,641	3,657	3,673	3,689	3,705	3,721
	Total Accounts		3,577	3,593	3,609	3,625	3,641	3,657	3,673	3,689	3,705	3,721
	New Accounts		16	16	16	16	16	16	16	16	16	16
	Avg. Annual Growth Rate		0.45%	0.45%	0.45%	0.44%	0.44%	0.44%	0.44%	0.44%	0.43%	0.43%
	EFFECTIVE		Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27
2	Wastewater Rates -- Residential											
	Residential	47.80	47.80	47.80	47.80	49.03	50.50	52.01	53.05	54.12	55.20	55.20
	Increase -- Dollars	-	-	-	-	1.43	1.47	1.51	1.04	1.06	1.08	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Residential Outside	95.20	95.20	95.20	95.20	98.06	101.00	104.03	106.11	108.23	110.39	110.39
	Increase -- Dollars	-	-	-	-	2.86	2.94	3.03	2.08	2.12	2.16	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Low Income	28.57	28.57	28.57	28.57	29.43	30.31	31.22	31.84	32.48	33.13	33.13
	Increase -- Dollars	-	-	-	-	0.86	0.88	0.91	0.62	0.64	0.65	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Discounted Low Income	14.58	14.58	14.58	14.58	15.02	15.47	15.93	16.25	16.56	16.91	16.91
	Increase -- Dollars	-	-	-	-	0.44	0.45	0.46	0.32	0.33	0.33	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
3	Wastewater Rates -- Commercial											
	Small Retail	53.79	53.79	53.79	53.79	55.40	57.07	58.78	59.95	61.15	62.38	62.38
	Increase -- Dollars	-	-	-	-	1.61	1.68	1.71	1.18	1.20	1.22	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Small Restaurants	92.07	92.07	92.07	92.07	94.83	97.68	100.61	102.62	104.67	106.77	106.77
	Increase -- Dollars	-	-	-	-	2.76	2.84	2.93	2.01	2.05	2.09	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Bars & Restaurants	153.59	153.59	153.59	153.59	158.20	162.94	167.83	171.19	174.01	178.10	178.10
	Increase -- Dollars	-	-	-	-	4.61	4.75	4.89	3.36	3.42	3.49	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Hotels -- Per Room	28.58	28.58	28.58	28.58	29.44	30.32	31.23	31.85	32.49	33.14	33.14
	Increase -- Dollars	-	-	-	-	0.86	0.88	0.91	0.62	0.64	0.65	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Large Retail	238.12	238.12	238.12	238.12	245.28	252.62	260.20	266.40	270.71	276.13	276.13
	Increase -- Dollars	-	-	-	-	7.14	7.38	7.58	5.20	5.31	5.41	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Mixed Use	87.76	87.76	87.76	87.76	90.39	93.10	95.90	97.82	99.77	101.77	101.77
	Increase -- Dollars	-	-	-	-	2.63	2.71	2.79	1.92	1.96	2.00	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%
	Schools	1,097.62	1,097.62	1,097.62	1,097.62	1,130.55	1,164.47	1,199.40	1,223.39	1,247.65	1,272.61	1,272.61
	Increase -- Dollars	-	-	-	-	32.93	33.92	34.93	23.99	24.47	24.96	-
	Increase -- Percent	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	2.0%	2.0%	2.0%	0.0%

