



Drinking Water Rate Study Prepare for Pine Grove CSD

Rural Community
Assistance Corporation



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Executive Summary

The Pine Grove CSD Rate study was requested as part of a capital planning project to replace most of the distribution system for the community. The long term sustainability of the system is the primary driver of this study. Other factors considered in this study are:

- Fairness to users –
- Justifiability –
- Compatibility with Proposition 218 –

This study utilizes historical information from budgets and financial statements, as well as projections of inflation, growth, conservation, and capital replacements. Using the cash needs basis for a capital replacement plan helps the water system develop reserves to provide cash at key intervals for replacement of long term assets.

The current rate structure includes several areas RCAC recommends reconsidering based on the above factors. Rate classes are challenging to justify and therefore not recommended for compliance with Prop 218. Additionally, removing tiered pricing structures helps create more justifiable rates.

Based on all the inputs provided by the CSD RCAC recommends the following rates.

Proposed Rate Schedule

Standby fees will be 50% of the below standard fees.

Proposed Base Rate Schedule by Fiscal Year

Meter Size	2023	2024	2025	2026	2027
0.625	108.51	112.85	117.37	122.06	126.94
1.000	271.28	282.13	293.42	305.16	317.36
2.000	868.10	902.83	938.94	976.50	1,015.56
4.000	2,712.83	2,821.34	2,934.19	3,051.56	3,173.62

Usage per cubic foot of water consumed will be according to the following schedule.

Proposed Usage Rate Per Cubic Foot by Fiscal Year

User Status	2023	2024	2025	2026	2027
Standard	\$0.047	\$0.049	\$0.051	\$0.053	\$0.055
Standby	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Bulk/Hydrant	\$0.018	\$0.019	\$0.019	\$0.020	\$0.021

The budgeting resulting from all the information collected and review with the staff is included below.

Introduction

Founded in 1978, RCAC provides training, technical, and financial resources and advocacy so rural communities can achieve their goals. Since 1978, our dedicated staff and active board, coupled with our key values: leadership, collaboration, commitment, quality, and integrity, have helped effect positive change in rural communities across the West.

RCAC's work includes environmental infrastructure (water, wastewater, and solid waste facilities); affordable housing development; economic and leadership development; and community development finance. These services are available to communities with populations of fewer than 50,000, other nonprofit groups, Tribal organizations, farmworkers, colonias and other specific populations. Headquartered in West Sacramento, California, RCAC's employees serve rural communities in 13 western states and the Pacific islands.

Purpose of this financial capacity analysis

Pine Grove Community Service District (CSD) received technical assistance in completing a financial capacity analysis and rate study to prepare for system rehabilitation and state funding. The system would like to ensure adequate financial resources to make sure they can support new infrastructure. Additionally, the rates should be evaluated for compliance with Proposition 218 rulings.

Board Responsibilities

The Pine Grove CSD Board recognizes its responsibility to ensure long term financial stability of the system and intends to fund reserves.

Guiding principles in a rate study

- System Sustainability – The system should remain financially viable and consider long term sustainability. This includes establishing and maintaining sufficient reserves.
- Fairness to users – Water users should pay for the portion of the system they use or have access to and not be responsible for subsidizing use for other users.
- Justifiability – All rates should be based on accurate calculations of the complete costs to maintain and operate the water system.
- Compatibility with Proposition 218 – All rates for community service districts in California are subject to Proposition 218 rulings and guidance.

Disclaimer

The findings, recommendations, and conclusions contained in this financial analysis are based on financial information provided to RCAC by Pine Grove CSD. Although reasonable care was made to assure the reliability of this information, no warranty is expressed or implied as to the correctness, accuracy or completeness of the information contained herein. Any action taken on the basis of such findings, recommendations, or conclusions is undertaken at the discretion of Pine Grove CSD. In no event will RCAC or its partners, employees, or agents, be liable for any decision made or action taken in reliance on the information contained in this analysis.

