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## **"Full" Capital Funding Plan**



### **Lake Canyon Community Service District Los Gatos, CA**

**Report #: 34016-0**  
**For Period Beginning: July 1, 2018**  
**Expires: June 30, 2019**

**Date Prepared: April 17, 2018**



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**Hello, and welcome to your Capital Plan!**

**T**his Report is a valuable budget planning tool, for with it you control the future of your property. It contains all the fundamental information needed to understand your current and future obligations, some of the most significant expenses that ownership will face.

**W**ith respect to Reserves, this Report will tell you "where you are," and "where to go from here."

**In this Report, you will find...**

- 1) A List of What you're Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

**More Questions?**

Visit our website at [www.ReserveStudy.com](http://www.ReserveStudy.com) or call us at:

**415-694-8931**



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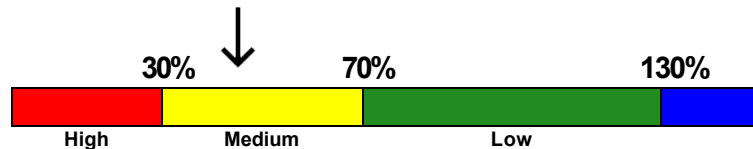
### 3- Minute Executive Summary

Property: Lake Canyon Community Service District  
 Location: Los Gatos, CA  
 Report Period: July 1, 2018 through June 30, 2019

Property #: 34016-0  
 # of Units: 57

Project Starting Reserve Balance .....	\$136,545
Currently Fully Funding Reserve Balance .....	\$297,922
Average Reserve Deficit (Surplus) Per Unit .....	\$2,831
Percent Funded .....	45.8 %
Recommended 2018 "Monthly Fully Funding Contributions" .....	\$2,500
Recommended 2018 Special Assessments for Reserves .....	\$0
2017 Contribution Rate .....	\$1,000

Reserves % Funded: 45.8%



Special Assessment Risk:

#### *Economic Assumptions:*

Net Annual "After Tax" Interest Earnings Accruing to Reserves .....1.00 %  
 Annual Inflation Rate .....3.00 %

- This is a "Full" Capital Plan
- The information in this Reserve Study is based on our site inspection on 2/2/2018
- This Reserve Study was prepared by, or under the supervision of, a credentialed Reserve Specialist (RS).
- Because your Reserve Fund is at 45.8 % Funded, this means the organization's special assessment & deferred maintenance risk is currently Medium.
- Your multi-year Funding Plan is designed to gradually bring you to the 100% level, or "Fully Funded".
- Based on this starting point, your anticipated future expenses, and your historical Reserve contribution rate, our recommendation is for you to set your Reserve contributions at \$2,500/Monthly.
- We are recommending a monthly Reserve contribution increase which is greater than 20% and will require unit owner approval
- No assets appropriate for Reserve designation were excluded.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
General Facility				
301	Tank Enclosure - Repair/Replace	15	0	\$15,000
302	Generator (A) - Replace	15	0	\$10,000
302	Generator (B) - Replace	15	5	\$1,350
302	Generator (C) - Replace	15	6	\$3,500
305	Inventory Tracking System - Replace	8	4	\$1,150
514	Sluff Wall - Replace/Repair	25	3	\$24,250
1905	Leachfield - Inspection	10	0	\$15,000
1906	Leachfield - Repair/Replace	20	0	\$15,000
1930	Main Pumps - (Partial) Replace	8	4	\$2,650
1932	Main Pumps Panels - Replace	30	5	\$10,000
1933	Main Tanks - Repair/Replace	30	5	\$10,000
1935	Sewage Pumps - (Partial) Replace	8	6	\$2,350
1937	Sewage Pumps Panels - Replace	30	10	\$3,950
1940	Residential Pumps - (Partial) Repl.	1	0	\$2,350
1942	Residential Pump Panels - Replace	30	10	\$15,000
1943	Residential Tanks - Repair/Replace	30	20	\$90,000
1950	Effluent Line - Repair/Replace	90	70	\$395,000
1960	Effluent Line - Clean	30	10	\$100,000
<b>18 Total Funded Components</b>				

Note 1: Yellow highlighted line items are expected to require attention in this initial year.

## Introduction



A Capital Plan is the art and science of anticipating, and preparing for, a property major predictable repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Capital Plan is your Component List (what you are reserving for). This is because the Component List defines the *scope and schedule* of all your anticipated upcoming major, predictable capital projects. Based on that List and your starting balance, we calculate the property Capital Fund Strength (reported in terms of "Percent Funded"). Then we compute a Funding Plan to provide for the needs of the property. These form the three results of your Capital Plan.



Capital contributions are not "for the future". Capital contributions are designed to offset the ongoing, daily deterioration of your Capital assets. Done well, a stable, budgeted Capital Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the property is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

## Methodology



For this [Capital Plan](#), we started with a review of ownership boundaries, as detailed by property, recent Capital expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Capital), and research into any well-established historical precedents. We performed

an on-site inspection to quantify and evaluate your major predictable, creating your Reserve Component List *from scratch*.

## *Which Physical Assets are Funded by Reserves?*

There is a national-standard four-part test to determine which expenses should appear in your Component List. First, it must be a maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an property total budget). This limits Capital Components to major, predictable expenses.



RESERVE COMPONENT "FOUR-PART TEST"

Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

## *How do we establish Useful Life and Remaining Useful Life estimates?*

- 1) Visual Inspection (observed wear and age)
- 2) Property Reserves database of experience
- 3) Property History (install dates & previous life cycle information)
- 4) Vendor Evaluation and Recommendation

## *How do we establish Current Repair/Replacement Cost Estimates?*

In this order...

- 1) Actual property cost history, or current proposals
- 2) Comparison to Property Reserves database of work done at similar properties
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

## *How much Reserves are enough?*

Capital Fund adequacy is not measured in cash terms. Capital Fund adequacy is found when the *amount* of current Capital cash is compared to Capital asset component deterioration (the *needs of the property*). Having *enough* means the property can execute its projects in a timely manner with existing Capital funds. Not having *enough* typically creates deferred maintenance or special funding needs.

Adequacy is measured in a two-step process:

- 1) Calculate the *value of deterioration* at the property (called Fully Funded Balance, or FFB).
- 2) Compare that to the Capital Fund Balance, and express as a percentage.



Each year, the *value of deterioration* at the property changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special funding needs and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all properties are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special funding needs).

Measuring your Capital Funds by Percent Funded tells how well prepared your property is for upcoming Reserve expenses. Those charged with maintaining the physical property should be very aware of this important figure!

## How much should we contribute?



According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the property's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their property. Remember, it is the Board's job to provide for the ongoing care of the real property that supports your entity mission.

