Sector 2A Snohomish Cascade Association

Snohomish, WA

Level II Reserve Study (With Site-Visit)

Fiscal Year: 2023

Report#: 17323

Version: Draft1

Reserve Data Analyst, Inc.

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Report Date: January 12, 2023

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Sector 2A Snohomish Cascade Association
Introduction

Thank you for utilizing the services of Reserve Data Analyst for your reserve study. We strive to create a comprehensive report that can be utilized for your budgeting needs. If there are any questions, concerns, corrections, or revisions needed please do not hesitate to call or email us. While this study does have some explanations of the methodology used, we have kept it to a minimum for brevity. More detailed explanations of methodology & concepts are explained in our Reserve Study Guidebook available at the following link:

www.reservedataanalyst.com/guidebook

The recommendations for the allocation rates of the different funding models are only for the beginning year of this reserve study; all future years are projections which are educated guesses and have numerous assumptions (e.g., inflation, proper maintenance, proper installation, known reserve account balances, etc.) built into the models. The further out in time a reader of the study goes, the less reliable the projections are likely to be. Note that the recommendations for the first fiscal year in the study are based on current cost and current useful life estimate levels as opposed to future cost and future useful life projections which again are educated guesses.

From year to year the recommendations of the reserve analyst will typically change (sometimes significantly) based on variables such as what projects have been done, what projects has been deferred, changes to the allocation rate, changes to the starting balance, changes to the component list, actual inflation rate figure (versus projections), maintenance or lack of maintenance of components, etc. Annual updates to this report help to incorporate changes to these variables as they occur so revisions to the recommendations are less significant than if updates are done infrequently. .

There are a couple of tips to consider that will help you both navigate this study and understand the different sections within the study:

- ***Study Navigation*** - To navigate this study more easily, we recommend printing out the Table of Contents page at the beginning of the study and the Component Index page(s) at the rear of the study. We have found it easiest for most readers to have the PDF of this study open on their computer while referring to the printed-out Table of Contents and Component Index pages.

Within this reserve study you will find:

- A list of common questions that a typical reader of our reserve study will have, as well as links to additional information on the topics: (*Reserve Study Knowledge Base*)
- A list of the site and building components that are reportedly the Client's responsibility along with their respective costs and quantity: (*The Component List*)
- A timeline of the estimated dates that we recommend funds be allocated to the repair/replacement project. (*Projected Expenditures - Chart, List & Spreadsheet*)
- Various funding models with different goals in mind. (*Summary Comments Page and Projections Page*)

Sector 2A Snohomish Cascade Association
Executive Summary

Name	Sector 2A Snohomish Cascade Association
Location	Snohomish, WA
Contributing Members	247
Base Year / Age	June 1, 1997
Fiscal Year Ends	December 31, 2023

Level of Service	Level II Reserve Study (With Site-Visit)
Prepared for Fiscal Year	2023
Last On-Site Inspection Date	January 12, 2023
Inflation Rate for Projections	3.00%
*Interest Rate for Projections	0.05%
*Tax Rate on Interest Earned	30.0%
Funding Plan Method	Inflation Adjusted Pooled Cash Flow Method

Reserve Account Summary

Current Percent Funded (as of January 1, 2023)		
24.1%	**Fiscal Year Beginning Fully Funded Balance**	$327,384
	***Estimated FY Start Balance**	$78,957
	Total Reserve Account Surplus or (Deficit)	(248,427)
	Avg. Surplus or (Deficit) Per Contributing Member	-1006
	***Current Annual Reserve Allocation Rate**	$30,875 per year
	***Approved Special Assessments**	None in fiscal year 2023.
	***Approved Loans**	None in fiscal year 2023.

