Planning • Management • Engineering
P.O. Box 123 • Port Orchard, WA 98366 • 888-881-0958 • 360-876-0958

March 12, 2021
Scott Lake Maintenance Company
2631 114th Way
Olympia, WA 98512

Dear Scott Lake Maintenance Company:

Northwest Water Systems, Inc. has conducted the attached Water Rate Study for the Scott Lake Water System with the purpose of determining a sufficient reserves budget and proposing rate structures in order to sustainably support the water system into the future.

Northwest Water Systems is not setting your rates or reserve funding targets but providing detailed information and recommendations so that you can decide on the water rates adequate for your community. The rates that we discuss are a suggestion of what the water rates should be in order to continue with regular operations and adequately fund long-term infrastructure goals.

After reviewing your system infrastructure condition and current finances, we developed three rate scenarios, which are discussed in Section 6.2 of the report. These are intended to align with several different rate options or funding strategies that you may consider.

The baseline "Rate Structure A" is not a viable option, but is included for comparison as it represents what the rates would default to after the $18.28 assessment is finished, if no other action is taken. This would almost certainly result in reliance on loans or special assessments for funding significant replacement projects, as there would not be adequate reserve savings to fund them internally. On the other end of the spectrum is a more aggressive rate structure that would provide adequate reserves to fund all replacements. We recommend pursuing this structure (termed "Rate Structure C" in the report), as it will allow for increased contributions to your reserves with the expectation that future replacements will then be able to be internally funded. This proposed rate structure is as follows:

Rate Structure C

Tier	Use Range	Rate	Estimated Average Fee
Base Rate	0 – 700 cu.ft.	$75.00	$75.00
Tier 1	701 - 1,000 cu.ft.	$1.25 / 100 cu.ft.	$0.28
Tier 2	1,001 - 1,500 cu.ft.	$1.75 / 100 cu.ft.	$0.89
Tier 3	above 1,500 cu.ft.	$2.00 / 100 cu.ft.	$0.61
Total			**$76.79**

Note that we recommend that the water use allocated to the base rate or lowest tier be reduced from 1,000 cubic feet per month to 700 cubic feet per month, as this is more typical and a better reflection of average use within your system.

The proposed Rate Structure C represents a significant increase from existing rates. As discussed in the following rate study, instituting a lower rate structure than that proposed will likely only postpone eventual rate hikes, as significant infrastructure replacement will otherwise be financed via loans with resultant rate increases then necessitated to meet repayment. Institution of the proposed rate now is intended to smooth any future increases (other than annual adjustment for inflation). An option for transitioning from the existing rate structure to the proposed rate structure is found in the attached rate study.

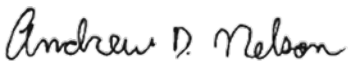
Although we evaluate Scott Lake Water System's current and future operating costs and offer rate structure suggestions, a Rate Study is only a "snapshot in time", therefore, we recommend this Rate Study be updated periodically. Without regular updates to the rate study, the mathematical calculations and funding models may very well lose their accuracy and affect your long-term goals.

When considering the proposed increased rates, it is important to keep in mind the following key factors that necessitate a higher water rate:

1. The rates have historically been very low and inadequate to provide proper funding for upcoming repairs and replacement projects. The proposed rates are to some degree making up for past years of under-funding the reserves.
2. The community HOA fee is very low (only $10) which is not adequate to support the non-water related expenses of the community. Because this rate is written in the bylaws and not easily changed, the water rate has to make up for the low HOA fee.
3. Simply put, water infrastructure and components are expensive, and have become increasingly so during recent years. Water rates need to be periodically adjusted to account for current market costs of equipment and labor, and it has been some time since Scott Lake's water rates have had a proper adjustment.

Please feel free to contact me with any questions you may have regarding our analysis or assumptions. We hope that this study proves to be a useful planning tool for your system.

Sincerely,



Andrew Nelson, Design Engineer

NORTHWEST WATER SYSTEMS, INC.

2021
Water Rate and Reserve Study

prepared for the

Scott Lake Maintenance Company

Board of Trustees

by

Northwest Water Systems, Inc.

Planning • Management • Engineering

P.O. Box 123 • Port Orchard, WA 98366 • 888-881-0958 • 360-876-0958

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Chapter 1 Overview

This report has been prepared by Northwest Water Systems in order to determine the recommended reserve funding and rate structure for the Scott Lake Water System. It is designed to assist the Scott Lake Board of Trustees in making decisions and is not intended for submission to the Washington State Department of Health nor the Utilities and Transportation Commission.

This comprehensive Rate and Reserve Study will help guide the SLMC Board in their budgeting decisions related to the reserve account and make practical suggestions so that SLMC can continue to adequately maintain the Water System's infrastructure and meet their obligations to the Scott Lake community.

The analysis is based on a starting reserves and savings balance of $770,000 and projects the necessary savings amounts to fund all future capital replacements. It is assumed that portions of the current reserves will be allocated for an operating reserve, emergency reserve, short-term replacement reserve, and long-term replacement reserve, as discussed in Section 3.2. Only active billed connections are used in development of water rate structure recommendations; growth projections of two additional connections per year are used for the 10-year budget forecast.

This report estimates the system costs and revenue that will be required to maintain the Scott Lake Water System over the long term and proposes options for updating the base and tiered rates to meet those long-term objectives. The proposed water rate will provide sufficient revenue to: (1) meet the day-to-day operations expenses and (2) build significant financial reserves to adequately fund the water system's future capital costs without imposing an undue burden on the customers. **The existing rates are inadequate to properly fund the system and are not sustainable.** Furthermore, because of the many years of low rates, the current level of reserve funding is substantially lower than needed for several major upcoming replacement projects.

Please note that this analysis is for the water rate, which is separate from the HOA fee. It should also be acknowledged that the $10 HOA fee is low, and the water rate therefore has to help make up some of the funding for non-water related community expenses.

1.1 Sources and Historical Records

This evaluation utilizes system maps, usage data, annual budgets, financial records provided by Scott Lake, data from the Washington State Department of Health records, and the system's latest Water System Plan.

The most recent financial records available for review were from the 2018-2019, 2019-2020, 2020-2021, and draft 2021-2022 fiscal year budgets, which are included in the Appendix. Note that the earlier budgets were not necessarily a realistic reflection of Scott Lake's expenses. The draft 2021-2022 budget is intended to be a more realistic estimate, and was used as the primary basis for the values in the 10-Year Operational Budget in Section 4.4 of this report.

1.2 Description of Water System

The Scott Lake Water System is an existing Group A Community water system located in Thurston County, Washington that serves the Scott Lake community. The community is comprised 1,450 full-time residents according to the latest Water Facilities Inventory Report. The system serves 590 active metered connections.

The water system is owned and operated by the Scott Lake Maintenance Company (SLMC). The Board of Trustees oversees the management of the water system funding.

1.3 Water System Demographics

The Scott Lake water system service area consists of primarily permanent single-family residences. There are also several non-residential connections, namely the community center, fire station, and convenience store. The focus of this study is on the residential connections and water rates, as they comprise the majority of water use and revenue.

Recent history indicates a gradual growth trend toward buildout with between 1 and 3 connections added per year. Therefore, it is assumed for budgetary purposes that the total number of connections will increase by an average of 2 each year.

Chapter 2 Assumptions

2.1 Component Inventory and Lifespan

For rate studies conducted for UTC exempt water systems, estimated lifespan is based on typical lifespan we have seen in the field rather than on standard depreciation schedules. We find that for properly installed and operated components that typical lifespan is significantly greater than lifespan given in depreciation schedules and therefore is the better measure for reserve planning. Our field observations are based both on our engineering experience and on the input of our water system operational and maintenance divisions and of contractors we frequently work with.

The life span of equipment can vary greatly even from the same supplier and under similar operational and maintenance conditions. In the absence of information to the contrary it is necessary to make the assumption that equipment is properly sized, installed, operated, and maintained. Lifespan is estimated based on average lifespan seen for the component under these conditions. For example, an improperly sized pump or pump operating with a failed pressure tank will fail prematurely. A properly sized pump pumping at design flow against constant head for several extended cycles per day (such as pumping to a reservoir) will typically last longer than average. Similarly, water mains installed in high traffic or unstable areas, with significant point stress (due to rocky bedding or excessive path curvature), near large tree roots, or using substandard materials or installation techniques will often fail prematurely.

When current condition of components can be reasonably known (such as for reservoirs, pumphouse buildings, etc) lifespan estimates are modified by results of inspection or other history. Otherwise, average lifespan as discussed above is utilized in calculating component lifespan.

