

Sewer Rate Study Prepared for the Seeley County Water District

At the request of the Seeley County Water District



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January 2020

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This document was prepared under a USDA
contract with RCAC.

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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 sewer treatment, storage and distribution facilities owned and operated by the district, SCWD provides sewer services to an estimated **426** connections.

In 2019 RCAC received a request from the district to conduct a sewer rate study that would meet its existing and future revenue needs. Developing a sustainable, fair and justifiable rate structure was identified as the key objective 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.

Developing an appropriate rate structure, RCAC examined financial, asset and other data provided by the district. RCAC also consulted with SCWD staff to identify current and future operating and capital needs, projected sewer usage, community growth, and related reserves. In addition to these needs, district staff also requested the determination of an appropriate capacity, development and annexation charges, which are detailed in the report.

Under SCWD’s existing structure, sewer rates are based on a standard unit of residential usage known as an Equivalent Dwelling Unit [EDU]. Residential users are charged a flat rate of \$50.63 per month while remaining users (e.g., multi-family apartment dwellers, commercial customers) are charged a flat rate in proportion to this standard unit. Using a standardized methodology developed by the United States Environmental Protection Agency based on characteristics of sewer usage, RCAC evaluated SCWD’s customer base to provide a more accurate determination of customer EDUs.

RCAC recommends the rate following adjustments over the course of the next five years based on the current EDU charge of **\$50.63**:

Year	2020	2021	2022	2023	2024
Rate Selected (per EDU, Monthly)	\$52.00	\$53.00	\$54.00	\$55.00	\$56.00
Percentage Increase	2.71%	1.92%	1.89%	1.85%	1.82%

RCAC anticipates these adjustments will generate sufficient revenue to meet the existing and projected needs of the SCWD wastewater utility.

Primary assumptions in this report over the projected five-year period include a 1 percent annual growth in sewer demand starting in year three of the rate study period, 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 1.7 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 expansion 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 that the revenue needs are met.

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

Fairness: Sewer 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 sewer than the cost to provide the sewer.

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

Justifiability: Sewer rates must be based on the actual financial needs of the district. Revenue generated from sewer rates can't be used for anything else but to pay for the costs of procuring, treating and distributing sewer 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 district 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 district 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 estimated Median Household Income (MHI) of \$25,536 (+/- \$7,075) based on the 2017 5-year American Community Survey (ACS). This number is 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 to a freeway 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 sewer capacity and expansion fees.¹

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

Sewer system

SCWD owns and operates assets providing sewer service to Seeley’s residents including piping, two lift stations, and collection facility, pumps, two lift stations, and an aeration wastewater treatment plant with a treatment capacity of 0.25 million gallons-per-day (MGD). Effluent from the WWTP is discharged to the New River.

Ending FY19, SCWD provided sewer service to an estimated 426 connections. The estimated demand on the plant from the Town of Seeley has been estimated at 150,000 gallons per day (gpd).²

The treatment plant has experienced numerous challenges, which SCWD is addressing. In 2017-18 the plant exceeded effluent limitations for copper numerous times and in 2019 SCWD proposed a revised compliance project to bring the plant into compliance within five years.³

Forecasted Sewer Use

Similar to anticipated growth in population RCAC estimates that sewer production will increase modestly during the next 5 years⁴:

Total Consumption Adjustment		0.0%	0.0%	1.0%	2.0%	3.0%
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Should extensive development occur as planned at Sunbeam Lake within the District’s service area, SCWD would need to provide additional sewer capacity. Full development of the Coyne Ranch Project with 2500 residents would exceed SCWD’s current treatment capacity (0.25mgd) by approximately 50%.⁵

3 Current rates and financial condition

Current Rate Schedule

Existing sewer 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 \$50.63 for each EDU. SCWD’s complete sewer rate schedule from the last rate study is shown in the following table:

² Fuscoe Engineering, Inc., *Preliminary Sewer Assessment: Coyne Ranch at Sunbeam Lake (2016)*, p.5.

³ PROPOSED TIME SCHEDULE ORDER (TSO) R7-2019-0029 ISSUED TO SEELEY COUNTY WATER DISTRICT WASTEWATER TREATMENT FACILITY SEELEY, IMPERIAL COUNTY (March 4, 2019)

⁴ The rate study assumes the construction of 20 homes between 2022 and 2024 as part of Coyne Ranch or related development.

⁵ Fuscoe Engineering, inc., *Preliminary Sewer Assessment: Coyne Ranch at Sunbeam Lake (2016)*, p.10.

WASTE

				3/1/2018	3/1/2019	3/1/2020	3/1/2021	3/1/2022
Customer	Current Monthly Bill	New Monthly Bill Effective 03/01/2017		One Year After \$1.57	One Year After \$1.61	One Year After \$1.67	One Year After \$1.73	One Year After \$1.78
Average Single-Family Customer (=1 EDU)	\$42.45	\$47.45	3.30%	\$49.02	\$50.63	\$52.30	\$54.03	\$55.81
Average Two-Family Customer, per Household (=7 EDU EA)	\$21.23	\$33.22	3.30%	\$34.32	\$35.45	\$36.02	\$37.83	\$39.08
Average Multi-Family, per Household	Varies	\$33.22	3.30%	\$34.32	\$35.45	\$36.62	\$37.83	\$39.08
Average Commercial Customer, 2 EDU's	\$57.33	\$94.90	3.30%	\$98.03	\$101.27	\$104.61	\$108.06	\$111.63
Large Commercial Customer, 29.75 EDU's	Currently SCWD Has No Large Commercial Customer	\$1,411.64	3.30%	\$1,458.22	\$1,506.35	\$1,556.05	\$1,607.40	\$1,660.45
Large Commercial Customer, 34.0 EDU's	\$457.54	\$1,613.30	3.30%	\$1,665.54	\$1,721.53	\$1,778.35	\$1,837.03	\$1,897.65
Large Commercial Customer, 82.5 EDU's	\$3,388.41	\$3,914.63	3.30%	\$4,043.81	\$4,177.26	\$4,315.11	\$4,457.51	\$4,604.60