## What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the value of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that properties in the 70 - 130% range *enjoy a low risk of special funding needs or deferred maintenance.*



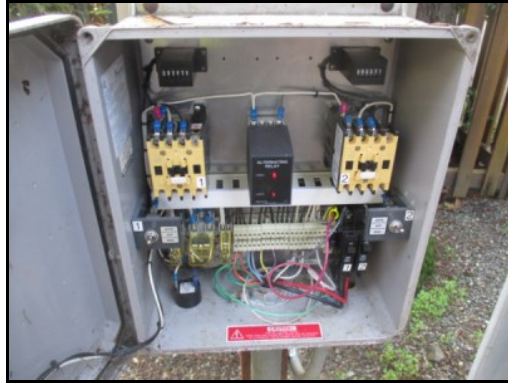
Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special funding needs & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

## Site Inspection Notes

During our site visit on 2/2/2018, we started with a brief meeting with Stacey Johnson (GM). We visually inspected the organization, and were able to see most areas.

During our site inspection we also identified pump filter expenses would be handled from the Operational/Maintenance budget vs Reserves.

Please see the Photographic Inventory Appendix at the end of this report for detailed look at each component.



# Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses at your property as defined by your Reserve Component List. A summary of these components are shown in the Component Details table, while a summary of the expenses themselves are shown in the 30-yr Expense Summary table.

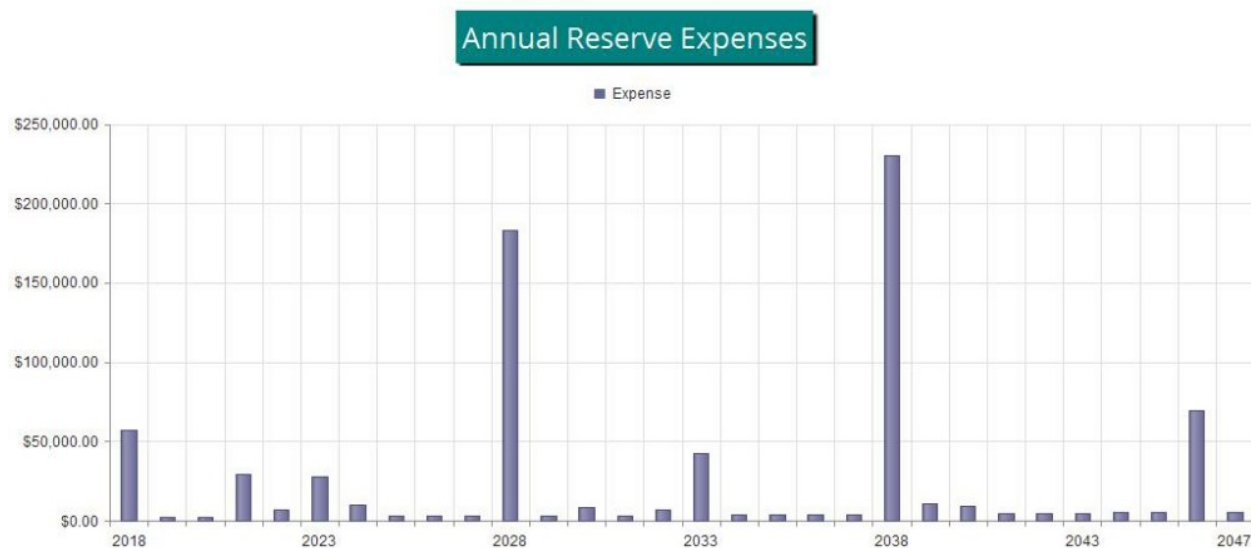


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$136,545 as-of the start of your fiscal year. This is based on your actual balance on 1/14/2018 of \$136,545 and anticipated Reserve contributions and expenses projected through the end of your Fiscal Year. As of 7/1/2018, your Fully Funded Balance is computed to be \$297,922. (see Acct/Tax Summary table). This figure represents the deteriorated value of your facility components. Comparing your Reserve Balance to your Fully Funded Balance indicates your 45.8 % Funded.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$2,500/Monthly this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary and the Cash Flow Detail tables.

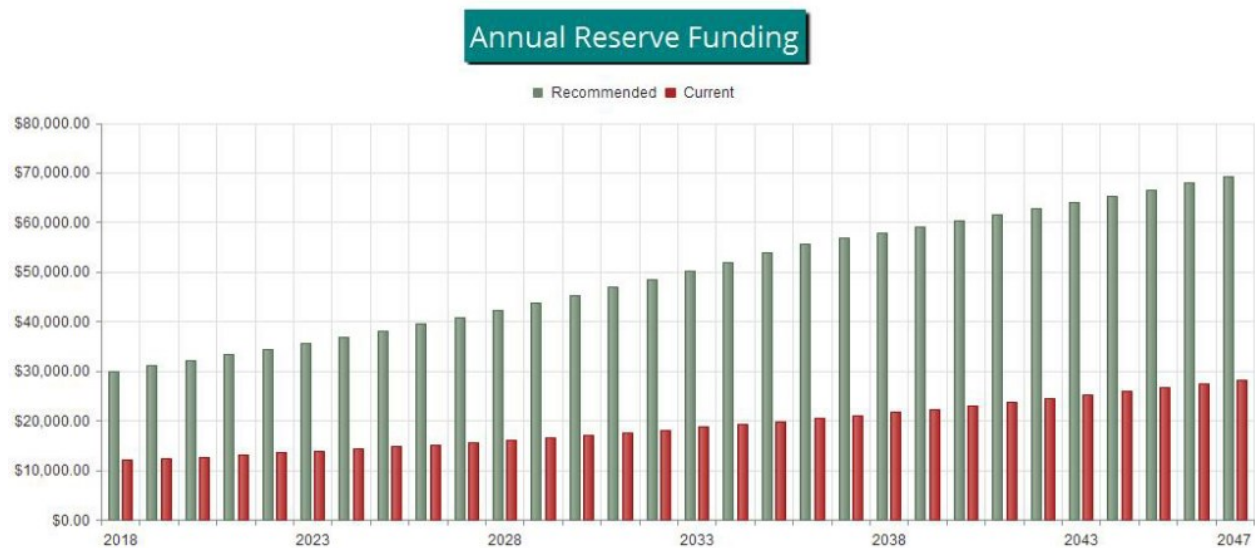


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan and at your current budgeted contribution rate, compared to your always-changing Fully Funded Balance target.

