



CITY OF
BAINBRIDGE ISLAND



Water & Sewer Rate Study

Presented by:
Chris Gonzalez, Project Manager

January 23, 2019



Agenda

- ◆ **Review of Updated Rate Study Recommendations**
 - Water Revenue Requirements
 - Water Cost-of-Service Analysis
 - Sewer Revenue Requirements
 - Sewer Cost-of-Service Analysis

- ◆ **Questions/Discussion**



Summary of Changes – Water Financial Plan

Summary of 2018 – 2024 Projections	Jan 2019 Forecast	Sep 2018 Forecast	Difference
Total Capital Cost	\$9,268,000	\$11,625,000	(\$2,357,000)
Total External Financing Required	\$1,000,000	\$1,400,000	(\$400,000)
Total Rate-Funded System Reinvestment	\$360,000	\$958,000	(\$598,000)
Average Annual O&M Cost	\$1,547,000	\$1,278,000	\$269,000

- ◆ **2018 CIP expenditures \$350,000 lower than projected**
 - Equipment and miscellaneous improvements expensed
 - City spent less than projected on some 2018 projects (e.g. Rockaway intertie)
- ◆ **\$475,000 in future projects moved from CIP to operating budget (expensed)**
 - SCADA Upgrades (\$155,000); meter replacements (\$318,000)
- ◆ **Operating budget updated to incorporate 2019 – 2020 budget projections**
 - \$1.3 million in additional spending in 2019 – 2020 on infrastructure replacement
 - Ongoing annual O&M cost beyond 2020 has increased by \approx \$150,000



Water Revenue Requirement Summary

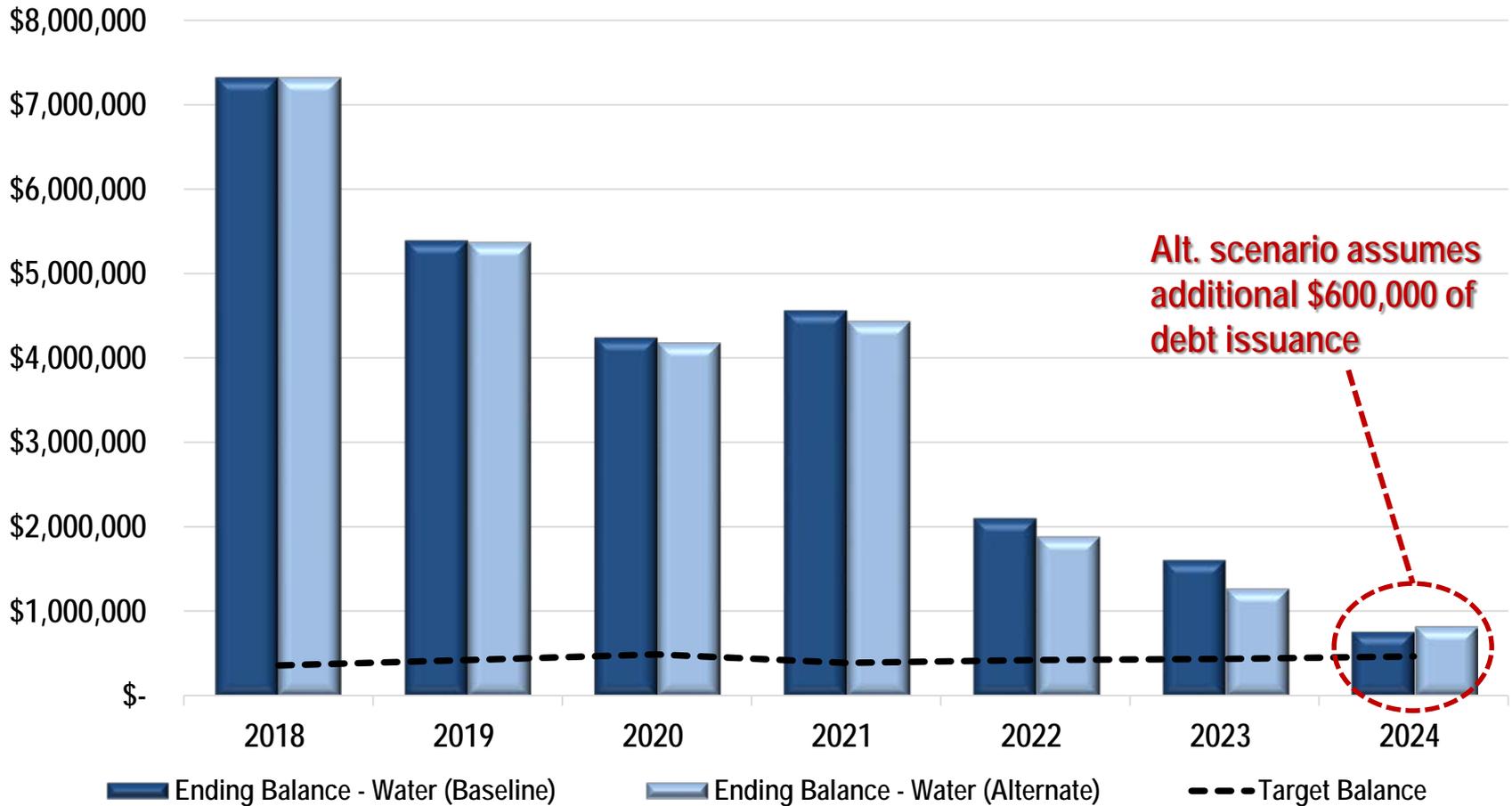
Water Revenue Requirement	Existing	Proposed	Projected				
	2019	2019	2020	2021	2022	2023	2024
Annual Rate Adjustment		4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Single-Family Bill @ 7 ccf/Month	\$19.74	\$20.51	\$21.35	\$22.23	\$23.12	\$24.03	\$24.98
Change From Prior Year		+\$0.77	+\$0.84	+\$0.88	+\$0.89	+\$0.91	+\$0.95
% of Depreciation Funded		0%	0%	19%	26%	26%	26%