2.2 Operational and Replacement Cost

The inventory of components is as complete and detailed as is necessary to satisfy the planning needs of the water system. It is typical that a component line item includes the cost of the component itself, as well as installation, installation of any commonly necessary appurtenances, and other requirements such as typical permitting and engineering as required; in some cases such additional items are broken out into their own line items. A certain level of economy of scale is also assumed by necessity. Prices for smaller items such as valve replacement are not intended to represent cost to replace one individual component, rather they represent cost per unit for a more comprehensive replacement of a number of units or of an entire section of distribution system along with the valves, etc.

As with component lifespan, cost to replace a given component is subject to significant variation based on site conditions, the contractor selected, state of the economy, etc. It is not uncommon to see variation of 50% - 100% or more between bids for the same scope of work. Costs of capital replacement utilized in this report represent recent averages for similar scope of work and in some cases are based on actual invoices for work performed on the Scott Lake system.

It is assumed that inflation will average 3%, as has been historically recorded in the "Consumer Price Index" (CPI). Although water systems are comprised primarily of items that may not follow the CPI, it is nevertheless the best assumption that is available. Ideally, long-term reserves will be placed in interest bearing savings instruments (investments) that will exceed inflation; however, this is often difficult to achieve for “safe” investments. A 1.5% annual rate of return is assumed for long-term reserves. This

assumption should be updated in future rate studies based on actual return of investment vehicles available to SLMC. Projections of future reserves are done in “present worth” or 2021 dollars.

2.3 Capital Funding Mechanism

There are numerous capital improvement and replacement program funding mechanisms available. The best method, if feasible, is internally funding via available reserves. If internal funding is not feasible a commercial loan may be sought, though these are often difficult to secure due to the lack of familiarity of many commercial lending institutions with funding water utility projects. Baring the above mechanisms state and federal loans and grants are often available, some of the most common being Block Grants, State Revolving Fund, and USDA Rural Development loans. Advantages of these programs are low interest rates and extended payback periods, and at times grant money or loan forgiveness. Disadvantages are that these programs can be time consuming to obtain and can delay a project, and that they impose a number of additional requirements on the project. Additional requirements vary, but can include environmental and archeological studies, prevailing wage, US Iron and Steel, and a generally higher level of project management and oversite, including mandatory public bid process. Costs associated with funding type are not included in component cost estimates of this report.

2.4 Rate Recommendations

Rate recommendations of this report are based on gradual growth in the customer base with no significant income from connection fees. Average operational and repair costs of the past several years are extrapolated based on the aforementioned assumed rate of inflation.

After institution of the recommended rate structure, an annual increase of 3% is assumed to compensate for inflation. It is recommended that the system re-evaluate its financial condition each year and make adjustments for actual O&M expenses and changes to capital planning as appropriate.

Chapter 3 Water Distribution System Components

3.1 Useful Life of Critical Capital Facilities

Components that are not expected to require imminent replacement are not discussed here, but are listed in the component inventory. However, we identified several components that may need to be addressed within the next several years. These are discussed below and should be kept in mind when considering near-term replacement expenses.

- Records are unavailable indicating if or when the original pumps in Wells #2, #4, and #6 have been replaced. It is therefore possible that one or multiple of these pumps will need to be replaced within the next 10 years.
- The chlorine treatment system was originally installed in 2002. The chlorine injection pump may be nearing the end of its useful life and need replacement within the next several years.
- The backup generators and propane tanks at the well field and lift station appear to be original. The system should be prepared for major service or replacement of this equipment.
- It is unclear if or when the booster pumps at the lift station and one of the pumps at the upper reservoir site have been replaced. Replacement of these pumps may be necessary within this 10-year planning period.
- Most of the distribution system valves and portions of the water line (primarily the 2" poly pipe and service laterals) are in urgent need of replacement. This will likely be a focus for the system for the next several years.
- Reservoir life has been estimated based on the presently available information. However, they are due for cleaning, sealing, and overall inspection, which may reveal the need for more significant repair work or a shorter expected remaining lifetime.

Replacement of the distribution system is nearly always the largest expense a water system will ever face. As the distribution system ages it is common to have an increasing trend of leakage and breakage. At some point the distribution system becomes untenable on either or both the basis of health and reliability or of maintenance and cost. It is paramount that distribution replacement is anticipated before this point is reached, as replacement is a large capital project requiring a significant lead time in order to obtain engineering and financing, not to mention to execute the installation itself. It should also be noted that performing mainline replacements at the same time as major road work or repaving in the community can save substantial sums of money and should be scheduled accordingly. Even if a given section of distribution pipe is expected to have several more years of useful life, it is almost always cost effective to replace it "early" while the road is already torn up rather can coming back several years later. We strongly recommend coordinating the scheduling of waterline and road work projects.

Replacement planning recommendations of this report primarily focus on age of existing infrastructure as this is the primary metric for which reliable information is available. However, one of the best indicators that distribution replacement should be planned for in the near future is an increasing trend of distribution system leakage and line breakages. We highly recommend that SLMC consider these distribution system trends in their ongoing capital planning.

3.2 Replacement Cost of Existing Capital Facilities

Replacement cost of existing capital equipment is calculated by assignment of an estimated present worth replacement cost (cost to replace the component in 2021) and then applying inflation over the timespan from the present until the date of anticipated replacement as calculated in the previous section.

Present Value: PV
Number of Years until Replacement: n
Inflation Rate: i
Future Value: $FV = PV(1 + i)^n$

Existing reserves are applied to meet the cost of components anticipated to require replacement in the near term. For the remainder a recommended annual reserve contribution for each component is then calculated based on meeting the estimated cost (FV) at the date of replacement, with a reserve fund yield rate applied to reserves via Future Value Payment.

Reserve interest yield: r
Adjusted Annual Reserve Contribution: $PMT = \frac{FV(r-i)}{(1+r)^n-(1+i)^n}$

Summing the annual reserve contribution across all components yields a total recommended annual capital replacement reserve contribution, which is further subdivided into short term and long-term asset payments. Short term assets consist of components with a calculated service lifespan of 15 years or less, and include items such as service meters and bladder tanks. Long term assets have an estimated service life in excess of 15 years, and typically include distribution piping, reservoirs, buildings, and pumps.

As mentioned above in Chapter 1, it is assumed that the total existing funding will be allocated to four distinct reserve funds. The following paragraphs discuss each of these funds and the assumptions or recommendations made regarding the initial balance allocated to each reserve fund, target balance, and annual contribution. The 10-Year Budget in Section 4.4 provides a full summary of each reserve's funding and contributions.

Short-Term Reserves should be well funded on an ongoing basis in order to assure reserves are in place for short term replacement expenses. Annual short-term reserve contributions of about $35,000 (indexed to inflation) are recommended, assuming a starting balance of $165,000. These funds should be readily accessible as they are intended to cover near term replacement costs that are not planned years in advance.

Additionally, we recommend having an **Emergency Reserve** in place to cover unexpected and immediate repairs. Ideally, this fund is large enough to cover the most expensive critical item in the system which could fail with little or no warning. For the Scott Lake system, the most expensive items are the reservoirs, calcite treatment system, well site generator, and wells / well pumps. It is unlikely that a reservoir or the treatment system will fail catastrophically or suddenly – it is more reasonable to assume that minor repairs could be made until reserves are adequate to replace them. Therefore, we recommend having an emergency fund that is capable of covering a new well and well pump installation. The estimated cost to replace one of the larger wells (including new Source Approval), the pump, and related appurtenances is between $45,000 and $50,000. Therefore, we recommend maintaining an emergency fund with a minimum balance of $50,000. This amount would also be adequate to cover multiple less expensive

emergencies within the same year, such as several of the larger well or booster pumps or generators failing. This value should be adjusted for inflation each year.

We also recommend that an **Operating Reserve** be maintained with a balance of 10 - 12% your annual operating budget. For your system, we estimate this to be about $60,000. This account is meant for routine operation and maintenance costs and can cover some moderate replacements without needing to dip into the emergency fund.

The **Long-Term Reserve** contribution represents the contribution estimated to be necessary in order to fully fund all long-term capital replacements from reserves only. The estimated annual long-term reserve contribution necessary to fully fund all future capital replacement from reserves is $165,000 indexed to inflation, based on a starting balance of $500,000. Even if external funding is pursued for large projects, a modest long-term reserves balance should be available to fund smaller discrete projects (typically less than $100,000) which must be executed on short timelines and therefore cannot be aggregated into a larger capital project. This would often include replacement of pumps, pumphouses, telemetry, backup generators, and sometimes sources. Replacement of the largest class of capital equipment such as reservoirs and distribution system divisions are typically planned well in advance and are therefore acceptable candidates for external funding.