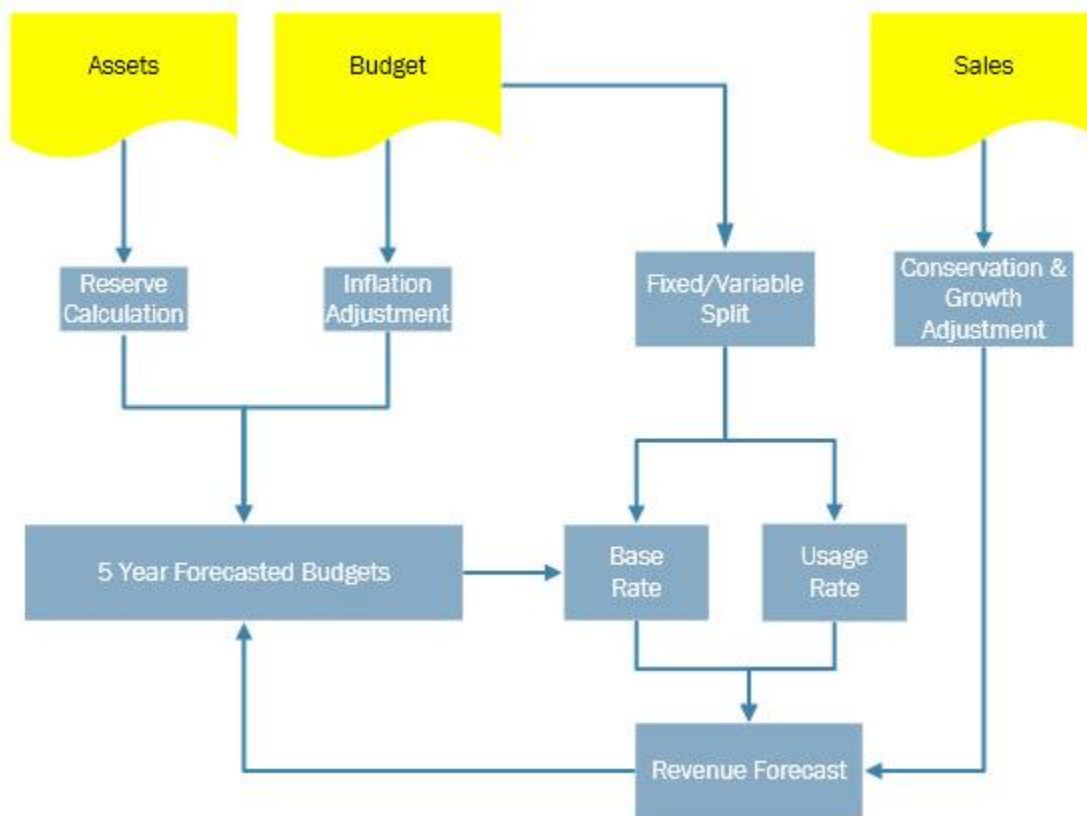
Methodology of setting rates

RCAC utilizes several tools when establishing rates, including:

Using two (2) years of historic audits, current year projections, and anticipated extraordinary costs a five year projected budget is created and verified with staff and the board for accuracies. This five-year budget is then divided into fixed and variable expenses. The fixed expenses are used to calculate the theoretical base rate for water, as those expenses are unchanged. The variable expenses are used to project a usage charge. Most systems adjust usage and base rate to reflect community needs and maintain affordability.

The Capital Replace Plan (CRP) Review includes an analysis of systems capital assets to determine long term replacement costs, funding availability and expected remaining life. In the case of Pine Grove CSD a large capital project is currently being planned but is initial stages for funding. These assets were incorporated into a plan for those assets to be replaced. The complete CRP can be found in Appendix B.

Lastly, RCAC utilizes historic usage information, anticipated conservation, and community growth to develop a usage projection for the same five year period.



System Basic Statistics

Community

Pine Grove Community Services District (CSD) provides water delivery and public parks to the community located within its boundaries. The CSD boundaries include the community of Pine Grove which is located along SR 88 and Ridge Road in Amador County. The system also provides services to several customers outside their defined boundaries.

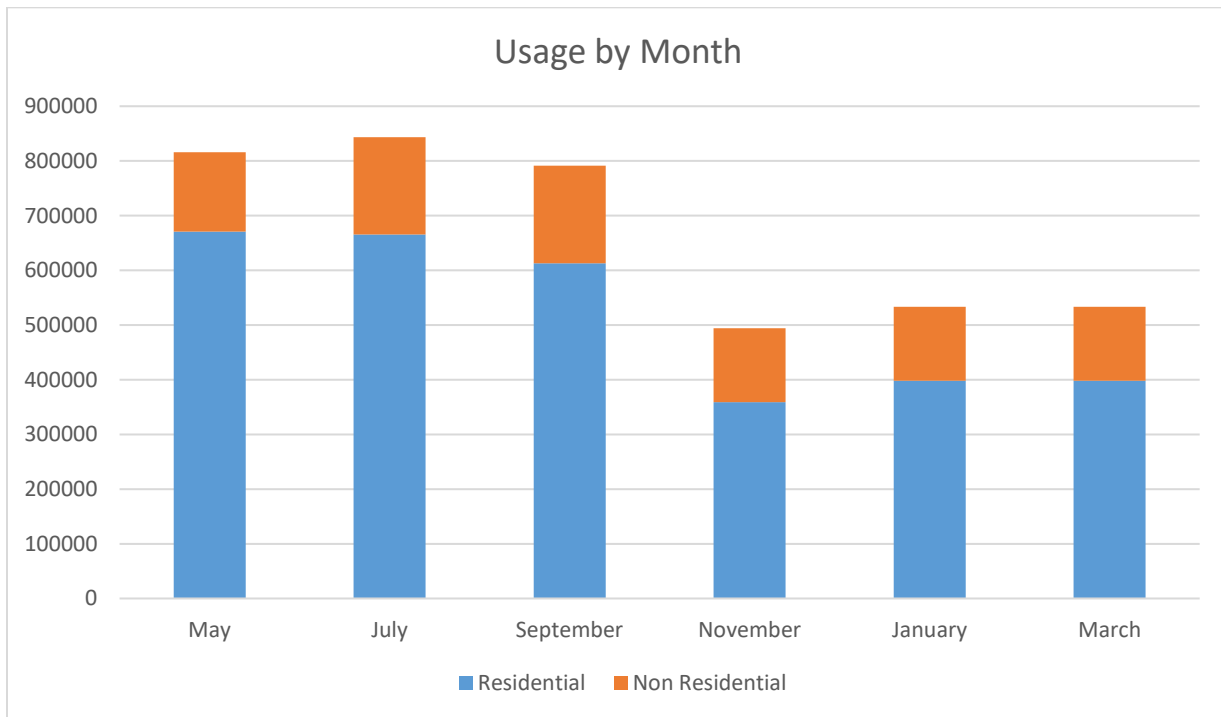
The CSD was originally established to provide water supply and fire protection facilities in 1965. Amador Fire Protection District assumed responsibility for fire protection in 1994. The addition of public parks was approved in 2006.