Other sewer system charges

SCWD assesses customers various sewer service-related charges. RCAC did not assess these charges under 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	Assignment of EDUs for general customer classes may be inaccurate and difficult to justify
Rates appear equitable based on EDU concept	May not legally defensible under California Proposition 218

While the current EDU structure appears equitable, the assignment of uniform EDUs to generic customer classes such as large and small commercial customers may be inaccurate. For example, while both a post office and small commercial café could be considered small commercial traffic, the latter would likely have a greater demand for sewer services. Likewise, one would expect that a small gas station, with the probability of small amounts of oil and gas spillage, would exert a greater wastewater treatment demand than a similarly-sized building housing an accountant. Recognizing this disparity, RCAC offers a more equitable method of assigning EDUs.

Revenue from existing rates

As shown below FY18-19 financial reporting indicates that the sewer system is not generating sufficient revenue to pay for identified expenses. This net loss does not consider recommended reserve contributions. Without adjustment, the impact of inflation and other factors will likely aggravate this condition placing sustainable system operation in peril.

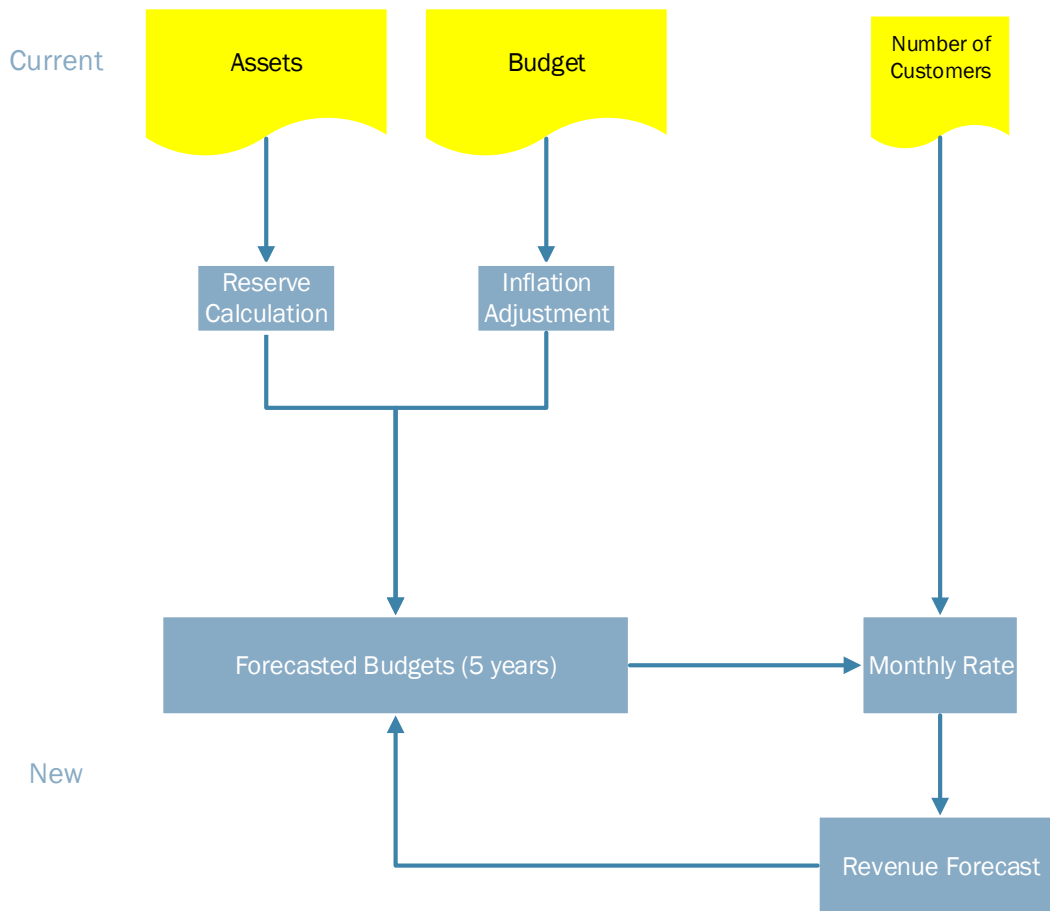
SCWD Profit and Loss	FY18	FY19
TOTAL REVENUE	\$353,939	\$357,617
TOTAL EXPENSES	\$464,468	\$431,746
NET LOSS OR GAIN:	\$-110,529	\$-73,296

4 Rate setting process

The figure⁶ below explains the process of setting rates.

Working with the District manager and operator, RCAC compiled the list of all capitalized assets, the current budget and the current number and type of customers, as provided by the district.

⁶ In this report all yellow cells contain data obtained outside the model. All blue cells are calculated.



Working with the district manager and operator, RCAC compiled the list of all capitalized assets, the current budget and the current number and type of customers, as provided by the district. From the list of assets the required reserves are calculated (Section 5 of this report) and fed into a five-year budget projection (Section 6)

The budget is adjusted for 3 percent inflation.

The current number of customers (426) is adjusted for new homes currently being built. This report assumes that 20 new homes will be built over the next five years.

With the assistance of the district, RCAC conducted a survey of the commercial sewer users and converted them, using an EPA-provided conversion table, to EDUs.

