CITY OF SONOMA

Cost of Service and Rate Design Discussion

City Council Meeting 6/4/2018



Agenda

- 1. Where We Are
- 2. Update on Reserves
- 3. Transfers
- 4. COS Discussion
- 5. Proposed Rates

Where We Are

Financial Plan

- Evaluation of CIP and financing options
- Cash flow analysis for financial sufficiency

Rate Setting Framework

- Financial goals and policies
- Pricing objectives

Cost of Service & Rate Design

- Cost allocations
- Rate design
 - Rate calculations
- Customer impact analyses

Final Rate Adoption

<u>June 25</u>

- Report
- Rate Decision

Prop 218 Notice (45 day mailed)

August TBD

- Public Hearing
- Rate Adoption

Goal: Continue to Provide High Quality, Dependable Water to the Community



Council's Policy Objectives

Affordability / Infrastructure Investment / Financial Stability

*\$11.0M takes into account inflation, expenses from FY 2019 through FY 2023 4

Assumptions

- Financial Information
 - > Staffing
 - Includes negotiated salary and benefits for FY 18/19 and minor staffing changes
 - 18/19 Revised Personnel Allocations
 - Includes Cost Allocation Plan new methodology
 - > O&M based on proposed FY 18/19 budget
 - Capital based on 5 year capital projects from Water Plan with adjustments based on capital priorities and balancing rate increases
 - With AMI and without AMI- can toggle as option



Cost of Service Discussion





Capital Project Plan Adjustments to Water Master Plan

- Changes: postponed renewal and replacement to FY 2022, postponed drilling Well No. 9, & incorporated three years of projected benefits in offsetting Meter System Upgrades (AMI) cost.
- Total CIP Reduction through FY 2023: \$4.3 million.

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Water Services with Street Rehabilitation	\$0	\$233,398	\$0	\$247,612	\$0
Condition Data - Phase 1	\$18,540	\$0	\$0	\$0	\$0
Condition Data - Phase 2	\$118,450	\$106,811	\$49,173	\$50 <i>,</i> 648	\$52,167
Renewal and Replacement of Existing Pipelines	\$0	\$0	\$1,201,344	\$1,237,384	\$1,274,506
Condition Assessment of AC Pipes	\$23,690	\$0	\$0	\$0	\$0
Fire Flow Improvements - Upsizing AC Pipe 8" PVC	\$164,800	\$1,060,900*	\$0	\$0	\$0
PVC	\$72,100	\$434,969*	\$0	\$0	\$0
New Well No. 9	\$465,620	\$307,131	\$1,640,120	\$0	\$0
2020 UWMP and Water Master Plan Update	\$0	\$0	\$81,955	\$0	\$0
Meter System Upgrades	\$25,750	\$79,568	<mark>\$2,723,893</mark> \$2,026,939*	\$0	\$0
 Total	\$423,330	\$1,915,646	\$2,158,066	\$1,535,644	\$1,326,673

*- these projects are likely to be debt funded

Financial Policies and Reserves

Reserves	Financial Pl Proposed 2018	an Levels 8 Rate Study	Target Future Ra	Levels te Study
Operating Reserve	15% of O&M	\$636,767	25% of O&M	\$1,061,279
Capital Reserve	1 Year of Average CIP Expenditure	\$1,045,421	1 Year of Average CIP Expenditure	\$1,045,421
Rate Stabilization Fund	10% of Volumetric Revenue	\$305,086	20% of Volumetric Revenue	\$610,172
Emergency	0% of Net Asset Values (RCLD)	\$0	2.5% of Net Asset Values (RCLD)	\$540,845
TOTAL		\$1,987,274		\$ 3,257,717 9

Financial Plan



Revenue Adjustment Schedule Multi-yr Financial Plan

10



- » Recovers costs from customer classes in proportion to the demands they place on the system, recognizing the impact of each customer class on the costs to run system facilities
- » Cost of Service is the fundamental methodology used to establish utility rates in the United States

Water Cost of Service

Allocation to Cost Components



Distribute Cost Components to Customer Classes



used to Distribute Costs to Each Class

CUSTOMER CLASSES (Cost to Serve Each Class)

(Single Family, Multi-family, Commercial etc.)