CITY OF BISBEE WASTEWATER COST OF SERVICE MODEL											
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Model Summary											
Scenario: 2018 10 12 -- Scenario 1											
4 TOTAL Revenues and Expenses											
WW Rate Revenues	\$	2,076,788	\$ 2,085,753	\$ 2,094,738	\$ 2,161,578	\$ 2,235,932	\$ 2,312,805	\$ 2,370,935	\$ 2,428,552	\$ 2,487,525	\$ 2,602,018
Non-Rate Revenues:											
City Sales Tax		344,500	344,500	344,500	344,500	344,500	344,500	344,500	344,500	344,500	344,500
Interest/Penalties Earned		163,000	163,000	163,000	163,000	163,000	163,000	163,000	163,000	163,000	163,000
Miscellaneous Revenue		40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
APS Solar Reimburse -WWTP		25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
USE of WWTP Reserves		-	-	-	-	-	-	-	-	-	-
USER Fees		-	-	-	-	-	-	-	-	-	-
SERVICE Charge/Penalty		25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
HOOK-UP Fees		4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000
USE of fund balance		-	-	-	-	-	-	-	-	-	-
Other Income		-	-	-	-	-	-	-	-	-	-
Total Non-Rate Revenues		801,500	801,500	801,500	801,500	801,500	801,500	801,500	801,500	801,500	801,500
Total Revenues		2,878,288	2,887,253	2,896,238	2,763,078	2,637,432	2,914,305	2,972,435	3,030,052	3,089,025	3,103,518
Operating Expenses											
Personnel		395,171	408,837	423,057	437,861	453,278	469,340	486,080	503,536	521,748	540,749
Operating & Maint.		585,029	603,894	623,814	643,916	664,827	686,675	709,191	732,505	756,851	781,684
Operating Expenses		980,200	1,012,830	1,046,872	1,081,778	1,118,205	1,156,015	1,195,271	1,236,041	1,278,599	1,322,434
Net Revenues after Operating Expenses		1,898,088	1,874,423	1,849,367	1,681,298	1,719,227	1,758,290	1,777,164	1,794,011	1,810,426	1,781,102
Capital Outlays		640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000
Transfers		462,215	462,215	462,215	462,215	462,215	462,215	462,215	462,215	462,215	462,215
Debt Service -- Current											
Factor Truck Loan		30,905	30,905	30,905	30,905	30,905	30,905	30,905	30,905	30,905	-
Refinanced WWTP Loans		549,508	549,338	549,100	549,488	549,483	549,025	549,175	548,875	549,125	548,888
WFA Solar		79,847	76,824	79,801	79,777	79,753	79,727	79,701	79,674	79,647	79,618
Other		-	-	-	-	-	-	-	-	-	-
Total		660,261	660,067	659,806	660,170	660,121	659,857	659,781	659,454	659,677	659,506
Debt Service -- Future											
Series 2019		-	-	-	-	-	-	-	-	-	-
Series 2020		-	-	-	-	-	-	-	-	-	-
Series 2021		-	-	-	-	-	-	-	-	-	-
Series 2022		-	-	-	-	-	-	-	-	-	-
Series 2023		-	-	-	-	-	-	-	-	-	-
Series 2024		-	-	-	-	-	-	-	-	-	-
Series 2025		-	-	-	-	-	-	-	-	-	-
Series 2026		-	-	-	-	-	-	-	-	-	-
Series 2027		-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-
Total Debt Service		660,261	660,067	659,806	660,170	660,121	659,857	659,781	659,454	659,677	659,506
Total Cost of Service		2,742,675	2,775,113	2,808,893	2,844,163	2,860,841	2,917,867	2,957,287	2,997,711	3,040,288	3,053,135
Net Revenues		(64,407)	(87,690)	(112,155)	(81,087)	(42,105)	(3,503)	15,167	32,341	18,737	50,380
Percent of COS		-2.4%	-3.3%	-4.2%	-2.9%	-1.5%	-0.1%	0.5%	1.1%	1.6%	1.6%

<div style="border: 1px solid white; padding: 5px; display: inline-block; margin: 0 auto;"> CITY OF BISBEE WASTEWATER COST OF SERVICE MODEL </div>											
	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Model Summary

Scenario: 2018 10 12 -- Scenario 1

6 Debt Coverage Calculation

Coverage-Eligible Revenues		2,878,268	2,887,253	2,896,238	2,763,078	2,837,432	2,914,305	2,972,435	3,030,052	3,088,025	3,103,516
Operating Expenses		980,200	1,012,830	1,046,672	1,081,778	1,118,205	1,156,015	1,195,271	1,236,041	1,278,397	1,322,414
Net Revenues Eligible for Coverage		1,898,068	1,874,423	1,849,567	1,681,298	1,719,227	1,758,290	1,777,164	1,794,011	1,810,628	1,781,102
Debt Service – Current		680,261	680,067	659,806	680,170	680,121	659,657	658,781	650,454	658,677	628,508
Debt Service – Future											
Series 2019											
Series 2020											
Series 2021											
Series 2022											
Series 2023											
Series 2024											
Series 2025											
Series 2026											
Series 2027											
Total											
Total Debt Service	\$	680,261	680,067	659,806	680,170	680,121	659,657	658,781	650,454	658,677	628,508
Debt Coverage		2.67	2.84	2.80	2.68	2.60	2.67	2.69	2.72	2.74	2.63