The expenses, including the reserve requirements, are then allocated among the EDUs. This unit of allocation, known as the Equivalent Dwelling Unit (EDU), is then multiplied by the EDU factor discussed in Section 7. The current unit EDU has a value of \$53.06.

5 Capital replacement program

The CRP table (Exhibit 1) provides with a detail of the reserves needed to replace the capital assets. There are three sections in the CRP:

- Existing capital replacement program: assets the district currently has in place
- New project replacement program: assets the district is currently replacing. (None for SCWD)
- Future capital improvement program: assets the district wishes to add to the system.

The total line of the CRP table (-\$5,480) is the amount the district must put aside each year to be able to fund the replacement of equipment for the wastewater system and the stormwater system. Note that this is a negative number. This implies that the district has saved enough money to be able to fund future replacement of all assets. However, this amount changes annually as old assets are replaced and new assets are installed.

Source of the data

The data in the capital replacement program (CRP) comes from the information supplied by the district and standards from the American Water Works Association (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 for the replacement of components can only come from cash saved by the district, a loan or a grant.

While the possibility of receiving substantial grants to replace certain components of the system is good at this time, these possibilities will diminish over time as government funding capabilities are expected to diminish.

The current median household income (MHI) of \$25,563 makes SCWD a “Severely Disadvantaged Community”, which qualifies it for 100 percent grant funding of many construction or replacement projects. However, this window of grant opportunity may be closing and cannot be counted on for all future replacement projects.

Involving consultation with SCWD staff, RCAC identified the following default funding for the sewer 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		

It will require a substantial effort of the district’s staff to obtain these grants and loans. The amount of grants obtained for future projects has a large impact on the rates. Therefore this study recommends a new rate study when new loans or grants are obtained.

6 Budget

The purpose of the sewer system operating budget is to ensure the system's revenues balance with 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 sewer 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 year
- 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 sewer sales, recommended reserves, and other sources of revenue.

The sewer 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 sewer rate study recommend a review of four types of reserves:

1. Debt reserve: To comply with conditions identified in the district's U.S. Department of Agriculture loan, the district will need to set aside \$2,354, equivalent to 1 year's annual debt service. However, the district has \$3,002 set aside, creating a surplus. The district's current surplus is \$648. RCAC recommends that this reserve be transferred to the system's capital replacement plan.
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 \$55,587, and the existing operating reserve balance (i.e., checking account balance) on 7/01/19 was \$110,000. This means that the district has been over-allocating operating reserves by \$54,413. 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 amount recommendation is based on the cost of 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 \$60,000. As of 7/01/19 SCWD identified an emergency reserve of \$40,000. RCAC recommends that the district fully fund this emergency reserve account over the next five years at \$4,000 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 \$210,802 available for CRP reserve funding (\$155,741 in existing capital reserves plus recommended transfers of \$54,413 and \$648 from the district's operating and debt reserves, respectively). For purposes of this rate study, this amount (\$210,802) is applied to 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 Reserves		Amount			
Debt Reserve	\$3,002		As per lending agreement(s)		
Operating Reserve	\$110,000		Often in Checking Account		
Emergency Reserve	\$40,000		Often in Savings Account		
Capital Reserve	\$155,741		Mostly in CDs or other investments		
Total	\$308,743				
Reserve Targets		Amount	Make Up Period	First Year Reserve Addition	Excess funds to be transfer to CIP
Debt Reserve	\$2,354	See F17:F22		-\$648	\$648
Operating Reserve	\$55,587		3	\$0	\$54,413
Emergency Reserve	\$60,000		5	\$4,000	\$0
Available for Capital Reserve	\$210,802				

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 established for each reserve type involving investment, access and use of funds.

Sales adjustments

Adjustments to sales rely on community growth. As discussed in Section 2, RCAC anticipates that total sewer consumption will increase in response to limited new development in the district’s service area identified at 20 houses from 2022 to 2024. Given the uncertainty in both the extent and timing of such development, the actual growth in service demand cannot be estimated readily.

Total Consumption Adjustment		0.0%	0.0%	1.0%	2.0%	3.0%
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7 Equivalent dwelling unit assessment

Critical in developing a fair sewer rate, RCAC, under the direction of SCWD, conducted an EDU assessment of Seeley’s physical sewer connections in July 2019.

RCAC identified each commercial use and calculated the EDUs of each commercial connection, using the table below.

The assessment resulted in a total of 695 EDUs for the SCWD sewer system presented in Exhibit 3.