The following table provides a summary of the infrastructure and equipment we analyzed, our assessment of each component's remaining life, and the estimated replacement cost. This forms the basis for determining an adequate budget and water rate for your system.

Component	Year Installed	Service Life	Age	Assessed Remaining Life	Current Unit Price	Units	Current Replacement Cost	Cost at Next Replacement
Well #2, 6" x 35', and Source Approval	1972	80	49	31	$20,000	1	$20,000	$50,002
Well #4, 8" x 40', and Source Approval	1976	80	45	35	$22,000	1	$22,000	$61,905
Well #5, 8" x 40', and Source Approval	1982	80	39	41	$22,000	1	$22,000	$73,918
Well #6, 8" x 41', and Source Approval	1986	80	35	45	$22,000	1	$22,000	$83,195
Well #2 Pump (7.5-HP), Controls, Drop Pipe	1972	30	49	1	$20,000	1	$20,000	$20,600
Well #4 Pump (15-HP), Controls, Drop Pipe	1976	30	45	1	$25,000	1	$25,000	$25,750
Well #5 Pump (15-HP), Controls, Drop Pipe	2020	30	1	29	$25,000	1	$25,000	$58,914
Well #6 Pump (15-HP), Controls, Drop Pipe	1986	30	35	1	$25,000	1	$25,000	$25,750
Chlorine Injection Pump and Tank*	2002	15	19	5	$1,000	1	$1,000	$1,159
Chlorine Contact Pipe, 12"	2002	80	19	61	$120	100	$12,000	$72,820
Hydropneumatic Tank, 3,000 gallons*	1972	55	49	10	$20,000	1	$20,000	$26,878
Air Compressor, Speedaire 3-gal	1972	15	49	1	$500	1	$500	$515
Generator, Cummins 60 KW, propane	1972	50	49	1	$35,000	1	$35,000	$36,050
Propane Tank, 500 gallons	1972	40	49	1	$2,000	1	$2,000	$2,060
Pump House	1972	60	49	11	$20,000	1	$20,000	$27,685
Treatment Facility, 22' x 34'	2002	60	19	41	$20,000	1	$20,000	$67,198
Limestone Contact Tanks	2002	40	19	21	$20,000	7	$140,000	$260,441
Well Site Fence	2019	50	2	48	$10,000	1	$10,000	$41,323
Concrete Reservoir at Lift Station, 80k-gal	1972	80	49	31	$150,000	1	$150,000	$375,012
Generator, Cummins 20 kW, propane	1986	30	35	1	$12,000	1	$12,000	$12,360
Propane Tank, 250 gallons	1986	40	35	5	$1,500	1	$1,500	$1,739
Lift Station Building, concrete block	1986	80	35	45	$5,000	1	$5,000	$18,908
Booster Pump 1, 5 HP, 100-gpm	1986	30	35	1	$9,000	1	$9,000	$9,270
Booster Pump 2, 5 HP, 100-gpm	1986	30	35	1	$9,000	1	$9,000	$9,270
Lift Station Fencing	1986	50	35	15	$10,000	1	$10,000	$15,580
Upper Reservoir, Steel, 60k-gal, 21'x24'	1986	80	35	45	$135,000	1	$135,000	$510,515
Booster Building	1986	60	35	25	$10,000	1	$10,000	$20,938
Generator, Kohler 14 kW, propane	2019	30	2	28	$11,000	1	$11,000	$25,167
Propane Tank, 250 gallons	1986	40	35	5	$1,500	1	$1,500	$1,739
Booster Pump 3, 3 HP, 100-gpm*	1986	30	35	5	$7,000	1	$7,000	$8,115
Booster Pump 4, 3-HP, 100-gpm	2020	30	1	29	$7,000	1	$7,000	$16,496
Bladder Tanks, 34-gallon	2015	10	6	4	$500	12	$6,000	$6,753
Reservoir Site Fencing	1986	50	35	15	$5,000	1	$5,000	$7,790
Telemetry System	2010	20	11	9	$20,000	1	$20,000	$26,095
2" Pipe, Poly	1976	50	45	5	$50	7300	$365,000	$423,135
4" Pipe, AC*	1976	75	45	20	$60	23275	$1,396,500	$2,522,234
6" Pipe, AC	1976	75	45	30	$70	10900	$763,000	$1,852,001
8" Pipe, PVC	1986	75	35	40	$80	1200	$96,000	$313,156
2" and 4" Valves (estimated quantity)*	1976	30	45	2	$800	130	$104,000	$110,334
6" Valves (estimated quantity)*	1976	30	45	2	$1,000	50	$50,000	$53,045
8" Valves (estimated quantity)*	1986	30	35	2	$1,200	20	$24,000	$25,462
Service Laterals*	1976	75	45	5	$1,200	590	$708,000	$820,766
Service Meters*	2004	15	17	8	$350	590	$206,500	$261,588
Meter Setters	2004	25	17	8	$300	590	$177,000	$224,218

*Components marked with an asterisk (*) have been given an Assessed Life based on their apparent condition or estimated replacement schedule which is different than the otherwise calculated remaining life given the assumed installation date and typical service life.

Chapter 4 Revenue and Expenses

4.1 Revenue

Current revenue is based on an average water rate (including current assessments) of roughly $50 per month per connection. This is comprised of a $22 base water rate, a $10 replacement reserve assessment, and an $18.28 special assessment for repayment of a reserve withdrawal. The proposed rate structure in this study will consolidate the $10 assessment into the base water rate, while leaving the $18.28 repayment assessment as a separate fee, which is scheduled to end in two years.

There is also a $10 per month HOA fee which we consider to be separate from the water rate. This is represented in the "Non-Water Income" line in the proposed 10-year budget below in Section 4.4, which also includes income from the cell tower lease and other miscellaneous income not directly related to the water system.

4.2 Expenses

Operating expense estimates in this report are based primarily on past budgets, current records and forecasts. The water system is not expected to experience rapid growth or changes in usage so capital improvements are not expected to significantly impact the operational expenses. It is therefore safe to assume that when indexed to inflation, most operational expenses will remain relatively unchanged.

The largest contributor to the operations and maintenance expense is the day-to-day system management and labor costs, and minor repairs. For our analysis, we assumed labor costs would remain consistent over the planning period aside from annual adjustments for inflation. Electrical usage is generally proportional to water usage and is expected to remain relatively constant on a yearly basis.

The total for general expenses (which does not include reserve funding) is approximately $447,000 and is expected to increase annually with inflation.

4.3 Existing Reserves

As noted above, the total initial funds available is approximately $770,000. These funds should be allocated to the four reserve accounts discussed above in Section 3.2: Operating Reserve, Emergency Reserve, Short-Term Asset Reserve, and Long-Term Asset Reserve.

It is advised that long-term reserve funds be placed in interest bearing savings instruments; an average yield of 1.5% on the long-term reserve account is assumed in this rate study. It is recommended that SLMC keep their short-term replacement reserves in liquid investments. The emergency reserve and operational reserve must be readily available and should be maintained in FDIC insured savings accounts, with individual account balances below the $250,000 insured threshold. A small rate of return on short term and emergency reserves is likely, however, for the purpose of this rate study yield is assumed to be zero.

Estimated Rate of Return on Long-Term Reserves 1.50%
Estimated Rate of Return on Short-Term, Operational, and Emergency Reserves 0.00%
Estimated Annual Inflation Rate 3.00%

4.4 10-Year Operational Budget

The following table provides a 10-year summary of the system's operational budget, including the general expenses and reserve allocations discussed above. Note that the "Repair and Maintenance" line item is intended to cover minor day-to-day upkeep and repairs, and does not include significant replacements which are covered in the capital replacement reserve funding.