Water Revenue Requirement (Alt)	Existing	Proposed	Projected				
	2019	2019	2020	2021	2022	2023	2024
Annual Rate Adjustment		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Single-Family Bill @ 7 ccf/Month	\$19.74	\$20.14	\$20.54	\$20.94	\$21.35	\$21.76	\$22.18
Change From Prior Year		+\$0.40	+\$0.40	+\$0.40	+\$0.41	+\$0.41	+\$0.42

- ◆ **Water rate strategy can remain at 4.0% annual increases**
 - Decreased system reinvestment transfers to recognize funding embedded in operating budget
 - Requires use of existing reserves to cover additional maintenance costs in 2019 – 2020
- ◆ **Alternate scenario does not fund system reinvestment explicitly**
 - Relies on City's ability to issue debt or defer capital projects if cash funding is insufficient

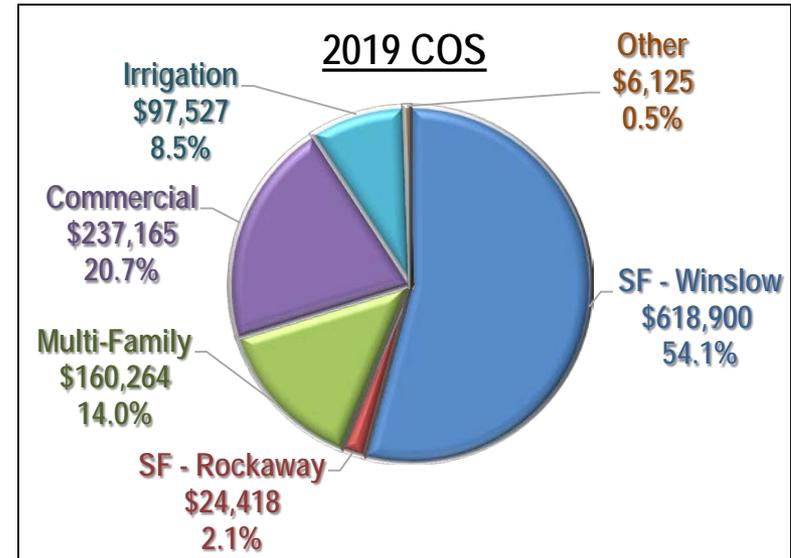
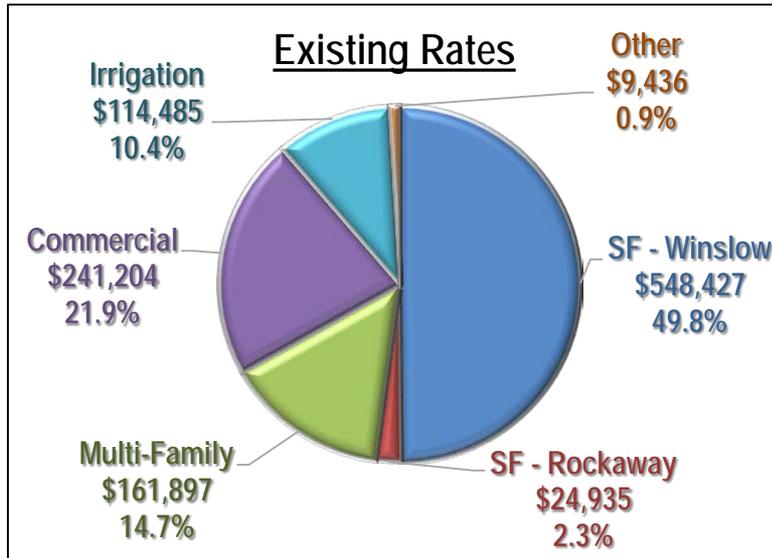


Projected Cash Balances – Water





2019 Water Utility Cost Allocation



- ◆ COSA shows a shift in cost recovery to Winslow SF from other customers
 - Generally consistent with September 2018 Forecast
 - Shift is smaller due to updated 2019 cost projections (e.g. infrastructure maintenance)



Water COS Implementation Alternatives

Revenue Requirement Allocation: COS	2019 Revenue	% of Total	2019 Rate Increase	2020 Revenue	% of Total	2020 Rate Increase	2021 Revenue	% of Total	2021 Rate Increase
Single-Family – Winslow	\$ 618,900	54.1%	+12.9%	\$ 697,984	57.7%	+10.8%	\$ 696,807	54.4%	-1.9%
Single-Family – Rockaway	24,418	2.1%	-2.1%	26,065	2.2%	+6.4%	26,637	2.1%	+1.9%
Multi-Family	160,264	14.0%	-1.0%	155,549	12.9%	-4.5%	178,048	13.9%	+12.6%
Commercial	237,165	20.7%	-1.7%	229,569	19.0%	-3.6%	257,058	20.1%	+11.5%
Irrigation	97,527	8.5%	-14.8%	94,799	7.8%	-7.0%	114,911	9.0%	+15.9%
Other (Mixed Use)	6,125	0.5%	-35.1%	6,281	0.5%	+2.5%	6,584	0.5%	+4.8%
Total	\$1,144,399	100.0%	+4.0%	\$1,210,247	100.0%	+4.0%	\$1,280,046	100.0%	+4.0%