0-30% Low | 30-70% Fair | 70-100% Good

5-Year Summary - Annual Reserve Allocation Rates & Year End % Funded

	100% Funding Model		Recommended Funding Model		Baseline Funding Model		**Current Funding Model		
2023	$293,158	100%	$54,850	12%	$74,183	19%	$30,875	3%	***2023***
2024	$48,984	101%	$56,495	28%	$45,512	30%	$31,801	12%	***2024***
2025	$51,972	102%	$58,190	25%	$46,878	24%	$32,755	0%	***2025***
2026	$53,532	103%	$59,936	39%	$48,284	34%	$33,738	9%	***2026***
2027	$55,137	102%	$61,734	33%	$49,733	25%	$34,750	-8%	***2027***
	Account is at least 100% funded each year.		*Achieve 100% funded within the timeframe of this study.*		*Reserve account above $0 within timeframe of study.*		*Current allocation rate has been supplied by the Client.*		

** Data supplied by the Client, assumed to be correct and not independently verified.*
***Any negative percent funded shown is for visual representation of deficiency.*

What is a Reserve Study?

A reserve study is a budgeting tool that can be utilized to make more informed budgeting decisions regarding a reserve account, it is an independent assessment of the adequacy of the reserve account balance and allocation rate utilizing a mathematical formula known as the "Percent Funded" calculation.

The Reserve Analyst develops funding models that:

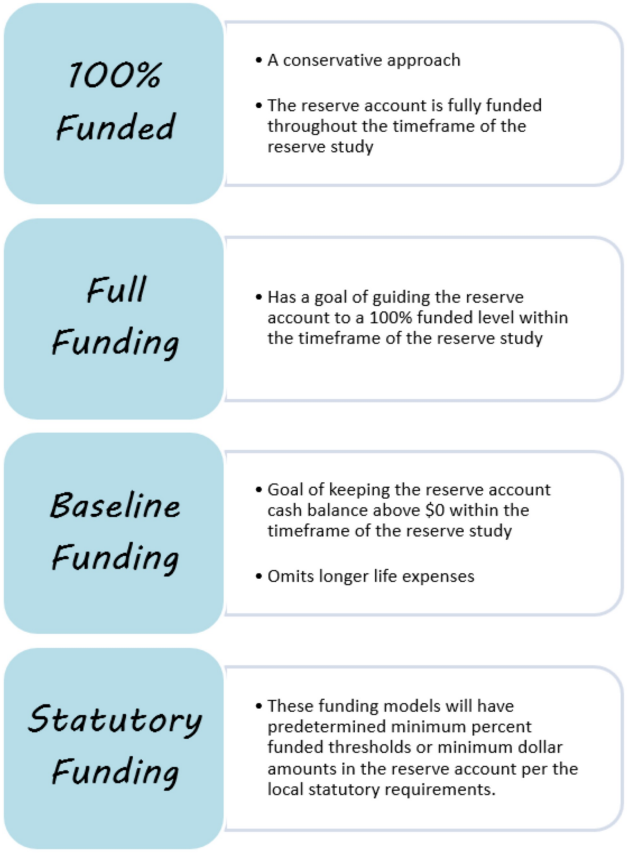
- Distribute the costs as fairly as possible over time
- Have stable budgets over time (i.e., limiting large fluctuations from one year to the next)
- Limit the risk for reliance on emergency financing or having to defer overdue projects

A Reserve Study is an independent assessment of the reserve account and is not the Budget ….

This study is not the budget, and it should not be revised to just reflect the budgeting decisions of the Client. An example of this is to push off overdue projects that the Client may not have the funds to complete. This report should reflect the replacement dates of the components utilizing average or historical records for the useful lives & costs for these projects; the useful lives can be updated to reflect actual on-site conditions as the components age and in updates to this report. Should the Client decide to make budgeting decisions such as deferring projects (typically due to a lack of funds) and that appear to be overdue carries its own risk with relation to scenarios like higher project costs later and marketability issues.