Ten Year Budget
for the
Scott Lake Water System

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
General Operating Expenses										
Mileage Reimb	0	0	0	0	0	0	0	0	0	0
Donations	500	515	530	546	563	580	597	615	633	652
Property and Liability Insurance	17,500	18,025	18,566	19,123	19,696	20,287	20,896	21,523	22,168	22,834
Licenses & permits	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520	1,566
Comm Center Rental Refund	0	0	0	0	0	0	0	0	0	0
Meetings and Seminars	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262
Office Expenses	15,700	16,171	16,656	17,156	17,670	18,201	18,747	19,309	19,888	20,485
Payroll Expenses	115,785	119,259	122,836	126,521	130,317	134,227	138,253	142,401	146,673	151,073
Professional Services	88,500	91,155	93,890	96,706	99,608	102,596	105,674	108,844	112,109	115,472
Repairs and Maintenance	150,000	154,500	159,135	163,909	168,826	173,891	179,108	184,481	190,016	195,716
Taxes	10,500	10,815	11,139	11,474	11,818	12,172	12,538	12,914	13,301	13,700
Utilities	44,500	45,835	47,210	48,626	50,085	51,588	53,135	54,729	56,371	58,062
General Expense Total	**446,685**	**460,086**	**473,888**	**488,105**	**502,748**	**517,830**	**533,365**	**549,366**	**565,847**	**582,823**
Operating Reserve										
Target Balance	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286
Current Balance	58,252	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006
Annual Installment	1,748	1,800	1,854	1,910	1,967	2,026	2,087	2,149	2,214	2,280
Running Balance	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286
Emergency Reserve										
Target Balance	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
Current Balance	48,544	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339
Annual Installment	1,456	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900
Running Balance	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
Short-Term Asset Reserve										
Target Balance	265,000	272,950	281,139	289,573	298,260	307,208	316,424	325,917	335,694	345,765
Current Balance	165,000	199,485	235,535	272,667	304,159	342,392	382,967	424,759	206,216	250,553
Annual Installment	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667
Expenditures	515	0	0	6,753	1,159	0	0	261,588	0	0
Running Balance	199,485	235,535	272,667	304,159	342,392	382,967	424,759	206,216	250,553	296,220
Long-Term Asset Reserve										
Target Balance	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729	885,221
Current Balance	500,000	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729
Annual Installment	165,000	169,950	175,049	180,300	185,709	191,280	197,019	202,929	209,017	215,288
Special Assessment	129,422	129,861	-	-	-	-	-	-	-	-
Expenditures	141,110	188,840	0	0	1,255,494	0	0	224,218	26,095	26,878
Accrued Interest	9,800	11,611	14,411	17,332	1,545	4,437	7,459	7,252	10,104	13,082
Running Balance	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729	885,221
Reserve Payment Total	**332,626**	**339,161**	**215,579**	**222,046**	**228,708**	**235,569**	**242,636**	**249,915**	**257,413**	**265,135**
Total Non-Water Income	106,790	109,994	113,294	116,692	120,193	123,799	127,513	131,338	135,278	139,337
Special Assessment Income	129,422	129,861								
Required Water Rate Income	543,099	559,392	576,174	593,459	611,263	629,600	648,488	667,943	687,981	708,621
Monthly Cost Summary										
Number of Billed Connections	590	592	594	596	598	600	602	604	606	608
General Expenses	$ 48.01	$ 49.28	$ 50.59	$ 51.93	$ 53.31	$ 54.73	$ 56.18	$ 57.67	$ 59.21	$ 60.78
Reserve Payments	$ 28.70	$ 29.46	$ 30.24	$ 31.05	$ 31.87	$ 32.72	$ 33.59	$ 34.48	$ 35.40	$ 36.34
Monthly Cost Per Connection	$ 76.71	$ 78.74	$ 80.83	$ 82.98	$ 85.18	$ 87.44	$ 89.77	$ 92.16	$ 94.61	$ 97.12

A 3% rate of inflation is assumed for all regular expenses. The Operating, Emergency, and Short-Term Replacement Reserves should be kept in readily accessible liquid assets. A negligible rate of return is expected for these reserves. The Long-Term Replacement Reserve should be kept in moderately conservative investments with an assumed rate of return of 1.5%.

Chapter 5 Future Reserve Funding

The level of capital replacement reserve funding is a continuum and is generally in flux as savings accrue and are then utilized to fund projects. While a high level of funding which does not require any dependence on outside funding sources is ideal, many systems end up acquiring loans for large projects either out of necessity, or in order to not substantially increase customer rates. In general, water systems which utilize loans to fund infrastructure projects continue to use loans for capital replacement projects, as water rates would typically have to be quite high in order to simultaneously repay past debt obligation while also funding long term replacement reserves. Most commonly water systems strike a balance wherein replacement reserves are less than 100% funded (typically 30%-70%), allowing funding of small or emergent replacements via reserves but often relying on external funding for large capital projects.

At the current funding levels and rate of reserve contributions, the system would have adequate reserves to fund many of the replacements within the next 30 years except for very large items such as the distribution system, which would require funding from loans. Full internal funding of all projects including replacement of the distribution system would require an annual contribution to the long-term reserves of approximately $165,000, which is the assumed approach and is reflected in the operational budget above.

Chapter 6 Water Rates

The three major components of Scott Lake's water rates are:

- Operational and Administrative Expenses
- Short Term Capital Costs / Reserve Funding
- Long Term Capital Costs / Reserve Funding

Financial sustainability requires that the water system be capable of generating adequate revenue to fund operation and maintenance costs as well as short term capital equipment expenses. Long term capital projects may be funded either via reserves or via external funding provided water rates are sufficient to accommodate any additional debt repayment which external funding may impose. Funding of large capital projects from reserve funds is preferred when possible. The total reserves balance should not be drawn down below an inflation adjusted level of approximately $400,000 in order to ensure adequate operating, emergency, and short-term capital replacement reserves are maintained.

6.1 Current Rates and Structure

Current water rates are comprised of several components, as shown in the table below. Note that this represents water-related charges only, and does not include the HOA fee.

Current Water Rate Structure

Base Water Rate (2,000 cubic feet per 2 months)	$22.00/month
Tier 1 (2,001 to 3,000 cubic feet)	$1.00 per 100 cu.ft.
Tier 2 (above 3,000 cubic feet)	$1.50 per 100 cu.ft.
Replacement Reserve Assessment	$10.00/month
Special Assessment (to pay back reserve withdrawal of $300k)	$18.28/month

The above water rate structure results in an average total fee of about $50 per month per connection.

6.2 Water Rate Structure Options

The Scott Lake community consists of primarily single-family residential connections. Based on available meter records, average system wide usage is roughly 150 gallons per connection per day. Because water use can vary seasonally, the majority of the water rate should come from the base rate so that revenue is consistent throughout the year. That being said, it is also important to have tiered usage charges above the base rate to recoup costs associated with customers who use larger amounts of water. Although the majority of the cost of service is not dependent on usage amounts, higher water demands do require increased capacity and storage and cause higher rates of equipment wear and electrical use. A tiered rate structure also provides incentive for water conservation and can be considered part of a Water Use Efficiency program.

Based on Scott Lake water system characteristics and our assessment of appropriate levels of reserve funding, we have developed three different proposed rate structures, as shown in the tables below. A base rate allows for average use without any additional usage fee. Tiers 1 – 3 reflect "moderately heavy use", "heavy use", and "excessive use", respectively. Each tier applies a usage charge for any water use

within its specified range. Note that the below rate structures are monthly, in contrast to the existing two-month billing cycle.

Compared to the existing rate structure, Rate Structure A represents no change, other than doing away with the reserve repayment assessment of $18.28 per month. The $10 assessment would be kept, but combined with the existing base rate for a $32 base fee. While Rate Structure A represents only a minor impact to customers (actually, it lowers the total rate compared to the existing rate and assessments), it does not provide the level of funding necessary to save for major, long-term projects such as replacement of the distribution system. In fact, this structure would leave the operational budget roughly $300,000 short annually. If this rate structure is used, funding for even small or medium projects would have to come from loans or more special assessments. Rate Structure A is considered to not be financially viable, but is included here for comparison, as it represents what the rates would default back to once the temporary $18.28 repayment assessment is ended, if no other change is made.

Rate Structure A

Tier	Use Range	Rate	Estimated Average Fee
Base Rate	0 – 1,000 cu.ft.	$32.00	$32.00
Tier 1	1,001 - 1,500 cu.ft.	$1.00 / 100 cu.ft.	$0.51
Tier 2	above 1,500 cu.ft.	$1.50 / 100 cu.ft.	$0.46
Tier 3	N/A		
Total			**$32.97**

Rate Structure B consists of a $20 increase to the base rate (which includes the current $10 reserve assessment) and would make the $18.28 assessment permanent (but kept as a separate line item). This results in an effective monthly fee of $70.28 plus charges from the two existing usage tiers. If things go well and major infrastructure and equipment last as long or longer than the anticipated service life, this approach may allow enough reserves to be saved to fund most replacements other than the distribution system without loans. However, very large projects or infrastructure that needs to be replaced sooner than anticipated would likely still require the use of loans, as would the replacement of the distribution system.

