



Water Rate Study Prepared for the Seeley County Water District

At the request of the Seeley County Water District



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Executive Summary

The Seeley County Water District [SCWD] serves the community of Seeley, California, which has a population of approximately 1,573 residents and a median household income (MHI) of \$25,563 (+/- \$7,075) as estimated by the 2017 five-year American Community Survey. Consisting of water treatment, storage, and distribution facilities owned and operated by the district, SCWD provides water services to an estimated 426 connections.

In 2019 RCAC received a request from the district to conduct a water rate study that would meet its existing and future revenue needs. Developing a sustainable, fair and justifiable rate structure are key objectives of this study. One major consideration involves compliance with California Proposition 218. The goal of this study, therefore, is to develop a rate structure that will meet these objectives.

In developing an appropriate rate structure and the accompanying five-year revenue forecast, RCAC examined financial, asset and other data provided by the district. RCAC also consulted with SCWD staff to be able to calculate current and future operating and capital needs, projected water usage, community growth, and related reserves. In addition to these needs, district staff also requested the determination of an appropriate capacity, development, connection, and annexations charges, which are detailed in the report.

Under SCWD's existing structure, water rates are derived from the relative size of each dwelling unit, or Equivalent Dwelling Unit [EDU], which is multiplied by a flat charge of \$36.08 for each EDU to arrive at a monthly bill. In addition, each customer is charged \$1.29 for every thousand gallons of water used. There are three general customer classes: single-family residential unit (1.0 EDU), multi-family residential (0.7 EDU), and commercial (1.0 EDU).

In accordance with the standard methodology developed by the American Water Works Association (AWWA), RCAC proposes that SCWD adopt a rate structure based on water capacity demand, as reflected in the customer meter size. This change would satisfy the requirement for rate equity stipulated under California Proposition 218. The corresponding monthly base charge would be \$29.37 for $\frac{3}{4}$ " meters, \$48.95 for 1" meters, \$97.89 for 1.5" meters, \$156.63 for 2" meters, and \$489.47 for 4" meters. An additional charge of \$1.98 would be assessed for every 1,000 gallons of water used.

Noting most of SCWD's water customers have standard $\frac{3}{4}$ " residential meters, most single-family residential customers will enjoy a lower base rate, which will drop from \$36.07 to \$29.37 per month. With expected adjustments in usage, the following table shows the estimated change in monthly water bills based on meter size and average monthly use:

Meter Size	Meter Size	Current	Year 1	Year 2	Year 3	Year 4	Year 5
0.750	3/4"	\$49.01	\$49.99	\$50.13	\$50.13	\$50.13	\$50.33
1.000	1"	\$57.89	\$83.51	\$83.77	\$83.77	\$83.77	\$84.10
1.500	1.5"	\$58.33	\$133.14	\$133.42	\$133.42	\$133.42	\$133.76
2.000	2"	\$229.33	\$474.89	\$477.06	\$477.06	\$477.06	\$480.14
4.000	4"	\$166.05	\$695.60	\$696.94	\$696.94	\$696.94	\$698.93

During the first year of implementation, the proposed water rates are expected to generate \$373,028 in water revenue. Over the five-year forecast period, the proposed rate structure is expected to generate \$1,986,083 in revenue, \$287,523 in reserves, and \$105,893 in net income following contribution to reserves.

Major assumptions of this report over the projected five-year period include a 1 percent annual growth in water connections, an initial 3 percent increase in water consumption before tapering off, a 3 percent annual increase in operating expenses, a 3.2 percent loan rate for capital improvement projects, a 0.5 percent “write-off” on uncollectable accounts, and a 1.5 percent return on invested funds. Recognizing potential growth from planned developments (e.g., Coyne Ranch Project), the study includes additional revenue beginning in FY22 from calculated capacity and system development fees. While the new rates and fees are expected to generate sufficient revenue, the district is strongly encouraged to review these projections, assumptions and other financial data periodically to ensure continued sustainability ~~that~~ ~~these are still correct.~~

1 Introduction

Rural Community Assistance Corporation

Founded in 1978, Rural Community Assistance Corporation (RCAC) is a 501(c) (3) nonprofit organization that provides training, technical and financial resources, and advocacy so rural communities can achieve their goals and visions. For more than 40 years, our dedicated staff and active board, coupled with our key values: leadership, collaboration, commitment, quality and integrity, have helped rural communities throughout the West achieve positive change.

Purpose of this rate study

The purpose of this study is to make The Seeley County Water District aware of the need to raise water rates. The system must be able to maintain operations and build reserves to cover the inevitable need to replace all components of the operation.

Board responsibilities

The governing body has a fiduciary responsibility to set the rates at such a level that the utility will be able to continue to operate now and into the future, including providing funds to replace all parts of the system as they wear out. While this document recommends certain rates, the ultimate decision rests with the governing body.

Guiding principles of this study

This study is guided by the following principles:

Sustainability: Water rates should cover costs permitting The Seeley County Water District to provide water services now and for the foreseeable future.

Fairness: Water rates should be fair to all ratepayers. No single ratepayer or group of ratepayers should be singled out for different rates. The district should not charge more for water than the cost to provide the water.

Ease of understanding: Water rates should be easy for staff to understand, implement and explain to customers. The structure should be compatible with current utility billing software.

Justifiability: Water rates must be based on the actual financial needs of the district. Revenue generated from water rates can't be used for anything else but to pay for the costs of procuring, treating and distributing water within its service area, plus any administrative costs and reserves.

Disclaimer

The recommendations contained in this rate study are based on financial information provided to RCAC by the association and its representatives. Although every effort was made to ensure the

reliability of this information, no warranty is expressed or implied as to the correctness, accuracy or completeness of the information contained herein.

Any opinions, findings, and conclusions or recommendations expressed in this material are solely the responsibility of the author and do not necessarily represent the official views of RCAC. For accounting advice, a Certified Public Accountant should be consulted. For legal advice, the association should seek the advice of an attorney.

2 Community and system

Community

The Seeley County Water District provides water, sewer and dumper services to the census-designated place (CDP) of Seeley, California, a community located about 10 miles north of the U.S.-Mexico border. The community lies within the Imperial Valley, long known for its diverse and abundant irrigated produce.

Designated a colonia, Seeley has an estimated median household income (MHI) of \$25,536 (+/- \$7,075) based on the 2017 five-year American Community Survey (ACS). This number is far below the state average of \$67,169. According to the same survey, the current estimated population of Seeley is 1,573 (+/- 434), down from 1,739 residents during the 2010 Census.

The Town of Seeley is comprised mainly of residential dwellings along with an elementary school, post office, a community park, and several businesses. In addition to supplying the town's water needs, SCWD also provides water service to the Sunbeam Lake County Park, which includes a recreation vehicle park and a seasonal winter population, as well as a rest area.

Opportunities for growth exist in the SCWD service area including the proposed Coyne Ranch Development Project which adjoins Sunbeam Lake. As part of a multi-phase project, the proposed development could involve the construction of 650 homes during the next several years. Consulting with SCWD staff, the rate study recognizes additional revenue through associated water capacity and system development fees.¹

Water system

Classified as a community public water system, the Seeley County Water District (SCWD) provides potable water to the Town of Seeley in Imperial County. As its sole supply SCWD purchases raw surface water from the Imperial Irrigation District (IID).

¹ The rate study assumes the development of 20 homes between 2022 and 2024 as part of Coyne Ranch or related developments.

The water system is served by two primary water storage facilities with a combined capacity of one million gallons and two treatment facilities with a combined treatment capacity of two million gallons per day (mgd). There are also two raw water storage ponds that have a combined capacity of four million gallons. Finished water is conveyed via a combination of C900, ACP and PVC piping ranging from 2" to 12" in diameter.

Customer base description

Ending FY19, SCWD provided water service to 426 connections. As shown in the system's recent U.S. Department of Agriculture (USDA) Security Inspection dated October 21, 2019, below, the district has multiple connection types falling within three general customer categories: residential, apartment, and commercial.