Revenue Requirement Allocation: Phased COS	2019 Revenue	% of Total	2019 Rate Increase	2020 Revenue	% of Total	2020 Rate Increase	2021 Revenue	% of Total	2021 Rate Increase
Single-Family – Winslow	\$ 585,900	51.2%	+6.8%	\$ 633,727	52.4%	+6.3%	\$ 684,154	53.4%	+6.1%
Single-Family – Rockaway	25,558	2.2%	+2.5%	26,279	2.2%	+2.5%	27,962	2.2%	+6.1%
Multi-Family	165,297	14.4%	+2.1%	171,607	14.2%	+2.1%	178,048	13.9%	+2.0%
Commercial	245,787	21.5%	+1.9%	251,413	20.8%	+1.9%	257,058	20.1%	+1.9%
Irrigation	114,485	10.0%	0.0%	119,710	9.9%	0.0%	125,173	9.8%	0.0%
Other (Mixed Use)	7,371	0.6%	-21.9%	7,511	0.6%	+1.9%	7,651	0.6%	+1.9%
Total	\$1,144,399	100.0%	+4.0%	\$1,210,247	100.0%	+4.0%	\$1,280,046	100.0%	+4.0%

- ◆ 2020 COS allocation is different due to one-time meter replacement project
- ◆ Phased scenario combines mixed-use/commercial (2019) and Winslow/Rockaway rates (2020)
 - Multi-family and commercial reach COS by 2021
 - Remaining classes expected to reach COS by 2022-23



Summary of Changes – Sewer Financial Plan

Summary of 2018 – 2024 Projections	Jan 2019 Forecast	Sep 2018 Forecast	Difference
Total Capital Cost	\$10,494,000	\$11,127,000	(\$633,000)
Total External Financing Required	-	-	-
Total Rate-Funded System Reinvestment	\$2,394,000	\$3,225,000	(\$831,000)
Average Annual O&M Cost	\$3,024,000	\$2,621,000	\$403,000

- ◆ **2018 CIP expenditures \$360,000 lower than projected**
 - City spent less than projected on Madrona Townhomes/Henshaw sewer improvements
- ◆ **Operating budget updated to incorporate 2019 – 2020 budget projections**
 - Additional \$120,000 – \$130,000 per year in salary and benefit costs (new FTEs)
 - Additional \$100,000 for WWTP study (2019)
 - Repairs averaging \$311,000 per year for 2019 – 2020; \$150,000 per year thereafter
 - \$70,000 per year for SCADA upgrades (2020 – 2021)
 - Total ongoing annual O&M cost increased by \$375,000 – \$400,000



