SWEETWATER SPRINGS WATER DISTRICT

TO: Board of Directors **AGENDA NO. V-A**

FROM: Ed Fortner, General Manager

Meeting Date: May 7, 2020

SUBJECT: Bartle and Wells Associates Rate Study Presentation

RECOMMENDED ACTION: Receive Rate Study Final Report.

FISCAL IMPACT: N/A

DISCUSSION:

Bartle and Wells Associates was awarded the work to produce a Rate Study with recommendations over a five year period. The rate increase framework has been presented to the Board and the Final Report will be given tonight. The Public Hearing on the recommended rate increase for FY 2021 will be held at the June 4th Board meeting.

SWEETWATER SPRINGS WATER DISTRICT

WATER RATE STUDY DRAFT FINAL REPORT

May 1, 2020

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

This page was intentionally left blank.

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

1889 Alcatraz Avenue
Berkeley, CA 94703
T: 510-653-3399
www.bartlewells.com

May 1, 2020

Ed Fortner
General Manager
Sweetwater Springs Water District
17081 Highway 116
Guerneville, CA 95446

Re: Water Rate Study

Bartle Wells Associates (BWA) is pleased to submit to Sweetwater Springs Water District (District the attached Water Rate Study Report. The results of the of the study are a product of Staff and Budget Committee review. Findings were presented at the Board meeting on March 5, 2020.

This study presents BWA's analysis of the operating and non-operating expenses of the District's water fund and provides five-year cash flow projections and rates. The primary purpose of this study was to analyze the District's water operations and make recommendations that would achieve financial sustainability. Another important purpose of this study was to review rates to ensure that they adhere to the State's legal requirements.

The enclosed report recommends updating rates and charges to more accurately recover the costs of providing service to the District's water customers. Recommendations were developed with substantial input from District staff and Ad-Hoc Committee members. BWA finds that the rates and charges proposed in our report are based on the cost of service for each customer, follow generally accepted rate design criteria, and adhere to the substantive requirements of Proposition 218. BWA believes that the proposed rates are fair and reasonable to the District's customers.

We have enjoyed working with the District on this rate study. Please contact us with any future questions about this study and the recommended water rates.

Sincerely,

Doug Dove, CIPFA
Principal

Abigail Seaman
Financial Analyst

This page was intentionally left blank.

Table of Contents

Table of Contents 1
1 Executive Summary 1
1.1 Background 1
1.2 Proposition 218 1
1.3 Use of Generally Accepted Rate-Making Principles 2
1.4 Water System Overview 3
1.4.1 Factors driving Rate Increases 4
1.4.2 Current Water Rates 4
1.4.3 Proposed Water Rates 5
2 Water Financial Projections and Rates 5
2.1 Water Financial Overview 5
2.2 Current Bimonthly Water Rates 6
2.3 Current Water Accounts 7
2.4 FY 2019 Water Consumption 7
2.5 Financial Challenges/Key Drivers of Rate Increases 8
2.5.1 Ongoing Operating Cost Inflation 8
2.5.2 Water Capital Plan 8
2.5.3 Debt Obligations 9
2.5.4 Fund Balance and Policies 9
2.6 Water Enterprise Revenue Requirements 10
2.7 Water Rate Structure Recommendations 11
2.7.1 Cost Allocation 11
2.7.2 Fixed Service Charge Recommendations 11
2.7.3 Water Variable Charge Recommendations 12
2.8 Regional Water Survey 12
2.9 Estimated Bill Impacts 13
3 Conclusion and Recommendations 14
3.1 Conclusion 14
3.2 Recommendations 14
Appendix A: Prop 218 Notice 15
Appendix B: Water Tables 16

1 Executive Summary

1.1 Background

Sweetwater Springs Water District (District) provides water distribution and maintenance service to 3,400 customers in five townships adjacent to the Russian River. Towns served include Guerneville, Rio Nido, Guernewood Park, Villa Grande, and Monte Rio. The District's water system is a self-sustaining enterprise, meaning revenues (mostly sourced from water rates) aim to recover the cost to operate and maintain the water system. The District has implemented small annual rate increases over the last 10 years but these have not been sufficient to address capital investment and replacement needs.

The District has contracted Bartle Wells Associates (BWA) to conduct a water rate study which examines current and projected costs and the existing water rate structure as it pertains to California legislation. Basic objectives of the rate study include:

- Identify rate setting principles.
- Develop long-term financial projections to determine future annual water enterprise revenue requirements.
- Evaluate rate alternatives and recommend water rates designed to equitably recover the costs of providing service.

Based on input from District staff, key guiding principles included developing rates that:

- Are fair and equitable to all customer classes.
- Recover the costs of providing service and generate adequate funding for capital needs.
- Are easy to understand and implement.
- Comply with the legal requirements of Proposition 218 and other California laws.

1.2 Proposition 218

Utility rates are subject to the procedural and substantive requirements as set forth in Proposition 218. Proposition 218 was adopted by California voters in 1996 and added Articles 13C and 13D to the California Constitution. Article 13D, Section 6 governs property-related charges, which the California Supreme Court subsequently ruled includes ongoing utility service charges such as water and wastewater. Article 13D, Section 6 establishes a) procedural requirements for imposing or increasing property-related charges, and b) substantive requirements for those charges. Article 13D also requires voter approval for new or increased property-related charges but exempts from this voting requirement rates for water and wastewater service. The substantive requirements of Article 13D, Section 6 require the District's utility rates to meet the following conditions:

- Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.
- No fee or charge may be imposed for a service unless that service is used by, or immediately available to, the owner of the property in question.
- No fee or charge may be imposed for general governmental services, such as police or fire services, where the service is available to the public at large in substantially the same manner as it is to property owners.

The procedural requirements of Proposition 218 for all utility rate increases are as follows:

- Noticing Requirement: The District must mail a notice of proposed rate increases to all affected property owners. The notice must specify the basis of the fee, the reason for the fee, and the date/time/location of a public rate hearing at which the proposed rates will be considered/adopted.
- Public Hearing: The District must hold a public hearing prior to adopting the proposed rate increases. The public hearing must be held not less than 45 days after the required notices are mailed.
- Rate Increases Subject to Majority Protest: At the public hearing, the proposed rate increases are subject to majority protest. If 50% plus one of affected property owners submit written protests the proposed rate increases, the increases cannot be adopted.

1.3 Use of Generally Accepted Rate-Making Principles

The rates developed in this study use a straightforward methodology to establish an equitable system of fixed and variable charges that recover the cost of providing service and fairly apportion costs to each rate component. The rates were developed using generally accepted cost-based principles and methodologies for establishing water rates, charges, and fees contained and discussed in the American Water Works Association (AWWA) M1 Manual.

In developing water rates, it is important to know that there is no "one-size-fits-all" approach for establishing cost-based water rates. "The (M1 Manual) is aimed at outlining the basic elements involved in water rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements."[1]

[1] AWWA Manual M1 Manual, Principles of Water Rates, Fees, and Charges, Sixth Edition, 2012, page 5.