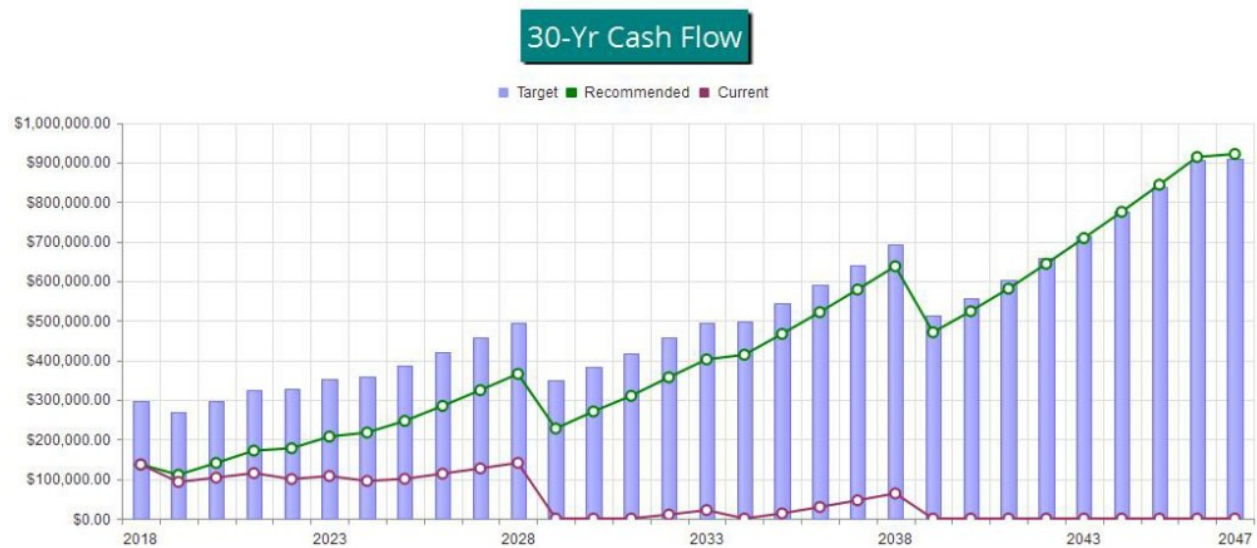


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan.

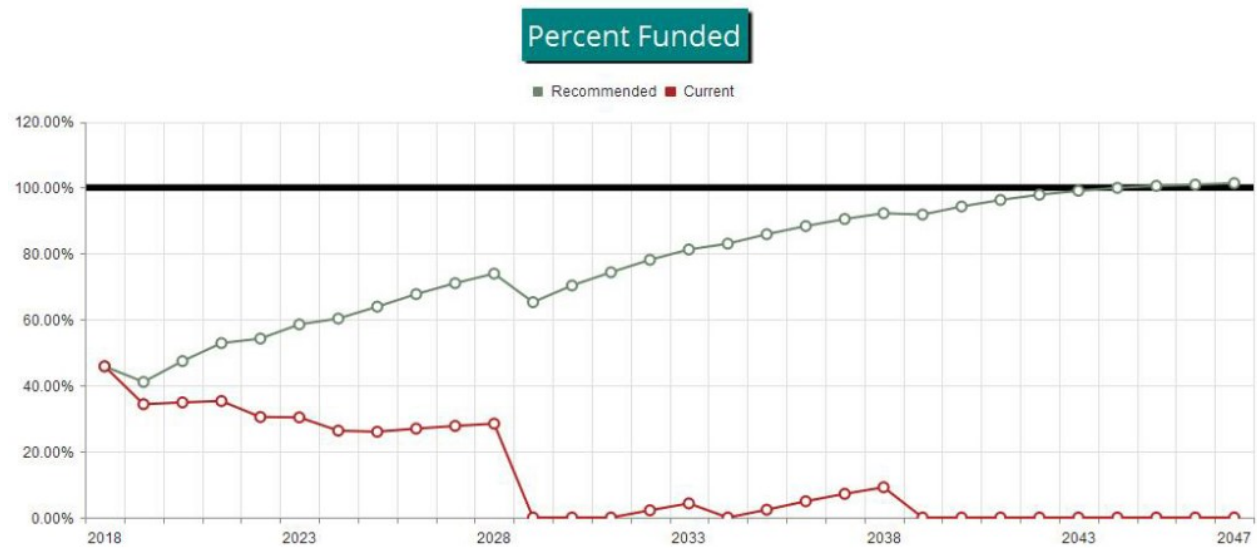


Figure 4

## Table Descriptions

The tabular information in this Report is broken down into nine tables, not all which may have been chosen by your Project Manager to appear in your report. Tables are listed in the order in which they appear in your Report.

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings of your Reserve Components.

Analysis Summary provides a summary of the starting financial information and your Project Manager's Financial Analysis decision points.

Reserve Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the property total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding needs of the your property, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

Accounting-Tax Summary provides information on each Component's proportionate portion of key totals, valuable to accounting professionals primarily during tax preparation time of year.

30-Yr Reserve Plan Summary provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special funding needs risk at the beginning of each year.

30-Year Income/Expense Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

# Reserve Component List Detail

34016-0  
Full

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
					Best Case	Worst Case
General Facility						
301	Tank Enclosure - Repair/Replace	(1) Enclosure	15	0	\$13,500	\$16,500
302	Generator (A) - Replace	(1) 7000 Watt Generator	15	0	\$9,000	\$11,000
302	Generator (B) - Replace	(1) Champion Generator	15	5	\$1,200	\$1,500
302	Generator (C) - Replace	(1) Honda Generator	15	6	\$3,000	\$4,000
305	Inventory Tracking System - Replace	(1) System	8	4	\$1,000	\$1,300
514	Sluff Wall - Replace/Repair	Approx 100 LF	25	3	\$22,000	\$26,500
1905	Leachfield - Inspection	(1) Inspection	10	0	\$13,500	\$16,500
1906	Leachfield - Repair/Replace	(1) Inspection	20	0	\$13,500	\$16,500
1930	Main Pumps - (Partial) Replace	(2 of 3) 1.5 HP Pumps	8	4	\$2,400	\$2,900
1932	Main Pumps Panels - Replace	(3) Pump Panels	30	5	\$9,000	\$11,000
1933	Main Tanks - Repair/Replace	(2) Tanks	30	5	\$9,000	\$11,000
1935	Sewage Pumps - (Partial) Replace	(3 of 6) 1.5 HP Pumps	8	6	\$2,100	\$2,600
1937	Sewage Pumps Panels - Replace	(6) Pump Panels	30	10	\$3,600	\$4,300
1940	Residential Pumps - (Partial) Repl.	(3 of 25) 1.5 HP Pumps	1	0	\$2,100	\$2,600
1942	Residential Pump Panels - Replace	(25) Pump Panels	30	10	\$13,500	\$16,500
1943	Residential Tanks - Repair/Replace	(50) Tanks	30	20	\$80,000	\$100,000
1950	Effluent Line - Repair/Replace	Approx. 7,600 LF x 50%	90	70	\$350,000	\$440,000
1960	Effluent Line - Clean	Approx. 7,600 LF	30	10	\$90,000	\$110,000
18 Total Funded Components						