Equivalent Dwelling Unit Calculation Worksheet

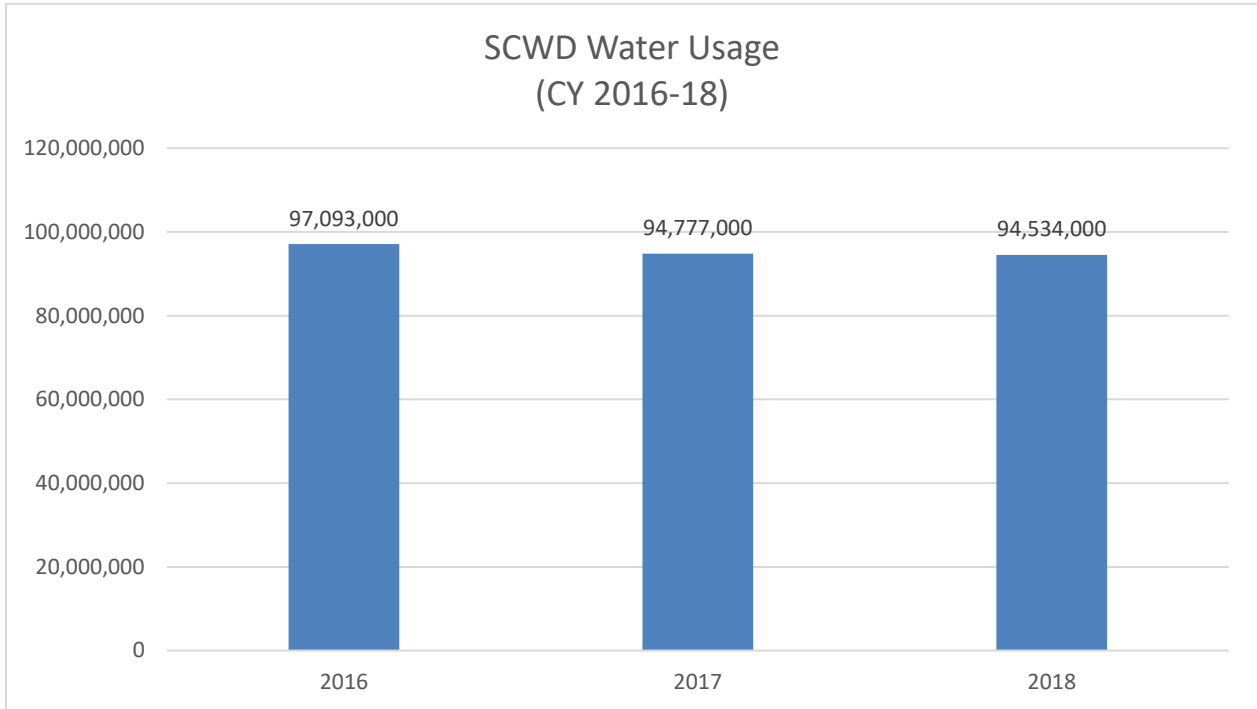
Name of Community Seeley
 Name of Service Provider Seeley County Water District
 Type of Service Water
 Median Household Income Level 25,336
 Gallons, Cubic Feet, Hundred Cubic Feet or Acre Feet? Gallons

Fiscal Year Ended June 30, 2019

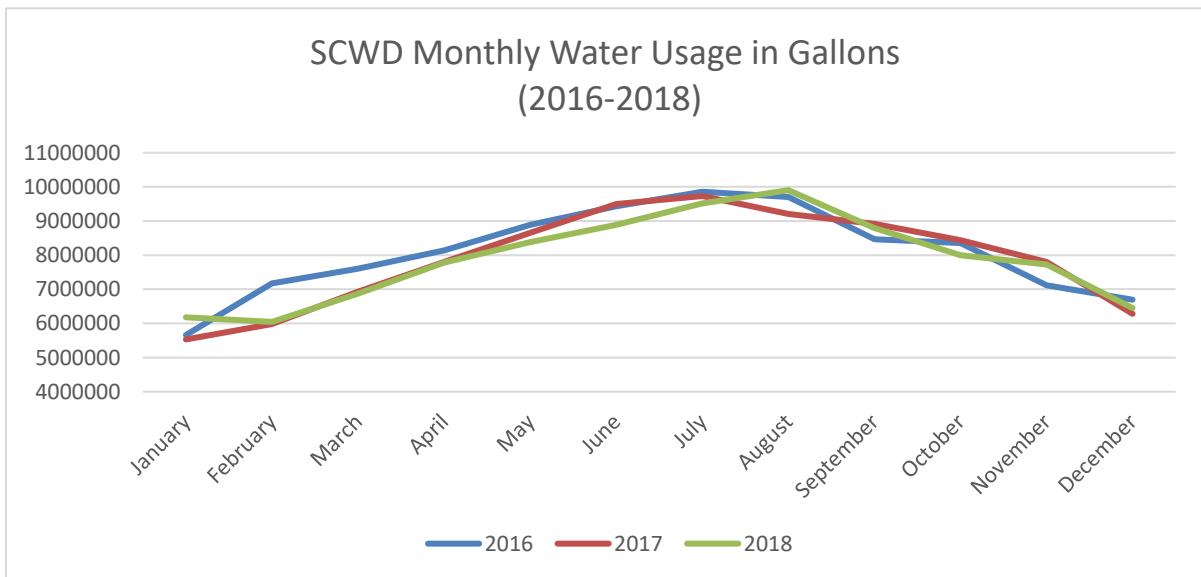
Connection Type	Number of Connections	Annual Consumption Amount	Annual Consumption per Connection	EDU's
Residential	388	65,179,530.24	45,201.10	36.08
Commercial	6	139,000	13250.00	72.17
Industrial	N/A	N/A	N/A	N/A
Sunbeam RV Park	1	14,899,000.00	1,241,583	2,977.00
Cal-Trans (Sunbeam Rest Area)	1	4,092,000.00	341,000	1,073.53
School	3	2,639,000.00	219,917	1,226.88
Residence w/1 meter/2 units	7	393,000.00	49,417	50.54
Residence w/1 meter/3 units	1	244,000.00	20,333	75.81
Apartment w/1 meter/4 units	7	341,000.00	28,417	101.08
Apartment w/1 meter/2 units	N/A	N/A	N/A	N/A
Apartment w/2 meter/10 units	1	1,329,000.00	110,750	252.70
Apartment w/1 meter/8 units	1	246,000.00	20,500	202.16
Apartment w/6 meters/48 units	1	3,740,000.00	311,667	1,212.96
Apartment w/2 meters/4 units	N/A	N/A	N/A	N/A
Apartment w/1 meter/ 3 units	8	362 ,000.00	30,167	75.81
Apartment w/2 meters/38 units	1	3,073,000.00	256,250	960.26
Totals	426	96,898,530.24	2,673,527.10	8,316.98

Water usage and loss

SCWD's water consumption has remained relatively stable in recent years. In FY19 the water system reported using 96,898,530 gallons of water. For CY16 through CY18 shown below, overall water usage varied by less than 3 percent.



As reflected in the following graph, the area's limited rainfall (<3" annually) and hot summer temperatures (routinely exceeding 110 degrees Fahrenheit) place high water demands on the system:



SCWD purchases and treats surface water from the Imperial Irrigation District (IID). Estimates indicate that water loss and unspecified water use constitute less than 4 percent of the water that IID delivers, which appears lower than most utilities.²³

From a rate perspective, sufficient revenue will be needed to address both long-term and seasonal variations in water demand. The utility should verify sources of both real and apparent water loss.⁴

Forecasted water consumption

Adjustments in forecasted water consumption reflect changes in current billed water usage (conservation factor) and community growth over a five-year period. Based on existing water use patterns and discussion with Seeley County Water District staff, the rate study forecasts a 3 percent growth in total consumption over the base year in year one, 2 percent growth over the base year in year two, 1 percent growth over the base year in year three, and 0 percent growth in years four and five. The projected increase in consumption is motivated by a reduction in the proposed monthly base rate for ¾” residential meters from \$36.07 to \$29.07.