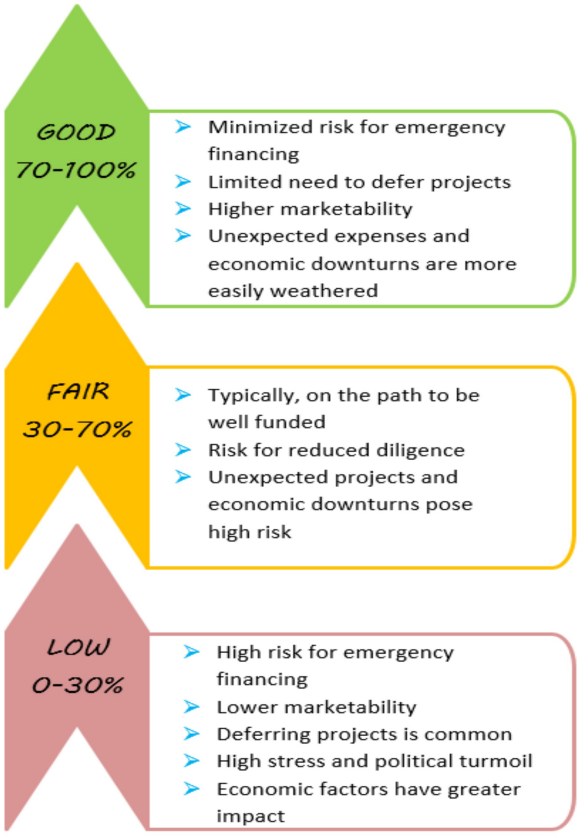
How Much Should We Reserve?

There is no right or wrong answer to the question of "How Much Should We Reserve?" as the reserve contributions in all the funding models in this study are based on different funding goals. It is more appropriate to consider the risk levels associated with different funding models as each Client has different risk tolerances and challenges in enacting whatever funding model is most appropriate to them. In our opinion any funding model that projects the reserve account balance to dip to zero would not be appropriate or fiscally responsible as future emergency financing or deferring projects are typically the outcome. Below are some of the more common funding models utilized:



About Percent Funded

Percent funded is a calculation of how much is in the reserve account versus an ideal amount known as the Fully Funded Balance. The different risk levels associated with the levels of funding are explained in more depth below.



The below video link explains the Percent Funded calculation in more detail:

www.reservedataanalyst.com/pf

About the Fully Funded Balance

The Fully Funded balance is a mathematical calculation that represents the accrued deterioration of a component or a group of components at a specific point in time. It is an answer to the question of "How much should be in a reserve account at a specific point in time?" When the reserve account balance is the same as the Fully Funded Balance the reserve account is considered Fully Funded (100% Funded) at that specific point in time.

The below video link provides a more in-depth explanation of the Fully Funded balance:

www.reservedataanalyst.com/ffb

Calculating Inflation in the Reserve Study

Inflationary factors impact the project costs over time and are the main driving force that must be overcome with diligent and steadfast budgeting towards reserves. Due to the compounding impact of inflation on costs, in a relatively short period of time, a reserve account can be become severely underfunded if it is not considered in the budgeting scenarios. Follow the below link to learn more about how we calculate inflationary factors (escalation of the prices) in the reserve study and some of the tools we use in the process:

www.reservedataanalyst.com/inf

Component Useful Life Estimates

The useful life of components in the reserve study are predominantly based on our experiences with many different types of organizations and their respective repair and replacement cycles with building and site components. In addition to our own experiences working with many organizations over the years there is ample data available online regarding useful life estimates of building and site components. It is important to note that the estimates in the reserve study are based on averages and are not specific to any one property. Follow the below link to view some of the various useful life tables that we utilize:

www.reservedataanalyst.com/ul

Determining Component Project Costs

We utilize many sources for determining what is an appropriate component project cost in the reserve study. These can include:

- Client invoices, bids, estimates
- Our in-house database that is based on the collection of many Client invoices, bids, and estimates
- Cost manuals that, when used correctly, are very accurate for average cost figures