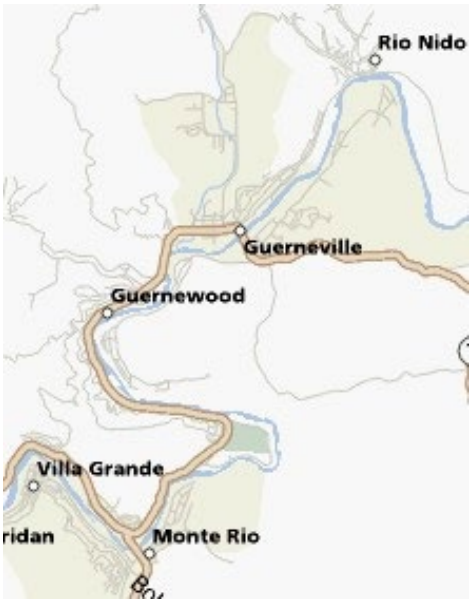
BWA used the following criteria when developing our recommendations for the District's water rates and finances:

1) *Revenue Sufficiency:* Rates should recover the annual cost of service and provide revenue stability.
2) *Rate Impact:* While rates are calculated to generate sufficient revenue to cover operating and capital costs, they should be designed to minimize, as much as possible, the impacts on ratepayers.
3) *Equitability:* Rates should be fairly allocated among all customer classes based on their estimated demand characteristics. Each user class only pays its proportionate share.
4) *Practicality:* Rates should be simple in form and, therefore, adaptable to changing conditions, easy to administer, and easy to understand.

1.4 Water System Overview

The District owns and operates a water system which collects, treats and distributes potable water. The District serves 3,400 customers over five townships in Sonoma County. Figure 1 shows a map of the District's service area.

Figure 1: Sweetwater Springs Water District Map



The District's main source of water revenue is bi-monthly water rates which were last increased on July 1, 2019. Rates will need to be increased to address ongoing operating cost increases and capital repair and replacement needs.

BWA recommends (1) increasing overall water rate revenue to better reflect the cost of service; and (2) modifying the volumetric rate structure by shifting from a four-tiered system to a two-tiered system.

1.4.1 Factors driving Rate Increases

The primary factors impacting the water rates are the significant cost of water and capital improvements to repair aging infrastructure. The District faces an average of $900,000 in capital expenditures each year over the next five years.

1.4.2 Current Water Rates

The District's current water rates are shown in Table ES 1 below.

Table ES1: Current Bimonthly Water Rates

	Base Rates	CDRC [1]	Volume Rates ($/hcf)			
	$/account	$/account	Tier 1	Tier 2	Tier 3	Tier 4
Single Family Residential			$1.50	$3.00	$4.50	$6.50
All Users	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
Multi Family (by # Dwelling Units)[2]						
2 DU's	$101.14	$18.53	(0-12.4)	(12.5-31)	(32-124)	125+
3 DU's	$137.03	$25.09	(0-16.8)	(16.9-42)	(43-168)	168+
4 DU's	$172.91	$31.60	(0-21.2)	(21.3-53)	(54-212)	212+
Commercial (by meter size)						
5/8"	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
1"	$163.15	$29.90	(0-20)	(21-50)	(51-200)	201+
1 1/2"	$325.25	$59.75	(0-40)	(41-100)	(101-400)	401+
2"	$522.00	$95.60	(0-64)	(65-160)	(161-640)	641+

1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

Current water rates include a bimonthly fixed charge which is fixed for single family residential customers, dwelling-unit based for multi-family customers, and meter-size-based for commercial customers. The Capital Debt Reduction Charge (CDRC) is structured the same way as the fixed base charge and aims to recover approximately $300,000, or one-third of the current water enterprise debt service. The District also collects variable charges on each hundred cubic foot (unit) of bimonthly water use. Customers pay volume rates based on a four-tier structure, with water allotments in each tier that increase with dwelling unit or meter size.

1.4.3 Proposed Water Rates

Proposed Water Rates are shown on Table ES 2.

Table ES2: 2020-21 Proposed Bimonthly Water Rates

	Base Rates $/account	CDRC [1] $/account	Volume Rates ($/hcf) Tier 1	Tier 2
Single Family Residential			$1.58	$3.77
All Users	$68.51	$12.55	(0-8)	9+
Multi Family (by # Dwelling Units)[2]				
2 DU's	$106.19	$19.46	(0-12.4)	12.5+
3 DU's	$143.88	$26.34	(0-16.8)	16.9+
4 DU's	$181.56	$33.18	(0-21.2)	21.3+
Commercial (by meter size)				
5/8"	$68.51	$12.55	(0-8)	9+
1"	$171.31	$31.40	(0-20)	21+
1 1/2"	$341.51	$62.74	(0-40)	41+
2"	$548.10	$100.38	(0-64)	65+

1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

BWA recommends 5% annual rate revenue increases to keep up with ongoing operating cost inflation and cover necessary capital improvement expenses. BWA also recommends restructuring rates to more accurately reflect the cost of water service and maintain equitability between customers by condensing the current tiered volumetric rate structure into a two-tier rate for all water usage.

2 Water Financial Projections and Rates

2.1 Water Financial Overview

Bartle Wells Associates conducted an independent evaluation of the District's water enterprise finances. Key observations include:

- Water rates have been increased approximately 3% per year annually. These have not been sufficient to but these have not been sufficient to address capital investment and replacement needs.
- The water enterprise has debt service requirements totaling approximately $1 million per year. The District is currently refinancing one Capital One Loan and will achieve initial savings of $650,000 per year over the next five years.
- The current Capital Improvement Plan totals $4.5 million through FY 2024-25. The CIP addresses aging infrastructure and other needed improvements and the District will requires additional funding to maintain prudent reserves.

- Projected water expenses were determined by developing projections based on historical audits, budgets, and up to date information provided by the District. Projected expenses and minimum reserve fund targets were used to develop annual revenue requirements.
- Current volume rates are complicated and require adjustments to comply with Proposition 218 requirements.

2.2 Current Bimonthly Water Rates

Current rates are shown on Table 1.

Table 1: Current Bimonthly Water Rates

	Base Rates	CDRC [1]	Volume Rates ($/hcf)			
	$/account	$/account	Tier 1	Tier 2	Tier 3	Tier 4
Single Family Residential			$1.50	$3.00	$4.50	$6.50
All Users	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
Multi Family (by # Dwelling Units)[2]						
2 DU's	$101.14	$18.53	(0-12.4)	(12.5-31)	(32-124)	125+
3 DU's	$137.03	$25.09	(0-16.8)	(16.9-42)	(43-168)	168+
4 DU's	$172.91	$31.60	(0-21.2)	(21.3-53)	(54-212)	212+
Commercial (by meter size)						
5/8"	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
1"	$163.15	$29.90	(0-20)	(21-50)	(51-200)	201+
1 1/2"	$325.25	$59.75	(0-40)	(41-100)	(101-400)	401+
2"	$522.00	$95.60	(0-64)	(65-160)	(161-640)	641+

1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

The District bills water service bi-monthly for residential customers and monthly for some commercial customers. The current water rates include two components:

1) **Fixed Base Charge:** Customers pay a fixed fee (calculated monthly) based on meter size. Single Family customers pay a single fixed fee based on typical single-family use. Multi family customers pay fixed fees based on dwelling unit according to the average change in additional water use per apartment dwelling unit, or a factor of 0.55. Commercial fixed rates increase by meter size according to meter factor ratios based on American Water Works Association (AWWA) guidelines.
2) **Capital Debt Reduction Charge (CDRC):** The CDRC is structured the same way as the fixed base charge and aims to recover approximately $300,000, or one-third of the current water enterprise debt service.

3) **Variable Charges:**

a. Residential customers are billed according to a 4-tier inclining rate structure. Water use is first billed in tier 1 and subsequently billed in higher, more expensive, tiers as water use increases in each billing period. Quantity Charges are billed per hundred cubic feet (HCF), with 1 HCF equal to approximately 748 gallons of water.

b. All other users (Multi Family and Commercial) are billed according to a two-tier inclining rate structure. Water use is first billed in tier 1 up to the customer's peak unit according to a meter demand factor and subsequently billed in a higher rate if peak use is reached. Meter demand factors are determined by meter size and customer class.