The community’s population growth is expected to increase by 1 percent annually throughout the forecast period for a cumulative increase of 5 percent. Expressed below, the composite increase, incorporating additional water usage and community growth, will be 4-5 percent annually throughout the forecast period:

Growth of Consumption over Base year

Conservation Factor

Community Growth Factor

Total Consumption Adjustment

	Year 1	Year 2	Year 3	Year 4	Year 5
Conservation Factor	3.0%	2.0%	1.0%	0.0%	0.0%
Community Growth Factor	1.0%	2.0%	3.0%	4.0%	5.0%
Total Consumption Adjustment	4.0%	4.0%	4.0%	4.0%	5.0%

² Fuscoe Engineering, Inc., Coyne Ranch Water Project Supply Assessment (2016), p. 9.

³ In its publication “WATER AUDITS AND WATER LOSS CONTROL FOR PUBLIC WATER SYSTEMS” (<https://www.epa.gov/sites/production/files/2015-04/documents/epa816f13002.pdf>), the US Environmental Protection Agency estimated average water loss in systems at 16%.

⁴ <https://waterandhealth.org/safe-drinking-water/water-loss-challenges-costs-opportunities/>

3 Current rates and financial condition

Current rate schedule

Existing water rates are based on average residential usage known as an equivalent dwelling unit, or EDU, with a single-family residence comprising one EDU. SCWD charges a flat rate of \$36.08 for each EDU.

Existing SCWD water rates

Customer	# EDUs	EDU Charge	Current Monthly Charge
Avg. Single-Family Customer	1	\$36.08	\$36.08
Avg. Two-Family Customer per Household	0.7	\$36.08	\$25.27
Avg. Multi-Family, per Household	0.7	\$36.08	\$25.27
Avg. Commercial Customer	2	\$36.08	\$72.16
Large Commercial Customer	29.75	\$36.08	\$1073.38
Large Commercial Customer	34.0	\$36.08	\$1226.72
Large Commercial Customer	82.5	\$36.08	\$2976.60

In addition, SCWD has assigned unique EDUs and charges to the following customers:

Acct #110	34.00 EDU x 36.08 =	1,226.88
Acct #121	7.5 EDU x 36.08 =	270.60
Acct #367	2.25 EDU x 36.08 =	81.18
Acct #75	1.75 EDU x 36.08=	63.14
Acct #404	1.75 EDU x 36.08=	63.14
Acct #45	1.5 EDU x 36.08=	54.12
Acct #299	1.25EDU x 36.08=	45.10
Acct #403	2.0 EDU x36.08=	72.17
Acct #302	1.25EDU x 34.37=	42.97
Acct #122	29.75 EDU x 36.08=	1073.53

Other water system charges

SCWD assesses customers' various water service-related charges. *RCAC did not assess these charges in the current rate study, but RCAC recommends that the district review these charges to ensure adequate cost recovery.*

- Delinquent Shutoff Processing Fee **\$45.00**
- Meter lock fee **\$75.00**
- Meter Lock Removal, 1st occurrence **\$150**
- Meter Lock Removal, 2nd More than (1) occurrence **\$250**
- Involuntary Meter Removal Charge (After 2nd cut lock) **\$150**
- NSF check fee 1st occurrence **\$25.00**
- NSF check fee 2nd occurrence **\$35.00**
- Returned credit card charge **\$25.00**
- 48-hour disconnection notice fee **\$10.00** (red tags)
- 24-hour advance notice service set-up charge **\$10.00**
- CUSTOMER Request same-day service set-up charge before 3:30 pm **\$50.00**
- CUSTOMER Request same- day service set-up charge after 3:30 pm **\$100.00**
- After-hours service restoral charge **\$100**
- Illegal Hydrant use **\$750.00**
- Illegal Sewer Hook-up **\$1000**
- Damaged Meter Fine **\$150.00**
- Straight-line/Meter By-pass Fine **\$150.00**
- Blocked Access Meter Fine **\$75.00**
- Water Meter Test fee **\$75.00**
- New Customer Account Deposit **\$220**
- Existing Customer Account Deposit **\$150**

Discussion of current rate structure

The following table describes the advantages and disadvantages of SCWD's current rate structure:

Advantage	Disadvantage
Customers are used to the existing rate structure	Too many customer classifications
Rates appear equitable based on EDU concept of water used	Potentially complicated to administer
	Inequitable based on customer water meter size
	Not legally defensible under California Proposition 218

For purposes of setting equitable base rates across various types of customers, many utilities use the concept of an **Equivalent Domestic Unit** (EDU) when setting rates. An EDU represents the amount of water used annually by a single-family household. Other classes of customers, i.e., multi-family households and commercial accounts, are assigned an EDU that matches their water use to that of single-family households, thus fairly distributing fixed costs across customer classes.

While the EDU formulation recognizes the concept of rate equity based on water usage, it does not consider the capacity of potential water demanded by each meter. This capacity, determined by the maximum theoretical volume of water that can be provided through each meter, more accurately represents the resources that a water system is obliged to supply to a customer at any given time.

From a practical perspective, the numerous customer designations suggest that the current rate structure may be challenging to administer and explain. In addition, California Proposition 218 does not recognize customer classes.

Financial reporting and indicators

As shown below FY17-19 financial reporting indicates that the water system is generating sufficient revenue to pay for identified expenses. This net gain does not consider recommended reserve contributions. Over the course of time, without adjustment, these rates may not be sufficient to cover necessary expenses asset replacement costs due to inflation and other factors.

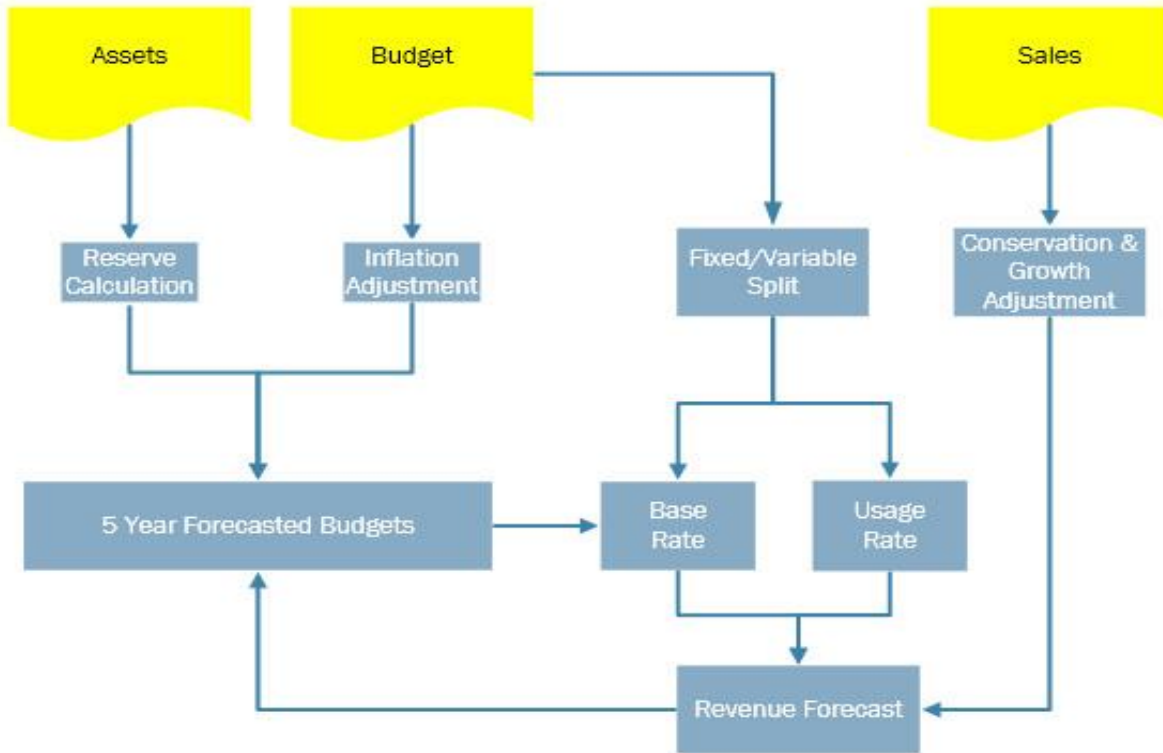
SCWD Profit and Loss	FY17	FY18	FY19
TOTAL REVENUE	\$367,932	\$372,950	\$392,841
TOTAL EXPENSES	\$321,510	\$307,168	\$294,055
NET LOSS OR GAIN:	\$46,422	\$65,782	\$98,786

4 Rate setting process

In accordance with the methodology developed by the AWWA⁵, RCAC begins the rate-setting process by compiling lists of all capitalized assets, the current budget and the current sales history as provided by the management of the Seeley Water Conservation District.