The CSD is governed by a five member board, who are elected. The board meets the 2nd and 4th Wednesday of each month at 9:00 am. Each board member is elected for a four year term. The system is run by a general manager and water manager.

The CSD has a medium household income of \$\$61,096 according to the 2020 American Community Survey. This constitutes less than 80% of the state median income. This qualifies the system for a high number of grants.

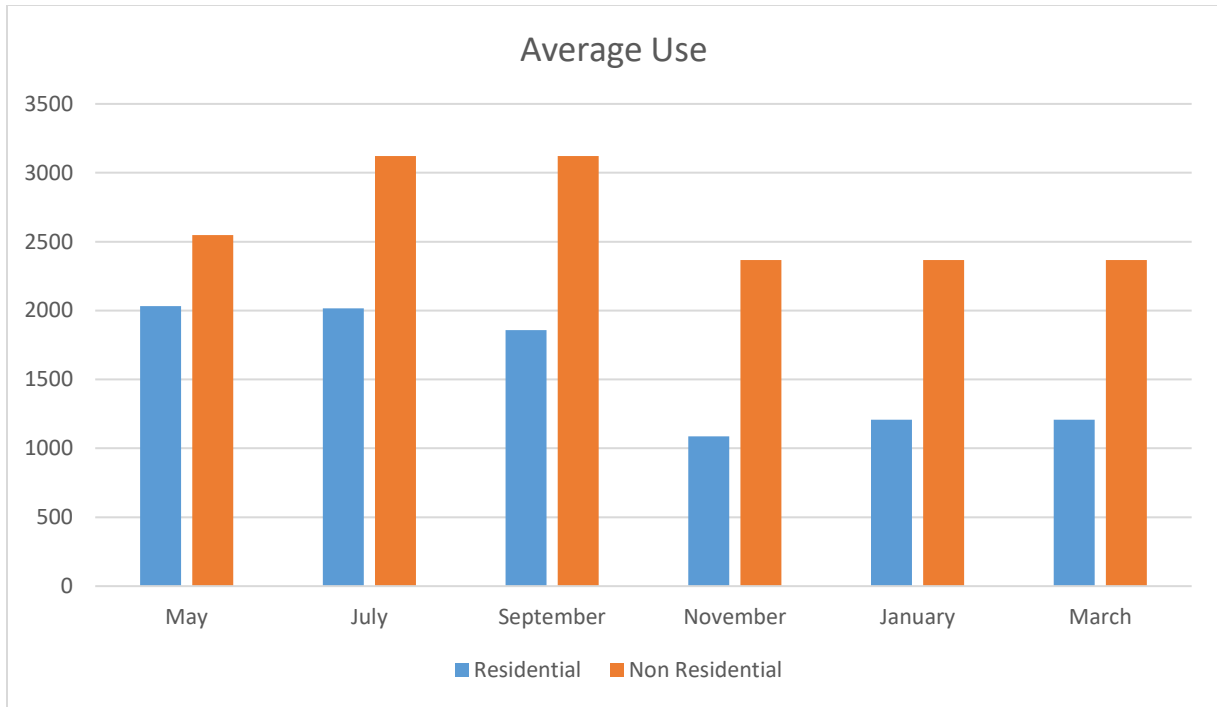
Customer Information

The system consists of primarily residential units. Although there are several large commercial customers, including a car wash that uses a large amount of water. The following graph illustrates the current use by customer class. Residential customers make up the bulk of the water usage each month with much more seasonal fluctuations than the non-residential customers.



The above chart also shows seasonal usage being highest in the warmer months. This is a common trend in water systems likely to continue.

The average use per customer is slightly higher for non-residential use than residential, as illustrated below.



Future population and usage projections

Pine Grove CSD is currently experiencing small population growth, approximately 0.25% growth per year. The system is also actively promoting conservation and intending to continue that trend. Therefore, this study assumes an annual conservation factor according to the schedule below.

Year 1	Year 2	Year 3	Year 4	Year 5
0.25%	0.50%	0.75%	1.00%	1.25%

Current Financial condition and analysis

Current Rate Structure

Pine Grove CSD currently utilizes a rate structure based partially on number of dwellings per connection and type of connection. The system also uses an increasing block method for usage charge. Residential rates include 500 cubic feet per connections, commercial rates do not include this rate. The system’s special rate classes include stand by, bulk sales and hydrant sales. The following rate structure represents current rates. RCAC expressed concern to the board regarding the current rate structure and Proposition 218. The various tiers, classes and included water each pose a different challenge to the law.