4 Fund Balance

Beginning Balance - Unrestricted Reserve	\$	621,136	1,486,729	2,048,669	2,576,415	3,135,328	3,732,219	4,368,636	5,023,804	5,696,145	6,384,862
Bond Issues											
Connection Fees											
Revenues less Cost of Service		(84,407)	(87,860)	(112,455)	(81,087)	(43,109)	(3,563)	15,167	32,341	48,737	50,380
Grant (Principal Forgiveness)											
Rate Rev Capital Reserve Contribution		640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000
Total Sources		575,593	552,140	527,545	558,913	596,891	636,417	655,167	672,341	688,737	690,380
Less Uses of Funds:											
Capital Improvement Plan											
Total Uses of Funds											
Ending Unrestricted and Capital Reserve Fund Balance		1,486,729	2,048,669	2,576,415	3,135,328	3,732,219	4,368,636	5,023,804	5,696,145	6,384,862	7,075,262

CITY OF BISBEE											
WASTEWATER COST OF SERVICE MODEL											
Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	

Input Area – Rate Recommendations
Scenario: 2018 10 12 – Scenario 1

Month of Adjustment (July = 1) EFFECTIVE		1	1	1	1	1	1	1	1	1	1
		Nov-18	Jul-19	Jul-20	Jul-21	Jul-22	Jul-23	Jul-24	Jul-25	Jul-26	Jul-27
Annual Adjustment											
Residential DASHBOARD	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Residential Outside DASHBOARD	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Small Retail	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Small Restaurants	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Bars & Restaurants	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Hotels – Per Room	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Large Retail	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Low Income	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Discounted Low Income	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Mixed Use	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Schools	0.00%	0.00%	0.00%	3.00%	3.00%	3.00%	2.00%	2.00%	2.00%	2.00%	0.00%
Residential											
Base Charge	\$ 47.60	\$ 47.60	\$ 47.60	\$ 47.80	\$ 49.03	\$ 50.50	\$ 52.01	\$ 53.05	\$ 54.12	\$ 55.20	\$ 55.20
Residential Outside											
Base Charge	95.20	95.20	95.20	95.20	98.08	101.00	104.03	106.11	108.23	110.39	110.39
Small Retail											
User Fee	-	-	-	-	-	-	-	-	-	-	-
Base Charge	53.79	53.79	53.79	53.79	55.40	57.07	58.78	59.95	61.15	62.38	62.38
Small Restaurants											
Base Charge	92.07	92.07	92.07	92.07	94.83	97.68	100.61	102.82	104.87	106.77	106.77
Bars & Restaurants											
User Fee	-	-	-	-	-	-	-	-	-	-	-
Base Charge	153.59	153.59	153.59	153.59	158.20	162.94	167.83	171.19	174.81	178.10	178.10

CITY OF BISBEE											
WASTEWATER COST OF SERVICE MODEL											
	Current	2018	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area -- Rate Recommendations
Scenario: 2018 10 12 -- Scenario 1

Hotels -- Par Room

User Fee											
Base Charge	28.58	28.58	28.58	28.58	29.44	30.32	31.23	31.85	32.49	33.14	33.14
Large Retail											
Base Charge	238.12	238.12	238.12	238.12	245.26	252.62	260.20	265.40	270.71	276.13	276.13
Low Income											
Base Charge	28.57	28.57	28.57	28.57	29.43	30.31	31.22	31.84	32.48	33.13	33.13
Discounted Low Income											
Base Charge	14.58	14.58	14.58	14.58	15.02	15.47	15.93	16.25	16.58	16.91	16.91
Mixed Use											
Base Charge	87.76	87.76	87.76	87.76	90.39	93.10	95.90	97.82	99.77	101.77	101.77
Schools											
Base Charge	1,097.62	1,097.62	1,097.62	1,097.62	1,130.55	1,164.47	1,199.40	1,223.39	1,247.85	1,272.81	1,272.81

Summary of Results -- Rate Calculator

Revenues Less Cost of Service	(64,407) -3.1%	(87,860) -4.2%	(112,455) -5.4%	(81,087) -3.8%	(43,109) -1.8%	(3,583) -0.2%	15,167 0.6%	32,341 1.3%	48,737 2.0%	50,380 2.0%
Net Revenues	(64,407)	(87,860)	(112,455)	(81,087)	(43,109)	(3,583)	15,167	32,341	48,737	50,380
Debt Coverage	2.57	2.54	2.50	2.55	2.50	2.67	2.69	2.72	2.74	2.83

CITY OF BISBEE										
WASTEWATER COST OF SERVICE MODEL										
Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area – Rate Recommendations
Scenario: 2018 10 12 – Scenario 1