In general, rates do not currently cover the cost of water service. The existing volumetric tier structure needs to be cost-justified, is complex from a billing perspective and is difficult to explain to customers. The current rate structure may lead to unstable revenue as consumption changes.

2.3 Current Water Accounts

The District serves approximately 3,400 accounts, the majority of which are single family residential. Current accounts and dwelling units are shown on Table 2.

Table 2: Sweetwater Springs Accounts & Dwelling Units

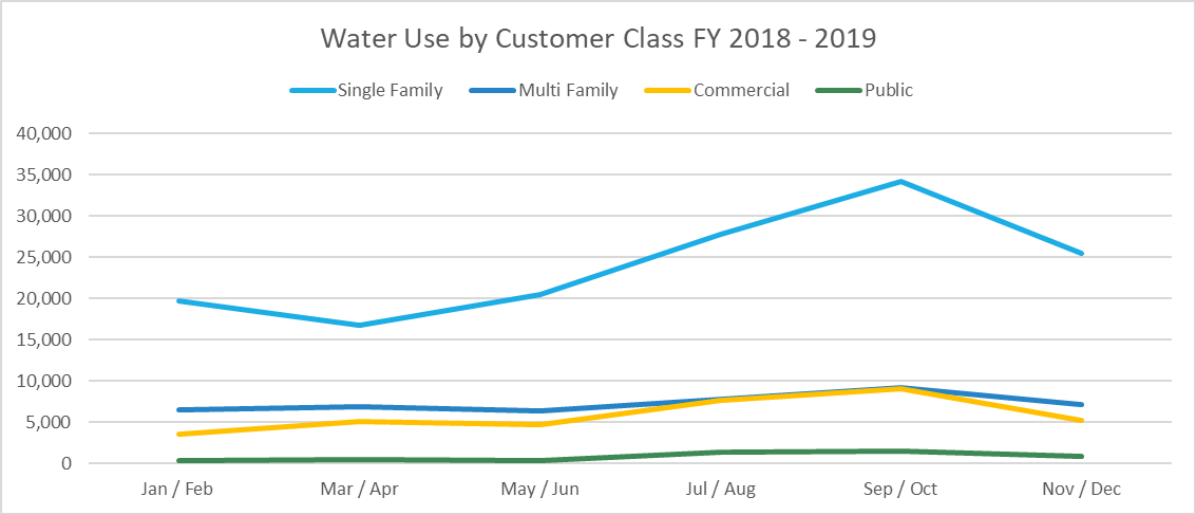
# Bimonthly Bills	Single Family	Multi Family	Commercial	Public	**Total**
5/8"	16,108	1,798	683	90	18,679
3/4"	6				6
1"	683	95	70	24	872
1 1/2"			18	6	24
2"		24	42	18	84
3"		12			12
Total	**16,797**	**1,929**	**813**	**138**	**19,677**
# Unique Accounts	2,865	331	141	23	3,360
# Dwelling Units	2,866	529			
Does not include Closed accounts or Collections Accounts					

Sweetwater Springs is a relatively slow-growth community and therefore can conservatively expect 0.5% of revenue growth per year as a result of new rate-payers or increased consumption.

2.4 FY 2019 Water Consumption

The water rate study conservatively assumes consumption has remained static since FY 2019 except for a small growth projection of approximately 0.5% per year between potential new users and a small increase in consumption. A summary of water consumption by customer class is shown in Figure 2 below. Each customer class has a water use trend that peaks in the September/October bill, which reflects usage in July/August. The average single family customer uses about 9 units bimonthly.

Figure 2: Water use by Customer Class FY 2019



2.5 Financial Challenges/Key Drivers of Rate Increases

The District's water enterprise will need to have consistent water rate increases over the next five years. Key drivers of future rate increases are summarized as follows.

2.5.1 Ongoing Operating Cost Inflation

The District's water operations budget totals approximately $2.1 million for FY 2019/20 including costs for water distribution, treatment, and supplies. Expenses are projected to increase 3% per year according to the average yearly percentage change in the Consumer Price Index (CPI) and is projected to total $2.4 million by 2024-25. Projected total operations costs are shown on Table 3.

Table 3: Water Projected Operations Costs

Budget (FY)	2019-20	Projection[1]	2020-21	2021-22	2022-23	2023-24	2024-25
Total Operating Expenditures	**$2,141,398**	*3.0%*	**$2,205,640**	**$2,271,809**	**$2,339,963**	**$2,410,162**	**$2,482,467**

2.5.2 Water Capital Plan

The District's Water Capital Improvement Plan totals $4.5 million and addresses aging infrastructure as well as other necessary improvements. The District's 5-Year Capital Improvement Plan shown on Table 4.

Table 4: 5-Year Capital Improvement Plan

Project Title	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
		draft CIP costs - inflation adjusted				
Old River Rd from Morningside Dr to Hwy 116 (GV)		$950,000				
Woodland Drive – mainline replacement		$550,000				
Wright Drive main pressure zone.				$350,000		
Wright Drive upper pressure zone				$900,000		
Natoma Tank				$250,000		
Schoeneman pressure zone						$900,000
Schoeneman Tank						$600,000
Total	**$0**	**$1,500,000**	**$0**	**$1,500,000**	**$0**	**$1,500,000**
Total Capital Funding 2019-20 through 2024-25						**$4,500,000**

Rate revenue is not currently sufficient to cover the Capital Improvement Plan while maintaining prudent reserves.

2.5.3 Debt Obligations

In addition to operating costs, the District pays semi-annual debt service payments on five debt issuances shown on Table 5.

Table 5: Water Projected Debt Service Schedule

	Payment Schedule (FY)	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
	OUTSTANDING LOANS/BONDS	**Budget**					
1	2014 Gen. Obligation Bonds	$64,284	$64,285	$64,285	$64,285	$64,286	$64,287
2	2019 GO Bond	$34,536	$59,682	$59,097	$59,501	$58,893	$59,275
3	State Loan Payments	$146,598	$146,598	$146,598			
4	Citizens PLL	$216,062	$216,062	$216,062	$216,062	$216,062	$216,062
5	Capital One Loan (Proposed Refi.)	$518,494	$443,672	$444,792	$444,728	$443,816	$441,694
	Total	**$979,974**	**$930,300**	**$930,835**	**$784,576**	**$783,057**	**$781,318**

The District has a total debt service coverage requirement of 1.25x.

2.5.4 Fund Balance and Policies

The District's current fund balance is shown on Table 6. The District has adopted policies establishing the minimum fund balance target in three categories. The operating cash reserve shall be at least 15% of annual operating expenses, the operating budget reserve shall be at least 25% of operating expenses, the debt payment reserve shall be at least 25% of total annual debt service payments, and the capital reserve shall be at least $250,000. The District's current fund balance exceeds the total reserve requirement but regular rate increases are needed to maintain reserve funding with rising operations and capital costs.

Table 6: Fund Balance and Policies

Total Cash Reserves		2019-20
All Accounts	June 30, 2019	**$3,186,493**
Fund Reserve Policies		
Operating Cash Reserve	(15% Operating Exp.)	$321,210
Operating Budget Reserve	(25% Operating Exp.)	$535,349
Debt Payment Reserve	(25% of total Debt Service)	$244,994
Capital Reserve		$250,000
Total Reserve Requirement		**$1,351,553**

2.6 Water Enterprise Revenue Requirements

The water cash flow projections incorporate the latest information available as well as reasonable, prudently conservative assumptions. Key assumptions include:

Growth & Water Demand Assumptions

- The District is a relatively slow-growth community - growth is projected at 0.5% per year
- Future water sales are projected to increase with growth.