Base Rate

User Class	Current Rate
Residential	\$90.42
Commercial	\$96.22
Multi-unit	\$90.42 per unit
Stand by	\$55.00

Usage Rate

User Class	Tier	Cost per CF
Residential Multi-unit (per unit tier)	<501	\$0.00
	501-1,000	\$0.042
	1,001-2,000	\$0.047
	>2,000	\$0.058
Commercial	<1,001	\$0.047
	1,001-2,000	\$0.054
	>2,000	\$0.060
Bulk (per 1,000 gallons)		\$15.50
Water Hydrant (per gallon)		\$0.10

Current Budget

The Pine Grove CSD currently budgets for capital replacements, allowing them to save for reserves and make needed repairs. Annual reserve contributions have averaged \$176,000 before depreciation. The system can sufficiently cover any short lived assets and many long term assets.

A summary of the current financial conditions including the approved 2022 budget is included in the table below. A complete budget is included in Appendix A.

	2020	2021	2022
Total Operation and Maintenance Expenses:	233,235	221,657	217,042
Total General and Administrative Expenses:	128,390	\$54,060	\$70,071
TOTAL EXPENSES	361,365	\$275,717	\$287,113
TOTAL REVENUE	503,429	\$498,052	\$451,094
NET LOSS OR GAIN:	142,064	\$222,334	\$163,981
NET CASH FLOW (Contribution to Reserves)	142,064	\$222,334	\$163,981

Current Financial Indicators

Overall system health is illustrated through several key financial indicators. The below ratios highlight the overall viability of the system and their capacity.

Quick ratio is the quickest way to measure a systems solvency and ability to repay short term liabilities. A number over 1 is considered good for all industries. For this study the quick ratio is calculated using $(\text{Cash} + \text{Accounts Receivable}) / \text{Current Liabilities}$. The system had \$904,318 in current assets, including investments in LAIF, as of September 30, 2021. The large assets are primarily investments reserved for capital improvements so only the cash on hand of \$41,896 is considered in the quick ratio. The system has \$7,215 in receivables at this same time.

Current liabilities are limited to accounts payable and payroll liabilities. Although these are not divided on the financial statements by enterprise the ratio is still 17:1. This indicates a strong financial position, but a need to revisit investment and reserve policies.

Days of cash is used to determine how long a system can operate without utilizing reserves or liquidating assets if money were to stop coming in for any reason. The system has over 90 days in cash, which is sufficient for their current needs.

Current Reserve Status

The system's board has taken great care to save and invest for the future of the system. Therefore, all reserves are meeting or exceeding their current recommendations. The primary reserves for any system are describe below, along with the target and existing reserves for the Pine Grove CSD.

Operating reserve is used to operate the system without needing revolving credits. This is used to pay day to day operation expenses and is repaid each billing cycle. RCAC recommends 1.5 billing cycles worth of expense in operating reserves. As a system that bills by monthly this equates to 25% of the annual budget, or \$58,724, which is slightly below the current reserve requirements.

Emergency reserves are used to repair critical assets in the case of unexpected failures caused by disaster or emergency. RCAC recommends this reserve be kept at \$50,000 and easily accessible. The system does not currently have a designated reserve for emergency but can establish one with existing reserves.

Capital Replacement reserves have been established to replace existing capital as planned. The system currently has over \$750,000 in reserves for capital replacement. This reserve amount changes based on capital Replacement needs and future planning but requires annual contributions to maintain and plan.

RCAC recommends all surplus revenue be transferred to capital replacement reserves each fiscal year.