Sewer Revenue Requirement Summary

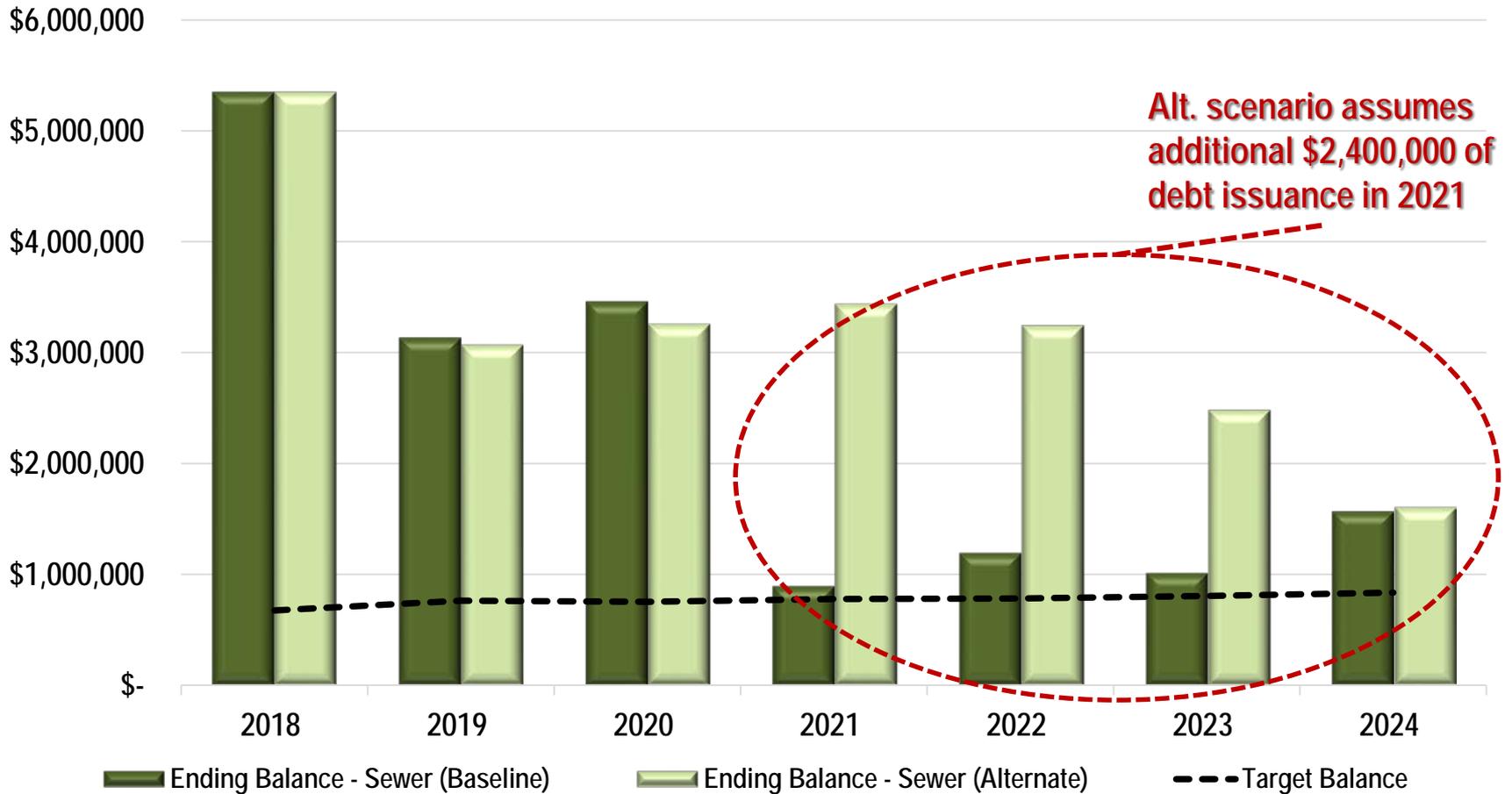
Sewer Revenue Requirement	Existing	Proposed	Projected				
	2019	2019	2020	2021	2022	2023	2024
Annual Rate Adjustment		4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Single-Family Bill @ 7 ccf/Month	\$93.65	\$97.39	\$101.27	\$105.29	\$109.52	\$113.90	\$118.43
Change From Prior Year		+\$3.74	+\$3.88	+\$4.02	+\$4.23	+\$4.38	+\$4.53
% of Depreciation Funded		0%	19%	34%	51%	66%	75%

Sewer Revenue Requirement (Alt)	Existing	Proposed	Projected				
	2019	2019	2020	2021	2022	2023	2024
Annual Rate Adjustment		2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Single-Family Bill @ 7 ccf/Month	\$93.65	\$95.55	\$97.47	\$99.41	\$101.37	\$103.41	\$105.47
Change From Prior Year		+\$1.90	+\$1.92	+\$1.94	+\$1.96	+\$2.04	+\$2.06

- ◆ Sewer rate strategy changed from 2.0% to 4.0% annual increases
 - Higher rate increases driven by updated forecast of O&M expenses
 - Decreased system reinvestment transfers to recognize funding embedded in operating budget
 - Requires use of existing reserves to cover additional costs in 2019
- ◆ Alternate scenario does not fund system reinvestment explicitly
 - Relies on City's ability to issue debt or defer capital projects if cash funding is insufficient