Revenue Assumptions

- Rate revenue is projected to increase according to proposed rate increases and projected growth.
- Interest income is estimated using 1% earning on beginning fund balance
- Other revenues are estimated based on current budget.

Expense Assumptions

- Operations and maintenance costs are based on the 2019-20 budget and escalate at the annual rate of 3.0% to account for future cost inflation.
- Debt service payments are projected according to payment schedules provided by Staff, including proposed refinance of Capital One Loan.
- Capital expenditures include $4.5 million in projects through FY 2024/25.

To address the needs outlined in Section 2.5, the District will need to increase water rates. Based on the assumptions above, BWA created a cash flow projection that determined revenue requirements for the next 5 years. The proposed rate increases are shown on Table 7.

Table 7: Water Proposed Rate Increases

Fiscal Year	2020-21	2021-22	2022-23	2023-24	2024-25
Proposed Rate Increases	5.0%	5.0%	5.0%	5.0%	5.0%

A detailed cash flow is shown on Table 7 in the appendix tables.

The proposed rates accomplish the following:

- Full Operations and Capital Improvement Plan funding
- Minimum debt service coverage of 1.25x net operating revenues over the next 5 years (with the use of a Rate Stabilization Fund)
- Minimum target fund balance according to policies outlined in Table 6.

Rates would be effective following a mailed Proposition 218 notice and successful public hearing. The effective date is projected to be July 1, 2020 but may be delayed or reduced at the District's discretion.

2.7 Water Rate Structure Recommendations

In addition to the proposed increases, Bartle Wells Associates also recommends a rate structure change to align with requirements set forth in Proposition 218 and ensure greater security of revenue collection.

2.7.1 Cost Allocation

BWA conducted a review of District expenses and recommends that the District recover 70% of rate revenue from fixed charges (fixed base charges plus CDRC) and 60% from variable charges. This represents no change to the District's current rate structure.

2.7.2 Fixed Service Charge Recommendations

BWA proposes no change to the current fixed rate structure. Proposed fixed charges are shown in Table 8 below.

Table 8: Proposed Fixed Charges

Fiscal Year	Current	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Proposed Rate Increase		**5.0%**	**5.0%**	**5.0%**	**5.0%**	**5.0%**
	Base Rates ($/account bimonthly)					
Single Family Residential						
All Users	$65.25	$68.51	$71.94	$75.54	$79.31	$83.28
Multi Family (by # Dwelling Units)[1]						
2 DU's	$101.14	$106.19	$111.50	$117.08	$122.93	$129.08
3 DU's	$137.03	$143.88	$151.07	$158.62	$166.55	$174.88
4 DU's	$172.91	$181.56	$190.64	$200.17	$210.18	$220.69
Commercial (by meter size)						
5/8"	$65.25	$68.51	$71.94	$75.54	$79.31	$83.28
1"	$163.15	$171.31	$179.87	$188.87	$198.31	$208.23
1 1/2"	$325.25	$341.51	$358.59	$376.52	$395.34	$415.11
2"	$522.00	$548.10	$575.51	$604.28	$634.49	$666.22
	Capital Debt Reduction Charge ($/account bimonthly)					
Single Family Residential						
All Users	$11.95	$12.55	$13.17	$13.83	$14.53	$15.25
Multi Family (by # Dwelling Units)[1]						
2 DU's	$18.53	$19.46	$20.43	$21.45	$22.52	$23.65
3 DU's	$25.09	$26.34	$27.66	$29.04	$30.50	$32.02
4 DU's	$31.60	$33.18	$34.84	$36.58	$38.41	$40.33
Commercial (by meter size)						
5/8"	$11.95	$12.55	$13.17	$13.83	$14.53	$15.25
1"	$29.90	$31.40	$32.96	$34.61	$36.34	$38.16
1 1/2"	$59.75	$62.74	$65.87	$69.17	$72.63	$76.26
2"	$95.60	$100.38	$105.40	$110.67	$116.20	$122.01

1 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

2.7.3 Water Variable Charge Recommendations

The proposed volume rates aim to recover a total of 30% of rate revenue through variable charges based on water use. This represents no change in the current volumetric revenue recovered. BWA also examined the current volumetric rate structure and proposes to reduce the current volume rates from four tiers to two tiers. The proposed tier 1 rate is unchanged from the current rate and represents lifeline use or slightly below average use. The tier 2 rate was calculated using a weighted average of rates and use in current tiers 2-4 and is designed to collect peaking costs for each customer class, conservatively estimated at about 10% of O&M.

Volume rates are shown on Table 9 for FY 2020-21 only in the interest of space. Rates will increase 5% per year thereafter. A full schedule of proposed volumetric rates are shown in Table 9 in the appendix.

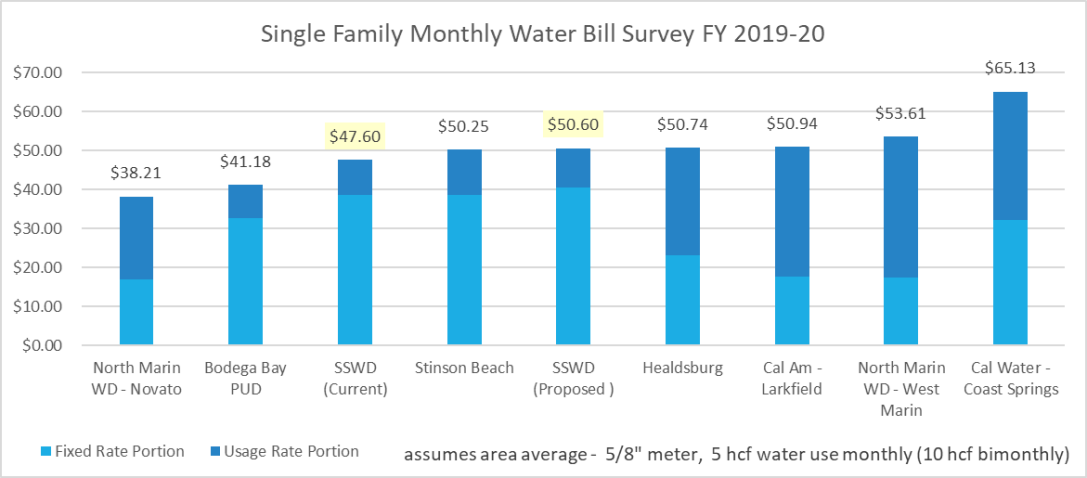
Table 9: Proposed Volume Rates (FY 2020-21 only)

Fiscal Year				**2020-21**	
Proposed Rate Revenue Increase				**5.0%**	
Single Family Residential		Tier 1 Use	Tier 2 Use	Tier 1	Tier 2
	All Users	(0-8)	9+	$1.58	$3.77
Multi Family (by # Dwelling Units)[1]					
	2 DU's	(0-12.4)	12.5+	$1.58	$3.77
	3 DU's	(0-16.8)	16.9+	$1.58	$3.77
	4 DU's	(0-21.2)	21.3+	$1.58	$3.77
Commercial (by meter size)					
	5/8"	(0-8)	9+	$1.58	$3.77
	1"	(0-20)	21+	$1.58	$3.77
	1 1/2"	(0-40)	41+	$1.58	$3.77
	2"	(0-64)	65+	$1.58	$3.77

2.8 Regional Water Survey

Figure 3 shows the proposed rates in the context of water rates in the Napa/Sonoma Area. The District's bill is currently among the lowest in the area and will continue to be low with the proposed rate increases.