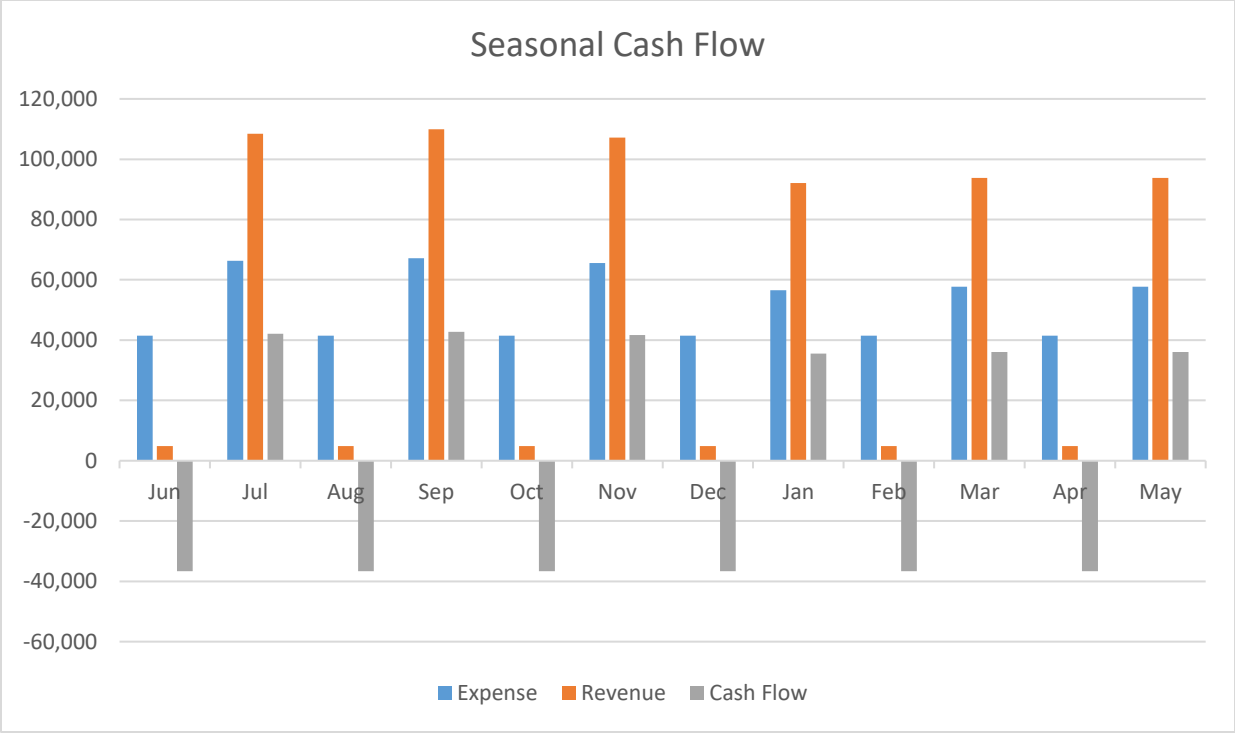
Analysis of current financial condition

Under the current rate structure, the system can cover operations and many of the system's long term infrastructure needs. Small reserves are set aside each year, but they are not sufficient to fund the system long term. The system needs to increase rates to replace their current reserves and increase contributions.

The current collections rate for the system is considered acceptable, including any arrearages caused by the COVID 19 Pandemic which have now been collected. This collection rate is sustainable long term with very few accounts being written off.

Seasonal Cash Flow

Pine Grove CSD collects sales revenue every two months with tax assessments and interest income recurring regularly. Expenses are typically paid every month. These combine to show monthly and seasonal cash flow inequalities as illustrated below:



Most Pine Grove water users do not exceed the 500 cf allowance so usage plays a very small role in revenue and minimizes seasonal fluctuations.

Future Financial condition and analysis

Capital projects planned

Pine Grove is currently applying for grant funding through the Water Resource Control Board to replace the majority of their distribution system. The planned replacements include all residential and commercial meters, all hydrants, distribution pipes and large valves. The majority of these assets last in excess of 40 years.

The current application grant is concluding in September of 2023, and further work will begin soon after to secure grant funding.

Suggested Capital Replacement Plan

Most of the Pine Grove system is being replaced in 2023 and therefore savings for replacement is spread out over the next 15-80 years. A complete CRP is in Appendix B. This includes both the assets replaced under the above mentioned plan and existing assets not to be replaced. Several key asset decisions the board made include initiating a meter replacement plan to spread the cost of meter replacement over several years.

Suggested reserve funding

The below reserves reflect targets based on RCAC’s cost analysis. Important factors contributing to these calculations are detailed below.

Operating reserve is designed to cover day to day operations of the system for 1.5 billing periods. In the case of Pine Grove, this is 90 days of operating cash. The CSD has \$234,897 in annual operating expenses, when reserve funding, debt service, and non-operating expense are removed from the calculations. This sets an operating reserve of \$58,724.

Emergency reserve should cover the most expensive critical asset repair or replacement in an emergency. The target for emergency reserve should be \$50,000.

The CSD does not have any funder imposed debt reserve.

Capital Replacement reserve for the next five years are outlined below:

	2023	2024	2025	2026	2027
Replacement of Existing Capital Assets	26,395	28,766	28,766	28,766	28,681
Replacement of Funded Project Assets	168,851	168,851	168,851	168,851	168,851
Total Capital Reserve Targets	195,246	197,618	197,618	197,618	197,532

The capitalization threshold for the CSD is \$1,000. Expenses below this cost are covered by yearly operations.

Suggested rates

There are three billing categories in the proposed rate structure. Standby customers, non-potable construction water, and standard customers.

- Standby customers will be for those customers who only occupy their homes seasonally but have a meter on their property and access water for fire protection and other emergencies.

- Non-potable hydrant water will be sold only to licensed contractors and those with active building permits using meters on the hydrants. This is an as needed water classification.
- Standard customers are all active users of the water system.

Proposed rate structure: All customers will use a uniform block rate, which includes a base rate and usage charge.

Proposed rate schedule

Standby fees will be 50% of the below standard fees.

Proposed Base Rate Schedule by Fiscal Year

Meter Size	2023	2024	2025	2026	2027
0.625	108.51	112.85	117.37	122.06	126.94
1.000	271.28	282.13	293.42	305.16	317.36
2.000	868.10	902.83	938.94	976.50	1,015.56
4.000	2,712.83	2,821.34	2,934.19	3,051.56	3,173.62

Usage per cubic foot of water consumed will be according to the following schedule.

Proposed Usage Rate Per Cubic Foot by Fiscal Year

User Status	2023	2024	2025	2026	2027
Standard	\$0.047	\$0.049	\$0.051	\$0.053	\$0.055
Standby	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Bulk/Hydrant	\$0.018	\$0.019	\$0.019	\$0.020	\$0.021

Impact of suggested rates on 5 year budget

The below table shows the resulting budget from the approved rates. The rates result in annual positive cash flow. The first two years the system will save less than their targeted reserves but will make the difference up in years three through five.