⁵ M1 Principles of Water Rates, Fees and Charges, 7th Edition (2017), American Water Works Association

Rate Setting with Water Meters



From the list of assets the required reserves are calculated and entered into a five-year budget projection. The budget is adjusted for inflation, estimated to be 3 percent per year. The number of customers is adjusted for unpaying customers and future water conservation as applicable. The budgeted expenses are then split between fixed and variable costs, which leads to a recommended base rate and usage charges. Involving consultation with the SCWD staff, the process was repeated several times to arrive at an acceptable rate.

5 Capital replacement program

SCWD's Capital Replacement Program (CRP) is divided into three major categories: 1) replacement and rehabilitation of existing capital infrastructure; 2) replacement of funded capital improvements including installation project and waterline replacement project, in 2022, and 3) replacement of future unfunded capital improvement projects. Highlights of the CRP include filter rehabilitation (2020), waterline replacement (2022), installation of an Integrated Regional Water Management (IRWM) system (2022), and rehabilitation of a Total Trihalomethane (TTHM) unit in 2024.

Source of the data

The data in the Capital Replacement Program (CRP) comes from the information supplied by the district and standards from the AWWA. This data is shown in Exhibit 1, including components, installation dates, and original costs, all supplied or estimated by SCWD.

The normal estimated life is based on AWWA and other industry standards.

The estimated remaining life is based on the best judgment of the operator as interviewed.

Sources of funding

Funding of the replacement of components can only come from the cash saved by the district, a loan or a grant.

As evidenced from past funding SCWD is eligible for grants and has been successful in obtaining this form of assistance, in part due to Seeley’s relatively low median household income and colonia designation. It is assumed that the district will be able to continue to access grants, although the possibility of increased demand for such resources by other systems and decreasing availability may diminish future opportunities. Involving consultation with SCWD staff, RCAC identified the following default funding for the water system’s CRP:

Default Funding of Asset Replacements				
Replacement Value	From To	Cash	Grant	Loan
\$0	\$20,000	100%	0%	0%
\$20,001	\$100,000	2%	98%	0%
\$100,001	\$500,000	2%	98%	0%
\$500,001	\$9,999,999	2%	98%	0%
\$10,000,000	\$99,999,999	2%	98%	0%
Capitalization Threshold		\$ 1,000		

Description

As shown in the total line at the bottom line of Exhibit 1, the application of these parameters will require the district to contribute \$20,261 annually to fund its CRP, which will enable the water system to replace capital assets at the end of their expected life.⁶

Alternative

If the district decides not to fund the annual capital reserve requirement, the district will have to come up with these amounts from other sources, or from steeper rate increases in future years. The association cannot count on the future generosity of the state or other government sources to provide grant funding.

⁶ Note: this amount changes annually as old assets are replaced and new assets are installed.

6 Budget

The purpose of the calculation of the water system's operating budget is to ensure the system's revenues balance its expenditures and needed reserves. To achieve a balanced budget, the utility should assess the following items with respect to future operational and capital needs, including the impact of inflation, system growth and water use trends:

- Current budget and historical revenues and expenses from the past two to four fiscal years
- Current debt-service requirements
- Operating and non-operating revenues and costs
- Uncollectable accounts (as a % of sales)
- Any unplanned "emergency" expenses that occurred within the past several years
- Revenues from customer billings and other sources of income for the past several years
- Required "reserve" levels necessary for the coming years
- Transfers to/from financial reserves

Source

Expenses shown in Exhibit 2 (five-year forecasted budget) were provided by the district based on its 2019-20 fiscal year budget, and includes consideration of projected water sales, recommended reserves, and other sources of revenue.

The water sales revenue shown is a calculated number based on:

- The proposed rates
- The number of paying customers
- An annual inflation factor of 3 percent

Reserve funding

The AWWA standards guiding this water rate study recommend a review of four types of reserves:

1. Debt reserve: To comply with conditions identified in the district's USDA loan, the district will need to set aside \$8,040, equivalent to 1 year's annual debt service. The district's current reserve allocation for this loan is \$400. RCAC recommends that this reserve be fully funded during the course of the next three years at \$2,547 per year.
2. Operating reserve: Operating reserves are established to provide the utility with the ability to withstand short term cash-flow fluctuations. The industry standard calls for 1.5 times the revenue collected during a billing cycle. Applying this standard, the target operating reserve is \$41,416, and the existing operating reserve balance (i.e., checking account balance) on 7/01/19 was \$90,000. RCAC recommends that the district transfer the surplus funds to its Capital Replacement Program (CRP) reserve.

3. **Emergency reserve:** Emergency reserves are intended to help utilities deal with short-term emergencies, such as mainline breaks or pump failures. The emergency reserve is intended to fund the immediate replacement or reconstruction of the system’s single most critical asset. The emergency reserve should be set at the replacement cost of the most expensive part that could fail. Consultation with SCWD staff identified a target reserve of \$100,000. As of 7/01/19 SCWD identified an emergency reserve of \$30,000. RCAC recommends that the district fully fund this account over the next five years at \$14,000 per annum.

4. **Capital Replacement Program (CRP) Reserve:** This reserve is to be used strictly to fund the portion of any replacement of capital assets that are worn out. As of 7/01/19 the SCWD identified \$178,854 available for CRP Reserve funding (\$130,000 in existing capital reserves plus a recommended transfer from the district’s operating reserve fund of \$48,854). For purposes of this rate study, this amount (\$178,854) is applied towards the CRP Reserve requirement and reduces the funds that the district needs to set aside each year for capital reserves.

These recommendations are summarized in the following table:

Existing Debt					
Description	Annual Payment	Maturity	Reserve Required	Reserve Allocated	Make Up Period
USDA W #8	\$ 8,040	2044	\$ 8,040	\$ 400	3
Total	\$ 8,040		\$ 8,040	\$ 400	
Existing Reserves					
	Amount				
Debt Reserve	\$400	As per lending agreement(s)			
Operating Reserve	\$90,000	Often in Checking Account			
Emergency Reserve	\$30,000	Often in Savings Account			
Capital Reserve	\$130,000	Mostly in CDs or other investments			
Total	\$250,400				
Reserve Targets					
	Amount	Period	Reserve	be transfer to CIP	
Debt Reserve	\$8,040	See F20:F25	\$2,547	\$0	
Operating Reserve	\$41,146	1	\$0	\$48,854	
Emergency Reserve	\$100,000	5	\$14,000	\$0	
Available for Capital Reserve	\$178,854				

SCWD should make periodic transfers from its operating account to the various reserve accounts. In addition, RCAC suggests the district consider establishing separate accounts for each reserve. The benefit of splitting the reserves into four separate accounts are:

1. These reserves have different time horizons: For example, the debt reserve can be invested for a long period of time—as long as the debt is on the books. Operating and emergency

reserves should be readily available. Capital replacement reserve funds can be invested in CDs with different maturity dates to coincide with the planned need for capital replacements.

2. Distinct policies can be facilitated for each reserves involving investment, access, and use of funds. (A sample reserve policy is attached as Exhibit 04.)

Sales adjustments

Adjustments to sales consider both per capita consumption (i.e., conservation factor) and community growth. As discussed in Section 2, RCAC anticipates that per capita consumption will increase in response to the initial decline in the base charge for ¾” meters typically associated with residential customers. Noting a decline in the Seeley CDP population between 2010 to 2017 (from 1739 to 1573 residents, respectively), RCAC projects a conservative 1 percent annual growth in the SCWD service area throughout the five-year forecast period, due primarily to anticipated development along Sunbeam Lake⁷. Given the uncertainty in both the extent and timing of such development, the actual growth rate of the service area cannot be predicted readily.