Figure 3: Regional Water Rate Survey



2.9 Estimated Bill Impacts

Estimated residential bill impacts are shown on Table 10. Condensing the tiered water rates causes residential bills with high use to increase because the Tier 2 rate has increased. Commercial rates with very use occurring in the current tiers 3 and 4 may see a decrease in bills since the condensed tier 2 is lower than these rates. Current rates were put in place to encourage water conservation, but the District can no longer cost-justify four water tiers.

Proposed Rate Increase Effect on Typical Water Users by Class FY 2020-21						
	Single Family Residential		Multi Family Residential (2 units)		Commercial (5/8" Meter)	
	Median	High	Median	High	Median	High
Water Use (hcf)	7	22	12	32	15	82
Water Bill (Current)	$87.70	$134.20	$137.66	$198.56	$110.20	$408.20
Water Bill (Proposed)	$92.09	$146.50	$145.18	$219.16	$120.08	$372.97
Bimonthly Difference	$4.39	$12.30	$7.52	$20.60	$9.88	-$35.23
% Increase	5%	9%	5%	10%	9%	-9%

3 Conclusion and Recommendations

This water rate study report presents a comprehensive review of the Sweetwater Springs Water Dsitrict's revenue requirements, cost allocations, and rate structures. The District will need regular annual rate increases to keep up with operations cost inflation and the Capital Improvement Plan while maintaining prudent reserves. Current rates are complex and will need to be updated to reflect the cost of service. These factors were considered in the rate study to fairly develop rates for customers.

3.1 Conclusion

The District practices sound financial planning that has provided for the financial health of the water enterprise. Historically, the District has increased rate revenue 3% on a yearly basis to keep up with inflationary cost increases and to accumulate reserves. This allows the District to avoid rate spikes when new costs are incurred. Unfortunately, at this level the District is unable to keep up with rising operations cost and the current Capital Improvement Plan while maintaining prudent reserves. These recent developments have been factored into a comprehensive water rate study and are reflected in the above proposed rates. Adoption of these rates reflect the District's commitment to stewarding financially sound utilities and providing reliable, high quality water service that will benefit the community many years into the future.

3.2 Recommendations

BWA recommends that the District adopt the rates shown in this report. Rates were developed as part of a collaborative process that included Staff and Budget committee review.

At minimum, BWA recommends that the District review and update its water rate study every five years and/or concurrent with Master Plan Updates. Proposition 218 allows public agencies to adopt rates over a five-year planning period. Any further rate increases must be supported by a comprehensive rate study.

Appendix A: Prop 218 Notice

Proposition 218 Notice to Customers and Property Owners of Record:

Public Hearing Regarding Proposed Water Rate Increases

Notice is hereby given, pursuant to Article XII(D) of the California Constitution, that Sweetwater Springs Water District is proposing to increase its rates for water service. The Board will conduct a public hearing on this matter, which will be held on:

Date: June 4, 2020
Time: 6:30 PM
Place: 17081 Hwy. 116, Ste. B Guerneville, CA 95446

The public hearing will review the proposed water rate increase and other related changes to water fees and charges. More information is provided below.

Water System Overview

Sweetwater Springs Water District operates and maintains a public water enterprise system that supplies safe, potable drinking water to 3,800 customers through two separate water supply and distribution systems. In total, the District operates and maintains five wells, 26 storage tanks, five pressure zones, and a filtration plant. District services include maintenance and repair of the water system up to the water meter, weekly water quality testing, meter reading, small and large-scale capital improvements, and installation of new services.

The District is aggressively investing in capital improvements, as well as infrastructure repair and replacement. We recently completed $1.5 million in capital improvement projects including replacement of 4,600 ft of existing pipelines and a new filter system.

Why is an increase in rates necessary?

The proposed increases to rates and charges, as set forth in Resolution 19-06 and summarized below, will be used to pay for the increasing need for capital improvements to the water system as well as debt service and operations costs.

The current capital improvement program addresses the need to bring District capital facilities to a standard level of adequacy and, once that is done, a sustainable capital improvement program will be needed to keep District facilities at an adequate level. The District faces an average of $750,000 per year for ongoing capital improvements necessary to maintain and upgrade existing facilities, including mainlines, tanks, and wells.

The proposed water rate increase follows the water rate study performed by Bartle Wells Associates and completed in March 2020. The study recommends restructuring water rates and increasing rate revenue annually by up to 5% in order to meet rising operations, debt, and capital improvement expenses. Budgets and spending needs will be analyzed on an annual basis to determine what level of increase, if any, is needed to meet expense requirements. The analysis done this year shows that an overall 5% rate revenue increase and a restructure of the current tiered volume rates is needed.

More Information Available Prior to the Hearing:

More information on the proposed water rates, including the draft Water Rate Study, is available at the District office at 17081 Highway 116, Suite B, Guerneville, California. This information will also be posted on the District's website, www.sweetwatersprings.com. In addition, District staff can be contacted at (707) 869-4000 to answer any questions you may have regarding the rate increases.

Current Bimonthly Water Rates

	Base Rates $/account	CDRC [1] $/account	Volume Rates ($/hcf) Tier 1	Tier 2	Tier 3	Tier 4
Single Family Residential			$1.50	$3.00	$4.50	$6.50
All Users	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
Multi Family (by # Dwelling Units)[2]						
2 DU's	$101.14	$18.53	(0-12.4)	(12.5-31)	(32-124)	125+
3 DU's	$137.03	$25.09	(0-16.8)	(16.9-42)	(43-168)	168+
4 DU's	$172.91	$31.60	(0-21.2)	(21.3-53)	(54-212)	212+
Commercial (by meter size)						
5/8"	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
1"	$163.15	$29.90	(0-20)	(21-50)	(51-200)	201+
1 1/2"	$325.25	$59.75	(0-40)	(41-100)	(101-400)	401+
2"	$522.00	$95.60	(0-64)	(65-160)	(161-640)	641+

hcf = hundred cubic foot, 748 gallons
1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

Current bimonthly water rates include a fixed base rate, Capital Debt Reduction charge and volumetric rates based on water use per hundred cubic foot (hcf) unit. One hundred cubic foot (hcf) is equal to 748 gallons. Rates need to be updated to reflect increased costs, capital repair and replacement needs, and the cost of water service to each customer pursuant to Proposition 218.

Proposed Bimonthly Water Rates

	Base Rates $/account	CDRC [1] $/account	Volume Rates ($/hcf) Tier 1	Tier 2
Single Family Residential			$1.58	$3.77
All Users	$68.51	$12.55	(0-8) hcf	9+ hcf
Multi Family (by # Dwelling Units)[2]				
2 DU's	$106.19	$19.46	(0-12.4)	12.5+
3 DU's	$143.88	$26.34	(0-16.8)	16.9+
4 DU's	$181.56	$33.18	(0-21.2)	21.3+
Commercial (by meter size)				
5/8"	$68.51	$12.55	(0-8)	9+
1"	$171.31	$31.40	(0-20)	21+
1 1/2"	$341.51	$62.74	(0-40)	41+
2"	$548.10	$100.38	(0-64)	65+

hcf = hundred cubic foot, 748 gallons
1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

The proposed bimonthly water rates represent an overall 5% rate revenue increase and a restructure of the current tiered volume rates from four tiers to two tiers.

How will this impact a typical Single-Family bill?

Sweetwater Springs utility rates are among the lowest in the area and will continue to be low with the proposed rate increases. Currently, a typical single family using 10 units of water bimonthly has a bill of $95.20. The proposed rates will increase the typical bill by 5%, or $6.01 bimonthly, for 10 units of water use. Greater water conservation will result in lower water bills.