#	Component	Current	X	Effective	/	Useful	=	Fully
		Cost		Age		Life		Funded
		Estimate						Balance
General Facility								
301	Tank Enclosure - Repair/Replace	\$15,000	X	15	/	15	=	\$15,000
302	Generator (A) - Replace	\$10,000	X	15	/	15	=	\$10,000
302	Generator (B) - Replace	\$1,350	X	10	/	15	=	\$900
302	Generator (C) - Replace	\$3,500	X	9	/	15	=	\$2,100
305	Inventory Tracking System - Replace	\$1,150	X	4	/	8	=	\$575
514	Sluff Wall - Replace/Repair	\$24,250	X	22	/	25	=	\$21,340
1905	Leachfield - Inspection	\$15,000	X	10	/	10	=	\$15,000
1906	Leachfield - Repair/Replace	\$15,000	X	20	/	20	=	\$15,000
1930	Main Pumps - (Partial) Replace	\$2,650	X	4	/	8	=	\$1,325
1932	Main Pumps Panels - Replace	\$10,000	X	25	/	30	=	\$8,333
1933	Main Tanks - Repair/Replace	\$10,000	X	25	/	30	=	\$8,333
1935	Sewage Pumps - (Partial) Replace	\$2,350	X	2	/	8	=	\$588
1937	Sewage Pumps Panels - Replace	\$3,950	X	20	/	30	=	\$2,633
1940	Residential Pumps - (Partial) Repl.	\$2,350	X	1	/	1	=	\$2,350
1942	Residential Pump Panels - Replace	\$15,000	X	20	/	30	=	\$10,000
1943	Residential Tanks - Repair/Replace	\$90,000	X	10	/	30	=	\$30,000
1950	Effluent Line - Repair/Replace	\$395,000	X	20	/	90	=	\$87,778
1960	Effluent Line - Clean	\$100,000	X	20	/	30	=	\$66,667
								\$297,922

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
General Facility					
301	Tank Enclosure - Repair/Replace	15	\$15,000	\$1,000	4.91 %
302	Generator (A) - Replace	15	\$10,000	\$667	3.28 %
302	Generator (B) - Replace	15	\$1,350	\$90	0.44 %
302	Generator (C) - Replace	15	\$3,500	\$233	1.15 %
305	Inventory Tracking System - Replace	8	\$1,150	\$144	0.71 %
514	Sluff Wall - Replace/Repair	25	\$24,250	\$970	4.77 %
1905	Leachfield - Inspection	10	\$15,000	\$1,500	7.37 %
1906	Leachfield - Repair/Replace	20	\$15,000	\$750	3.69 %
1930	Main Pumps - (Partial) Replace	8	\$2,650	\$331	1.63 %
1932	Main Pumps Panels - Replace	30	\$10,000	\$333	1.64 %
1933	Main Tanks - Repair/Replace	30	\$10,000	\$333	1.64 %
1935	Sewage Pumps - (Partial) Replace	8	\$2,350	\$294	1.44 %
1937	Sewage Pumps Panels - Replace	30	\$3,950	\$132	0.65 %
1940	Residential Pumps - (Partial) Repl.	1	\$2,350	\$2,350	11.55 %
1942	Residential Pump Panels - Replace	30	\$15,000	\$500	2.46 %
1943	Residential Tanks - Repair/Replace	30	\$90,000	\$3,000	14.74 %
1950	Effluent Line - Repair/Replace	90	\$395,000	\$4,389	21.57 %
1960	Effluent Line - Clean	30	\$100,000	\$3,333	16.38 %
18	Total Funded Components			\$20,349	100.00 %

#	Component	UL	RUL	Current Cost Estimate	Fully Funded Balance	Current Fund Balance	Proportional Reserve Contribs
General Facility							
301	Tank Enclosure - Repair/Replace	15	0	\$15,000	\$15,000	\$15,000	\$123
302	Generator (A) - Replace	15	0	\$10,000	\$10,000	\$10,000	\$82
302	Generator (B) - Replace	15	5	\$1,350	\$900	\$900	\$11
302	Generator (C) - Replace	15	6	\$3,500	\$2,100	\$2,100	\$29
305	Inventory Tracking System - Replace	8	4	\$1,150	\$575	\$575	\$18
514	Sluff Wall - Replace/Repair	25	3	\$24,250	\$21,340	\$21,340	\$119
1905	Leachfield - Inspection	10	0	\$15,000	\$15,000	\$15,000	\$184
1906	Leachfield - Repair/Replace	20	0	\$15,000	\$15,000	\$15,000	\$92
1930	Main Pumps - (Partial) Replace	8	4	\$2,650	\$1,325	\$1,325	\$41
1932	Main Pumps Panels - Replace	30	5	\$10,000	\$8,333	\$8,333	\$41
1933	Main Tanks - Repair/Replace	30	5	\$10,000	\$8,333	\$8,333	\$41
1935	Sewage Pumps - (Partial) Replace	8	6	\$2,350	\$588	\$588	\$36
1937	Sewage Pumps Panels - Replace	30	10	\$3,950	\$2,633	\$2,633	\$16
1940	Residential Pumps - (Partial) Repl.	1	0	\$2,350	\$2,350	\$2,350	\$289
1942	Residential Pump Panels - Replace	30	10	\$15,000	\$10,000	\$10,000	\$61
1943	Residential Tanks - Repair/Replace	30	20	\$90,000	\$30,000	\$0	\$369
1950	Effluent Line - Repair/Replace	90	70	\$395,000	\$87,778	\$0	\$539
1960	Effluent Line - Clean	30	10	\$100,000	\$66,667	\$23,067	\$410
18 Total Funded Components					\$297,922	\$136,545	\$2,500

# 30-Year Reserve Plan Summary

34016-0  
Full

Fiscal Year Start: 2018	Interest: 1.00 %	Inflation: 3.00 %
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes	