	2023	2024	2025	2026	2027
Total Operation and Maintenance Expenses:	234,897	238,653	247,873	257,473	267,469
Total General and Administrative Expenses:	\$352,947	\$358,008	\$360,238	\$362,535	\$364,816
TOTAL EXPENSES	\$596,684	\$604,217	\$614,020	\$625,917	\$637,869
TOTAL REVENUE	\$570,197	\$591,388	\$613,949	\$635,183	\$659,421
NET LOSS OR GAIN:	-\$17,647	-\$5,273	\$5,838	\$15,175	\$27,137
NET CASH FLOW (Contribution to Reserves)	\$177,599	\$192,344	\$203,455	\$212,793	\$224,669

Impact of suggested rates on Customer bills

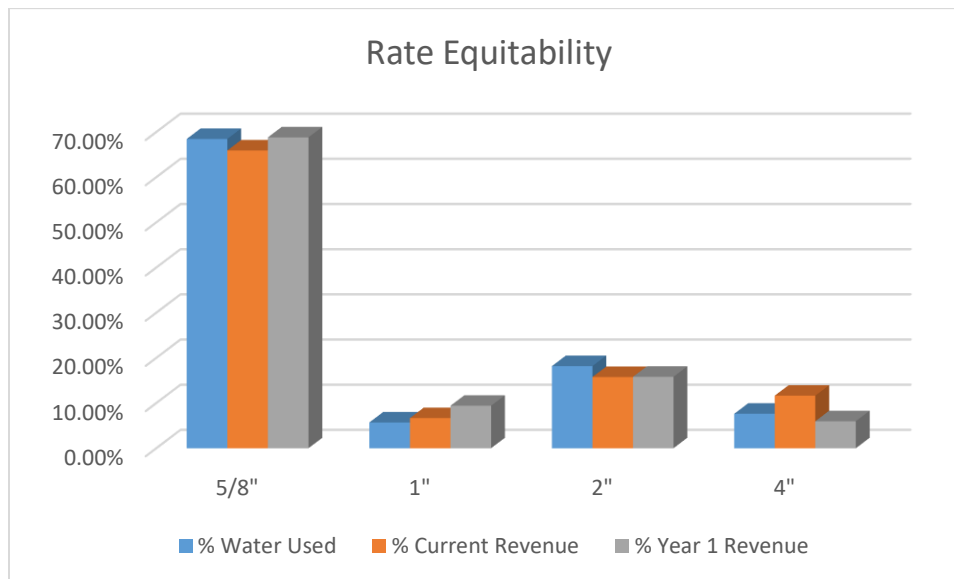
The above rates will impact the average customers based on meter size and will see moves toward a more equitable rate structure in upcoming bills.

	Current Rate	2023	2024	2025	2026	2027
5/8"	\$147.94	\$170.19	\$176.66	\$183.56	\$190.02	\$197.44
1"	\$229.72	\$348.50	\$362.01	\$376.28	\$390.24	\$405.62

2"	\$1,399.16	\$1,496.92	\$1,553.33	\$1,613.75	\$1,669.37	\$1,734.29
4"	\$8,998.81	\$5,087.59	\$5,278.00	\$5,482.64	\$5,668.23	\$5,887.94

The new rates make some progress toward equitability between 5/8" meter customers and 4" meter customers. However, because the usage among some 1" meter customers is low the new rates reflect less equitability for those one inch meters.

The CSD is considering reduction to a 5/8" meter bill for customers whose need for a 1" meter is dictated exclusively by building code. This would be a 5/8" meter customer who shows consistent historic use of the equal to or less than the median 5/8" meter customer. For decision making purposes the average 5/8" meter uses 1292 cubic feet per billing cycle.



Recommendations

Summary of rates and reserve funding

Rates

Meter Size	2023	2024	2025	2026	2027
0.625	108.51	112.85	117.37	122.06	126.94
1.000	271.28	282.13	293.42	305.16	317.36
2.000	868.10	902.83	938.94	976.50	1,015.56
4.000	2,712.83	2,821.34	2,934.19	3,051.56	3,173.62
Usage Fee/100 cf - Standard	\$0.047	\$0.049	\$0.051	\$0.053	\$0.055
Usage Fee/100 cf - Bulk/Hydrant	\$0.018	\$0.019	\$0.019	\$0.020	\$0.021

Standby fees will be 1/2 of the meter charge for the existing customer

Reserve Funding

The below table represents reserve targets for the next five years.

	2023	2024	2025	2026	2027
Operating Reserve (Ending Year Balance)	58,799	60,093	60,739	63,078	65,512
Emergency Reserve (Ending Year Balance)	50,000	50,000	50,000	50,000	50,000
Total Capital Reserve Targets (Annual Contribution)	195,246	197,618	197,618	197,618	197,532

Implementation of rate adjustments

Pine Grove CSD initiated the Prop 218 process in a board meeting and held the public hearing on May 11, 2022. Several objections were received; however, the number was not sufficient to stop the rate change.