Rates Discussion

Current Rate Structure

- Tiered SFR, MFR and Commercial volumetric Rates
- Fixed charges based on meter size

Current Residential	Tier Width (in 1,000	
Volumetric Charges	gallons or kgals)	Rate Per kgal
Tier 1	1 to 6	\$3.94
Tier 2	7 to 12	\$6.91
Tier 3	13 to 18	\$7.76
Tier 4	19+	\$11.22

Suggested Rate Options

- 1. Tiered SFR Rates- With AMI Spending
- 2. Uniform Volumetric Rates- With AMI Spending
- 3. Tiered SFR Rates- No AMI Spending
- 4. Uniform Volumetric Rates- No AMI Spending

Water Rate Structure Evolution





Uniform Rate: \$xx / hcf

Pros: Revenue stability, administrative ease, easy to understand

Cons: Weak conservation, not affordable for essential use

Water Rate Structure Evolution





Inclining Tiered Rate:

Pros: Promote conservation, affordable for essential use, easy to administer, easy to understand

Cons: Target large users

Inside City Limits – Residential Tier Reduction

	Current Structure	Proposed Structure	Proposed Methodology
Tier 1	6 kgals	2 kgals	Most affordable; 100% well water backfilled by SCWA water
Tier 2	6 kgals	5 kgals	Average SFR use
Tier 3	6 kgals	Beyond 7 kgals	All use above average
Tier 4	Beyond 18 kgals		

Proposed Fixed Charges – With AMI

	Current					
Meter Size	Charge	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
		8%	8%	8%	8%	8%
		Adjustment	Adjustment	Adjustment	Adjustment	Adjustment
5/8"	\$20.28	\$22.54	\$24.35	\$26.30	\$28.41	\$30.69
3/4"	\$20.28	\$22.54	\$24.35	\$26.30	\$28.41	\$30.69
1"	\$20.28	\$22.54	\$24.35	\$26.30	\$28.41	\$30.69
1 1/2"	\$30.94	\$37.02	\$39.99	\$43.19	\$46.65	\$50.39
2"	\$38.67	\$54.40	\$58.76	\$63.47	\$68.55	\$74.04
3"	\$58.01	\$100.75	\$108.81	\$117.52	\$126.93	\$137.09
4"	\$96.68	\$152.89	\$165.13	\$178.35	\$192.62	\$208.03
6"	\$154.82	\$297.73	\$321.55	\$347.28	\$375.07	\$405.08

Proposed Volumetric Charges – With AMI

Customer	Current					
Class	Charge	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
		8%	8%	8%	8%	8%
		Adjustment	Adjustment	Adjustment	Adjustment	Adjustment
SFR Tier 1	\$3.94	\$4.55	\$4.92	\$5.32	\$5.75	\$6.21
SFR Tier 2	\$6.91	\$6.27	\$6.78	\$7.33	\$7.92	\$8.56
SFR Tier 3	\$7.76	\$7.60	\$8.21	\$8.87	\$9.58	\$10.35
SFR Tier 4	\$11.22	N/A	N/A	N/A	N/A	N/A
MFR		\$6.16	\$6.66	\$7.20	\$7.78	\$8.41
Commercial		\$5.97	\$6.45	\$6.97	\$7.53	\$8.14
Municipal	\$5.74	\$6.16	\$6.66	\$7.20	\$7.78	\$8.41
Irrigation	\$7.57	\$6.58	\$7.11	\$7.68	\$8.30	\$8.97
Fire &						
Hydrant	\$7.57	<u>\$5</u> .04	<u>\$5</u> .45	\$ <u>5</u> .89	\$ <u>6</u> .37	<u>\$6</u> .88
Uniform		\$6.22	\$6.72	\$7.26	\$7.85	\$8.48

Elevation Charges – With AMI

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
	8%	8%	8%	8%	8%
	Adjustment	Adjustment	Adjustment	Adjustment	Adjustment
Elevation Charge	\$0.51	\$0.55	\$0.60	\$0.65	\$0.71

- Elevation charge derived from electric costs that are non-groundwater pumping related
- Charge per kgal
- Sonoma has 356 accounts that would pay this charge



Proposed Fixed Charges – No AMI

	Current					
Meter Size	Charge	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
		8%	8%	7%	6%	6%
		Adjustment	Adjustment	Adjustment	Adjustment	Adjustment
5/8"	\$20.28	\$22.54	\$24.35	\$26.06	\$27.63	\$29.29
3/4"	\$20.28	\$22.54	\$24.35	\$26.06	\$27.63	\$29.29
1"	\$20.28	\$22.54	\$24.35	\$26.06	\$27.63	\$29.29
1 1/2"	\$30.94	\$37.02	\$39.99	\$42.79	\$45.36	\$48.09
2"	\$38.67	\$54.40	\$58.76	\$62.88	\$66.66	\$70.66
3"	\$58.01	\$100.75	\$108.81	\$116.43	\$123.42	\$130.83
4"	\$96.68	\$152.89	\$165.13	\$176.69	\$187.30	\$198.54
6"	\$154.82	\$297.73	\$321.55	\$344.06	\$364.71	\$386.60