Year	Starting	Fully	Percent	Special Funding Needs	% Increase In Annual Reserve	Reserve Contribs.	Reserve Contribs.	Loan or	Interest Income	Reserve Expenses
	Reserve Balance	Funded Balance						Special Funding Needs		
2018	\$136,545	\$297,922	45.8 %	Medium	150.00 %	\$30,000	\$0	\$0	\$1,234	\$57,350
2019	\$110,429	\$268,749	41.1 %	Medium	3.50 %	\$31,050	\$0	\$0	\$1,253	\$2,421
2020	\$140,312	\$295,907	47.4 %	Medium	3.50 %	\$32,137	\$0	\$0	\$1,558	\$2,493
2021	\$171,514	\$324,452	52.9 %	Medium	3.50 %	\$33,262	\$0	\$0	\$1,744	\$29,067
2022	\$177,453	\$327,151	54.2 %	Medium	3.50 %	\$34,426	\$0	\$0	\$1,921	\$6,922
2023	\$206,878	\$353,426	58.5 %	Medium	3.50 %	\$35,631	\$0	\$0	\$2,119	\$27,475
2024	\$217,153	\$360,028	60.3 %	Medium	3.50 %	\$36,878	\$0	\$0	\$2,318	\$9,791
2025	\$246,557	\$385,771	63.9 %	Medium	3.50 %	\$38,168	\$0	\$0	\$2,654	\$2,890
2026	\$284,489	\$420,145	67.7 %	Medium	3.50 %	\$39,504	\$0	\$0	\$3,041	\$2,977
2027	\$324,058	\$456,234	71.0 %	Low	3.50 %	\$40,887	\$0	\$0	\$3,445	\$3,066
2028	\$365,324	\$494,111	73.9 %	Low	3.50 %	\$42,318	\$0	\$0	\$2,963	\$183,176
2029	\$227,429	\$348,431	65.3 %	Medium	3.50 %	\$43,799	\$0	\$0	\$2,488	\$3,253
2030	\$270,463	\$384,547	70.3 %	Low	3.50 %	\$45,332	\$0	\$0	\$2,901	\$8,768
2031	\$309,927	\$416,936	74.3 %	Low	3.50 %	\$46,919	\$0	\$0	\$3,332	\$3,451
2032	\$356,727	\$456,669	78.1 %	Low	3.50 %	\$48,561	\$0	\$0	\$3,792	\$7,109
2033	\$401,971	\$494,751	81.2 %	Low	3.50 %	\$50,260	\$0	\$0	\$4,077	\$42,610
2034	\$413,697	\$498,359	83.0 %	Low	3.50 %	\$52,020	\$0	\$0	\$4,398	\$3,771
2035	\$466,344	\$543,060	85.9 %	Low	3.50 %	\$53,840	\$0	\$0	\$4,936	\$3,884
2036	\$521,236	\$589,994	88.3 %	Low	3.50 %	\$55,725	\$0	\$0	\$5,496	\$4,001
2037	\$578,456	\$639,256	90.5 %	Low	2.00 %	\$56,839	\$0	\$0	\$6,076	\$4,121
2038	\$637,250	\$690,942	92.2 %	Low	2.00 %	\$57,976	\$0	\$0	\$5,536	\$230,279
2039	\$470,483	\$512,339	91.8 %	Low	2.00 %	\$59,135	\$0	\$0	\$4,969	\$10,883
2040	\$523,705	\$555,491	94.3 %	Low	2.00 %	\$60,318	\$0	\$0	\$5,519	\$9,006
2041	\$580,536	\$603,041	96.3 %	Low	2.00 %	\$61,525	\$0	\$0	\$6,118	\$4,638
2042	\$643,541	\$657,721	97.8 %	Low	2.00 %	\$62,755	\$0	\$0	\$6,756	\$4,777
2043	\$708,275	\$715,139	99.0 %	Low	2.00 %	\$64,010	\$0	\$0	\$7,412	\$4,920
2044	\$774,777	\$775,411	99.9 %	Low	2.00 %	\$65,290	\$0	\$0	\$8,086	\$5,068
2045	\$843,085	\$838,655	100.5 %	Low	2.00 %	\$66,596	\$0	\$0	\$8,778	\$5,220
2046	\$913,239	\$904,996	100.9 %	Low	2.00 %	\$67,928	\$0	\$0	\$9,166	\$69,553
2047	\$920,780	\$908,460	101.4 %	Low	2.00 %	\$69,287	\$0	\$0	\$9,570	\$5,538

# 30-Year Income/Expense Detail (yrs 0 through 4)

34016-0  
Full

Fiscal Year	2018	2019	2020	2021	2022
Starting Reserve Balance	\$136,545	\$110,429	\$140,312	\$171,514	\$177,453
Annual Reserve Contribution	\$30,000	\$31,050	\$32,137	\$33,262	\$34,426
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,234	\$1,253	\$1,558	\$1,744	\$1,921
Total Income	\$167,779	\$142,732	\$174,007	\$206,520	\$213,800
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$15,000	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$10,000	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$0	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$0	\$0	\$0	\$0	\$1,294
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$26,499	\$0
1905 Leachfield - Inspection	\$15,000	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$15,000	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$2,983
1932 Main Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$0
1937 Sewage Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$2,350	\$2,421	\$2,493	\$2,568	\$2,645
1942 Residential Pump Panels - Replace	\$0	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$57,350	\$2,421	\$2,493	\$29,067	\$6,922
Ending Reserve Balance	\$110,429	\$140,312	\$171,514	\$177,453	\$206,878

<b>Fiscal Year</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Starting Reserve Balance	\$206,878	\$217,153	\$246,557	\$284,489	\$324,058
Annual Reserve Contribution	\$35,631	\$36,878	\$38,168	\$39,504	\$40,887
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,119	\$2,318	\$2,654	\$3,041	\$3,445
Total Income	\$244,628	\$256,348	\$287,379	\$327,035	\$368,390
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$1,565	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$4,179	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$0	\$0	\$0	\$0	\$0
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$0	\$0
1905 Leachfield - Inspection	\$0	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$0
1932 Main Pumps Panels - Replace	\$11,593	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$11,593	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$2,806	\$0	\$0	\$0
1937 Sewage Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$2,724	\$2,806	\$2,890	\$2,977	\$3,066
1942 Residential Pump Panels - Replace	\$0	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$27,475	\$9,791	\$2,890	\$2,977	\$3,066
Ending Reserve Balance	\$217,153	\$246,557	\$284,489	\$324,058	\$365,324

<b>Fiscal Year</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>
Starting Reserve Balance	\$365,324	\$227,429	\$270,463	\$309,927	\$356,727
Annual Reserve Contribution	\$42,318	\$43,799	\$45,332	\$46,919	\$48,561
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,963	\$2,488	\$2,901	\$3,332	\$3,792
Total Income	\$410,604	\$273,716	\$318,696	\$360,178	\$409,080
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$0	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$0	\$0	\$1,640	\$0	\$0
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$0	\$0
1905 Leachfield - Inspection	\$20,159	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$0	\$0	\$3,778	\$0	\$0
1932 Main Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$3,555
1937 Sewage Pumps Panels - Replace	\$5,308	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$3,158	\$3,253	\$3,351	\$3,451	\$3,555
1942 Residential Pump Panels - Replace	\$20,159	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$134,392	\$0	\$0	\$0	\$0
Total Expenses	\$183,176	\$3,253	\$8,768	\$3,451	\$7,109
Ending Reserve Balance	\$227,429	\$270,463	\$309,927	\$356,727	\$401,971

<b>Fiscal Year</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>
Starting Reserve Balance	\$401,971	\$413,697	\$466,344	\$521,236	\$578,456
Annual Reserve Contribution	\$50,260	\$52,020	\$53,840	\$55,725	\$56,839
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,077	\$4,398	\$4,936	\$5,496	\$6,076
Total Income	\$456,308	\$470,115	\$525,120	\$582,457	\$641,371
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$23,370	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$15,580	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$0	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$0	\$0	\$0	\$0	\$0
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$0	\$0
1905 Leachfield - Inspection	\$0	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$0
1932 Main Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$0
1937 Sewage Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$3,661	\$3,771	\$3,884	\$4,001	\$4,121
1942 Residential Pump Panels - Replace	\$0	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$42,610	\$3,771	\$3,884	\$4,001	\$4,121
Ending Reserve Balance	\$413,697	\$466,344	\$521,236	\$578,456	\$637,250

<b>Fiscal Year</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>
Starting Reserve Balance	\$637,250	\$470,483	\$523,705	\$580,536	\$643,541
Annual Reserve Contribution	\$57,976	\$59,135	\$60,318	\$61,525	\$62,755
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$5,536	\$4,969	\$5,519	\$6,118	\$6,756
Total Income	\$700,763	\$534,588	\$589,542	\$648,179	\$713,052
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$2,438	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$6,511	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$2,077	\$0	\$0	\$0	\$0
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$0	\$0
1905 Leachfield - Inspection	\$27,092	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$27,092	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$4,786	\$0	\$0	\$0	\$0
1932 Main Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$0	\$4,503	\$0	\$0
1937 Sewage Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$4,244	\$4,372	\$4,503	\$4,638	\$4,777
1942 Residential Pump Panels - Replace	\$0	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$162,550	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$230,279	\$10,883	\$9,006	\$4,638	\$4,777
Ending Reserve Balance	\$470,483	\$523,705	\$580,536	\$643,541	\$708,275