EPA					Exhibit 3
EDU Tables for Sewer Service					
Customer Category	Category Number	Unit	EDU	Min 1 EDU?	
Single Family Dwelling	1	per dwelling	1.000	No	Single Family Dwelling
Apartments	2	per apartment	1.000	No	Apartments
Condominiums	3	per unit	1.000	No	Condominiums
Mobile Homes (free standing)	4	per unit	1.000	No	Mobile Homes (free standing)
Mobile Home Parks	5	per home space/lot	1.000	No	Mobile Home Parks
Rental Cottages	6	minimum per cottage	0.250	No	Rental Cottages
Efficiency Rental	7	per unit	0.625	Yes	Efficiency Rental
Assembly Halls	8	per seat	0.005	Yes	Assembly Halls
Boat Dock indiv. owned w/o dwelling	10	per dock space	0.100	No	Boat Dock indiv. owned w/o dwelling
Boat Dock indiv. owned w/dwelling	11	per dock space/parcel-lot	1.000	No	Boat Dock indiv. owned w/dwelling
Bowling Alleys (no food serv.)	12	per lane	0.188	No	Bowling Alleys (no food serv.)
Car Wash automatic	14	per automatic bay	1.500	No	Car Wash automatic
Car Wash manual	15	per manual bay	1.000	No	Car Wash manual
Church with no kitchen	17	per seat	0.011	Yes	Church with no kitchen
Church with kitchen	18	per seat	0.017	Yes	Church with kitchen
Country Clubs	19	per person	0.125	Yes	Country Clubs
Dance Halls	20	per person	0.005	Yes	Dance Halls
Dormitories/Barracks	21	per bed	0.063	No	Dormitories/Barracks
Drive-In Theatres	22	per car space	0.013	Yes	Drive-In Theatres
Factory without showers	24	per employee	0.063	Yes	Factory without showers
Factory with showers	25	per employee	0.088	Yes	Factory with showers
Food Service restaurant (not 24 hours)	27	per seat	0.088	Yes	Food Service restaurant (not 24 hours)
Food Service restaurant (24 hour serv.)	28	per seat	0.125	Yes	Food Service restaurant (24 hour serv.)
Food Service banquet rooms	29	per seat	0.013	Yes	Food Service banquet rooms
Food Service tavern	30	per seat	0.088	Yes	Food Service tavern
Food Servicedrive-in service	31	per space	0.125	Yes	Food Servicedrive-in service
Food Service restaurant along freeway	32	per seat	0.250	No	Food Service restaurant along freeway
Gas (fuel) Station	35	per pump	1.250	No	Gas (fuel) Station
Hospitals	36	per bed	0.750	No	Hospitals
Institutions	37	per person	0.250	Yes	Institutions
Laundries (coin operated)	38	per machine	0.350	No	Laundries (coin operated)
Marina with pump out connected to sewer	40	per dock, rack & storage space	0.100	Yes	Marina with pump out connected to sewers
Marina with restrooms & showers only	41	per dock, rack & storage space	0.050	Yes	Marina with restrooms & showers only
Motels/Sleeping Cabin	42	per unit	0.250	Yes	Motels/Sleeping Cabin
Nursing & Rest Homes	44	per patient	0.250	Yes	Nursing & Rest Homes
Office Buildings	47	per employee	0.050	Yes	Office Buildings
R.V. Parks & Camps (primitive)	48	per space	0.125	Yes	R.V. Parks & Camps (primitive)
R.V. Park & Camps (full service)	49	per space	0.313	Yes	R.V. Park & Camps (full service)
Recreation Parks	50	per park capacity	0.010	Yes	Recreation Parks
Retail Store	51	per employee	0.050	Yes	Retail Store
School elementary	53	per pupil	0.038	Yes	School elementary
School junior & high	54	per pupil	0.050	Yes	School junior & high
Shopping Center	55	per 100 s.f., no food/laundry	0.050	Yes	Shopping Center
Swimming pool without showers	57	per swimmer (capacity)	0.010	Yes	Swimming pool without showers
Swimming pool with showers	58	per swimmer capacity)	0.018	Yes	Swimming pool with showers
Youth and Recreation Camps	59	per person (capacity)	0.125	Yes	Youth and Recreation Camps
Vacant Lot		per lot	0.100	No	Vacant Lot

8 Proposed rates and related charges

During the next five years, RCAC estimates that the SWCD will need to generate at least \$ 2,387,549 in revenue to cover annual expenses including contributions to reserves. This revenue will be generated largely by a combination of sewer rate charges and new development fees.

Calculating the new sewer rate

RCAC divided projected expenses for 2020 (based on the 2019 budget) and divided this value by the calculated number of system EDUs (695) from Exhibit 3 to generate a monthly rate needed to provide a balanced budget. This theoretical rate was modified slightly to distribute the required increases over a five-year period.

Calculating the New Sewer Rates

Year	2019	2020	2021	2022	2023	2024	
Number of EDUs	695	695	695	701	708	715	
Current Monthly Rate	\$50.63						
Expenses		\$444,988	\$463,811	\$478,622	\$492,775	\$507,353	
Monthly Rate per EDU, Necessary to Balance the Budget		\$53.31	\$55.57	\$52.74	\$53.90	\$55.08	Average \$ 54.12
Rate Increase Needed to Balance		5.29%	4.24%	-5.08%	2.18%	2.19%	6.89%
Rate Selected (per EDU, Monthly)		\$52.00	\$53.00	\$54.00	\$55.00	\$56.00	Total
Percentage Increase		2.71%	1.92%	1.89%	1.85%	1.82%	

Sewer 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, they 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 sewer system.

RCAC recommends that SCWD 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 sewer 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 sewer system based on the 2/2/19 balance sheet (\$733,684)
- Less the liabilities (\$53,818)
- 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) (\$1,538,373)
 - Less straight line depreciation, because the system is old (\$847,664)
 - Less grants received⁷ because old and new customers have the right to benefit from government grants. (\$615,255)

The current value or equity of the sewer system is, therefore, \$755,320.

We then allocated this value (\$755,320) according to the number of EDUs (695), which gives us a value of \$1,088 per EDU. This is the recommended amount of the capacity charge per EDU for each new connection.

When the owner of an existing parcel requests hookup to the system, SCWD staff should determine the total EDUs for that new connection, and charge \$1088 for each new EDU.

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.

⁷ 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.

To estimate the cost to provide the added capacity we look at the current replacement cost of the sewer system, as shown on the capital replacement program (Exhibit 1) (\$2,356,970). This system was designed for 695 EDUs. Dividing the cost, by the EDUs, gives us \$3,394 per EDU.

We then estimate the demand those new parcels will create on the system, either by knowing the EDUs or by the parcel size if the use 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 50 percent of the cost of any future expansion of the water system.