WW Rate Revenues

WW Rate Revenue

Residential	\$ 1,558,520	\$ 1,564,517	\$ 1,572,514	\$ 1,623,974	\$ 1,691,157	\$ 1,740,309	\$ 1,785,425	\$ 1,830,210	\$ 1,876,072	\$ 1,888,416
Residential Outside										
Small Retail	87,140	87,785	88,431	91,528	94,955	98,507	101,275	104,033	106,881	107,785
Small Restaurants	17,877	17,877	17,877	18,184	18,708	19,270	19,671	20,084	20,465	20,499
Bars & Restaurants	25,803	25,803	25,803	26,513	27,308	28,127	28,713	29,287	29,873	29,922
Hotels – Per Room	129,982	129,982	129,982	133,556	137,563	141,690	144,639	147,531	150,482	150,728
Large Retail	76,208	76,208	76,208	78,304	80,653	83,072	84,801	86,497	88,227	88,372
Low Income	42,512	42,855	43,198	44,738	46,443	48,210	49,595	50,976	52,392	52,876
Discounted Low Income	14,522	14,522	14,522	14,921	15,369	15,830	16,159	16,482	16,812	16,839
Mixed Use	73,718	73,718	73,718	75,748	78,018	80,359	82,031	83,672	85,345	85,485
Schools	52,686	52,686	52,686	54,195	55,759	57,431	58,627	59,799	60,995	61,095
Total WW Rate Revenues	2,076,768	2,085,753	2,094,738	2,161,578	2,235,932	2,312,805	2,370,935	2,428,552	2,487,525	2,502,016

Less Revenues to be Raised from Rates:

Residential	\$ 1,631,323	\$ 1,657,131	\$ 1,683,834	\$ 1,712,004	\$ 1,740,892	\$ 1,770,546	\$ 1,801,782	\$ 1,833,859	\$ 1,867,800	\$ 1,878,590
Residential Outside										
Small Retail	80,818	82,282	83,794	85,384	87,013	88,688	90,442	92,245	94,137	94,885
Small Restaurants	9,578	9,690	9,788	9,900	10,016	10,138	10,263	10,394	10,533	10,543
Bars & Restaurants	8,361	8,470	8,563	8,662	8,764	8,869	8,980	9,085	9,216	9,225
Hotels – Per Room	226,889	229,300	231,810	234,498	237,252	240,085	243,103	246,204	249,496	249,732
Large Retail	15,966	16,138	16,312	16,501	16,695	16,895	17,107	17,325	17,557	17,573
Low Income	74,233	75,627	77,068	78,578	80,127	81,718	83,366	85,099	86,896	87,637
Discounted Low Income	49,888	50,216	50,788	51,354	51,958	52,578	53,239	53,918	54,639	54,891
Mixed Use	41,908	42,351	42,815	43,311	43,820	44,343	44,900	45,473	46,061	46,125
Schools	2,395	2,420	2,447	2,475	2,504	2,534	2,566	2,598	2,633	2,636
Sub-Total	2,141,175	2,173,613	2,207,193	2,242,663	2,279,041	2,318,367	2,355,767	2,396,211	2,438,788	2,451,835

Rate Revenue Less RRRR:

Residential	(74,803)	(92,614)	(111,321)	(88,029)	(59,735)	(30,237)	(16,357)	(3,950)	8,472	9,828
Residential Outside										
Small Retail	6,322	5,503	4,637	6,142	7,941	9,821	10,833	11,788	12,724	12,900
Small Restaurants	8,099	7,997	7,891	8,284	8,693	9,134	9,406	9,670	9,933	9,958
Bars & Restaurants	17,422	17,333	17,240	17,851	18,544	19,259	19,733	20,192	20,656	20,697
Hotels – Per Room	(96,907)	(99,318)	(101,828)	(100,939)	(99,689)	(98,395)	(98,464)	(98,672)	(98,014)	(99,004)
Large Retail	60,242	60,072	59,896	61,802	63,957	66,178	67,894	69,172	70,670	70,798
Low Income	(31,721)	(32,772)	(33,868)	(33,840)	(33,684)	(33,507)	(33,791)	(34,124)	(34,503)	(34,761)
Discounted Low Income	(35,166)	(35,694)	(36,244)	(36,433)	(36,599)	(36,748)	(37,080)	(37,438)	(37,827)	(37,851)
Mixed Use	31,613	31,367	30,904	32,435	34,198	36,018	37,131	38,199	39,264	39,360
Schools	50,291	50,266	50,239	51,660	53,255	54,899	56,081	57,201	58,362	58,459
Rate Revenue less Revenue Rqmt	(64,407)	(87,860)	(112,455)	(81,037)	(43,108)	(3,383)	15,167	32,341	48,737	50,380