<b>Fiscal Year</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>	<b>2047</b>
Starting Reserve Balance	\$708,275	\$774,777	\$843,085	\$913,239	\$920,780
Annual Reserve Contribution	\$64,010	\$65,290	\$66,596	\$67,928	\$69,287
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,412	\$8,086	\$8,778	\$9,166	\$9,570
Total Income	\$779,697	\$848,153	\$918,459	\$990,333	\$999,637
# Component					
<b>General Facility</b>					
301 Tank Enclosure - Repair/Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (A) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (B) - Replace	\$0	\$0	\$0	\$0	\$0
302 Generator (C) - Replace	\$0	\$0	\$0	\$0	\$0
305 Inventory Tracking System - Replace	\$0	\$0	\$0	\$2,631	\$0
514 Sluff Wall - Replace/Repair	\$0	\$0	\$0	\$55,482	\$0
1905 Leachfield - Inspection	\$0	\$0	\$0	\$0	\$0
1906 Leachfield - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1930 Main Pumps - (Partial) Replace	\$0	\$0	\$0	\$6,063	\$0
1932 Main Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1933 Main Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1935 Sewage Pumps - (Partial) Replace	\$0	\$0	\$0	\$0	\$0
1937 Sewage Pumps Panels - Replace	\$0	\$0	\$0	\$0	\$0
1940 Residential Pumps - (Partial) Repl.	\$4,920	\$5,068	\$5,220	\$5,377	\$5,538
1942 Residential Pump Panels - Replace	\$0	\$0	\$0	\$0	\$0
1943 Residential Tanks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1950 Effluent Line - Repair/Replace	\$0	\$0	\$0	\$0	\$0
1960 Effluent Line - Clean	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$4,920	\$5,068	\$5,220	\$69,553	\$5,538
Ending Reserve Balance	\$774,777	\$843,085	\$913,239	\$920,780	\$994,099

## Accuracy, Limitations, and Disclosures

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Derek Eckert, R.S., company president, is a credentialed Reserve Specialist (#114). All work done by Association Reserves is performed under his Responsible Charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

Per NRSS, information provided by official representative(s) of the client, vendors, and suppliers regarding financial details, component physical details and/or quantities, or historical issues/conditions will be deemed reliable, and is not intended to be used for the purpose of any type of audit, quality/forensic analysis, or background checks of historical records. As such, information provided to us has not been audited or independently verified.

Estimates for interest and inflation have been included, because including such estimates are more accurate than ignoring them completely. When we are hired to prepare Update reports, the client is considered to have deemed those previously developed component quantities as accurate and reliable, whether established by our firm or other individuals/firms (unless specifically mentioned in our Site Inspection Notes). During inspections our company standard is to establish measurements within 5% accuracy, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our work is done only for budget purposes. Uses or expectations outside our expertise and scope of work include, but are not limited to, project audit, quality inspection, and the identification of construction defects, hazardous materials, or dangerous conditions. Identifying hidden issues such as but not limited to plumbing or electrical problems are also outside our scope of work. Our estimates assume proper original installation & construction, adherence to recommended preventive maintenance, a stable economic environment, and do not consider frequency or severity of natural disasters. Our opinions of component Useful Life, Remaining Useful Life, and current or future cost estimates are not a warranty or guarantee of actual costs or timing.

Because the physical and financial status of the property, legislation, the economy, weather, owner expectations, and usage are all in a continual state of change over which we have no control, we do not expect that the events projected in this document will all occur exactly as planned. This Reserve Study is by nature a "one-year" document in need of being updated annually so that more accurate estimates can be incorporated. It is only because a long-term perspective improves the accuracy of near-term planning that this Report projects expenses into the future. We fully expect a number of adjustments will be necessary through the interim years to the cost and timing of expense projections and the funding necessary to prepare for those estimated expenses.

In this engagement our compensation is not contingent upon our conclusions, and our liability in any matter involving this Reserve Study is limited to our fee for services rendered.

Where any uncertainties exist, we urge the association to obtain a legal review and written opinion of the legitimacy of the funding policies, as stipulated or permitted under your Declaration and local statutes. As these are legal questions, we highly recommend use of an experienced real property attorney specializing in association law.

Re-use of reserve study, figures or calculations in any other format absolves ARSF of all responsibility.

## Terms and Definitions

<b>BTU</b>	British Thermal Unit (a standard unit of energy)
<b>DIA</b>	Diameter
<b>GSF</b>	Gross Square Feet (area). Equivalent to Square Feet
<b>GSY</b>	Gross Square Yards (area). Equivalent to Square Yards
<b>HP</b>	Horsepower
<b>LF</b>	Linear Feet (length)
<b>Effective Age</b>	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
<b>Fully Funded Balance (FFB)</b>	The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an property total.
<b>Inflation</b>	Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.
<b>Interest</b>	Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
<b>Percent Funded</b>	The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
<b>Remaining Useful Life (RUL)</b>	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
<b>Useful Life (UL)</b>	The estimated time, in years, that a common area component can be expected to serve its intended function.

## Component Details

The primary purpose of the photographic appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The photographs herein represent a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

- 1) Common area maintenance repair & replacement responsibility
- 2) Component must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of Annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life of how often the project is expected to occur, RUL = Remaining Useful Life pr how many years from our reporting period) and representative market cost range termed “Best Cost” and “Worst Cost” below the photo. There are many factors that can result in a wide variety of potential costs, we are attempting to represent a market to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

## General Facility

### Comp #: 300 Facility Overview

Quantity: Pumps, Tanks, Lines

Location: Lake Canyon Community Service District

Funded?: No. This component provides insight of the facilities water system.

History:

Evaluation: Raw sewage is collected in septic tanks (concrete and fiberglass) that are located on individual lots to provide primary treatment of the sewage. In some cases, a single septic tank serves two houses and is termed a "cluster system". For several properties, raw sewage is collected in a small vault and pumped via a solids handling pump to a septic tank. The effluent from the individual and cluster septic tanks flows by gravity or is pumped (with "STEP" units) into the effluent collection system (approximately 5,000 feet of 2-inch and 4-inch diameter PVC effluent sewers) where it flows by gravity to the Main Lift Station near the east end of the community. The effluent sewers follow the existing roads in the community. From the Main Pump Station, effluent is pumped via a four-inch force main across Beardsley Creek (at the Laurel Drive bridge), approximately 2,600 feet to a community leachfield located in an open grassland area on the adjoining property owned by Santa Clara County Parks Department. The force main follows Laurel Road to its terminus, and then traverses park property largely along an existing unpaved access road, ultimately terminating at a dosing tank upslope of the leachfield site on the park property.

The community leachfield consists of a dual system of trenches, divided into a Summer and Winter leachfield, equal in capacity to 200 percent of the estimated peak design flow of approximately 17,225 gpd. The leachfield consists of approximately 5,335 lineal feet of trench (2,465 l.f. for the Winter leachfield and 2,870 l.f. for the Summerleachfield), and covers approximately two acres.