It's important to understand that unless we are provided actual project costs based on a client invoice/bid or estimate we utilize average costs figures that are not specific to any one Client. In the bidding process you will find that there is a ... large difference in price from one vendor to the next for a variety of reasons. We aim to be in the middle of these estimates unless we have Client data to incorporate into the reserve study. Future costs (projections) for the component expenses are simply inflated from current cost based on the inflation assumption in the reserve study. It is important to remember that our current recommendations are based on current project costs and not the inflated number that is utilized in the projections portion of the reserve study. The below link goes into this topic in more detail:

www.reservedataanalyst.com/cost

National Reserve Study Standards

There are two recognized organizations that dictate national reserve study standards in the industry. The Community Association's Institute and the Association of Professional Reserve Analysts award designations to those reserve study professionals that meet education & work experience, adhere to the minimum report requirements, complete ongoing continuing education courses, and abide by ethical considerations in the field. The standards for both organizations can be viewed at the links below:

www.reservedataanalyst.com/CAI

www.reservedataanalyst.com/APRA

What Components to Include in the Study?

Reserve expenses for components are major expenses which must be budgeted for in advance to provide the necessary funds in time for their occurrence. Reserve expenses are reasonably predictable both in terms of frequency and cost. They are expenses that when incurred would have a significant impact on the smooth operation of the budgetary process from one year to the next if they were not reserved for in advance.

A common concern when beginning this process is what components are to be included and funded for in the Reserve Study. Nationally recognized CAI Reserve Study Standards as well as APRA Standards of Practice dictate that the reserve components need to meet the following criteria:

- It's not already covered in the Operating Budget
- The component has a limited life expectancy
- The component has a reasonably defined remaining useful life
- As required by local statutes

When to Complete Reserve Projects?

Components should be replaced when they are no longer functioning as designed. This is best determined by your component specific Vendor who can inspect and give their best professional advice on the condition assessment and timeframe on when/what needs to be done. Note that this reserve study is ***not*** a "to do list"; it is a budgeting document with recommendations for when we suggest having the funds allocated towards the projects ... If something fails earlier than projected than replace it, if it lasts longer (as determined by your component specific Vendor) then take their advice as they are the professionals in their specific field. Projects should be completed when they need to be completed regardless of our projections in the study. Note that this does not mean it would be appropriate to delay projects simply because funds are not available though as that is a budgeting decision not based on component specific Vendor recommendations. A common issue we see is the delay of projects simply because there is a lack of reserve funds available, only to have a much larger and more expensive project later due to collateral damage (e.g., not replacing a roof in a timely manner, which then leaks and causes siding damage).

Ongoing Component Maintenance

While this reserve study has been developed to disclose and inform the Client of the predictable larger long-term project costs related to site and building components, there is also a need to complete regular inspections and repairs to virtually all components on much shorter cycles. These costs would typically be covered in the annual and ongoing Operating Budget.

Virtually all the components should receive regular cycles of inspection and repairs by a qualified Vendor. Failure to complete ongoing maintenance typically leads to shorter useful lives and higher costs later. RSMeans provides a free link to common building and site component items to inspect at various corresponding time frames.

www.reservedataanalyst.com/RSmeans

Recommendations Versus Projections

In the reserve study the Reserve Analyst' *recommendations* for the allocation rates of the different funding models apply only to the year the reserve study is being developed for. All *projections* in the study are future educated guesses with assumptions about a significant number of variables (e.g., inflation rate, financials, component useful life, component remaining useful life, proper maintenance, etc.).

Projections can be accurate or extremely inaccurate based on these assumptions; because of this we do not suggest giving much consideration to projections in the decision making for overall reserve budgeting. This may sound counterintuitive, but this is due to recommendations for the allocation rates, in the initial year of the study, being based on predominantly current known factors (e.g., *current* costs, *current* inflation, *current* maintenance practices) versus projections which are based on future assumptions to a variety of variables (e.g., *future* costs, *future* inflation rates, and *future* maintenance practices). Follow the below link to our website to learn more about recommendations versus projections.

www.reservedataanalyst.com/projections

You Have a Study Now What?… Goal Setting

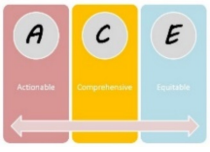
Adequately budgeting for reserves is often one of the more difficult tasks our clients face. Reserve component projects are infrequent and often years down the line, making it very easy to just "deal with it later". We have found those that are most successful with reserve budgeting goals typically follow these simple … rules when creating and implementing a reserve budget.