Parcel Size in Acres	Parcel Size in SF	Estimated EDUs	Theoretical SDC	Proposed SDC
		R	R * \$3394	50%
<=1/4 Acre	10,890	1.0	\$ 3,394	\$ 1,697.00
>1/4 to <2 Acres	<87120	1.5	\$ 5,091	\$ 2,545.50
>= 2 Acres	>=87,120	2.0	\$ 6,788	\$ 3,394.00

If the use of the parcel is known, charge the fee according to EDU. If the use of the new parcel 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 map⁸.

This income shall be deposited in a special expansion bank account, and shall only be used for future expansion of the sewer 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 sewer 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 connection.

⁸ 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.

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.

Consolidated rate and fee structure

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

Sewer rates: Rate per EDU:

Year	2020	2021	2022	2023	2024
EDUs	695	695	701	708	715
Charge	\$52.00	\$53.00	\$54.00	\$55.00	\$56.00

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	Before Occupancy Permit is issued	Before LAFCO approves the annexation
Deposit amount	N/A	N/A	\$2,000	\$2000
Amount of Fee (Sewer)	\$1,100	\$1,697	Time & Material	Time & Material

Per Unit (sewer)	EDU	EDU if know, otherwise by 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

Estimated profit/loss generated from the proposed rate and fee structure are shown below:

Income Generated by New Rates	\$433,390	\$441,724	\$454,559	\$467,561	\$480,729
NET LOSS OR GAIN:	-\$10,907	-\$21,411	\$10,575	\$9,385	\$7,938
Balanced Budget?	No	No	Yes	Yes	Yes
CONTRIBUTION TO RESERVES	-\$12,972	-\$17,994	\$15,062	\$13,873	\$12,425
Target Contribution to Reserves	-\$2,064	\$3,417	\$4,487	\$4,487	\$4,487
Meet Target Contribution?	No	No	Yes	Yes	Yes
Positive Cashflow?	No	No	Yes	Yes	Yes

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. During the first two years, the system will have negative cash flow, this is acceptable since the district has been over allocating the operating reserves by \$54,413.

With the exception of the first two years, 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 fully meet system needs including reserve contributions.

Consequences of inaction

As shown below, without a rate adjustment SCWD’s financial position will continue to deteriorate:

Year	2019	2020	2021	2022	2023	2024
Number of EDUs	695	695	695	701	708	715
Current Monthly Rate	\$50.63					
Expenses	\$444,988	\$463,811	\$478,622	\$492,775	\$507,353	
Monthly Rate per EDU, Necessary to Balance the Budget	\$53.30	\$55.56	\$52.73	\$53.87	\$55.05	
Rate Increase Needed to Balance	5.28%	4.23%	-5.09%	2.18%	2.18%	
Rate Selected (per EDU, Monthly)	\$50.63	\$50.63	\$50.63	\$50.63	\$50.63	\$50.63
Percentage Increase	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Income Generated by New Rates	\$421,972	\$421,972	\$426,191	\$430,411	\$434,631	
NET LOSS OR GAIN:	-\$22,269	-\$41,065	-\$17,651	-\$27,579	-\$37,930	
Balanced Budget?	No	No	No	No	No	No

In addition, 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.

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

Fee Type	2022	2023	2024
Capacity	\$2,000	\$2,000	\$2,000
Expansion	\$34,000	\$34,000	\$34,000

10 Conclusion and recommendations

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 industry-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 sewer system.

RCAC also recommends that SCWD adopt best practices to improve operating efficiency. These practices include developing an asset management plan, conducting an energy audit, and investigating sources of sewer loss and non-revenue sewer.