Proposed Volumetric Charges – No AMI

	Current					
Class	Charge	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
		8%	8%	7%	6%	6%
		Adjustment	Adjustment	Adjustment	Adjustment	Adjustment
SFR Tier 1	\$3.94	\$4.55	\$4.92	\$5.27	\$5.59	\$5.93
SFR Tier 2	\$6.91	\$6.27	\$6.78	\$7.26	\$7.70	\$8.17
SFR Tier 3	\$7.76	\$7.60	\$8.21	\$8.79	\$9.32	\$9.88
SFR Tier 4	\$11.22	N/A	N/A	N/A	N/A	N/A
MFR		\$6.16	\$6.66	\$7.13	\$7.56	\$8.02
Commercial		\$5.97	\$6.45	\$6.91	\$7.33	\$7.77
Municipal	\$5.74	\$6.16	\$6.66	\$7.13	\$7.56	\$8.02
Irrigation	\$7.57	\$6.58	\$7.11	\$7.61	\$8.07	\$8.56
Fire &						
Hydrant	\$7.57	\$5.04	\$5.45	\$5.84	\$6.20	\$6.58
Uniform		\$6.22	\$6.72	\$7.20	\$7.64	\$8.10

Elevation Charges – No AMI

	Current					
	Charge	FY 2019 8% Adjustment	FY 2020 8% Adjustment	FY 2021 7% Adjustment	FY 2022 6% Adjustment	FY 2023 6% Adjustment
Elevation	*	\$0 51	\$0 55	¢0 50	\$0.63	\$0.67

Surrounding Communities Typical Residential Comparison Use Recent Rate Surveys





ESCALATION FACTORS

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Budgetary Inflation Factors					
General	3.0%	3.0%	3.0%	3.0%	3.0%
Salary	3.0%	3.0%	3.0%	3.0%	3.0%
Benefits	8.0%	8.0%	8.0%	8.0%	8.0%
Utilities	3.0%	3.0%	3.0%	3.0%	3.0%
Construction	3.0%	3.0%	3.0%	3.0%	3.0%
Insurance	3.0%	3.0%	3.0%	3.0%	3.0%
Engineering	3.0%	3.0%	3.0%	3.0%	3.0%
Professional Services	3.0%	3.0%	3.0%	3.0%	3.0%
Water Purchase Cost	6.0%	6.0%	6.0%	6.0%	6.0%
No Inflation	0.0%	0.0%	0.0%	0.0%	0.0%
Non-Operating Revenue Growth	0.0%	0.0%	0.0%	0.0%	0.0%

Historic CPI averages have been roughly 3%. Historic CCI (construction cost index) has been on average slightly above 3% for Northern California since 1978. Anticipated SCWA cost increases are roughly ~6%/year.

ACCOUNT & USAGE GROWTH

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Account Growth	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%
Demand Factor	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Inside City Accounts	4,384	4,402	4,420	4,440	4,460	4,481
Outside City Accounts	326	327	328	329	330	331
Inside City Fire Lines	140	140	140	140	140	140
Outside City Fire Lines	12	12	12	12	12	12
Sold Water	1,673 AF	1,680 AF	1,687 AF	1,694 AF	1,702 AF	1,710 AF

CURRENT DEBT

	EV 2019	EV 2010	EV 2020	EV 2021	EV 2022	EV 2022
2012 Povonuo Pondo	F1 2010	FT 2019	FT 2020	F1 2021	FT 2022	FT 2023
2012 Revenue Donus						
Principal	\$75,000	\$75,000	\$75,000	\$80,000	\$85,000	\$85 <i>,</i> 000
Interest (3.9%)	\$48,653	\$45,728	\$42,803	\$39,780	\$36,563	\$33,248
Total	\$123,653	\$120,728	\$117,803	\$119,780	\$121,563	\$118,248

2012 Revenue Bonds were a refinance of the 2001 Bond Issuance. The 2001 Bond Issuance financed the following improvements:

Water Tank Project

Construction of a 3.0 million gallon water storage tank, 1800 lineal feet of 12inch diameter water transmission pipe, a pump station and pressure zone intertie facilities.

Installation of Water Mains and Laterals

The construction consisted of 8" and 10" diameter water mains and appurtenances: water service laterals; necessary trenching, road and concrete repair; and other associated work.



Raftelis is a Registered Municipal Advisor within the meaning as defined in Section 15B (e) of the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder (Municipal Advisor Rule).

However, except in circumstances where Raftelis expressly agrees otherwise in writing, Raftelis is not acting as a Municipal Advisor, and the opinions or views contained herein are not intended to be, and do not constitute "advice" within the meaning of the Municipal Advisor Rule.

Thankyou!

Contact: Sally Van Etten 510 813 8704 / svanetten@raftelis.com