Actionable
Is your goal possible within the constraints & limitations of very important but often overlooked factors related to statutory requirements and the governing documents? What may seem very "Reasonable" to the Board may very well be illegal or against the governing documents.

Comprehensive
Your goal should be clear and specific, otherwise you won't be able to focus your efforts or feel truly motivated to achieve it. When drafting your goal, try to answer the four "W" questions - *What* do we want to accomplish? *Why* is this goal important? *Who* is involved? *When* is this goal set to occur?

Equitable
Your goal should be reasonable and attainable to be successful. In other words, it should stretch your abilities but remain possible. When you set an achievable goal, you may be able to identify previously overlooked opportunities or resources that can bring you closer to it. This often means that transitioning to a more stable financial track will take years of smaller goals being obtained. Severely underfunded reserve accounts typically develop after many years or decades; it's usually not reasonable for the answers to come quick or easily.

Follow the below link to our website to learn more about the ACE way to reserve budgeting.



https://www.reservedataanalyst.com/ace

Sector 2A Snohomish Cascade Association
Plat Map

Sector 2A Snohomish Cascade Association
Reserve Analyst Comments

Reserve Study Update Comments on Inflation - FY 2022 Update

Per the most recent construction cost data in this region the inflation rate has been 12.5% since the prior reserve study was performed on 10/01/2021. This inflation rate has been applied to the component project estimated costs in this reserve study update.

Note that a historical average 3% has been applied to projections (future estimated project costs) in the reserve study as even though there will be time periods of inflation that are well above and below this historical average inflation rate, we would expect the long-term average to fall back in line with the historical average in the United States based on data going back over 100 years. To learn more about how inflation is applied to the reserve study please visit www.reservedataanalyst.com/inf

Comments on Fully Funded Balance Calculations (Fully Funded Balance Calculation Page)

The Fully Funded balance calculations for each component (age & useful life) have been adjusted if a component has been superseded by another component, received a positive or negative life adjustment, been phased over a period of time or is overdue (e.g., has an age greater than the typical useful life of the component). These adjustments are needed so that the fully funded balance mathematical calculation for each component is accurate and appropriately contributes to the total fully funded balance calculation (located on the executive summary & projection pages) for all components in this reserve study.

Comments on Assessment & Disclosure Form

Included in the fee for this reserve study is an Assessment & Disclosure Form which complies with statutory requirements for common interest communities. Please follow the following link to complete the request form on our website: https://www.reservedataanalyst.com/rad/

Note that this form can only be requested after the budget has been voted on and approved by the Board and/or Community Membership. This disclosure is a requirement for Boards to provide to the membership annually.

Excluded Components

Unless noted otherwise the below components have been excluded from funding in this reserve study. Note that the inclusion of any of these items later via a revision or update to this study will impact the funding strategies developed by the Reserve Analyst.

Not Client's Responsibility

The below components are reportedly not the Client's responsibility per their interpretation of their governing documents. Note that the Reserve Analyst does not interpret governing documents and have excluded items based on the Client' s request and their interpretation of their own governing documents. If there is ambiguity or questions as to what specific wording means in the governing documents, we recommend consulting with a qualified and experienced attorney.

1. Utility Main Lines - Utility Companies / County
2. Asphalt Streets - County
3. Utility Lines - County
4. Streetlights - County
5. Public Sidewalks (31,900 sf abutting common area parcels) - County

6. Hydrants - County
7. Fencing at Private Lots (excluding Sno-Cascade Dr)- Lot Owner's Responsibility
8. Landscaping & Chain Link Fence at Puget Park Drive - County

Operating Account Expense

The below components are reportedly paid from the Operating Account and have not been included in this reserve study.