11 Appendix

Exhibit 1: Capital replacement program

Sewer capital replacement program

Capital Replacement Program		(Cash-Needs Approach)														Exhibit 1 b
Sewer																Date: 1/16/20
																System Number: 0
																Service Connections: 51
																\$1,667
Quantity	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 \$3000)	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
Replacement of Existing Capital Assets																
1	Ford Truck 2018 68%	2018	16,883	H	\$16,883	15	2	17,600	13	5	17,600	100%	0%	0%	19,106	-419
3	INF Lift Stn. Pump	2014	13,576	H	\$40,728	15	6	46,137	9	10	46,137	2%	98%	0%	1,002	-15
1	Xylem Waste Eff. Pump	2015	7,605	H	\$7,605	15	5	8,438	10	11	8,438	100%	0%	0%	9,160	-129
1	UV S. Trent Revamp	2016	15,650	H	\$15,650	15	4	17,007	11	12	17,007	100%	0%	0%	18,462	-249
1	Equipment SWR	2018	5,202	H	\$5,202	20	2	5,423	18	19	5,423	100%	0%	0%	5,887	-66
0	Aerator	2014	7,967	H	\$0	20	6	0	14	15	0	0%	0%	100%	0	0
1	Cleanout	2010	13,300	H	\$13,300	20	10	16,372	10	11	16,372	100%	0%	0%	17,774	-250
1	2005 Ford Ranger	2005	14,305	H	\$14,305	15	15	19,538	0	1	19,538	100%	0%	0%	21,210	-1,672
1	Lift stations	1981	25,000	H	\$25,000	30	39	56,227	-9	-1	56,227	2%	98%	0%	1,221	-96
1	UPS Phase 1 (??)	1985	376,775	H	\$376,775	40	35	779,800	5	1	779,800	2%	98%	0%	16,931	-1,335
1	UPS Phase 2 (??)	1987	127,508	H	\$127,508	40	33	253,155	7	8	253,155	2%	98%	0%	5,496	-91
1	Control System Filter	2010	5,650	H	\$5,650	10	10	6,955	0	2	6,955	100%	0%	0%	7,550	-327
1	Muffin Monster Grinder (Abandoned)	2011	\$30,000	H	\$30,000	20	9	36,170	11	0	36,170	2%	98%	0%	785	0
1	Backwash Pump (Revamp)	2005	\$15,000	H	\$15,000	15	15	20,487	0	0	20,487	2%	98%	0%	445	0
1	UV Sewer Trent	2010	\$15,650	H	\$15,650	20	10	19,265	10	12	19,265	100%	0%	0%	20,914	-282
6	Pontoon Aerator	2010	\$10,000	H	\$60,000	15	10	73,860	5	6	73,860	2%	98%	0%	1,604	-31
5	Floating Aerator	2010	\$10,000	H	\$50,000	15	10	61,550	5	6	61,550	2%	98%	0%	1,336	-26
1	UV Wedeco	2016	\$1	H	\$1	70	4	1	66	66	0	0%	0%	100%	0	0
2	Lift Stations	2005	\$150,000	H	\$300,000	80	15	409,739	65	68	409,739	2%	98%	0%	8,896	-66
1	1998 Ford F150 (68%)	1998	13,202	H	\$13,202	15	22	20,854	-7	2	20,854	2%	98%	0%	453	-20
1	2009 Ford Ranger	2009	9,543	H	\$9,543	15	11	11,994	4	5	11,994	100%	0%	0%	13,021	-286
1	2008 Ford Ranger	2008	9,000	H	\$9,000	15	12	11,549	3	5	11,549	100%	0%	0%	12,538	-275
1	Harban Trailer Jet	2014	46,535	H	\$46,535	15	6	52,715	9	5	52,715	2%	98%	0%	1,145	-25
1	Catepillar Generator	2010	80,000	H	\$80,000	15	10	98,480	5	10	98,480	2%	98%	0%	2,138	-31
1	Backhoe	2009	33,458	H	\$33,458	15	11	42,052	4	5	42,052	2%	98%	0%	913	-20
1028	6-8" INF Pressure Pipe	2000	30	C	\$20,173	50	20	30,840	30	31	77,102	2%	98%	0%	670	17
	6-8" INF Pressure Pipe	2000	10	C		50	20		30	31		0%	0%	100%	0	
1069	4" Eff Pressure Pipe	2000	15	C	\$10,489	50	20	16,035	30	31	40,089	2%	98%	0%	348	9
521	Gravity Pipe	2000	10	C	\$3,408	50	20	5,210	30	31	13,025	100%	0%	0%	5,656	140
554	6" Interpond Piping	2000	12	C	\$4,349	50	20	6,648	30	31	16,621	100%	0%	0%	7,217	179
1	Large Pond Stabilization Lining (65 ml HDPE)	2015	135,000	H	\$135,000	36	5	149,783	31	32	149,783	2%	98%	0%	3,252	-30
1	Office Airconditioning (55%)	2019	3,960	H	\$3,960	10	1	4,043	9	10	4,043	100%	0%	0%	4,389	-65
1	HDPE Lining for 5 Smaller Stabilization Ponds	2012	50,000	H	\$50,000	36	8	59,044	28	10	59,044	2%	98%	0%	1,282	-19
Subtotal Replacement of Existing Capital Assets					\$1,538,373			2,356,970			2,445,073	9%	91%	0%	210,802	-5,480
Replacement of Funded Project Assets																
0	No items identified											0%	0%	0%	0	0
Subtotal Replacement of Funded Project Assets								0			0	0%	0%	0%		0