Growth of Consumption over Base year		Year 1	Year 2	Year 3	Year 4	Year 5
Conservation Factor		3.0%	2.0%	1.0%	0.0%	0.0%
Community Growth Factor		1.0%	2.0%	3.0%	4.0%	5.0%
Total Consumption Adjustment		4.0%	4.0%	4.0%	4.0%	5.0%

7 Fixed and variable expenses

System water rates are based on a combination of fixed (base) charges and variable (usage) charges. In theory, base charges should cover the system’s fixed costs, while usage charges should cover the system’s variable costs. Exhibit 3 shows the split between fixed and variable expenses based on consultation with district staff.

Source

The data comes from the FY19-20 budget as shown in Exhibit 2.

Description

Some expenses vary by the volume of water sold. For example, electricity costs will go up when more water is processed.

Other expenses are fixed. For example, insurance costs remain the same whether water is sold or not. Most costs are somewhere in between.

⁷ The rate study assumes development of 20 new homes between 2022 and 2024.

RCAC anticipates that fixed costs including reserves will constitute 89 percent of SCWD’s total water system expenses and only 11 percent are variable. It is not unusual for a small water system to have a high percentage of fixed costs.

Alternatives

While fixed expenses should be covered by the base rate (the same every month), variable cost should be covered by the usage rate (based on the quantity sold). Should fixed costs not be covered by the base rate, but by variable income, there could be seasonal shortfalls in cash-flow of the district. However, with the new rates, RCAC does not expect this to be a major concern for SCWD’s water system.

8 Proposed rates and related charges

During the next five years, RCAC estimates that the SWCD will need to generate at least \$1,880,191 in revenue to cover annual expenses including contributions to reserves, system growth, and potential development.

SCWD staff cited the Coyne Ranch Development Project as a specific area of potential development. As related in the Coyne Ranch Water Project Supply Assessment (Fusco Engineering, Inc. 2016) the project anticipates the construction of 663 single-family and multi-family residential units within the SCWD service area. Consultation with SCWD staff indicates construction on this project will begin within the next 5 years. Based on discussion with SCWD the rate study conservatively assumes the construction of 20 units between 2022 and 2024. As appropriate, RCAC recommends that revenue needs for this or related development be generated through fees described in this section. The proposed fee structure is presented at the end of this section.

Base and variable rates

To give customers more control over their water bill, RCAC recommends that the district only cover 62 percent of its fixed expenses with the base charge and the remaining fixed expenses are covered with variable revenue or the usage charge. RCAC’s analysis indicates that this will not negatively impact cash flows during the winter months when consumption is typically low.

Meter Size (in inches)	Base Rate (Year 1)	Theoretical Base Rate
0.750	\$ 29.37	\$57.04
1.000	\$ 48.95	\$95.07
1.500	\$ 97.89	\$190.14
2.000	\$ 156.63	\$304.22
4.000	\$ 489.47	\$950.68

RCAC recommends that the remainder of the appropriate revenue needs be generated by the variable charge (usage charge) amounting to \$1.98 per 1,000 gallons per connection regardless of meter size.

Water fees

When new customers hook up to the system, they use a certain portion of the system. Eventually, the system will run out of capacity to serve the new customers and additional capacity will have to be built. Since all customers use some of the capacity of the existing system, all new customers should pay their fair share of the cost of building that capacity.

These charges apply only to new construction on parcels that have never been connected to the system.

RCAC recommends that Seeley CWD charges four different fees, depending on the circumstances of the new parcel:

- Capacity
- System development
- Connection
- Annexation

Capacity charges

Capacity charges are charged by the district when the property owner of an *existing* parcel wishes to hookup to the system.

It is assumed that the water system was designed with the eventual hookup of this parcel in mind. The new customer basically needs to buy a portion of the capacity of the existing system.

The value of the system is determined by:

- Assets of the water system based on the 2/2/19 balance sheet (\$427,153)
- Less the liabilities (\$248,650)
- Adjustments:
 - Instead of using the assets listed on the balance sheet, we used the complete list of assets as shown on the Capital Replacement Program (Exhibit 1) (\$6,965,812)
 - Less straight line depreciation, because the system is old (\$2,051,234)
 - Less grants received⁸ because old and new customers have the right to benefit from government grants. (\$4,788,723)

The current value or equity of the system is, therefore, \$304,357. This is a relatively low number because the system is old and a large portion was funded by grants.

⁸ The exact amount of past grants is unknown. We assumed that capital projects in the past and in the future were/will be funded with the same percentage of grants, versus cash and loans.

We then allocated this value (\$304,357) according to the demand imposed by the new customer (column K) on the existing system as determined by meter size:

Meter Size in "	Number of Meters	AWWA Safe Maximum Operating Cap. (GPM)	Max Demand (GPM)	% of Max Demand by Meter Size	Total Equity by Meter Size	Theoretical Equity by meter size	Proposed Capacity Charge
I	J	K	L=J*K	M=% of total	N=%*total	O=N/J	100%
3/4"	409	30	12,270	76.69%	\$ 233,404	\$ 571	\$ 571
1"	11	50	550	3.44%	\$ 10,462	\$ 951	\$ 951
1.5"	1	100	100	0.63%	\$ 1,902	\$ 1,902	\$ 1,902
2"	13	160	2,080	13.00%	\$ 39,566	\$ 3,044	\$ 3,044
4"	2	500	1,000	6.25%	\$ 19,022	\$ 9,511	\$ 9,511
	436		16,000	100.00%	\$ 304,357		

The capacity charge is collected at the time of obtaining a building permit.

This income shall be deposited in the operating account, and be included in the excess cash calculation as shown in the reserve policy.

The capacity charge is in addition to system development charges. It is paid only once for each parcel; once for sewer and once for water.

System development charges

When new parcels are created either through a parcel map or tract map, these parcels were not included in the original design of the system and hence have to pay for their full cost of developing that capacity.

To estimate the cost to provide the added capacity we look at the current replacement cost of the system, as shown on the Capital Replacement Program (Exhibit 1) (\$10,838,517). This system was designed for a maximum demand of 16,000 gallons per minute (GPM). Dividing the cost, by the maximum capacity, gives us \$642 per GPM.

We then estimate the demand those new parcels will create on the system, either by knowing what meter size they will require or by the parcel size if the meter size is unknown.

However, the cost of the future construction of this added capacity needs to be adjusted for any future grants SCWD may receive. We assumed that SCWD will only have to come up with 25 percent of the cost of any future expansion of the water system.

Parcel Size in Acres	Parcel Size in SF	Estimated Meter Size	Max Demand (GPM)	Theoretical SDC	Proposed SDC
O	P	Q	R=K	R * \$654	25%
<=1/4 Acre	10,890	3/4"	30	\$ 19,620	\$ 4,905
>1/4 to <2 Acres	<87120	1"	50	\$ 32,700	\$ 8,175
>= 2 Acres	>=87,120	1.5"	100	\$ 65,400	\$ 16,350

If the size of the future meters is known, charge the fee according to meter size. If the size of the meter is not known, charge by parcel size as shown in the table above.

Expansion fees are paid at the time of the recordation of the parcel map or tract map⁹.

This income shall be deposited in a special expansion bank account, and shall only be used for future expansion of the water system. In the district's accounting books, the expansion charges for the water and sewer must be separated.

Connection charges

Connection charges pay for the physical connection to the system. This charge includes time and material, not only for field staff but for office staff and outside engineering and management as well. This income shall be deposited in the operating account.

A deposit of \$2,000 for connection charges is collected at the time of obtaining a building permit, with the final payment due upon obtaining the occupancy permit. Staff needs to keep track of time and materials. RCAC recommends a deposit of \$2,000 for each water and sewer.

Annexation charges

Annexation charges are charged the developer when the district is asked to expand its boundaries. This charge includes time and material, not only for field staff but for office staff, outside engineering, surveyors, LAFCO, and management as well. This income shall be deposited in the operating account.