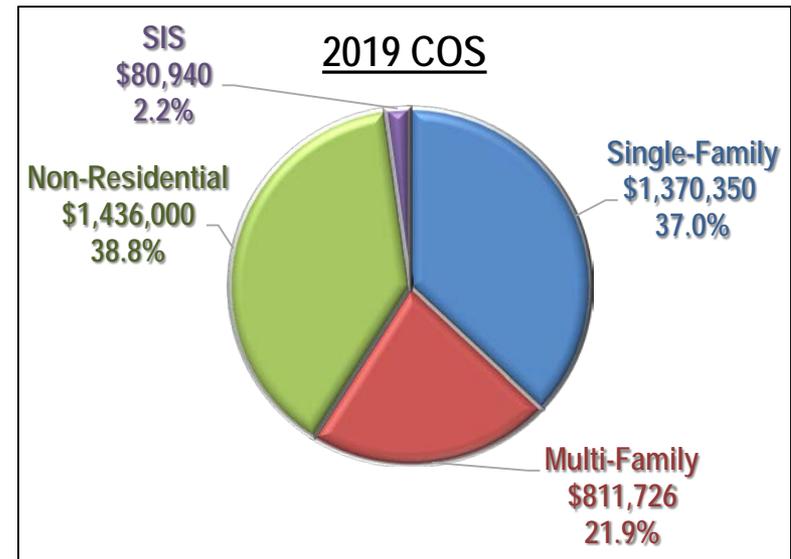
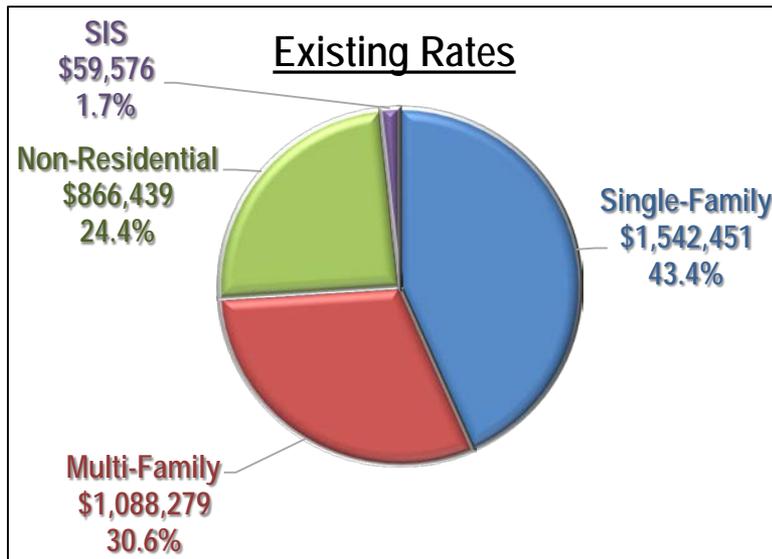


Projected Cash Balances – Sewer





2019 Sewer Utility Cost Allocation



- ◆ COSA shows a shift in cost recovery from Winslow residential to Winslow non-residential and South Island Sewer customers
 - Generally consistent with September 2018 Forecast
 - Updated allocation reflects reduction in O&M directly attributable to SIS



Sewer COS Implementation Alternatives

Revenue Requirement Allocation: COS	2019 Revenue	% of Total	2019 Rate Increase	2020 Revenue	% of Total	2020 Rate Increase	2021 Revenue	% of Total	2021 Rate Increase
Single-Family – Winslow	\$1,370,350	37.0%	-11.2%	\$1,445,698	37.1%	+3.7%	\$1,532,442	37.3%	+4.2%
Multi-Family – Winslow	811,726	21.9%	-25.4%	858,730	22.0%	+4.0%	910,394	22.2%	+4.2%
Non-Residential – Winslow	1,436,000	38.8%	+65.7%	1,489,231	38.2%	+3.4%	1,555,421	37.8%	+4.2%
South Island Sewer	80,940	2.2%	+35.9%	105,851	2.7%	+29.1%	112,776	2.7%	+5.2%
Total	\$3,699,015	100.0%	+4.0%	\$3,899,511	100.0%	+4.2%	\$4,111,032	100.0%	+4.2%