Rate Structure B

Tier	Use Range	Rate	Estimated Average Fee
Repayment Assessment (made permanent)			$18.28
Base Rate	0 – 1,000 cu.ft.	$52.00	$52.00
Tier 1	1,001 - 1,500 cu.ft.	$1.00 / 100 cu.ft.	$0.51
Tier 2	above 1,500 cu.ft.	$1.50 / 100 cu.ft.	$0.46
Tier 3	N/A		
Total			**$71.25**

Finally, Rate Structure C proposes more aggressive changes to bring rates up to a sustainable level. This structure increases the base rate to $75 and modifies the base and tiered water use allocations. The 2020 service meter records indicate an average water use of 150 gallons per day, or around 600 cubic feet per month. Therefore, we recommend lowering the base allocation closer to this value, rather than the existing 1,000 cubic feet per month. The resulting average rate is significantly higher than what customers are currently paying. However, based on the anticipated infrastructure replacement costs and timeline, this is the minimum level of revenue that would build adequate reserves to cover all replacement costs without the need for future loans or special assessments. Note that for Rate Structure C the $18.28 assessment would be *separate and in addition to* the rate structure shown here until it ends in two years.

Rate Structure C

Tier	Use Range	Rate	Estimated Average Fee
Base Rate	0 – 700 cu.ft.	$75.00	$75.00
Tier 1	701 - 1,000 cu.ft.	$1.25 / 100 cu.ft.	$0.28
Tier 2	1,001 - 1,500 cu.ft.	$1.75 / 100 cu.ft.	$0.89
Tier 3	above 1,500 cu.ft.	$2.00 / 100 cu.ft.	$0.61
Total			**$76.79**

Our recommendation is for the system to implement Rate Structure C. The resulting water rate will provide financial sustainability for the system and allow a high level of service quality and reliability to be provided into the future without relying on loans or needing sudden, large special assessments to cover the cost of replacement projects. Although the average rate from this rate structure is a substantial increase from the current effective rate, it is in line with state guidance for water affordability. While the change could be made at once, moving to the proposed rate structure from the current rates could be more easily accepted by transitioning gradually over the course of several years, instead of making one single large increase. The below table shows a suggested phase-in schedule of 3 years. Implementation of the usage tiers and associated volumes can be made immediately, as this is a minor overall impact to customer rates. The base rate is then increased each year until the target base rate is reached. Once the target rate is achieved, only annual adjustments of 3% to keep pace with inflation should be necessary. Keep in mind, however, that phasing in over several years will result in reduced funding until the full rate is implemented.

Proposed Three-Year Phase-in Schedule

	2021	2022	2023
Target Base Rate	$75.00	$77.25	$79.57
Actual Base Rate	$32.00	$56.00	$79.57
Implement Usage Tiers	YES		

It should be understood that not raising rates now only delays more significant future increases, as loans would then need to be taken out for large replacement projects in coming years. Eventually, this will start to forcibly push up water rates to keep up with the loan repayments and interest, and will make it increasingly difficult to set aside additional reserves. Either way, water rates end up increasing, but by being proactive now, the system can stay ahead of the curve and make well-planned, intentional adjustments rather than waiting for the next big replacement to come due and making sudden reactionary changes.

The following table shows the anticipated expenditures for long-term asset replacement for the next 30 years. Additionally, a comparison of the proposed rate structures is shown. Each of the rate structures provides for a different level of reserve funding and therefore, varying degrees of reliance on loans. The estimated amount of any loans needed to fund replacement projects, as well as the years they would be needed, is also indicated.

Year	Replacement Expenses for Long-Term Components	Using Rate Structure A			Using Rate Structure B			Using Rate Structure C		
		Long-Term Reserve Contribution	Loans Required	Reserve Balance at End of Year	Long-Term Reserve Contribution	Loans Required	Reserve Balance at End of Year	Long-Term Reserve Contribution	Loans Required	Reserve Balance at End of Year
		Starting Balance ---------->		$ 500,000	Starting Balance ---------->		$ 500,000	Starting Balance ---------->		$ 500,000
2021	$ 141,110	$ 70,800	$ -	$ 436,135	$ 129,422	$ -	$ 495,637	$ 294,422	$ -	$ 663,112
2022	$ 188,840	$ 72,924	$ -	$ 325,022	$ 133,305	$ -	$ 446,703	$ 299,811	$ -	$ 785,694
2023	$ -	$ 75,112	$ -	$ 406,136	$ 137,304	$ -	$ 592,767	$ 175,049	$ -	$ 975,153
2024	$ -	$ 77,365	$ -	$ 490,754	$ 141,423	$ -	$ 745,202	$ 180,300	$ -	$ 1,172,785
2025	$ 1,255,494	$ 79,686	$ 850,000	$ 116,670	$ 145,666	$ 550,000	$ 137,405	$ 185,709	$ -	$ 104,545
2026	$ -	$ 82,077	$ -	$ 201,728	$ 150,036	$ -	$ 291,752	$ 191,280	$ -	$ 300,263
2027	$ -	$ 84,539	$ -	$ 290,561	$ 154,537	$ -	$ 452,983	$ 197,019	$ -	$ 504,741
2028	$ 224,218	$ 87,075	$ -	$ 155,719	$ 159,173	$ -	$ 393,756	$ 202,929	$ -	$ 490,703
2029	$ 26,095	$ 89,687	$ -	$ 222,600	$ 163,948	$ -	$ 539,583	$ 209,017	$ -	$ 683,729
2030	$ 26,878	$ 92,378	$ -	$ 292,422	$ 168,866	$ -	$ 691,795	$ 215,288	$ -	$ 885,221
2031	$ 27,685	$ 95,149	$ -	$ 365,284	$ 173,932	$ -	$ 850,613	$ 221,746	$ -	$ 1,095,471
2032	$ -	$ 98,004	$ -	$ 470,237	$ 179,150	$ -	$ 1,045,210	$ 228,399	$ -	$ 1,343,728
2033	$ -	$ 100,944	$ -	$ 579,749	$ 184,525	$ -	$ 1,248,180	$ 235,251	$ -	$ 1,602,663
2034	$ -	$ 103,972	$ -	$ 693,977	$ 190,061	$ -	$ 1,459,815	$ 242,308	$ -	$ 1,872,646
2035	$ 23,370	$ 107,091	$ -	$ 789,364	$ 195,762	$ -	$ 1,656,691	$ 249,577	$ -	$ 2,130,337
2036	$ -	$ 110,304	$ -	$ 913,164	$ 201,635	$ -	$ 1,886,201	$ 257,065	$ -	$ 2,423,212
2037	$ -	$ 113,613	$ -	$ 1,042,178	$ 207,684	$ -	$ 2,125,293	$ 264,777	$ -	$ 2,728,309
2038	$ -	$ 117,022	$ -	$ 1,176,588	$ 213,915	$ -	$ 2,374,296	$ 272,720	$ -	$ 3,046,044
2039	$ -	$ 120,532	$ -	$ 1,316,577	$ 220,332	$ -	$ 2,633,548	$ 280,901	$ -	$ 3,376,849
2040	$ 2,522,234	$ 124,148	$ 1,400,000	$ 272,518	$ 226,942	$ -	$ 343,330	$ 289,328	$ -	$ 1,161,103
2041	$ 260,441	$ 127,873	$ -	$ 142,049	$ 233,751	$ -	$ 321,389	$ 298,008	$ -	$ 1,216,650
2042	$ -	$ 131,709	$ -	$ 277,864	$ 240,763	$ -	$ 570,584	$ 306,949	$ -	$ 1,546,453
2043	$ -	$ 135,660	$ -	$ 419,727	$ 247,986	$ -	$ 830,848	$ 316,157	$ -	$ 1,890,549
2044	$ -	$ 139,730	$ -	$ 567,849	$ 255,426	$ -	$ 1,102,568	$ 325,642	$ -	$ 2,249,433
2045	$ 20,938	$ 143,922	$ -	$ 701,196	$ 263,088	$ -	$ 1,364,889	$ 335,411	$ -	$ 2,602,365
2046	$ -	$ 148,239	$ -	$ 862,177	$ 270,981	$ -	$ 1,660,408	$ 345,473	$ -	$ 2,992,056
2047	$ -	$ 152,687	$ -	$ 1,030,086	$ 279,110	$ -	$ 1,968,611	$ 355,838	$ -	$ 3,398,112
2048	$ 25,167	$ 157,267	$ -	$ 1,179,619	$ 287,484	$ -	$ 2,264,392	$ 366,513	$ -	$ 3,795,549
2049	$ 122,541	$ 161,985	$ -	$ 1,237,349	$ 296,108	$ -	$ 2,474,528	$ 377,508	$ -	$ 4,111,274
2050	$ 1,852,001	$ 166,845	$ 650,000	$ 154,475	$ 304,991	$ -	$ 941,431	$ 388,833	$ -	$ 2,687,827

Notes:

1. The loan values shown above include an extra $50,000 to cover additional costs associated with the State and Federal loan programs. This amount is an expense and does not contribute to the reserve balance.