Appendices

- A. Multi-year Budget
- B. Capital Replacement Plan

Budget
Pine Grove CSD

Date: 03/04/22
Inflation Factor (%): 3.00
Loan Interest Rate (%): 2.00
System Number: CA0310005

	2020	2021	2022	2023	2024	2025	2026	2027
OPERATIONS & MAINTENANCE EXPENSES								
Line Maintenance and Repairs		\$30,000	\$30,000	\$36,000	\$31,827	\$32,782	\$33,765	\$34,778
Water Analysis - Lab Fees		\$5,175	\$5,433	\$5,596	\$5,764	\$5,937	\$6,115	\$6,299
Water Supplies and Services		\$92	\$0	\$0	\$0	\$0	\$0	\$0
Automobile - Gasoline		\$715	\$950	\$979	\$1,008	\$1,038	\$1,069	\$1,101
Automobile - Repairs		\$6,011	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637
Water Purchase		\$78,608	\$89,193	\$98,112	\$103,018	\$108,169	\$113,577	\$119,256
Salaries		\$69,821	\$68,007	\$70,048	\$72,149	\$74,314	\$76,543	\$78,839
Payroll Expenses		\$7,655	\$7,537	\$7,763	\$7,996	\$8,236	\$8,483	\$8,737
Repairs & Maintenance		\$10,614	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478
Electric		\$6,801	\$7,481	\$7,706	\$7,937	\$8,175	\$8,420	\$8,673
Sewer		\$3,245	\$1,440	\$1,483	\$1,528	\$1,574	\$1,621	\$1,669
Trash		\$2,920	\$0	\$0	\$0	\$0	\$0	\$0
Total Operation and Maintenance Expenses:	233,235	221,657	217,042	234,897	238,653	247,873	257,473	267,469

Budget
Pine Grove CSD

Date: 03/04/22
Inflation Factor (%): 3.00
Loan Interest Rate (%): 2.00
System Number: CA0310005

	2020	2021	2022	2023	2024	2025	2026	2027
Operating Reserve Funding				\$0	\$0	\$0	\$0	\$0
Emergency Reserve Funding				\$0	\$0	\$0	\$0	\$0
Debt Reserve Funding				\$0	\$0	\$0	\$0	\$0
Replacement of Existing Capital Assets				\$26,395	\$28,766	\$28,766	\$28,766	\$28,681
Replacement of Funded Project Assets				\$168,851	\$168,851	\$168,851	\$168,851	\$168,851
Reserves for Additional Capital Assets				\$0	\$0	\$0	\$0	\$0
Debt Service				\$85,528	\$86,053	\$86,053	\$86,053	\$86,053
Bank Service Charges		\$85	\$85	\$88	\$90	\$93	\$96	\$99
Cleaning Janitorial		\$79	\$100	\$103	\$106	\$109	\$113	\$116
Computer & Internet Expenses		\$1,853	\$1,853	\$1,909	\$1,966	\$2,025	\$2,086	\$2,148
Dues & Subscriptions		\$4,000	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502	\$4,637
Insurance Expense		\$3,716	\$4,087	\$4,210	\$4,336	\$4,466	\$4,600	\$4,738
Licenses & Permits		\$800	\$800	\$824	\$849	\$874	\$900	\$927
Meals & Entertainment		\$91	\$250	\$258	\$265	\$273	\$281	\$290
Memberships		\$1,600	\$1,600	\$1,648	\$1,697	\$1,748	\$1,801	\$1,855
Office Supplies		\$15,024	\$15,576	\$16,043	\$16,524	\$17,020	\$17,530	\$18,056
Postage & Delivery		\$1,864	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478
Accounting		\$14,133	\$14,840	\$15,285	\$15,744	\$16,216	\$16,703	\$17,204
Audit		\$4,900	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441	\$8,695
Legal		\$2,032	\$7,000	\$7,210	\$7,426	\$7,649	\$7,879	\$8,115
Rent Expense		\$310	\$1,980	\$2,039	\$2,101	\$2,164	\$2,229	\$2,295
Telephone Expense		\$3,294	\$3,300	\$3,399	\$3,501	\$3,606	\$3,714	\$3,826
Training/Education		\$0	\$2,500	\$2,575	\$2,652	\$2,732	\$2,814	\$2,898
Travel Expense		\$280	\$1,600	\$1,648	\$1,697	\$1,748	\$1,801	\$1,855
Total General and Administrative Expenses:	128,390	\$54,060	\$70,071	\$352,947	\$358,008	\$360,238	\$362,535	\$364,816
TOTAL EXPENSES	361,365	\$275,717	\$287,113	\$596,684	\$604,217	\$614,020	\$625,917	\$637,869

Budget
Pine Grove CSD

Date: 03/04/22
Inflation Factor (%): 3.00
Loan Interest Rate (%): 2.00
System Number: CA0310005

SOURCE OF FUNDS / REVENUES RECEIVED

Sales Revenue (Base + Usage)		\$437,811	\$384,654	\$519,942	\$539,673	\$560,731	\$580,414	\$603,060
New connections				\$0	\$0	\$0	\$0	\$0
Interest income		\$2,000	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377	\$3,478
Uncollectable Receivables				-\$1,040	-\$1,079	-\$1,121	-\$1,161	-\$1,206
Reconnect/Admin				\$0	\$0	\$0	\$0	\$0
Fees Late/NSF				\$0	\$0	\$0	\$0	\$0
Participation Fee		\$6,300	\$12,600	\$0	\$0	\$0	\$0	\$0
Assessment		\$44,000	\$44,220	\$45,547	\$46,913	\$48,320	\$49,770	\$51,263
Meter Installation Fees			\$1,300	\$1,339	\$1,379	\$1,421	\$1,463	\$1,507
Backflow Valves		\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320	\$1,320
Bulk Sales		\$6,621	\$4,000					
TOTAL REVENUE	503,429	\$498,052	\$451,094	\$570,197	\$591,388	\$613,949	\$635,183	\$659,421
NET LOSS OR GAIN:	142,064	\$222,334	\$163,981	-\$17,647	-\$5,273	\$5,838	\$15,175	\$27,137
NET CASH FLOW (Contribution to Reserves)	142,064	\$222,334	\$163,981	\$177,599	\$192,344	\$203,455	\$212,793	\$224,669