Exhibit 2: Five year sewer budget forecast

Forecasted Budget Sewer							Exhibit 2	
	FY 20 Budget						Inflation Factor (%): 3.00	Loan Interest Rate (%): 3.20
EXPENSES AND SOURCES OF FUNDS	2017	2018	2019	2020	2021	2022	2023	2024
OPERATIONS & MAINTENANCE EXPENSES								
Admin - other	0	0	0	0	0	0	0	0
Advertising	2,786	1,276	0	0	0	0	0	0
Alert Service	16	139	6	6	6	6	6	6
Bad Debts	9,120	0	0	0	0	0	0	0
Bank Charges	592	87	0	0	0	0	0	0
Business Insurance	9,916	7,915	15,000	15,450	15,914	16,391	16,883	17,389
Capital Improvements	0	4,886	0	0	0	0	0	0
Contract Labor	2,891	3,679	804	828	853	879	905	932
Customer Relations	0	0	0	0	0	0	0	0
Deposit Refund	0	0	0	0	0	0	0	0
Depreciation	0	0	0	0	0	0	0	0
Director Fees	4,894	8,652	7,044	7,255	7,473	7,697	7,928	8,166
Drug Testing	0	17	0	0	0	0	0	0
Dues and Subscriptions	5,765	3,558	4,666	4,805	4,950	5,098	5,251	5,409
Employee Insurance	16,629	24,129	25,452	26,215	27,002	27,812	28,646	29,505
Employee Relations	166	170	24	25	25	26	27	28
Fees & Permits	4,344	4,519	5,833	6,008	6,188	6,374	6,565	6,762
Fuel	3,788	5,110	4,048	4,169	4,294	4,423	4,556	4,692
General Fund Expenses	860	0	0	0	0	0	0	0
Lab Testing	35,018	40,402	33,000	33,990	35,010	36,060	37,142	38,256
Legal & Professional Fees	22,074	26,240	28,887	29,754	30,646	31,566	32,513	33,488
Mileage Reimbursement	-583	0	0	0	0	0	0	0
Miscellaneous & Uncategorized Expenses	0	0	0	0	0	0	0	0
Office Expense	340	5,673	940	968	997	1,027	1,057	1,089
Other Expense	0	619	0	0	0	0	0	0
Permit Fees	110	372	275	283	292	301	310	319
Postage and Freight	2,011	1,761	1,502	1,547	1,594	1,641	1,691	1,741
Professional Services	31,334	24,030	9,900	10,197	10,503	10,818	11,143	11,477
Public Relations	0	2,234	695	716	737	759	782	806
Repairs and Maintenance	7,462	7,755	6,990	7,200	7,416	7,638	7,867	8,103
Salaries, Wages and Payroll Taxes	133,641	222,699	245,000	252,350	259,921	267,718	275,750	284,022
Security System	0	214	0	0	0	0	0	0
Source - Purchased H2O	0	0	0	0	0	0	0	0
Street Lights - Utilities	0	0	0	0	0	0	0	0
Supplies	14,132	2,874	5,955	6,134	6,318	6,507	6,702	6,903
Telephone Expense	4,791	6,969	5,223	5,382	5,543	5,709	5,881	6,057
Transportation and Travel	311	414	221	227	233	240	248	255
Tuition	571	1,754	23	28	29	30	31	32
Uniforms	3,647	3,894	3,953	2,323	2,392	2,464	2,538	2,614
Utilities	40,800	30,610	28,000	28,840	29,705	30,596	31,514	32,460
Vacation & Sick Pay Expense	9,944	10,366	0	0	0	0	0	0
Wastewater Treatment	0	11,452	0	0	0	0	0	0
Total Refurbishing and Rebuilding Cost				0	0	0	0	0
Total Operation and Maintenance Expenses:	367,370	464,468	431,746	444,699	458,040	471,781	485,934	500,512
GENERAL & ADMINISTRATIVE EXPENSES								
Debt Reserve				-648	0	0	0	0
Operating Reserve				0	0	0	0	0
Emergency Reserve				4,000	4,000	4,000	4,000	4,000
Reserves for Existing Capital Assets				-5,416	-583	487	487	487
Reserves for Funded Project Assets				0	0	0	0	0
Reserves for Future Project Assets				0	0	0	0	0
Interest Income	0	0	0	0	0	0	0	0
Sales	0	0	0	0	0	0	0	0
Debt Service				2,354	2,354	2,354	2,354	2,354
Total General and Administrative Expenses:	0	0	0	290	5,771	6,841	6,841	6,841
TOTAL EXPENSES	367,370	464,468	431,746	444,989	463,811	478,622	492,775	507,353
SOURCE OF FUNDS / REVENUES RECEIVED								
Sewer Revenue	420,205	353,939	357,617	433,390	441,724	454,559	467,561	480,729
Interest Income (Sewer)	0	0	323	332	342	353	363	374
Sales	0	0	0	0	0	0	0	0
Uncollectable Receivables (Bad Debts)	-9,120	0	0	-2,167	-2,209	-2,273	-2,338	-2,404
Fees	0	0	0	0	0	0	0	0
Dividend Income (Sewer)			83	85	88	91	93	96
Dividend Income (Dumper)			35	36	37	38	39	40
Interest Income (Dumper)			323	332	342	353	363	374
Sales (Dumper)			70	72	74	76	79	81
Capacity Fee				2000	2000	2000	2000	2000
Expansion Fee						34000	34000	34000
TOTAL REVENUE	411,085	353,939	358,450	434,081	442,399	489,197	502,161	515,292
NET LOSS OR GAIN:	43,715	-110,529	-73,296	-10,907	-21,411	10,575	9,385	7,938