1. Storm Sewer System Maintenance - We recommend setting up an annual contract with a qualified Vendor.
2. Asphalt Crack Sealing - Complete Annually as needed
3. Small Signage (at parks and native growth area)
4. Ongoing Landscaping
5. Minor Irrigation System Repairs
6. Baseball Field Upkeep

Sector 2A Snohomish Cascade Association
The Component List

Report Date	January 12, 2023
Beginning Fiscal Year	January 01, 2023
Account Number	17323

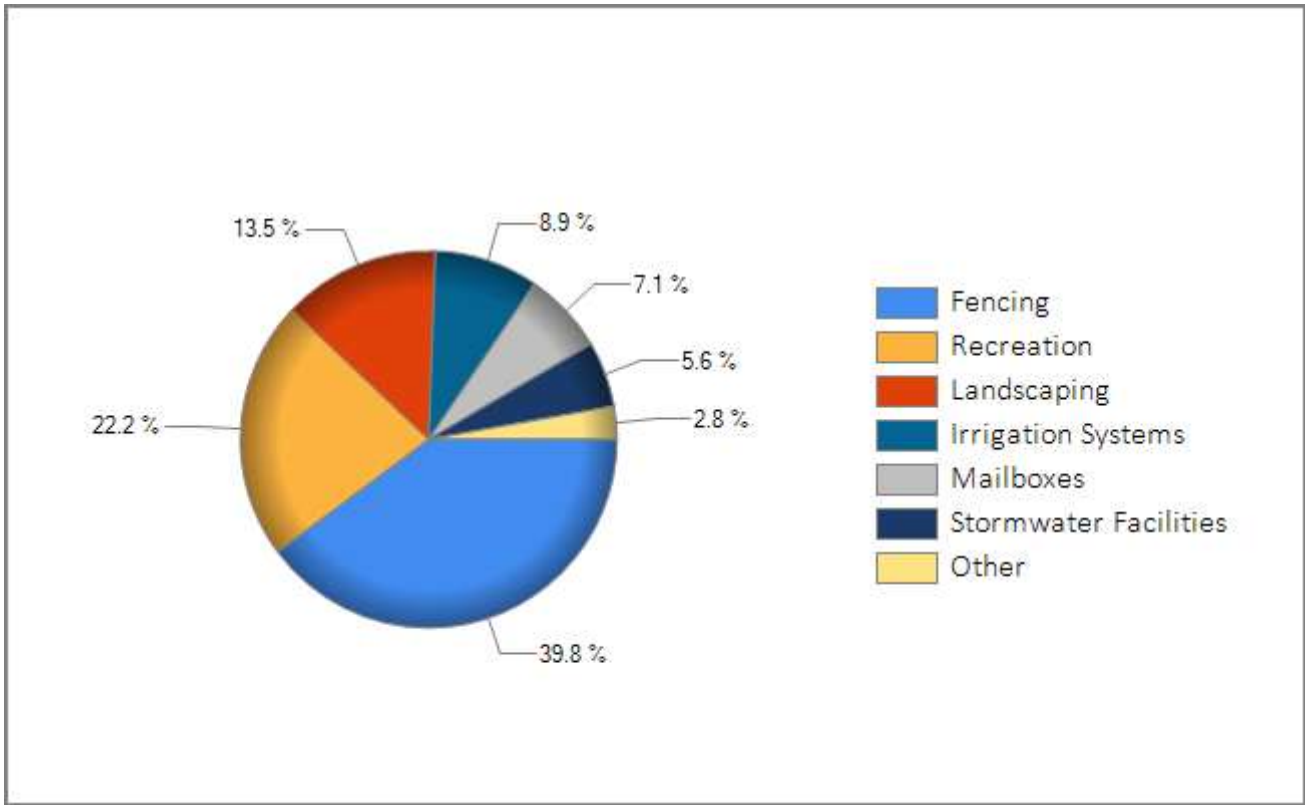
Version Number Draft1

Component Description	Approx. Date In Service	Replacement Year	Useful Life	Adjustment	Remaining UL	Units	Per Unit Cost And Percent Replacement	Current Cost
Asphalt - Overlay	1997	2023	25	0	0	4,113 sf	2.55	10,488
Asphalt - Sealcoat	2015	2023	5	0	0	4,113 sf	0.35	1,440
Baseball Backstop (chain link) - Replace	1997	2042	45	0	19	1 ea	9,268.09	9,268
Baseball Infield Fence (chain link) - Replace	1997	2042	45	0	19	152 lf	47.50	7,220
Concrete Curb - 20% Repair	1997	2023	5	15	0	227 lf	42.86@ 20%	1,946
Fence (chn link - NE Pond) - Replace	2010	2050	40	0	27	760 lf	42.28	32,133
Fence (chn link - NW Pond) - Replace	2016	2056	40	0	33	430 lf	42.28	18,180
Fence (chn link baseball 3.5') - Replace	1997	2037	40	0	14	345 lf	28.96	9,991
Fence (sno-cascade drive) - Paint/Stain	2016	2023	5	0	0	3,821 lf	9.84	37,599
Fence (sno-cascade drive) - Replace	2016	2041	25	0	18	3,821 lf	37.07	141,644
Fence (wood - NW Pond) - Paint/Stain	2017	2023	5	0	0	203 lf	9.84	1,998
Fence (wood - NW Pond) - Replace	1997	2023	25	0	0	203 lf	37.07	7,525