2. Rate Structure A is not financially viable, as it would leave the operational budget significantly under-funded. What is shown here is a reserve contribution equivalent to the current $10 assessment, for the sake of comparison.

The capital reserves should be re-evaluated periodically to verify that they are growing adequately and to permit changes to the rates if they are found to be insufficient or excessive. With the current number of 590 billed connections, each $1.00 change in the monthly base rate results in a $7,080 change in annual income. A common question asked at sanitary surveys is whether the system has recently evaluated its capital reserves; therefore, we recommend performing these capital improvement evaluations in the months prior to sanitary surveys, which occur on either 3 or 5-year cycles at the discretion of the Department of Health.

Chapter 7 Summary of Recommendations

Historically, the water rates at Scott Lake have been quite low and inadequate to fund the system. Although residents may be hoping or expecting that current assessments were only temporary, our analysis shows that going back to the previous low water rates would not provide adequate funding for ongoing maintenance and future infrastructure replacement. To be sustainable, the base rate needs to be increased substantially, and the existing $18.28 assessment should be kept for its planned duration of two more years. The proposed rate structure is intended to capture both the day-to-day expenses of running the system as well as saving adequate reserves.

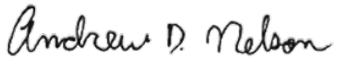
At the current level of funding and if the existing assessments are not integrated as a permanent part of the rate structure, the system would not be able to pay for a large capital project such as mainline replacement without conducting an additional special assessment or obtaining external funding such as loans. It is critical that the system be proactive in planning for these projects now, so that they will be prepared when key infrastructure is due for replacement. At the very least, long-term reserves should be funded sufficiently to cover all anticipated small and mid-size projects, as common funding mechanisms such as USDA and SRF loans tend to increase the cost of a project by approximately $50,000. Unless the financial need is great, it is typically uneconomical and thus undesirable to fund small to medium projects from these sources due to the additional costs involved, as well as longer timelines in order to secure funding and meet prerequisite requirements.

We recommend implementing Rate Structure C. This structure results in a rate that is affordable and sustainable, while eliminating future reliance on loans. Rate Structure C is on the higher end of water rates for comparable systems in Western Washington; however, it is important to remember that the system has been underfunded from years of low rates, and that the general community costs are also being supported by the water rate due to a low HOA fee.

Because Scott Lake residents are accustomed to lower water rates, the board may decide to phase in the adopted rate structure over the next 3 years as described in Section 6.2. After the target rate is reached, rates should then be updated annually to keep pace with inflation and the rising costs of operating and maintaining the water system. A gradual increase each year is generally easier for customers to accept, and prevents the need for sudden, large increases or special assessments in future years to catch up with operating costs.

Overall, the Scott Lake Water System is on a good track with the work being done on system improvements and efforts being made to create realistic operating budgets and financial planning. With implementation of the recommended rate structure, SLMC will be well positioned for sustainable operation into the foreseeable future.

Report Prepared By:



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Chapter 8 Appendix

Capital Replacements Worksheet
Proposed Ten Year Budget
SLMC Financials – 2018-2019, 2019-2020, 2020-2021, 2021-2022

Capital Replacements Worksheet
for the
Scott Lake Water System

Date of Capital Replacement Assessment	2021	
Starting Reserve and Savings Balance	$ 770,000	
Total Available Funding	$ 770,000	
Projected Inflation Rate	3.0%	
Long-Term Savings Account Interest Rate	1.5%	
Interest Compoundings per Year	1	
Short-Term / Long-Term Break Point	15	years

Component	Year Installed	Service Life	Age	Assessed Remaining Life	Current Unit Price	Units	Current Replacement Cost	Cost at Next Replacement
Well #2, 6" x 35', and Source Approval	1972	80	49	31	$20,000	1	$20,000	$50,002
Well #4, 8" x 40', and Source Approval	1976	80	45	35	$22,000	1	$22,000	$61,905
Well #5, 8" x 40', and Source Approval	1982	80	39	41	$22,000	1	$22,000	$73,918
Well #6, 8" x 41', and Source Approval	1986	80	35	45	$22,000	1	$22,000	$83,195
Well #2 Pump (7.5-HP), Controls, Drop Pipe	1972	30	49	1	$20,000	1	$20,000	$20,600
Well #4 Pump (15-HP), Controls, Drop Pipe	1976	30	45	1	$25,000	1	$25,000	$25,750
Well #5 Pump (15-HP), Controls, Drop Pipe	2020	30	1	29	$25,000	1	$25,000	$58,914
Well #6 Pump (15-HP), Controls, Drop Pipe	1986	30	35	1	$25,000	1	$25,000	$25,750
Chlorine Injection Pump and Tank*	2002	15	19	5	$1,000	1	$1,000	$1,159
Chlorine Contact Pipe, 12"	2002	80	19	61	$120	100	$12,000	$72,820
Hydropneumatic Tank, 3,000 gallons*	1972	55	49	10	$20,000	1	$20,000	$26,878
Air Compressor, Speedaire 3-gal	1972	15	49	1	$500	1	$500	$515
Generator, Cummins 60 KW, propane	1972	50	49	1	$35,000	1	$35,000	$36,050
Propane Tank, 500 gallons	1972	40	49	1	$2,000	1	$2,000	$2,060
Pump House	1972	60	49	11	$20,000	1	$20,000	$27,685
Treatment Facility, 22' x 34'	2002	60	19	41	$20,000	1	$20,000	$67,198
Limestone Contact Tanks	2002	40	19	21	$20,000	7	$140,000	$260,441
Well Site Fence	2019	50	2	48	$10,000	1	$10,000	$41,323
Concrete Reservoir at Lift Station, 80k-gal	1972	80	49	31	$150,000	1	$150,000	$375,012
Generator, Cummins 20 kW, propane	1986	30	35	1	$12,000	1	$12,000	$12,360
Propane Tank, 250 gallons	1986	40	35	5	$1,500	1	$1,500	$1,739
Lift Station Building, concrete block	1986	80	35	45	$5,000	1	$5,000	$18,908
Booster Pump 1, 5 HP, 100-gpm	1986	30	35	1	$9,000	1	$9,000	$9,270
Booster Pump 2, 5 HP, 100-gpm	1986	30	35	1	$9,000	1	$9,000	$9,270
Lift Station Fencing	1986	50	35	15	$10,000	1	$10,000	$15,580
Upper Reservoir, Steel, 60k-gal, 21'x24'	1986	80	35	45	$135,000	1	$135,000	$510,515
Booster Building	1986	60	35	25	$10,000	1	$10,000	$20,938
Generator, Kohler 14 kW, propane	2019	30	2	28	$11,000	1	$11,000	$25,167
Propane Tank, 250 gallons	1986	40	35	5	$1,500	1	$1,500	$1,739
Booster Pump 3, 3 HP, 100-gpm*	1986	30	35	5	$7,000	1	$7,000	$8,115
Booster Pump 4, 3-HP, 100-gpm	2020	30	1	29	$7,000	1	$7,000	$16,496
Bladder Tanks, 34-gallon	2015	10	6	4	$500	12	$6,000	$6,753
Reservoir Site Fencing	1986	50	35	15	$5,000	1	$5,000	$7,790
Telemetry System	2010	20	11	9	$20,000	1	$20,000	$26,095
2" Pipe, Poly	1976	50	45	5	$50	7300	$365,000	$423,135
4" Pipe, AC*	1976	75	45	20	$60	23275	$1,396,500	$2,522,234
6" Pipe, AC	1976	75	45	30	$70	10900	$763,000	$1,852,001
8" Pipe, PVC	1986	75	35	40	$80	1200	$96,000	$313,156
2" and 4" Valves (estimated quantity)*	1976	30	45	2	$800	130	$104,000	$110,334
6" Valves (estimated quantity)*	1976	30	45	2	$1,000	50	$50,000	$53,045
8" Valves (estimated quantity)*	1986	30	35	2	$1,200	20	$24,000	$25,462
Service Laterals*	1976	75	45	5	$1,200	590	$708,000	$820,766
Service Meters*	2004	15	17	8	$350	590	$206,500	$261,588
Meter Setters	2004	25	17	8	$300	590	$177,000	$224,218

*Components marked with an asterisk (*) have been given an Assessed Life based on their apparent condition or estimated replacement schedule which is different than the otherwise calculated remaining life given the assumed installation date and typical service life.