Revenue Requirement Allocation: Phased COS	2019 Revenue	% of Total	2019 Rate Increase	2020 Revenue	% of Total	2020 Rate Increase	2021 Revenue	% of Total	2021 Rate Increase
Single-Family – Winslow	\$1,542,451	41.7%	0.0%	\$1,569,070	40.2%	0.0%	\$1,596,149	38.8%	0.0%
Multi-Family – Winslow	1,088,279	29.4%	0.0%	1,107,176	28.4%	0.0%	1,126,401	27.4%	0.0%
Non-Residential – Winslow	1,003,565	27.1%	+15.8%	1,152,524	29.6%	+14.5%	1,311,566	31.9%	+13.5%
South Island Sewer	64,720	1.7%	+8.6%	70,741	1.8%	+7.9%	76,916	1.9%	+7.4%
Total	\$3,699,015	100.0%	+4.0%	\$3,899,511	100.0%	+4.0%	\$4,111,032	100.0%	+4.1%

- ◆ Cost shifts result in slight revenue loss due to slower non-residential growth expectations
- ◆ Winslow single-family expected to reach COS by 2023; other classes expected to take longer



Sample Bimonthly Bill Impacts – Residential

Bimonthly Bill	Mar-Apr Usage	Existing (2019)	Phased COS (Recommended)			Sep-Oct Usage	Existing (2019)	Phased COS (Recommended)		
			2019	2020	2021			2019	2020	2021
Single-Family A (3/4")										
Water Bill	8 ccf	\$ 30.26	\$ 32.33	\$ 34.36	\$ 36.46	14 ccf	\$ 39.48	\$ 42.18	\$ 44.83	\$ 47.57
Sewer Bill	8 ccf	143.62	143.62	143.62	143.62	6 ccf	129.06	129.06	129.06	129.06
Total Bill		\$ 173.88	\$ 175.95	\$ 177.98	\$ 180.08		\$ 168.54	\$ 171.24	\$ 173.89	\$ 176.63
% D From Prior Year			1.2%	1.2%	1.2%			1.6%	1.5%	1.6%
Single-Family B (1")										
Water Bill	10 ccf	\$ 53.38	\$ 57.03	\$ 60.62	\$ 64.32	20 ccf	\$ 70.98	\$ 75.83	\$ 80.61	\$ 85.52
Sewer Bill	10 ccf	158.18	158.18	158.18	158.18	11 ccf	165.46	165.46	165.46	165.46
Total Bill		\$ 211.56	\$ 215.21	\$ 218.80	\$ 222.50		\$ 236.44	\$ 241.29	\$ 246.07	\$ 250.98
% D From Prior Year			1.7%	1.7%	1.7%			2.1%	2.0%	2.0%
Multi-Family A (1", 60 Units)										
Water Bill	200 ccf	\$ 862.40	\$ 868.01	\$ 886.23	\$ 904.29	374 ccf	\$1,052.06	\$1,111.20	\$1,134.54	\$1,157.66
Sewer Bill	200 ccf	5,942.80	5,942.80	5,942.80	5,942.80	374 ccf	7,209.52	7,209.52	7,209.52	7,209.52
Total Bill		\$6,805.20	\$6,810.81	\$6,829.03	\$6,847.09		\$8,261.58	\$8,320.72	\$8,344.06	\$8,367.18
% D From Prior Year			0.1%	0.3%	0.3%			0.7%	0.3%	0.3%
Multi-Family B (2", 50 Units)										
Water Bill	264 ccf	\$ 824.76	\$ 825.57	\$ 842.91	\$ 860.09	623 ccf	\$1,216.07	\$1,303.33	\$1,330.70	\$1,357.81
Sewer Bill	264 ccf	5,660.92	5,660.92	5,660.92	5,660.92	623 ccf	8,274.44	8,274.44	8,274.44	8,274.44
Total Bill		\$6,485.68	\$6,486.49	\$6,503.83	\$6,521.01		\$9,490.51	\$9,577.77	\$9,605.14	\$9,632.25
% D From Prior Year			0.0%	0.3%	0.3%			0.9%	0.3%	0.3%