The trenches are 3.0 to 3.5 feet deep, spaced at 10 feet on center, and receive effluent in doses from duplex dosing siphons located in a dosing tank upslope of the leachfield site. Pressure distribution laterals with 1/4-inch perforations (spaced at 5 feet o.c.), are used to distribute the effluent uniformly throughout the trenches.

Useful Life:

Remaining Life:

No Photo Available

Best Case:

Worst Case:

Cost Source:

**Comp #: 301 Tank Enclosure - Repair/Replace****Quantity: (1) Enclosure**

Location: Beardsley Rd adjacent from unit 19141

Funded?: Yes.

History: Scheduled Repairs/Replacements - 2018/2019

Evaluation: This equipment enclosure stores the generators and main tank pump panels. The community plans to repair the enclosure in the near future. This component provides an allowance for repairs and/or replacement to the enclosure at the interval below.

Useful Life:  
15 years

Remaining Life:  
0 years



Best Case: \$ 13,500

Worst Case: \$ 16,500

Lower allowance to repair &amp; replace

Higher allowance to repair &amp; replace

Cost Source: Estimate Provided by Client

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**Comp #: 302 Generator (A) - Replace****Quantity: (1) 7000 Watt Generator**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: Yes.

History: Scheduled Purchase - 2018/2019

Evaluation: The community plans to purchase a generator that is large enough to run the main pump station pumps in case of an emergency. Once purchased, we recommend having service vendor assess overall condition and if predictable basis for replacement or overhaul is determined, include funding within future reserve study update(s). The cost below was provided by the client.

Useful Life:  
15 years

Remaining Life:  
0 years

No Photo Available

Best Case: \$ 9,000

Worst Case: \$ 11,000

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

**Comp #: 302 Generator (B) - Replace****Quantity: (1) Champion Generator**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: Yes.

History:

Evaluation: Age of the asset is unknown at this time. Have service vendor assess overall condition and if predictable basis for replacement or overhaul is determined, include funding within future reserve study update(s).

Useful Life:

15 years

Remaining Life:

5 years



Best Case: \$ 1,200

Worst Case: \$ 1,500

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

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**Comp #: 302 Generator (C) - Replace****Quantity: (1) Honda Generator**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: Yes.

History:

Evaluation: Age of the asset is unknown at this time. Have service vendor assess overall condition and if predictable basis for replacement or overhaul is determined, include funding within future reserve study update(s).

Useful Life:

15 years

Remaining Life:

6 years



Best Case: \$ 3,000

Worst Case: \$ 4,000

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

**Comp #: 305 Inventory Tracking System - Replace****Quantity: (1) System**

Location: Lake Canyon Community Service

Funded?: Yes.

History:

Evaluation: This component provides an allowance for an inventory tracking system of the operation components.

Useful Life:  
8 yearsRemaining Life:  
4 years

No Photo Available

Best Case: \$ 1,000

Worst Case: \$ 1,300

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

---

**Comp #: 514 Sluff Wall - Replace/Repair****Quantity: Approx 100 LF**

Location: Behind main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: Yes.

History:

Evaluation: The sluff wall was upright at the time of the site inspection, however, the wall is showing signs of wood rot and decay at the base of the posts. We recommend consultation with a licensed professional contractor to help establish a viable repair and/or replacement plan.

Useful Life:  
25 yearsRemaining Life:  
3 years

Best Case: \$ 22,000

Worst Case: \$ 26,500

Lower allowance to replace/repair

Higher allowance to replace/repair

Cost Source: ARSF Cost Database

**Comp #: 1905 Leachfield - Inspection****Quantity: (1) Inspection**

Location: Leachfield

Funded?: Yes.

History:

Evaluation: Per the Operations & Maintenance Manual, "The community leachfield consists of a dual system of trenches, divided into a Summer and Winter leachfield, equal in capacity to 200 percent of the estimated peak design flow of approximately 17,225 gpd. The leachfield consists of approximately 5,335 lineal feet of trench (2,465 l.f. for the Winter leachfield and 2,870 l.f. for the Summer leachfield), and covers approximately two acres. The trenches are 3.0 to 3.5 feet deep, spaced at 10 feet on center, and receive effluent in doses from duplex dosing siphons located in a dosing tank upslope of the leachfield site. Pressure distribution laterals with 1/4-inch perforations (spaced at 5 feet o.c.), are used to distribute the effluent uniformly throughout the trenches."

This component provides an allowance to have the leachfield tank inspected.

Useful Life:  
10 years

Remaining Life:  
0 years

No Photo Available

Best Case: \$ 13,500

Worst Case: \$ 16,500

Lower allowance to inspection

Higher allowance to inspection

Cost Source: Estimate Provided by Client

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**Comp #: 1906 Leachfield - Repair/Replace****Quantity: (1) Inspection**

Location: Leachfield

Funded?: Yes.

History:

Evaluation: We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly.

Useful Life:  
20 years

Remaining Life:  
0 years

No Photo Available

Best Case: \$ 13,500

Worst Case: \$ 16,500

Lower allowance to repair/replace

Higher allowance to repair/replace

Cost Source: Estimate Provided by Client

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**Comp #: 1930 Main Pumps - (Partial) Replace**

**Quantity: (2 of 3) 1.5 HP Pumps**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: Yes.

History:

Evaluation: This component provides an allowance to replace (2) pumps at the interval below. We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly.

Useful Life:  
8 years

Remaining Life:  
4 years



Best Case: \$ 2,400

Worst Case: \$ 2,900

Lower allowance to replace (2) pump

Higher allowance to replace (2) pump

Cost Source: Estimate Provided by Client

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**Comp #: 1931 Main Pump Filters - Replace**

**Quantity: (3) Pumps Filters**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

Funded?: No. Replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

History:

Evaluation: Informed that replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

Useful Life:

Remaining Life:

No Photo Available

Best Case:

Worst Case:

Cost Source:

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**Comp #: 1932 Main Pumps Panels - Replace**

**Quantity: (3) Pump Panels**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

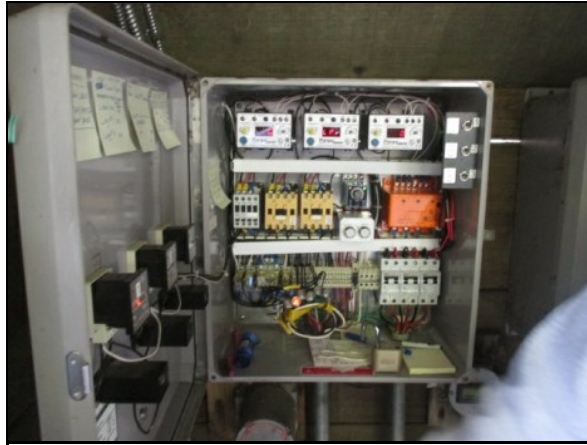
Funded?: Yes.

History:

Evaluation: We recommend contacting a licensed professional to better determine the cost and timing of future replacement.