Ten Year Budget
for the
Scott Lake Water System

	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
General Operating Expenses										
Mileage Reimb	0	0	0	0	0	0	0	0	0	0
Donations	500	515	530	546	563	580	597	615	633	652
Property and Liability Insurance	17,500	18,025	18,566	19,123	19,696	20,287	20,896	21,523	22,168	22,834
Licenses & permits	1,200	1,236	1,273	1,311	1,351	1,391	1,433	1,476	1,520	1,566
Comm Center Rental Refund	0	0	0	0	0	0	0	0	0	0
Meetings and Seminars	2,500	2,575	2,652	2,732	2,814	2,898	2,985	3,075	3,167	3,262
Office Expenses	15,700	16,171	16,656	17,156	17,670	18,201	18,747	19,309	19,888	20,485
Payroll Expenses	115,785	119,259	122,836	126,521	130,317	134,227	138,253	142,401	146,673	151,073
Professional Services	88,500	91,155	93,890	96,706	99,608	102,596	105,674	108,844	112,109	115,472
Repairs and Maintenance	150,000	154,500	159,135	163,909	168,826	173,891	179,108	184,481	190,016	195,716
Taxes	10,500	10,815	11,139	11,474	11,818	12,172	12,538	12,914	13,301	13,700
Utilities	44,500	45,835	47,210	48,626	50,085	51,588	53,135	54,729	56,371	58,062
General Expense Total	**446,685**	**460,086**	**473,888**	**488,105**	**502,748**	**517,830**	**533,365**	**549,366**	**565,847**	**582,823**
Operating Reserve										
Target Balance	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286
Current Balance	58,252	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006
Annual Installment	1,748	1,800	1,854	1,910	1,967	2,026	2,087	2,149	2,214	2,280
Running Balance	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286
Emergency Reserve										
Target Balance	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
Current Balance	48,544	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339
Annual Installment	1,456	1,500	1,545	1,591	1,639	1,688	1,739	1,791	1,845	1,900
Running Balance	50,000	51,500	53,045	54,636	56,275	57,964	59,703	61,494	63,339	65,239
Short-Term Asset Reserve										
Target Balance	265,000	272,950	281,139	289,573	298,260	307,208	316,424	325,917	335,694	345,765
Current Balance	165,000	199,485	235,535	272,667	304,159	342,392	382,967	424,759	206,216	250,553
Annual Installment	35,000	36,050	37,132	38,245	39,393	40,575	41,792	43,046	44,337	45,667
Expenditures	515	0	0	6,753	1,159	0	0	261,588	0	0
Running Balance	199,485	235,535	272,667	304,159	342,392	382,967	424,759	206,216	250,553	296,220
Long-Term Asset Reserve										
Target Balance	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729	885,221
Current Balance	500,000	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729
Annual Installment	165,000	169,950	175,049	180,300	185,709	191,280	197,019	202,929	209,017	215,288
Special Assessment	129,422	129,861	-	-	-	-	-	-	-	-
Expenditures	141,110	188,840	0	0	1,255,494	0	0	224,218	26,095	26,878
Accrued Interest	9,800	11,611	14,411	17,332	1,545	4,437	7,459	7,252	10,104	13,082
Running Balance	663,112	785,694	975,153	1,172,785	104,545	300,263	504,741	490,703	683,729	885,221
Reserve Payment Total	**332,626**	**339,161**	**215,579**	**222,046**	**228,708**	**235,569**	**242,636**	**249,915**	**257,413**	**265,135**
Total Non-Water Income	106,790	109,994	113,294	116,692	120,193	123,799	127,513	131,338	135,278	139,337
Special Assessment Income	129,422	129,861								
Required Water Rate Income	543,099	559,392	576,174	593,459	611,263	629,600	648,488	667,943	687,981	708,621
Monthly Cost Summary										
Number of Billed Connections	590	592	594	596	598	600	602	604	606	608
General Expenses	$ 48.01	$ 49.28	$ 50.59	$ 51.93	$ 53.31	$ 54.73	$ 56.18	$ 57.67	$ 59.21	$ 60.78
Reserve Payments	$ 28.70	$ 29.46	$ 30.24	$ 31.05	$ 31.87	$ 32.72	$ 33.59	$ 34.48	$ 35.40	$ 36.34
Monthly Cost Per Connection	$ 76.71	$ 78.74	$ 80.83	$ 82.98	$ 85.18	$ 87.44	$ 89.77	$ 92.16	$ 94.61	$ 97.12

A 3% rate of inflation is assumed for all regular expenses. The Operating, Emergency, and Short-Term Replacement Reserves should be kept in readily accessible liquid assets. A negligible rate of return is expected for these reserves. The Long-Term Replacement Reserve should be kept in moderately conservative investments with an assumed rate of return of 1.5%.

SLMC BUDGET FOR 2018-2019

30-Apr-19 100% of the Fiscal Year

	BUDGET	MONTH	TO DATE	BALANCE	%
Revenues:					
Maint. Assess.	$ 68,000.00	$ 4,419.78	$ 51,258.89	$ 16,741.11	75.38%
Water Assess.	$ 157,200.00	$ 13,746.29	$ 179,706.04	$ (22,506.04)	114.32%
Water Meters	$ 1,300.00	$ -	$ 1,300.00	$ -	100.00%
CC Rentals	$ 3,500.00	$ 300.00	$ 3,875.00	$ (375.00)	110.71%
Copier/FAX Income	$ 50.00	$ -	$ 14.75	$ 35.25	29.50%
Leases	$ 20,550.00	$ 316.07	$22,914.64	$ (2,364.64)	111.51%
Misc. & Donations	$ 250.00	$ 9.75	$ 406.25	$ (156.25)	162.50%
Boat Ramp Keys	$ 200.00	$ 20.00	$ 480.00	$ (280.00)	240.00%
	$ 251,050.00	$ 18,811.89	$ 259,955.57	$ (8,905.57)	103.55%
Expenditures:					
COMMUNITY CTR.					
Private Car Reimb.	$ 50.00	$ -	$0.00	$ 50.00	0.00%
Salary	$ 6,000.00	$ 500.00	$6,000.00	$ -	100.00%
Taxes - P/R	$ 700.00	$ 73.63	$875.26	$ (175.26)	125.04%
Maintenance	$ 1,870.00	$ 112.15	$1,332.38	$ 537.62	71.25%
Supplies	$ 850.00	$ -	$1,167.10	$ (317.10)	137.31%
Electricity	$ 2,000.00	$ 171.00	$1,927.90	$ 72.10	96.40%
Trash Removal	$ 1,100.00	$ 85.31	$1,023.72	$ 76.28	93.07%
	$ 12,570.00	$ 942.09	$12,326.36	$ 243.64	98.06%
OFFICE					
Private Car Reimb.	$ 210.00	$ -	$0.00	$ 210.00	0.00%
Postage	$ 4,000.00	$ 130.15	$1,336.15	$ 2,663.85	33.40%
Printing	$ 1,600.00	$ -	$722.02	$ 877.98	45.13%
Card processing	$ 2,600.00	$ 86.48	$737.71	$ 1,862.29	28.37%
Salary	$ 25,000.00	$ 2,083.32	$24,999.84	$ 0.16	100.00%
Expenses	$ 3,800.00	$ 351.51	$3,229.02	$ 570.98	84.97%
Taxes - P/R	$ 2,250.00	$ 206.07	$2,983.53	$ (733.53)	132.60%
Telephone bundle, ADT	$ 4,400.00	$ 244.89	$3,153.87	$ 1,246.13	71.68%
Equipment	$ -	$ -	$0.00	$ -	0.00%
	$ 43,860.00	$ 3,102.42	$37,162.14	$ 6,697.86	84.73%
PARK					
Salary	$ 23,000.00	$ 1,850.00	$22,200.00	$ 800.00	96.52%
Taxes - P/R	$ 2,520.00	$ 193.64	$2,914.83	$ (394.83)	115.67%
Maintenance	$ 10,000.00	$ 70.00	$5,696.31	$ 942.60	56.96%
Portable toilets	$ 2,100.00	$ 174.00	$2,268.00	$ 1,927.00	108.00%
Trash Removal	$ 1,300.00	$ 151.79	$2,088.76	$ (788.76)	160.67%
Electricity	$ 400.00	$ 28.64	$357.38	$ 42.62	89.35%
	$ 39,320.00	$ 2,468.07	$35,525.28	$ 3,794.72	90.35%