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Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area – Rate Recommendations
Scenario: 2018 10 12 – Scenario 1

WASTEWATER -- Customer & Usage Data

Customer Class Units – Base Annual Units

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Residential	2,725	2,739	2,753	2,767	2,781	2,795	2,809	2,823	2,837	2,851
Residential Outside	-	-	-	-	-	-	-	-	-	-
Small Retail	135	136	137	138	139	140	141	142	143	144
Small Restaurants	16	16	16	16	16	16	16	16	16	16
Bars & Restaurants	14	14	14	14	14	14	14	14	14	14
Hotels -- Per Room	379	379	379	379	379	379	379	379	379	379
Large Retail	27	27	27	27	27	27	27	27	27	27
Low Income	124	125	126	127	128	129	130	131	132	133
Discounted Low Income	83	83	83	83	83	83	83	83	83	83
Mixed Use	70	70	70	70	70	70	70	70	70	70
Schools	4	4	4	4	4	4	4	4	4	4
Total Wastewater	3,577	3,593	3,609	3,625	3,641	3,657	3,673	3,689	3,705	3,721

Net Annual Fixtures after Minimum:

Residential										
Monthly Customers Billed	2,725	2,739	2,753	2,767	2,781	2,795	2,809	2,823	2,837	2,851
Residential Outside										
Monthly Customers Billed	-	-	-	-	-	-	-	-	-	-
Small Retail										
Monthly Customers Billed	135	136	137	138	139	140	141	142	143	144
Small Restaurants										
Monthly Customers Billed	16	16	16	16	16	16	16	16	16	16
Bars & Restaurants										
Monthly Customers Billed	14	14	14	14	14	14	14	14	14	14
Hotels -- Per Room										
Monthly Customers Billed	379	379	379	379	379	379	379	379	379	379
Large Retail										
Monthly Customers Billed	27	27	27	27	27	27	27	27	27	27
Low Income										
Monthly Customers Billed	124	125	126	127	128	129	130	131	132	133
Discounted Low Income										
Monthly Customers Billed	83	83	83	83	83	83	83	83	83	83
Mixed Use										
Monthly Customers Billed	70	70	70	70	70	70	70	70	70	70
Schools										
Monthly Customers Billed	4	4	4	4	4	4	4	4	4	4
Rounded Net Fixtures after Minimum	3,577	3,593	3,609	3,625	3,641	3,657	3,673	3,689	3,705	3,721

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	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028

Input Area – Rate Recommendations
Scenario: 2018 10 12 – Scenario 1

Customer Class Units – Total Bills

	Current	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Residential	32,700	32,868	33,036	33,204	33,372	33,540	33,708	33,876	34,044	34,212	
Residential Outside	-	-	-	-	-	-	-	-	-	-	-
Small Retail	1,620	1,632	1,644	1,656	1,668	1,680	1,692	1,704	1,716	1,728	
Small Restaurants	192	192	192	192	192	192	192	192	192	192	
Bars & Restaurants	168	168	168	168	168	168	168	168	168	168	
Hotels – Per Room	4,548	4,548	4,548	4,548	4,548	4,548	4,548	4,548	4,548	4,548	
Large Retail	320	320	320	320	320	320	320	320	320	320	
Low Income	1,488	1,500	1,512	1,524	1,536	1,548	1,560	1,572	1,584	1,596	
Discounted Low Income	996	996	996	996	996	996	996	996	996	996	
Mixed Use	840	840	840	840	840	840	840	840	840	840	
Schools	48	48	48	48	48	48	48	48	48	48	
Total Wastewater	42,920	43,112	43,304	43,496	43,688	43,880	44,072	44,264	44,456	44,648	
	3,577	3,593	3,609	3,625	3,641	3,657	3,673	3,689	3,705	3,721	



AGENDA ITEM NUMBER 2

MAYOR & COUNCIL WORK SESSION FOR October 16, 2018

DATE ACTION SUBMITTED: October 9, 2018

DISCUSSION/PRESENTATION ONLY

SUBJECT: SOLAR PRESENTATION BY ARIZONA STATE UNIVERSITY

FROM: David M. Smith, Mayor

RECOMMENDATION: DISCUSSION ONLY

PROPOSED MOTION: WORK SESSION ONLY

DISCUSSION:

FISCAL IMPACT:

DEPARTMENT LINE ITEM ACCOUNT:

BALANCE IN LINE ITEM IF APPROVED:

Prepared by:


Ashlee Coronado
City Clerk

Reviewed by:


David M. Smith
Mayor