Affordability assuming MHI of \$60901 for residential meters. 2.06% 2.14% 2.22% 2.30% 2.39%

Does the Budget Balance?	No	No	Yes	Yes	Yes
Positive Annual Cash Flow?	Yes	Yes	Yes	Yes	Yes

Capital Replacement Program
Pine Grove CSD

AWWA Cash-Needs Approach

Exhibit 1

Date: 3/4/22

System Number: CA0310005

Service Connections: 388

Quantity	Asset	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Normal	Current Age	Estimated Current Cost	Planned	Estimated	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual
					Estimated Life			Remaining Life	Remaining Life						Reserve Required
Replacement of Existing Capital Assets															
1	SCADA System	1985	19,000	H	20	37	47,374	-17	1	\$34,316	25%	50%	25%	10,521	-1942.18
1	4' Rock Wall near meter	2006	8,000	C	20	16	8,000	4	4	\$9,004	100%	0%	0%	7,107	457.4854
1	Ditch Witch Line Locator	2021	4,500	H	10	1	4,613	9	5	\$6,048	100%	0%	0%	4,098	377.9778
1	Generator for Building	1996	12,000	C	30	26	3,960	4	4	\$4,457	100%	0%	0%	3,518	226.4553
1	MetroTech HL90 Leak Locator (HL901532)	2010	1,615	H	15	12	2,172	3	5	\$2,516	100%	0%	0%	1,930	112.3136
1	Milwaukee Demo Hammer	2010	1,915	C	20	12	1,915	8	5	\$2,220	100%	0%	0%	1,701	99.34226
1	3" pump with hose	2011	5,000	H	20	11	6,560	9	10	\$9,031	100%	0%	0%	5,828	300.1201
1	Tank Yard Fence	1999	1,590	H	20	23	2,806	-3	15	\$2,872	100%	0%	0%	2,492	18.66964
1	4" Monitoring Meter	2016	18,693	H	25	6	21,678	19	20	\$39,138	25%	0%	75%	4,814	225.6756
1	District Office Building	1965	77,579	H	50	57	158,480	-7	20	\$170,049	15%	85%	0%	21,118	159.9437
2	Monitoring Meters #2 & #3	2016	8,992	H	25	6	20,856	19	20	\$37,655	25%	0%	75%	4,632	217.1195
1	Tank to 88 Pipeline	2015	516,109	H	50	7	613,491	43	44	\$2,262,573	15%	85%	0%	81,750	5057.169
1	500,000 gal steel water tank	2019	2,244,716	H	50	3	2,417,314	47	47	\$9,840,624	15%	85%	0%	322,117	21084.96
Subtotal Replacement of Existing Capital Assets							3,752,041			12,909,888	15%	84%	1%	471,626	35,235
Replacement of Funded Project Assets															
Quantity	Asset	Year Acquired	Unit Cost (Current or Future)	Cost Type (C, F)	Normal Life	Time to Complete	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
325	Residential Water Meters	2022	2,500	C	20	0	812,500	20	21	1,511,489	100%	0%	0%	124,991	62,491
64	Commerical Water Meters	2022	2,500	C	20	0	160,000	20	21	297,647	100%	0%	0%	24,614	12,306
2500	10" Ductile Iron Pipe	2022	256	C	100	0	640,575	100	101	12,680,304	5%	80%	15%	4,927	4,792
8	10" Gate Valves	2022	5,475	C	40	0	43,800	40	41	147,164	5%	80%	15%	337	154
38	12" Butterfly Valves	2022	6,570	C	40	0	249,660	40	41	838,832	10%	75%	15%	3,841	1,755
9900	12" Ductile Iron Pipe	2022	256	C	100	0	2,536,677	100	101	50,214,006	5%	80%	15%	19,511	18,975
1500	16" Ductile Iron Pipe	2022	313	C	100	0	469,755	100	101	9,298,890	5%	80%	15%	3,613	3,514
33	2" CAV	2022	8,213	C	25	0	271,013	25	26	584,463	10%	75%	15%	4,169	1,950
14900	6" Ductile Iron Pipe	2022	142	C	100	0	2,121,015	100	101	41,985,897	5%	80%	15%	16,314	15,866
32	6" Gate Valve	2022	3,285	C	40	0	105,120	40	41	353,193	20%	50%	30%	3,234	1,478
12970	8" Ductile Iron Pipe	2022	214	C	100	0	2,769,419	100	101	54,821,183	5%	80%	15%	21,302	20,716
58	8" Gate Valves	2022	4,380	C	40	0	254,040	40	41	853,549	10%	80%	10%	3,908	1,786
80	Fire Hydrants	2022	13,140	C	50	0	1,051,200	50	51	4,746,613	25%	50%	25%	40,428	19,692
225	Service Laterals	2022	2,135	C	40	0	480,431	40	41	1,614,200	10%	60%	30%	7,391	3,377
Subtotal Replacement of Funded Project Assets							11,965,205			179,947,430	7%	78%	15%	278,579	168,851
Total Capital Reserves							15,717,246			192,857,318	7%	79%	14%	750,205	204,086