Rate Increase Approval Process

Sweetwater Springs Water District will hold a public hearing at the Board meeting scheduled **June 4, 2020 at 6:30pm at the District offices, 17081 Hwy. 116 Ste. B Guerneville, CA 95446.**

If you are a property owner or the person responsible for paying for water service, you may protest the proposed rate increases either prior to or during the Public Hearing on June 4, 2020. Only one protest per parcel will be counted. The rate increases will take effect unless protests are received from more than 50% of property parcels in the District.

At the Public Hearing, the Board of Directors will consider all written protests that are submitted during the public hearing as well as written protests that have been received. Written protests must indicate the property address and the name of the owner of record of the property and be signed by the person submitting the protest. Written protests may also be delivered to the District office no later than the close of the public hearing, as noticed above, or said protests may be sent by 1st-class mail, postage prepaid, to:

Sweetwater Springs Water District
P.O. Box 48
Guerneville, CA 95446

Mailed protests must be received by the District no later than the date of the public hearing. Any protests received after the close of the public hearing will not be counted.

Protest Ballot

Please provide address information, sign, and return this page below the dotted line if you choose to protest. You may protest on a separate ballot. If so, please include the information and signature requested.

Address: _____
_____
_____

Or APN: _____ (if multiple addresses, please list separately)

If you are a property owner or the person responsible for paying for water service at this address and you object to the proposed change in District water rates, you may sign this form and mail it to:

Sweetwater Springs Water District, P.O. Box 48, Guerneville, CA 95446

or hand deliver it to the District Office at:

17081 Highway 116, Suite B, Guerneville, California

In order for this form to be counted as a valid protest against the proposed rate change, the form must be signed and delivered to the District Office no later than the end of the public hearing to be held on June 6, 2019. Only one protest is permitted per parcel.

☐ I protest the proposed rate increase to fund the operation, maintenance, and capital improvement costs relative to providing water service. (Check to indicate your objection to the proposed rate increase.)

I declare that I am either the owner of the above-listed property, the authorized representative of the owner of the above-listed property, or the person responsible for paying for water service at the address shown above.

Please Sign here: _____

Please Print here: _____
(Name of property owner if different than name of the person signing this protest.)

Appendix B: Water Tables

Sweetwater Springs
WATER DISTRICT

Water COS Rate Study 2020

Draft Tables

Table of Contents

Table 1	Current Bimonthly Water Rates
Table 2	Customer Information
Table 3	O&M Expense Projection
Table 4	Capital Improvement Plan
Table 5	Debt Service
Table 6	Fund Balance & Policies
Table 7	Cash Flow Projection Options
Table 8	Proposed Fixed Charges
Table 9	Proposed Variable Charges
Table 10	Water Rate Survey

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

5/1/2020

Table 1: Current Bimonthly Water Rates
Sweetwater Springs Water District
Water COS Rate Study 2020

Current Bimonthly Water Rates

	Base Rates	CDRC [1]	Volume Rates ($/hcf)			
	$/account	$/account	Tier 1	Tier 2	Tier 3	Tier 4
Single Family Residential			$1.50	$3.00	$4.50	$6.50
All Users	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
Multi Family (by # Dwelling Units)[2]						
2 DU's	$101.14	$18.53	(0-12.4)	(12.5-31)	(32-124)	125+
3 DU's	$137.03	$25.09	(0-16.8)	(16.9-42)	(43-168)	168+
4 DU's	$172.91	$31.60	(0-21.2)	(21.3-53)	(54-212)	212+
Commercial (by meter size)						
5/8"	$65.25	$11.95	(0-8)	(9-20)	(21-80)	81+
1"	$163.15	$29.90	(0-20)	(21-50)	(51-200)	201+
1 1/2"	$325.25	$59.75	(0-40)	(41-100)	(101-400)	401+
2"	$522.00	$95.60	(0-64)	(65-160)	(161-640)	641+

1 - Capital Debt Reduction Charge
2 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

Table 2A: Customer Information
Sweetwater Springs Water District
Water COS Rate Study 2020

Customer Information - Account Data

# Bimonthly Bills	Single Family	Multi Family	Commercial	Public	**Total**
5/8"	16,108	1,798	683	90	18,679
3/4"	6				6
1"	683	95	70	24	872
1 1/2"			18	6	24
2"		24	42	18	84
3"		12			12
Total	**16,797**	**1,929**	**813**	**138**	**19,677**
# Unique Accounts	2,865	331	141	23	3,360
# Dwelling Units	2,866	529			

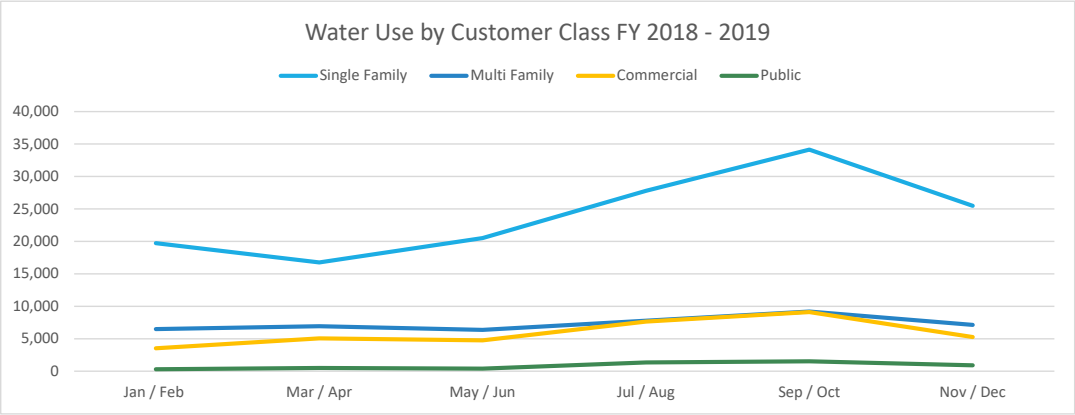
Does not include Closed accounts or Collections Accounts

Table 2B: Customer Information
Sweetwater Springs Water District
Water COS Rate Study 2020

Customer Information - Water Use

	Bill 1	Bill 2	Bill 3	Bill 4	Bill 5	Bill 6	Total
Total Water Use (hcf)	7/2018 - 8/2018	9/2018 - 10/2018	11/2018 - 12/2018	1/2019 - 2/2019	3/2019 - 4/2019	5/2019 - 6/2019	FY 2018/19
Single Family	27,788	34,140	25,467	19,729	16,759	20,526	144,409
Multi Family	7,783	9,193	7,126	6,502	6,923	6,366	43,893
Commercial	7,650	9,110	5,262	3,531	5,072	4,754	35,379
Public	1,346	1,524	892	300	504	394	4,960
Total	**44,567**	**53,967**	**38,747**	**30,062**	**29,258**	**32,040**	**228,641**

peak use



SFD - Water Use by Tier			
Current Tier Breakpoints		Consumption %	% Use Tiers 2-4
Tier 1 (0-8 units)	82,643	57%	
Tier 2 (9-20 Units)	36,565	25%	59%
Tier 3 (21 - 80 units)	20,183	14%	33%
Tier 4 (80+ units)	5,018	3%	8%
	144,409		

Does not include Closed accounts or Collections Accounts

Table 3: O&M Expense Projection
Sweetwater Springs Water District
Water COS Rate Study 2020