Sample Bimonthly Bill Impacts – Non-Residential

Bimonthly Bill	Mar-Apr Usage	Existing (2019)	Phased COS (Recommended)			Sep-Oct Usage	Existing (2019)	Phased COS (Recommended)		
			2019	2020	2021			2019	2020	2021
Restaurant (3/4")										
Water Bill	121 ccf	\$ 205.93	\$ 209.84	\$ 213.83	\$ 217.80	163 ccf	\$ 301.85	\$ 307.59	\$ 313.43	\$ 319.25
Sewer Bill	121 ccf	<u>1,128.26</u>	<u>1,306.82</u>	<u>1,496.82</u>	<u>1,698.87</u>	163 ccf	<u>1,434.02</u>	<u>1,660.97</u>	<u>1,902.46</u>	<u>2,159.27</u>
Total Bill		\$1,334.19	\$1,516.66	\$1,710.65	\$1,916.67		\$1,735.87	\$1,968.56	\$2,215.89	\$2,478.52
% Δ From Prior Year			13.7%	12.8%	12.0%			13.4%	12.6%	11.9%
Church (1-1/2")										
Water Bill	26 ccf	\$ 176.74	\$ 180.10	\$ 183.52	\$ 186.93	48 ccf	\$218.76	\$222.92	\$ 227.15	\$ 231.37
Sewer Bill	26 ccf	<u>436.66</u>	<u>505.77</u>	<u>579.30</u>	<u>657.50</u>	48 ccf	<u>596.82</u>	<u>691.28</u>	<u>791.78</u>	<u>898.66</u>
Total Bill		\$ 613.40	\$ 685.87	\$ 762.82	\$ 844.43		\$815.58	\$914.20	\$1,018.93	\$1,130.03
% Δ From Prior Year			11.8%	11.2%	10.7%			12.1%	11.5%	10.9%
Hotel (3")										
Water Bill	58 ccf	\$ 514.72	\$ 524.50	\$ 534.47	\$ 544.39	121 ccf	\$ 631.43	\$ 643.43	\$ 655.65	\$ 667.82
Sewer Bill	58 ccf	<u>669.62</u>	<u>775.60</u>	<u>888.36</u>	<u>1,008.28</u>	121 ccf	<u>1,128.26</u>	<u>1,306.82</u>	<u>1,496.82</u>	<u>1,698.87</u>
Total Bill		\$1,184.34	\$1,300.10	\$1,422.83	\$1,552.67		\$1,759.69	\$1,950.25	\$2,152.47	\$2,366.69
% Δ From Prior Year			9.8%	9.4%	9.1%			10.8%	10.4%	10.0%
School District (2")										
Water Bill	132 ccf	\$ 407.80	\$ 415.55	\$ 423.44	\$ 431.30	94 ccf	\$ 374.14	\$ 381.25	\$ 388.49	\$ 395.70
Sewer Bill	132 ccf	<u>1,208.34</u>	<u>1,399.58</u>	<u>1,603.06</u>	<u>1,819.45</u>	94 ccf	<u>931.70</u>	<u>1,079.15</u>	<u>1,236.05</u>	<u>1,402.90</u>
Total Bill		\$1,616.14	\$1,815.13	\$2,026.50	\$2,250.75		\$1,305.84	\$1,460.40	\$1,624.54	\$1,798.60
% Δ From Prior Year			12.3%	11.6%	11.1%			11.8%	11.2%	10.7%



Next Steps

- ◆ Feedback from Utility Advisory Committee
- ◆ Rate Recommendations for Council



Questions / Discussion



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