Useful Life:  
30 years

Remaining Life:  
5 years



Best Case: \$ 9,000

Worst Case: \$ 11,000

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

---

**Comp #: 1933 Main Tanks - Repair/Replace**

**Quantity: (2) Tanks**

Location: Main tank enclosure on Beardsley Rd, adjacent from unit 19141

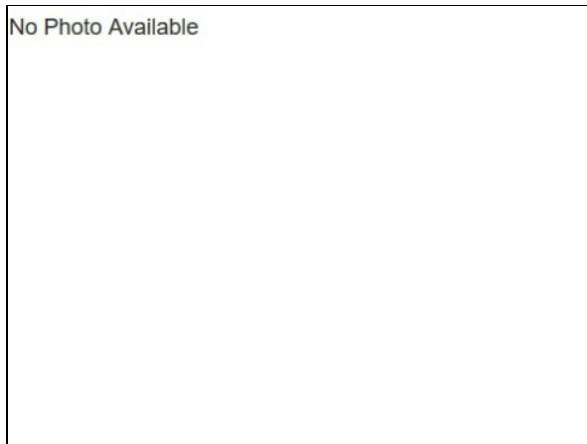
Funded?: Yes.

History:

Evaluation: We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly.

Useful Life:  
30 years

Remaining Life:  
5 years



Best Case: \$ 9,000

Worst Case: \$ 11,000

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

---

**Comp #: 1935 Sewage Pumps - (Partial) Replace****Quantity: (3 of 6) 1.5 HP Pumps**

Location: Collection system

Funded?: Yes.

History:

Evaluation: Per the Operations & Maintenance Manual, "There are six sewage pump units in the system to collect the sewage flow from the house and pump it up to the septic tank location. These consist of 30-inch diameter, ribbed PVC basins (typically 5-foot deep), with a submersible solids handling sewage pump. These units have similar controls as the STEP units; but the pump is made to handle sewage solids, and there is no screened vault. Also, the pump basins are much smaller than the septic tank units. The pumps have an operating dose of about 25 gallons, and reserve emergency storage capacity of about 50 gallons, maximum."

We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly. This component provides an allowance to replace (3) pumps at the interval below.

Useful Life:  
8 years

Remaining Life:  
6 years

No Photo Available

Best Case: \$ 2,100

Worst Case: \$ 2,600

Lower allowance to replace (3) pumps

Higher allowance to replace (3) pumps

Cost Source: Estimate Provided by Client

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**Comp #: 1936 Sewage Pump Filters - Replace****Quantity: (6) Pumps Filters**

Location: Collection system

Funded?: No. Replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

History:

Evaluation: Informed that replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

Useful Life:

Remaining Life:

No Photo Available

Best Case:

Worst Case:

Cost Source:

**Comp #: 1937 Sewage Pumps Panels - Replace****Quantity: (6) Pump Panels**

Location: Collection system

Funded?: Yes.

History:

Evaluation: We recommend contacting a licensed professional to better determine the cost and timing of future replacement.

Useful Life:  
30 yearsRemaining Life:  
10 years

No Photo Available

Best Case: \$ 3,600

Worst Case: \$ 4,300

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

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**Comp #: 1940 Residential Pumps - (Partial) Repl.****Quantity: (3 of 25) 1.5 HP Pumps**

Location: STEP Septic tank pumps

Funded?: Yes.

History:

Evaluation: Per the Operations & Maintenance Manual, "there are 50 septic tanks there are 25 tanks that are discharged by gravity flow (referred to as STEF Units) and 25 tanks that are discharged by a pump (referred to STEP units). The STEF units require typical maintenance (cleaning, filter replacement, etc) which is considered to be an operating expense. The STEP units will require pump replacements."

No expectation to replace all the pumps at one time, this component provides an allowance to replace (3) pumps annually. We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly. Track actual expenses for inclusion within future Reserve Study updates.

Useful Life:  
1 yearsRemaining Life:  
0 years

No Photo Available

Best Case: \$ 2,100

Worst Case: \$ 2,600

Lower allowance to replace (3) pumps

Higher allowance to replace (3) pumps

Cost Source: Estimate Provided by Client

**Comp #: 1941 Residential Pump Filters - Replace**

**Quantity: (25) Pumps Filters**

Location: STEP Septic tank pumps

Funded?: No. Replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

History:

Evaluation: Informed that replacement is handled out of the Operating Budget. No Reserve funding necessary at this time.

Useful Life:

Remaining Life:

No Photo Available

Best Case:

Worst Case:

Cost Source:

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**Comp #: 1942 Residential Pump Panels - Replace**

**Quantity: (25) Pump Panels**

Location: STEP Septic tank pumps

Funded?: Yes.

History:

Evaluation: This component provides an allowance for pump panel upgrades.

Useful Life:  
30 years

Remaining Life:  
10 years



Best Case: \$ 13,500

Worst Case: \$ 16,500

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

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**Comp #: 1943 Residential Tanks - Repair/Replace****Quantity: (50) Tanks**

Location: Individual and cluster tanks located on underground lots

Funded?: Yes.

History:

Evaluation: Per the Operations & Maintenance Manual, "there are a total of 50 septic tanks in the system, 49 of which, are 1,500-gallon tanks. One house is serviced by a 1,000-gallon tank due to space limitations which precluded the installation of a 1,500-gallon tank. About half of the tanks are concrete and half are fiberglass. All tanks function in the same manner to settle and digest sewage solids, and pass the clarified effluent into the collection system."

We recommend periodic inspections by a licensed professional to ensure the surfaces ages correctly.

Useful Life:  
30 years

Remaining Life:  
20 years

No Photo Available

Best Case: \$ 80,000

Worst Case: \$ 100,000

Lower allowance to replace

Higher allowance to replace

Cost Source: Estimate Provided by Client

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**Comp #: 1950 Effluent Line - Repair/Replace****Quantity: Approx. 7,600 LF x 50%**

Location: Underground

Funded?: Yes.

History:

Evaluation: We recommend consultation with a licensed professional contractor to help establish a viable repair and/or replacement plan. Although these lines have an extended life under normal circumstances (100 years estimated by National Association of Corrosion Engineers) it is best that the organization allocate an allowance for budget purposes.

Useful Life:  
90 years

Remaining Life:  
70 years

No Photo Available

Best Case: \$ 350,000

Worst Case: \$ 440,000

Lower allowance to replace

Higher allowance to replace

Cost Source: ARSF Cost Database

**Comp #: 1960 Effluent Line - Clean**

**Quantity: Approx. 7,600 LF**

Location: Effluent Lines at Oak Street, Laurel Street, Beardsley Street, Madrone Street, Manzanita Street and Leachfield lines  
Funded?: Yes.

History:

Evaluation: This component provides an allowance to clean the effluent lines throughout the property. We recommend consultation with a licensed professional contractor to help establish a viable repair and/or replacement plan.

Useful Life:  
30 years

Remaining Life:  
10 years

No Photo Available

Best Case: \$ 90,000

Worst Case: \$ 110,000

Lower allowance to clean

Higher allowance to clean

Cost Source: Estimate Provided by Client

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