O&M Expense Projection

	Budget (FY)	2018-19	2019-20	Projection[1]	2020-21	2021-22	2022-23	2023-24	2024-25
EXPENDITURES									
Salary and Benefits									
Total Salary		$930,800	$1,006,400	*3.0%*	$1,036,592	$1,067,690	$1,099,720	$1,132,712	$1,166,693
Total Benefits		$436,996	$514,368	*3.0%*	$529,799	$545,693	$562,064	$578,926	$596,293
Total Salary and Benefits		**$1,367,796**	**$1,520,768**		**$1,566,391**	**$1,613,383**	**$1,661,784**	**$1,711,638**	**$1,762,987**
Services and Supplies									
Total Communications		$25,170	$30,830	*3.0%*	$31,755	$32,708	$33,689	$34,699	$35,740
Total Insurances		$42,000	$44,000	*3.0%*	$45,320	$46,680	$48,080	$49,522	$51,008
Total Mainte/Repair - Office & Vehicles		$20,500	$27,000	*3.0%*	$27,810	$28,644	$29,504	$30,389	$31,300
Total Maint/Repair - Facilities		$135,800	$114,800	*3.0%*	$118,244	$121,791	$125,445	$129,208	$133,085
Total Miscellaneous Expenses		$30,500	$28,520	*3.0%*	$29,376	$30,257	$31,165	$32,100	$33,062
Total Office Expenses		$32,300	$34,100	*3.0%*	$35,123	$36,177	$37,262	$38,380	$39,531
Total Operating Supplies		$25,700	$28,200	*3.0%*	$29,046	$29,917	$30,815	$31,739	$32,692
Total Professional Services		$110,500	$132,500	*3.0%*	$136,475	$140,569	$144,786	$149,130	$153,604
Total Rents & Leases		$33,090	$33,090	*3.0%*	$34,083	$35,105	$36,158	$37,243	$38,360
Total Transportation & Travel		$27,050	$31,050	*3.0%*	$31,982	$32,941	$33,929	$34,947	$35,995
Total Uniforms		$3,440	$3,540	*3.0%*	$3,646	$3,756	$3,868	$3,984	$4,104
Total Utilities		$110,000	$113,000	*3.0%*	$116,390	$119,882	$123,478	$127,182	$130,998
Total Services and Supplies		**$596,050**	**$620,630**		**$639,249**	**$658,426**	**$678,179**	**$698,525**	**$719,480**
Total Operating Expenditures		**$1,963,846**	**$2,141,398**		**$2,205,640**	**$2,271,809**	**$2,339,963**	**$2,410,162**	**$2,482,467**

1 - average CPI annual increase

Table 4: Capital Improvement Plan
Sweetwater Springs Water District
Water COS Rate Study 2020

Capital Improvement Plan

CIP	Project Title	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
			draft CIP costs - inflation adjusted				
	Old River Rd from Morningside Dr to Hwy 116 (GV)		$950,000				
	Woodland Drive – mainline replacement		$550,000				
	Wright Drive main pressure zone.				$350,000		
	Wright Drive upper pressure zone				$900,000		
	Natoma Tank				$250,000		
	Schoeneman pressure zone						$900,000
	Schoeneman Tank						$600,000
	Total	**$0**	**$1,500,000**	**$0**	**$1,500,000**	**$0**	**$1,500,000**
	Total Capital Funding 2019-20 through 2024-25						**$4,500,000**

Table 5: Debt Service
Sweetwater Springs Water District
Water COS Rate Study 2020

Debt Service

	Payment Schedule (FY)	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
OUTSTANDING LOANS/BONDS		**Budget**					
1	2014 Gen. Obligation Bonds	$64,284	$64,285	$64,285	$64,285	$64,286	$64,287
2	2019 GO Bond	$34,536	$59,682	$59,097	$59,501	$58,893	$59,275
3	State Loan Payments	$146,598	$146,598	$146,598			
4	Citizens PLL	$216,062	$216,062	$216,062	$216,062	$216,062	$216,062
5	Capital One Loan (Proposed Refi.)	$518,494	$443,672	$444,792	$444,728	$443,816	$441,694
	Total	**$979,974**	**$930,300**	**$930,835**	**$784,576**	**$783,057**	**$781,318**

* Capital Loan proposed refinance would save approx. $43,500 over 15 years

5	Capital One Loan (Proposed Refi.)	$518,494	$443,672	$444,792	$444,728	$443,816	$441,694
	Total Debt with Restructure	**$979,974**	**$930,300**	**$930,835**	**$784,576**	**$783,057**	**$781,318**

Table 6: Fund Balance & Policies
Sweetwater Springs Water District
Water COS Rate Study 2020

Fund Balance & Policies

Total Cash Reserves		2019-20
All Accounts	June 30, 2019	**$3,186,493**
Fund Reserve Policies		
Operating Cash Reserve	(15% Operating Exp.)	$321,210
Operating Budget Reserve	(25% Operating Exp.)	$535,349
Debt Payment Reserve	(25% of total Debt Service)	$244,994
Capital Reserve		$250,000
Total Reserve Requirement		**$1,351,553**
Reserves Above (Below) Policy		**$1,834,940**

Table 7: Cash Flow Projection Options
Sweetwater Springs Water District
Water COS Rate Study 2020

Cash Flow Projection (BWA Proposed Increases)

Five-Year Projection		**Current**	**1**	**2**	**3**	**4**	**5**
Fiscal Year	**Reference**	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Proposed Rate Increase			5.0%	5.0%	5.0%	5.0%	5.0%
Growth			0.5%	0.5%	0.5%	0.5%	0.5%
Projected SF Bimonthly Bill (6 hcf use)		$86.20	$90.51	$95.04	$99.79	$104.78	$110.02
Beginning Fund Balance	Table 6	**$3,186,493**	**$3,592,246**	**$2,632,120**	**$3,248,312**	**$2,609,826**	**$3,566,227**
REVENUE							
Capital Debt Reduction Charge	Budget	$292,811	$308,989	$326,060	$344,075	$363,085	$383,146
Water Sales - Base Rate	Budget	$1,644,824	$1,735,701	$1,831,598	$1,932,794	$2,039,581	$2,152,267
Water Sales - Use Charges	Budget	$680,136	$717,714	$757,367	$799,212	$843,368	$889,964
Total Rate Revenue		**$2,617,771**	**$2,762,403**	**$2,915,026**	**$3,076,081**	**$3,246,034**	**$3,425,378**
Assessment	Budget	$750,000	$750,000	$750,000	$750,000	$750,000	$750,000
Interest[1]	Budget	$31,865	$35,922	$26,321	$32,483	$26,098	$35,662
Connection Fees	Budget	$6,978	$6,978	$6,978	$6,978	$6,978	$6,978
Service Upgrades	Budget	$10,384	$10,384	$10,384	$10,384	$10,384	$10,384
Rent	Budget	$107,382	$107,382	$107,382	$107,382	$107,382	$107,382
Miscellaneous Revenue	Budget	$2,745	$2,745	$2,745	$2,745	$2,745	$2,745
Total Other Revenue		**$909,354**	**$913,411**	**$903,810**	**$909,972**	**$903,587**	**$913,151**
Total Revenue		**$3,527,125**	**$3,675,814**	**$3,818,836**	**$3,986,053**	**$4,149,621**	**$4,338,529**
EXPENDITURES							
Total O&M	Table 3	$2,141,398	$2,205,640	$2,271,809	$2,339,963	$2,410,162	$2,482,467
Capital Improvement Plan	Table 4	$0	$1,500,000	$0	$1,500,000	$0	$1,500,000
Total Debt Service (w/ refi)	Table 5	$979,974	$930,300	$930,835	$784,576	$783,057	$781,318
Total Expenditures		**$3,121,372**	**$4,635,940**	**$3,202,644**	**$4,624,540**	**$3,193,220**	**$4,763,786**
Net Revenue Before Capital		$405,753	$539,875	$616,192	$861,513	$956,402	$1,074,743
Net Revenue		$405,753	($960,125)	$616,192	($638,487)	$956,402	($425,257)
Ending Fund Balance		**$3,592,246**	**$2,632,120**	**$3,248,312**	**$2,609,826**	**$3,566,227**	**$3,140,971**
Fund Balance Target		*$1,351,553*	*$1,364,831*	*$1,391,432*	*$1,382,129*	*$1,409,829*	*$1,438,316*
Debt Service Coverage		1.4	1.6	1.7	2.1	2.2	2.4