A deposit of \$2,000 for annexation charges is collected at the time of applying for the annexation, with the final payment due upon LAFCO's approval of the annexation. Staff needs to keep track of time and materials, as well as LAFCO's approval schedule. RCAC recommends a deposit of \$2,000 for each annexation.

⁹ A parcel map is a recorded map that subdivides a parcel into 4 or fewer parcels. A tract map is a recorded map that subdivides a parcel in 5 or more parcels.

Consolidated rate and fee structure

To meet the revenue needs outlined in this rate study RCAC proposes the following consolidated rate and fee structure:

Water rates:

Meter Size (inches)	Base Charge	Usage Rate (per 1000 gallons)
0.750	\$29.37	\$1.98
1.000	\$48.95	\$1.98
1.500	\$97.89	\$1.98
2.000	\$156.63	\$1.98
4.000	\$489.47	\$1.98

Additional proposed fees:

Charge	Capacity	System Development	Connection	Annexation
Purpose	To allow the customer access to the existing system	Build up capital for future expansion	To be reimbursed for the costs of providing a physical connection	To be reimbursed for the costs of working with the developer and LAFCO
When the Deposit is paid	N/A	N/A	Before Building Permit	When applying for annexation
When to be paid in full	With Building Permit	At Parcel Map or Tract Map recordation can 7 will	Before Occupancy Permit is issued	Before LAFCO approves the annexation
Deposit amount	N/A	N/A	\$2,000 each connection	\$2000 each annexation
Amount of fee (water)	\$571-\$9,511	\$4,905-\$16,350	Time & Material	Time & Material
Per Unit (water)	Per connection, based on meter size	Per parcel, based on the meter size if known, or the parcel size		
Where deposited	Operating bank account	Expansion bank account/CD	Operating bank account	Operating bank account
Note	The fee is in addition to System Development Charges. It is paid only once for each parcel.	It is paid only once for each parcel.	Hourly Rates: GM/Chief Operator: \$70 Operator: \$50 Admin: \$35 +15% overhead	Hourly Rates: GM/Chief Operator: \$70 Operator: \$50 Admin: \$35 +15% overhead

9 Impact of proposed rates and fees

Estimated profit/loss with proposed rates and fees

In setting the base rate and the usage rate, the model combines the revenue generated by each rate, compares it to the expenses (as shown in the budget), and calculates the estimated profit/loss and reserve contributions:

Results of the new rates	2020	2021	2022	2023	2024	5 Years
TOTAL EXPENSES	\$374,012	\$357,669	\$367,720	\$375,722	\$405,067	\$1,880,191
TOTAL REVENUE	\$373,028	\$374,619	\$408,002	\$414,029	\$416,406	\$1,986,084
NET LOSS OR GAIN: (Short/Over to Reserves)	-\$985	\$16,950	\$40,281	\$38,307	\$11,339	\$105,893
NET CASH FLOW (Contribution to Reserves)	\$35,823	\$53,758	\$78,211	\$75,028	\$44,704	\$287,523

A negative number (shaded in pink) indicates the system is not raising enough income to cover all expenses and reserve requirements. A positive number means the system covers all expenses, including reserves. With the exception of the first year, RCAC expects the proposed rate structure will generate enough revenue to meet all operational and reserve expense requirements. By the end of 2024, RCAC anticipates that the proposed rate structure will provide a total of \$287,523 in reserve contributions with \$105,893 in additional funds to build the system's financial capacity.

Consequences of inaction

Under status quo conditions¹⁰, it would appear that retaining the existing rates would have minimal financial impact with SCWD still being able to generate sufficient revenue to cover expenses and recommended reserves as shown below:

TOTAL EXPENSES	\$ 374,012.46	\$ 357,669.17	\$ 367,720.31	\$ 375,722.10	\$ 405,066.93
TOTAL REVENUE	\$ 396,158.37	\$ 400,365.11	\$ 404,631.61	\$ 408,958.92	\$ 413,600.86
NET LOSS OR GAIN:	\$ 22,145.90	\$ 42,695.94	\$ 36,911.30	\$ 33,236.82	\$ 8,533.93
NET CASH FLOW (Contribution to Reserves)	\$ 58,953.49	\$ 79,503.53	\$ 74,840.73	\$ 69,957.98	\$ 41,898.57
Does the Budget Balance?	Yes	Yes	Yes	Yes	Yes
Positive Annual Cash Flow?	Yes	Yes	Yes	Yes	Yes

Nevertheless, RCAC points out two major reasons for adopting the recommended rates:

1. The proposed rates and fees will comply with California Proposition 218 establishing an equitable rate structure.
2. As illustrated below, the failure to collect appropriate fees could greatly impact anticipated system revenue. With more homes developed, the importance of collecting these fees cannot be overstated.

¹⁰ Assumes no per capita increase in water consumption and no collection of water fees discussed in this section with other assumptions remaining intact.

Expected system revenue from collection of fees (based on 20 new homes)

Fee Type	2022	2023	2024
Capacity	\$3,424	\$3,995	\$3,995
System Development	\$29,430	\$34,335	\$34,335

10 Impact of proposed rates and fees

Working closely with SCWD staff and management, RCAC evaluated SCWD rates to provide develop a sustainable, fair and justifiable rate and fee structure. Based on the standard methodology the proposed structure will realign rates based on meter size, or capacity demand, ensuring a more equitable distribution of ratepayer charges in accordance with California Proposition 218 legal requirements. In addition to the proposed change in rates, RCAC recommends that the district adopt and implement the appropriate fees outlined in this report including capacity, system development, connection, and annexation charges. Failure to collect these charges, in consideration of the proposed development along Sunbeam Lake and/or other areas, could seriously impact the financial stability of the water system.

RCAC also recommends that SCWD adopt best practices to improve operating efficiency. These practices include developing a reserve policy, an asset management plan, conducting an energy audit, and investigating sources of water loss and non-revenue water. An example of a reserve policy is provided in Exhibit 4 of the Appendix.

11 Appendix

Exhibit 1: Capital replacement program

SCWD drinking water capital replacement program identifying system existing capital assets, funded capital assets, and additional future identified assets.

Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost (If > than \$1000)	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
Replacement of Existing Capital Assets															
Ford Truck 2018 32%	2018	9,931	h	\$9,931	5	2	10,352	3	8	13,114	100%	0%	0%	7,410	629
Computer Panel	2017	12,883	H	\$12,883	5	3	13,712	2	3	14,983	100%	0%	0%	9,814	1,649
Filter Media	2016	36370	h	\$36,370	5	4	39,523	1	10	53,115	2%	98%	0%	566	43
Pressure Filter Piping	2016	101,333	h	\$0	30	4	0	26	27	0	0%	0%	100%	0	0
Laterals Filter 2	2019	1,500	C	\$17,622	5	1	18,000	4	2	19,096	100%	0%	0%	12,883	3,035
Media Filter 2	2015	6,446	h	\$6,446	5	5	7,152	0	10	9,612	100%	0%	0%	5,119	386
Propac 9890 Tank TRK WTR	2015	11,109	h	\$0	5	5	0	0	2	0	0%	0%	100%	0	0
Propac 9890	2016	11,557	h	\$0	5	4	0	1	3	0	0%	0%	100%	0	0
Chevy Silverado	2014	37,739	h	\$37,739	10	6	42,751	4	3	46,715	2%	98%	0%	612	103
Lab equipment	1981	5,369	h	\$0	5	39	0	-34	1	0	0%	0%	100%	0	0
Back Hoe	2009	33,458	h	\$0	15	11	0	4	5	0	0%	0%	100%	0	0
Barrett Baldo 20HP	2015	19,940	h	\$19,940	15	5	22,124	10	11	30,624	2%	98%	0%	317	23
Harben Trailer Jet E180	2014	46,535	h	\$0	5	6	0	-1	2	0	0%	0%	100%	0	0
Hydromatic 514730137	2014	9,793	h	\$0	5	6	0	-1	2	0	0%	0%	100%	0	0
Raw Water Pond (was TTHM System improvement)	2011	2,007,748	h	\$2,007,748	60	9	2,420,700	51	30	5,875,673	2%	98%	0%	34,651	1,975
Water Pipe Line Project	2012	1,700,000	h	\$1,700,000	80	8	2,007,497	72	50	8,800,677	2%	98%	0%	28,736	1,814
Utility Plant IN Service	1964	90,401	h	\$0	40	56	0	-16	10	0	0%	0%	100%	0	0
Equipment	1980	11,713	h	\$0	10	40	0	-30	10	0	0%	0%	100%	0	0
NEW UPIS	1982	616,617	h	\$616,617	30	38	1,358,294	-8	20	2,453,230	2%	98%	0%	19,443	1,150
UPIS Extension	1983	9,361	h	\$9,361	30	37	20,196	-7	20	36,477	2%	98%	0%	289	17
Tank & Filters	1990	33,050	h	\$33,050	30	30	61,652	0	10	82,854	2%	98%	0%	883	67
Aerator	2007	8,683	h	\$0	5	13	0	-8	10	0	0%	0%	100%	0	0
Water Project Plant	2005	2,073,820	h	\$2,073,820	40	15	2,832,417	25	30	6,875,019	2%	98%	0%	40,545	2,311
Water Project	2005	16,639	h	\$16,639	40	15	22,725	25	30	55,161	2%	98%	0%	325	19
Ford Pickup	1981	2,094	h	\$0	5	39	0	-34	5	0	0%	0%	100%	0	0
Ford Pickup	1990	1,888	h	\$0	5	30	0	-25	5	0	0%	0%	100%	0	0
1998 Ford F 150	1998	4,915	h	\$4,915	5	22	7,764	-17	2	8,237	100%	0%	0%	5,557	1,309
Chevy Pickup Truck	2005	12,856	h	\$0	5	15	0	-10	10	0	0%	0%	100%	0	0
09 Ford Ranger	2009	4,491	h	\$4,491	5	11	5,645	-6	5	6,544	100%	0%	0%	4,040	462
TTHM System	2018	355,000	H	\$355,000	15	2	370,067	13	24	752,269	2%	98%	0%	5,297	305
Office Airconditioning (45%)	2019	3,240	H	\$3,240	10	1	3,308	9	10	4,446	100%	0%	0%	2,368	179
Subtotal Replacement of Existing Capital Assets				\$6,965,812			9,263,877			25,137,846	2%	98%	0%	178,854	15,475
Replacement of Funded Project Assets															
Water Pipeline Replacement Project	2022	\$ 1,048,640.25	C		40	2	1,048,640	42	43	3,737,896	2%	98%	0%	0	1,250
IRWM-Base Stations	2022	\$ 30,000.00	C		15	2	30,000	17	43	106,936	2%	98%	0%	0	36
IRWM-Base Station Antennas	2022	\$ 50,000.00	C		15	2	50,000	17	43	178,226	2%	98%	0%	0	60
IRWM-Software	2022	\$ 20,000.00	C		8	2	20,000	10	43	71,290	2%	98%	0%	0	24
IRWM-Meters	2022	\$ 50,000.00	C		15	2	50,000	17	43	178,226	2%	98%	0%	0	60
Subtotal Replacement of Funded Project Assets							1,198,640			4,272,573	2%	98%	0%	0	1,429
Enter Existing Reserves for Replacement of Funded Project Assets															
Reserves for Additional Capital Assets															
Bobcat	2024	26,000	C		10	4	26,000			29,263	20%	0%	80%	0	1,431
Third Filter Unit	2024	350,000	C		30	4	350,000			393,928	2%	98%	0%	0	1,926
										0	0%	0%	0%	0	0
										0	0%	0%	0%	0	0
Subtotal Reserves for Additional Capital Assets							376,000			423,191	3%	91%	6%	0	3,357
Enter Existing Reserves for Additional Capital Assets															
Total Capital Reserves							10,838,517			29,833,611	2%	98%	0%	178,854	20,261

Exhibit 2: Five-year budget forecast

Exhibit 2— Seeley 5-year drinking water 5-year-budget forecast (2020-2024) with new rate structure

Budget									Date:	01/11/20	Exhibit 2
Seeley County Water District									Inflation Factor (%):	3.00	
									Loan Interest Rate (%):	3.20	
									System Number:	CA1310013	
FY20 budget											
EXPENSES AND SOURCES OF FUNDS	2017	2018	2019	2020	2021	2022	2023	2024			
OPERATIONS & MAINTENANCE EXPENSES											
Admin - other	0	535	3	3	4	4	4	4	4		
Advertising	22	836	384	406	415	423	432	432	445		
Bad Debts	6,080	0	0	0	0	0	0	0	0		
Bank Charges	242	203	244	251	258	266	274	282			
Business Insurance	5,124	3,724	263	271	279	288	296	305			
Capital Improvements	0	6,066	0	0	0	0	0	0	0		
Contract Labor	1,593	337	694	715	736	758	781	804			
Customer Relations	0	0	0	0	0	0	0	0	0		
Deposit Refund	0	0	0	0	0	0	0	0	0		
Director Fees	3,006	4,071	4,696	4,837	4,982	5,131	5,285	5,444			
Drug Testing	0	8	0	0	0	0	0	0	0		
Dues and Subscriptions	3,512	1,911	3,408	3,510	3,616	3,724	3,836	3,951			
Employee Insurance	10,978	10,673	16,968	17,477	18,001	18,541	19,097	19,670			
Employee Relations	110	80	16	16	17	17	18	18			
Fees & Permits	8,667	8,401	2,498	2,573	2,651	2,730	2,812	2,896			
Fuel	2,605	2,438	2,623	2,702	2,783	2,866	2,952	3,041			
General Fund Expenses	712	0	0	0	0	0	0	0	0		
Lab Testing	6,709	12,158	15,108	15,608	16,059	16,524	17,004	17,514			
Legal & Professional Fees	20,597	12,525	19,258	20,431	20,828	21,242	21,675	22,325			
Mileage Reimbursement	1,083	349	128	131	135	139	144	148			
Miscellaneous & Uncategorized Expenses	0	0	0	0	0	0	0	0	0		
Office Expense	249	2,654	626	645	665	684	705	726			
Other Expense	376	301	1,998	2,058	2,120	2,183	2,249	2,316			
Permit Fees	73	186	183	189	195	200	206	213			
Postage and Freight	1,332	828	1,329	1,369	1,410	1,452	1,496	1,541			
Professional Services	28,952	31,110	7,765	8,226	8,390	8,561	8,740	9,002			
Public Relations	0	1,052	463	477	492	506	522	537			
Repairs and Maintenance	29,678	14,641	4,770	4,913	5,061	5,213	5,369	5,530			
Salaries, Wages and Payroll Taxes	89,094	104,799	117,000	120,872	124,366	127,970	131,685	135,635			
Security System	0	100	0	0	0	0	0	0	0		
Source - Purchased H2O	1,160	10,445	14,775	15,264	15,705	16,160	16,629	17,128			
Street Lights - Utilities	0	0	0	0	0	0	0	0	0		
Supplies	35,903	29,865	29,356	30,237	31,144	32,078	33,040	34,032			
Telephone Expense	2,675	5,146	3,044	3,135	3,229	3,326	3,426	3,528			
Transportation and Travel	185	195	0	0	0	0	0	0	0		
Tuition	561	1,134	16	17	17	18	18	19			
Uniforms	2,482	1,832	1,214	1,251	1,288	1,327	1,367	1,408			
Utilities	49,221	33,622	45,183	46,538	47,934	49,372	50,854	52,379			
Vacation & Sick Pay Expense	6,630	4,878	0	0	0	0	0	0	0		
Total Operation and Maintenance Expenses:	321,510	307,168	294,055	329,165	312,822	321,751	330,961	360,890			
GENERAL & ADMINISTRATIVE EXPENSES											
Operating Reserve Funding				0	0	0	0	0	0		
Emergency Reserve Funding				14,000	14,000	14,000	14,000	14,000	14,000		
Debt Reserve Funding				2,547	2,547	2,547	0	0	0		
Replacement of Existing Capital Assets				15,475	15,475	16,597	17,935	17,935			
Replacement of Funded Project Assets				1,429	1,429	1,429	1,429	1,429			
Reserves for Additional Capital Assets				3,357	3,357	3,357	3,357	0	0		
Debt Service				8,040	8,040	8,040	8,040	10,813			
Total General and Administrative Expenses:	0	0	0	44,848	44,848	45,969	44,761	44,177			
TOTAL EXPENSES	321,510	307,168	294,055	374,012	357,669	367,720	375,722	405,067			
SOURCE OF FUNDS / REVENUES RECEIVED											
Sales Revenue (Base + Usage)	\$ 367,932	372,950	368,303	348,739	349,831	349,831	349,831	351,387			
Capacity Fee				0	0	3424	3995	3995			
Expansion Fee						29430	34335	34335			
Uncollectable Receivables				-1,744	-1,749	-1,749	-1,749	-1,757			
Fees	0	0	5,655	5,999	6,115	6,237	6,364	6,555			
Sales			18,828	19,975	20,362	20,768	21,191	21,827			
General Fund Income			55	59	60	61	62	64			
TOTAL REVENUE	367,932	372,950	392,841	373,028	374,619	408,002	414,029	416,406			
NET LOSS OR GAIN:	46,422	65,782	98,786	-985	16,950	40,281	38,307	11,339			
NET CASH FLOW (Contribution to Reserves)	46,422	65,782	98,786	35,823	53,758	78,211	75,028	44,704			
Affordability assuming MHI of \$25536 for residential meters.											
				2.18%	2.18%	2.18%	2.18%	2.19%			
Does the Budget Balance?				No	Yes	Yes	Yes	Yes	Yes		
Positive Annual Cash Flow?				Yes	Yes	Yes	Yes	Yes	Yes		