Exhibit 3: EDU assessment

Designation of EDUs by account number following EPA methodology

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
186-06A	Mobile Homes (free standing)	per unit	1	4	1.000	No	1.00
104-05B	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
307	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
166	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
76	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
95	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
304	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
298	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
65	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
61	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
5	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
21	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
238	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
226A	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
19-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
429-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
246-08	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
245	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
244	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
269-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
282	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
424	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
358	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
8	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
173	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
36A-1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
36-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
34	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
123-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
13-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
134-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
17	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
87	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
419	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
116-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
204	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
162	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
25	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
133-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
346	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
376-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
215	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
157	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
385-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
46	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
341	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
43346	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
281	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
251	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
250	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
309-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
164-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
217-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
165-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
411	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
409-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
410	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
413-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
152-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
143-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
119	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
234	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
183-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
112	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
103-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
222	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
96	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
344-10	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
312	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
313-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
314	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
315	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
316-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
317	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
318	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
319-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
320	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
41	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
171-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
249-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
248-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
202	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
247	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
18	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
303	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
85	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
128-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
71	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
285	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
289	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
291-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
290-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
297-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
274	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
296-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
138	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
129	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
211-4	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
33	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
158	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
180	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
283	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
31	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
48	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
66-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
378	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
153-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
29	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
82-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
172	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
218	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
357-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
286	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
16-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
14	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
150-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
437A-1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
437B-1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
276-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
45	Institutions	per person	30	37	0.250	Yes	7.50
199-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
361-10	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
100-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
15	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
279	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
214	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
356	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
236	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
207-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
417	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
203	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
57	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
55	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
412	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
408-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
220-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
194	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
72	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
394	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
382	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
387-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
407	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
406-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
389-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
401	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
405-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
397-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
393	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
362	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
348	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
294	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
20	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
353	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
257	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
98-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
151-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
201	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
273-4	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
179	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
391-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
224	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
399-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
392	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
264-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
372-03	Apartments	per apartment	4	2	1.000	No	4.00
263-02	Apartments	per apartment	4	2	1.000	No	4.00
371	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
206-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
370	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
118	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
227	Apartments	per apartment	2	2	1.000	No	2.00
228	Apartments	per apartment	2	2	1.000	No	2.00
209	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
280B	Apartments	per apartment	2	2	1.000	No	2.00
280	Apartments	per apartment	2	2	1.000	No	2.00
170-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
168	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
160	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
40	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
369	Apartments	per apartment	3	2	1.000	No	3.00
132	Apartments	per apartment	3	2	1.000	No	3.00
354	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
365-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
145	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
432-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
176-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
431	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
174	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
175-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
178	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
208	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
22	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
254	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
253-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
159	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
252-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
181	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
267	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
195	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
43378	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
343	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
83	Church with kitchen	per seat	100	18	0.017	Yes	1.70
167	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
131	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
287-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
81	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
24	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
30	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
86	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
86A1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
43	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
140	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
213	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
221	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
117-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
58	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
395	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
404	Church with kitchen	per seat	125	18	0.017	Yes	2.13
102	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
144	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
347	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
256	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
193	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
239	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
398	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
240-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
243	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
11	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
242	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
64A1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
241	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
64	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
345	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
6	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
270-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
146-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
198	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
293-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
321	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
333	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
325	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
327-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
322	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
337	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
326-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
323-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
329	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
332	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
328	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
334	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
331	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
339	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
338	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
330-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
340	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
324-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
336	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
335	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
422	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
284-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
184	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
425-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
92	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
106-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
402	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
260-02	Apartments	per apartment	1	2	1.000	No	1.00
91	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
261-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
26	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
74	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
235	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
88-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
265	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
4	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
266	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
373	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
196-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
232	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
272-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
60-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
142-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
78	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
59	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
197-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
363-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
200	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
97	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
231	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
125-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
233-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
230-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
53	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
23	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
50	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
84	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
101	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
223-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							Exhibit 5
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
185-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
288-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
390	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
388	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
210-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
414-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
415	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
420-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
418	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
416	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
295	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
148	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
430	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
423	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
56	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
421	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
300	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
90	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
259	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
258	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
350-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
156-07	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
156A-9	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
377	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
42	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
428	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
427-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
426-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
229	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
69-09	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
99-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
161	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
32	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
67-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
109-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
28	Retail Store	per employee	2	51	0.050	Yes	1.00
403	Retail Store	per employee	1	51	0.050	Yes	1.00
375	Apartments	per apartment	4	2	1.000	No	4.00
39-02B	Apartments	per apartment	5	2	1.000	No	5.00
39-03	Apartments	per apartment	5	2	1.000	No	5.00
137	Apartments	per apartment	4	2	1.000	No	4.00
70A	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
70	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
80	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
79	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
51-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
93-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
7	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
0	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
126	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
360-04	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
368-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
182-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
380-2	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
380A-2	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
127-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
113	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
43436	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
35-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
396-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
400-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
62-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
63	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
54	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
37	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
73	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
177B-3	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
177A-C	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
177A-2	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
177C-2Apt3	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
262-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
47A-1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
47T-3	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
308-03	Apartments	per apartment	4	2	1.000	No	4.00
149-03	Apartments	per apartment	8	2	1.000	No	8.00
75	Church with no kitchen	per seat	63	17	0.011	Yes	1.00
52-07	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
52A2	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
169-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
49-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
49A-3	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
114A-7	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
114-11	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
366-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
342-06	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
77	Apartments	per apartment	4	2	1.000	No	4.00
302	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
383	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
379	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
381	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
275	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
135	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
305-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
189	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
384	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
374-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
212A-1	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
255	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
212	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
124-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00

EDU Allocation							
Account Number	Billing Category	Unit	Number of Units	Cat #	EDU	Minimum 1 EDU?	EDUs Billed
136	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
351	Apartments	per apartment	19	2	1.000	No	19.00
351	Apartments	per apartment	19	2	1.000	No	19.00
5	Apartments	per apartment	8	2	1.000	No	8.00
1	Apartments	per apartment	8	2	1.000	No	8.00
3	Apartments	per apartment	8	2	1.000	No	8.00
6	Apartments	per apartment	8	2	1.000	No	8.00
2	Apartments	per apartment	8	2	1.000	No	8.00
4	Apartments	per apartment	8	2	1.000	No	8.00
205	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
188-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
191-03	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
187-04	Office Buildings	per employee		47	0.050	Yes	1.00
187-02	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
94	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
192	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
255A-11	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
2	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
105-03	Food Service tavern	per seat	40	30	0.088	Yes	3.52
111-02	Food Service restaurant (not 24 hours)	per seat	56	27	0.088	Yes	4.93
154-05	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
163	Single Family Dwelling	per dwelling	1	1	1.000	No	1.00
439	Church with kitchen	per seat	50	18	0.017	Yes	1.00
139	Factory without showers	per employee		24	0.063	Yes	1.00
367	Institutions	per person	6	37	0.250	Yes	1.50
2	Recreation Parks	per park capacity	300	50	0.010	Yes	3.00
1 + 2	R.V. Park & Camps (full service)	per space	326	49	0.313	Yes	102.04
extra/M	Marina with restrooms & showers only	per dock, rack & st	1	41	0.050	Yes	1.00
3	Recreation Parks	per park capacity	100	50	0.010	Yes	1.00
4	Recreation Parks	per park capacity	100	50	0.010	Yes	1.00
110	School elementary	per pupil	348	53	0.038	Yes	13.22
111-02	Gas (fuel) Station	per pump	12	35	1.250	No	15.00
111-02	Retail Store	per employee	4	51	0.050	Yes	1.00
						Total	694.54

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 to 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.