GENERAL							
Patrol	$	5,000.00	$	420.00	$5,050.00	$	(50.00)	101.00%
Street Lights	$	20,000.00	$	1,315.88	$16,219.38	$	3,780.62	81.10%
Taxes,Permits,Fees	$	7,500.00	$	1,670.12	$12,371.62	$	(4,871.62)	164.95%
Prof. Services	$	3,000.00	$	420.00	$1,787.50	$	1,212.50	59.58%
	$	35,500.00	$	3,826.00	$35,428.50	$	71.50	99.80%
WATER							
Power for Pumping	$	12,000.00	$	738.53	$11,051.91	$	948.09	92.10%
Water Contract	$	50,000.00	$	4,168.15	$50,953.63	$	(953.63)	101.91%
Meters	$	1,000.00	$	-	$3,061.66	$	(2,061.66)	306.17%
System Repairs	$	31,000.00	$	1,046.46	$14,627.44	$	16,372.56	47.19%
Meter & Chlorine Read	$	3,600.00	$	200.00	$6,360.00	$	(2,760.00)	176.67%
Water Imp./Supplies	$	1,500.00	$	-	$52.22	$	1,447.78	3.48%
	$	99,100.00	$	6,153.14	$86,106.86	$	12,993.14	86.89%
MONTHLY	$	230,350.00	$	16,491.72	$206,549.14	$	23,800.86	89.67%
ANNUAL							
Insurance	$	17,700.00	$	-	$17,687.00	$	13.00	99.93%
Misc. expenses	$	3,000.00	$	12.00	$2,423.47	$	588.53	80.78%
	$	20,700.00	$	12.00	$20,110.47	$	601.51	97.15%
EXPEND. TOTALS	$	251,050.00	$	16,503.72	$226,659.61	$	24,390.39	90.28%

SLMC BUDGET FOR 2019-2020

		BUDGET
Revenues:		
Maint. Assess.	$	65,000.00
Water Assess.	$	170,000.00
Water Meters	$	2,000.00
CC Rentals	$	4,000.00
Park Shelter Rentals	$	300.00
Copier/FAX Income	$	50.00
Leases	$	23,000.00
Misc. & Donations	$	250.00
Boat Ramp Keys	$	250.00
	$	264,850.00
Expenditures:		
COMMUNITY CTR.		
Private Car Reimb.	$	50.00
Salary	$	6,600.00
Taxes - P/R	$	750.00
Maintenance	$	1,870.00
Supplies	$	1,000.00
Electricity	$	2,000.00
Trash Removal	$	1,100.00
	$	13,370.00
OFFICE		
Private Car Reimb.	$	210.00
Postage	$	3,400.00
Printing	$	1,570.00
Card costs	$	2,500.00
Salary	$	25,000.00
Expenses	$	3,800.00
Taxes - P/R	$	2,500.00
Telephone, ADT	$	4,400.00
Equipment	$	-
	$	43,380.00
PARK		
Salary	$	25,000.00
Taxes - P/R	$	2,700.00
Maintenance	$	8,000.00
Portable toilets	$	2,300.00
Trash Removal	$	2,100.00
Electricity	$	400.00
	$	40,500.00

GENERAL		
Patrol	$	5,100.00
Street Lights	$	18,000.00
Taxes,Permits,Fees	$	13,000.00
Prof. Services	$	3,000.00
Extra Duty Contract		$10,000.00
	$	49,100.00
WATER		
Power for Pumping	$	12,000.00
Water Contract	$	52,000.00
Meters	$	5,000.00
System Repairs	$	20,000.00
Meter Reading	$	7,000.00
Water Imp./Supplies	$	1,500.00
	$	97,500.00
ANNUAL		
Insurance	$	18,000.00
Special projects	$	3,000.00
	$	21,000.00
EXPEND. TOTAL		$264,850

Scott Lake Maintenance Company
Proposed Budget 2020-2021

	Budget
Ordinary Income/Expense	
Income	
Assessment - Maintenance	69,902.00
Assessment - Water	138,521.00
Replacement Reserve Assessment	69,578.00
Water Meter New Customer (pass-through)	0.00
Community Center Rentals	110.00
Shelter Rental	0.00
Cell Phone Site & Tower Lease	22,000.00
Lease Property Income	400.00
Credit Card Payment User Fee	0.00
Boat Ramp Keys	640.00
Uncategorized Income	0.00
Total Income	301,151.00
Gross Profit	301,151.00
Expense	
Mileage Reimbursment	0.00
Insurance - Allocated	17,500.00
Licenses & Permits	1,000.00
Community Center Rental Refund	500.00
Miscellaneous Expense	3,000.00
Meetings & Seminars	0.00
Office Expenses	10,050.00
Payroll Expenses	79,500.00
Patrol	12,000.00
Professional Services	3,500.00
Repairs and Maintenance	55,000.00
Taxes	10,500.00
Utilities	39,700.00
Water Contract	67,000.00
Meter Read / Chlorine Test	6,500.00
Water Meter Installation Cost	0.00
Replacement Reserve Used	0.00
Total Expense	305,750.00
Net Ordinary Income	-4,599.00
Other Income/Expense	
Other Income	
Interest Income	7,500.00
Total Other Income	7,500.00
Total Other Income	7,500.00
Other Expense	
Reserve Allocations	300,000.00
Total Other Expense	300,000.00
Net Other Income	-292,500.00
Net Income	**-297,099.00**

Scott Lake Maintenance Company
Profit & Loss Budget Overview
May 1, 2020 through January 26, 2021

	2021-2022		
Ordinary Income/Expense			
Income			
4001 · Assessment - Maintenance	73,440.00	90% of billed amount	
4002 · Assessment - Water		TBD - Rate Study	
4004 · Water Meter New Customer	0.00	Pass Through Cost	
4200 · Community Center Rentals	0.00		
4205 · Shelter Rental	0.00		
4210 · Cell Phone Site & Tower Lease	22,000.00		
4211 · Lease Property Income	2,200.00		
4900 · Donations	0.00		
4911 · Credit Card Payment User Fee	0.00		
4950 · Boat Ramp Keys	400.00		
49900 · Uncategorized Income	0.00		
Total Income	98,040.00		**98,040.00**
Expense			
5100 · Mileage Reimbursment	0.00		0.00
5250 · Donations	500.00		500.00
5300 · Property & Liability Insurance	17,500.00		17,500.00
5400 · Licenses & Permits	1,200.00		1,200.00
5450 · Community Center Rental Refund	0.00		0.00
5520 · Meetings & Seminars	2,500.00		2,500.00
5550 · Office Expenses			15,700.00
Postage & Shipping	2,000.00		
Printing Costs	2,000.00		
Office Suplies	3,000.00		
Software/Subscriptions	750.00		
Copier Lease	2,500.00		
Phone/Internet	3,800.00		
Security System	850.00		
Credit Card Fees	250.00		
Bank Service Charges	50.00		
Other	500.00		
5556 · Payroll Expenses			115,785.00
Salaries	95,276.00		
Payroll Taxes	8,984.00		
Benefits	11,400.00		
Payroll Processing Fees	125.00		
5570 · Professional Services			88,500.00
Water Operator/Utility Billing	70,000.00		
Patrol	15,000.00		
Accountant	1,750.00		
Legal	1,750.00		
5600 · Repairs and Maintenance	352,500.00		352,500.00
5750 · Taxes			10,500.00
Public Utility Taxes	10,000.00		
Property Taxes	500.00		
5800 · Utilities			44,500.00
Electricity	35,000.00		
Propane	1,000.00		
Waste Management	8,500.00		
5940 · Water Meter New Customer	0.00		
5950 · Replacement Reserve used	0.00		
5960 · Reserved Capital Used	0.00		
69800 · Uncategorized Expenses	0.00		
9900 · Loan Repayments	0.00		
Contingency Fund	10,000.00		10,000.00
Total Expense	659,185.00		**659,185.00**
Net Ordinary Income			
Other Income/Expense			
Other Income			
6000 · Other Income			**8,750.00**
Replacement Reserve Assessment		TBD - Rate Study	
Special Assessment		TBD - Two Year Reserve Payback Option	
Drainage District Contract	6,000.00	6,000 (Pending Contract)	
Interest Income	2,750.00	2750 (Based on current rates/balances)	
Total Other Income			
Other Expense			
7000 · Reserve Allocations	0.00		
Total Other Expense	0.00		
Net Other Income	0.00		
Net Income	**0.00**		