Exhibit 3: Fixed and variable expenses

Allocation of fixed and variable expenses based on 5-year budget forecast

Fixed vs Variable Expenses				Exhibit 3	
Seeley County Water District					
	5-Year Average	% Fixed	\$ Fixed	\$ Variable	
OPERATIONS & MAINTENANCE EXPENSES					
Admin - other	4	100%	4	0	
Advertising	424	10%	42	382	
Alert Service	44	10%	4	40	
Bad Debts	0	100%	0	0	
Bank Charges	266	100%	266	0	
Business Insurance	288	100%	288	0	
Capital Improvements	0	100%	0	0	
Contract Labor	759	100%	759	0	
Customer Relations	0	50%	0	0	
Deposit Refund	0	100%	0	0	
Depreciation	0	100%	0	0	
Director Fees	5,136	100%	5,136	0	
Drug Testing	0	100%	0	0	
Dues and Subscriptions	3,727	100%	3,727	0	
Employee Insurance	18,557	100%	18,557	0	
Employee Relations	17	90%	16	2	
Fees & Permits	2,732	100%	2,732	0	
Fuel	2,869	100%	2,869	0	
General Fund Expenses	0	100%	0	0	
Lab Testing	16,542	90%	14,888	1,654	
Legal & Professional Fees	21,300	0%	0	21,300	
Mileage Reimbursement	140	100%	140	0	
Miscellaneous & Uncategorized Expenses	0	100%	0	0	
Office Expense	685	100%	685	0	
Other Expense	2,185	100%	2,185	0	
Permit Fees	201	100%	201	0	
Postage and Freight	1,454	100%	1,454	0	
Professional Services	8,584	5%	429	8,155	
Public Relations	507	100%	507	0	
Repairs and Maintenance	5,217	100%	5,217	0	
Salaries, Wages and Payroll Taxes	128,105	90%	115,295	12,811	
Security System	0	100%	0	0	
Source - Purchased H2O	16,177	90%	14,559	1,618	
Street Lights - Utilities	0	100%	0	0	
Supplies	32,106	100%	32,106	0	
Telephone Expense	3,329	100%	3,329	0	
Transportation and Travel	0	100%	0	0	
Tuition	18	100%	18	0	
Uniforms	1,328	100%	1,328	0	
Utilities	49,416	100%	49,416	0	
Vacation & Sick Pay Expense	0	100%	0	0	
Total Refurbishing and Rebuilding Cost	9,000	100%	9,000	0	
Total Operation and Maintenance Expenses:	331,118		285,157	45,961	
GENERAL & ADMINISTRATIVE EXPENSES					
Operating Reserve Funding	0	100%	0	0	
Emergency Reserve Funding	14,000	100%	14,000	0	
Debt Reserve Funding	1,528	100%	1,528	0	
Replacement of Existing Capital Assets	16,684	100%	16,684	0	
Replacement of Funded Project Assets	1,429	100%	1,429	0	
Reserves for Additional Capital Assets	2,685	100%	2,685	0	
Debt Service	8,595	100%	8,595	0	
Capacity Fee	2,283	100%	2,283	0	
Expansion Fee	32,700	100%	32,700	0	
Total General and Administrative Expenses:	79,903		79,903	0	
Total All Expenses	411,021		365,060	45,961	
Fixed-Variable as % of all Expenses			89%	11%	

Exhibit 4: Reserve funding policy

Purpose

This policy aims to ensure that:

- The “reserves” are used for their intended purposes
- Procedures are set up to transfer funds to/from the “reserve” accounts.

AWWA reserves

In *M1 Principles of Water Rates, ed5*, page 13, AWWA identifies four reserve types: debt-, operating-, emergency-, and capital reserves.

Debt reserve

An amount of funds to be set aside as per agreement between the lender and the borrower.

Operating reserve

An amount set aside in the operating account to provide working capital. An amount equal to the total expenses over a period of one and a half billing cycle is usually considered an appropriate level. These funds must remain liquid and are usually deposited in a checking account.

If the county does not have individual checking accounts for each CSA, but disburses CSA expenses out of a general account, the operating reserve for each CSA should be accounted for in a subaccount.

Emergency reserve

An amount set aside for emergencies—not routine maintenance or capital replacement. These funds must be accessible within a few working days and are usually deposited in a savings account.

Capital reserve

An amount set aside for the future replacement of worn out equipment. The amount of required capital reserves is usually determined by the capital asset replacement program. These funds can be invested with longer term maturities, who coincide with the cash requirements of the capital asset replacement program.

Transfers to reserves

The county shall establish distinct accounting accounts for each CSA for each of the four reserve types. This does not mean that funds from different CSAs or the county can't be combined to provide a better return on investment. However, the time horizon for debt reserve is very long (i.e. a long term CD), operating reserve (i.e. a checking account) and emergency reserve (i.e. a savings account) is very short, and the time horizon for capital reserve depends on the projects coming up (i.e. a ladder of CDs).

On the accounting books, each CSA shall have a subaccount, identifying their funds.

Each quarter the county treasurer shall determine the excess cash generated by the CSA. This shall be determined by subtracting all items paid from all the revenue collected, included any transfers from the reserve accounts, as described in the section below.

This excess cash shall be deposited by the treasurer in the reserve accounts or subaccounts for that CSA, in the following order:

1. Any shortage in the debt reserve account or subaccount for that CSA.
2. Any shortage in the emergency account or subaccount of that CSA.
3. The remaining will be deposited in the capital reserve account or subaccount for that CSA.

Transfers from reserves

Funds in the reserve accounts will not be used for any other purpose than they were intended as set forth above, unless approved by the Board of Supervisors, after consultation with the CAB. Under no circumstances will reserve funds be spent by the county on another CSA.

Any transfer out of the debt-, emergency-, or capital reserve account shall be approved by the county treasurer.

Debt reserve

Can only be transferred when the associated debt is paid off or the lender authorizes a reduction in debt reserve. At that time the debt reserve is returned to the CSA's operating account or subaccount.

Operating reserve

Funds in the CSA's operating accounts or subaccount can only be transferred to pay expenses of the CSA who funded the account or subaccount.

Emergency reserve

Funds in the CSA's emergency reserve can only be transferred for emergency purposes. Emergencies are limited to disasters, drought, fire or any other unforeseeable event. The funds are not to be used for operating capital, pay debts, pay for capital improvements or replacements, maintenance or any other foreseeable event.

Capital reserve

Funds in the CSA's capital reserve account or subaccount can only be transferred for capital replacement projects for that CSA. The funds are not to be used for operating capital, pay debts or for emergencies.