1 - 1% earnings on beginning fund balance

Table 8: Proposed Fixed Charges
Sweetwater Springs Water District
Water COS Rate Study 2020

Proposed Fixed Charges

Fiscal Year	Current	2020-21	2021-22	2022-23	2023-24	2024-25
Proposed Rate Increase		5.0%	5.0%	5.0%	5.0%	5.0%
		Base Rates ($/account bimonthly)				
Single Family Residential						
All Users	$65.25	$68.51	$71.94	$75.54	$79.31	$83.28
Multi Family (by # Dwelling Units)[1]						
2 DU's	$101.14	$106.19	$111.50	$117.08	$122.93	$129.08
3 DU's	$137.03	$143.88	$151.07	$158.62	$166.55	$174.88
4 DU's	$172.91	$181.56	$190.64	$200.17	$210.18	$220.69
Commercial (by meter size)						
5/8"	$65.25	$68.51	$71.94	$75.54	$79.31	$83.28
1"	$163.15	$171.31	$179.87	$188.87	$198.31	$208.23
1 1/2"	$325.25	$341.51	$358.59	$376.52	$395.34	$415.11
2"	$522.00	$548.10	$575.51	$604.28	$634.49	$666.22
		Capital Debt Reduction Charge ($/account bimonthly)				
Single Family Residential						
All Users	$11.95	$12.55	$13.17	$13.83	$14.53	$15.25
Multi Family (by # Dwelling Units)[1]						
2 DU's	$18.53	$19.46	$20.43	$21.45	$22.52	$23.65
3 DU's	$25.09	$26.34	$27.66	$29.04	$30.50	$32.02
4 DU's	$31.60	$33.18	$34.84	$36.58	$38.41	$40.33
Commercial (by meter size)						
5/8"	$11.95	$12.55	$13.17	$13.83	$14.53	$15.25
1"	$29.90	$31.40	$32.96	$34.61	$36.34	$38.16
1 1/2"	$59.75	$62.74	$65.87	$69.17	$72.63	$76.26
2"	$95.60	$100.38	$105.40	$110.67	$116.20	$122.01

1 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

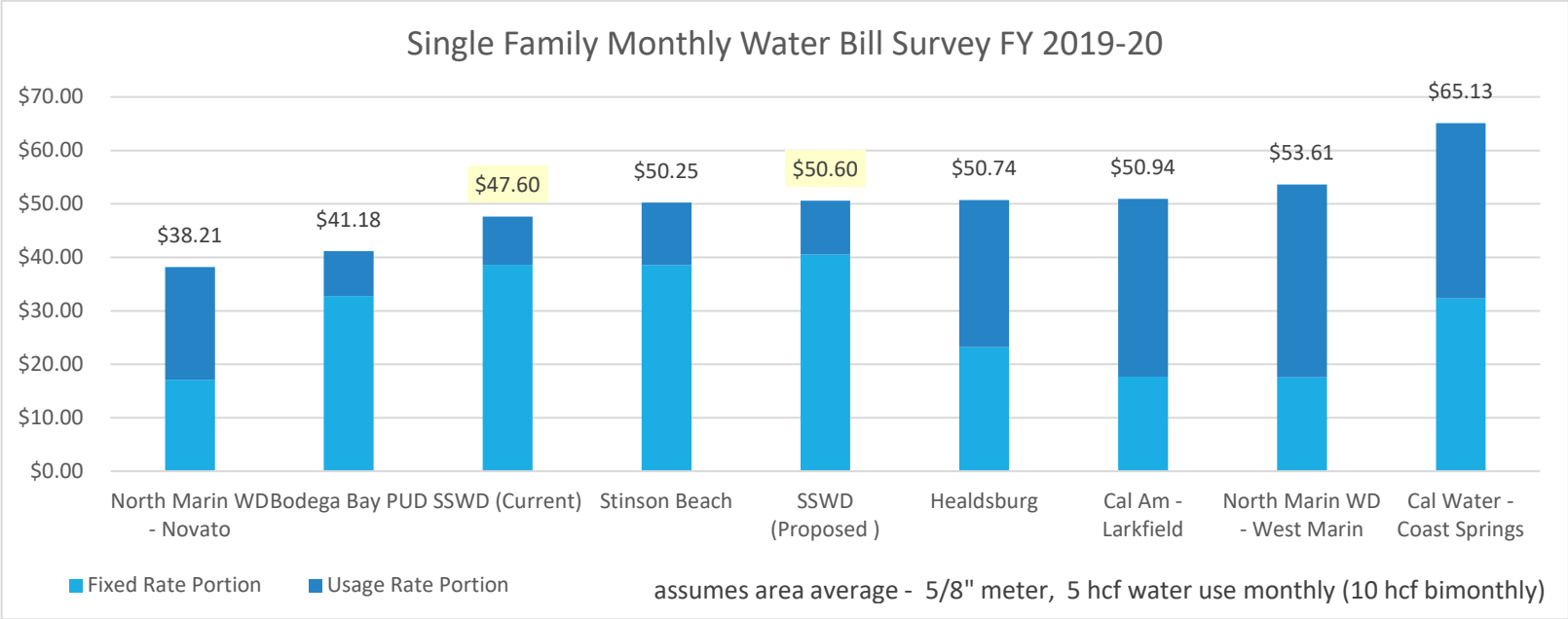
Table 9: Proposed Variable Charges
Sweetwater Springs Water District
Water COS Rate Study 2020

Proposed Variable Charges

			Volume Rates ($/account bimonthly)									
Fiscal Year			**2020-21**		**2021-22**		**2022-23**		**2023-24**		**2024-25**	
Proposed Rate Revenue Increase			**5.0%**		**5.0%**		**5.0%**		**5.0%**		**5.0%**	
Single Family Residential	Tier 1 Use	Tier 2 Use	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2	Tier 1	Tier 2
All Users	(0-8)	9+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
Multi Family (by # Dwelling Units)[1]												
2 DU's	(0-12.4)	12.5+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
3 DU's	(0-16.8)	16.9+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
4 DU's	(0-21.2)	21.3+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
Commercial (by meter size)												
5/8"	(0-8)	9+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
1"	(0-20)	21+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
1 1/2"	(0-40)	41+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59
2"	(0-64)	65+	$1.58	$3.77	$1.65	$3.96	$1.74	$4.16	$1.82	$4.37	$1.91	$4.59

1 - Multi Family unit multiplier = 0.55 for every extra unit; no meter multiplier

Proposed Tier 1 unchanged - lifeline rate
Proposed Tier 2 calculated using weighted average of current tier 2 to tier 4 rates and existing use; surcharge recovers estimated 10% O&M peaking cost
Single Volume Rate calculated using weighted average of current Tier 1 to Tier 4 rates and existing use

Table 10: Water Rate Survey
Sweetwater Springs Water District
Water COS Rate Study 2020

Water Rate Survey