Irrigation Backflow Valve - Replace	1997	2023	25	0	0	1 ea	1,737.77	1,738
Irrigation Controller Panels - Replace	1997	2032	35	0	9	4 ea	868.88	3,476
Irrigation Controllers - Replace	2015	2030	15	0	7	4 ea	868.88	3,476
Irrigation Piping - 25% Replace	1997	2027	5	25	4	105,307 sf	1.95@ 25%	51,337
Irrigation Valves (in-ground) - 10% Replace	2019	2023	1	0	0	52 ea	289.63@ 10%	1,506
Landscape Drainage (boat park) - Refurbish	2020	2040	20	0	17	1 ls	17,205.62	17,206
Landscape Drainage (small park) - Refurbish	2022	2042	20	0	19	1 ls	40,000.00	40,000
Landscaping (gravel) - Replenish	2017	2023	5	0	0	2,451 sf	1.45	3,554
Landscaping - 25% Tree Care	1997	2023	5	20	0	111 ea	405.48@ 25%	11,252
Lights (pole) - Replace	1997	2027	30	0	4	1 ea	2,850.00	2,850
Mailbox Cluster (2009) - Replace	2009	2033	24	0	10	3 ea	1,839.09	5,517
Mailbox Cluster (2013) - Replace	2013	2037	24	0	14	1 ea	1,839.09	1,839
Mailbox Cluster (2015) - Replace	2015	2039	24	0	16	1 ea	1,839.09	1,839
Mailbox Cluster (2017) - Replace	2017	2041	24	0	18	2 ea	1,839.09	3,678
Mailbox Clusters (2021) - Replace	2021	2045	24	0	22	18 ea	1,839.09	33,104
Parking Bollards (boat park) - Replace	1997	2032	35	0	9	3 ea	1,158.51	3,476
Pavers (sand set) - Replace	1997	2023	25	0	0	145 sf	18.50	2,682
Playground Structure (boat park) - Replace	2022	2047	25	0	24	1 ea	60,000.00	60,000
Playground Structure (small park) - Replace	1997	2025	25	3	2	1 ea	60,000.00	60,000
Playground Surface (boat park) - Replenish	2023	2023	3	0	0	1,600 sf	1.10	1,760
Playground Surface (small park) - Replenish	2022	2025	3	0	2	1,271 sf	1.10	1,398
Playground Timber Edging (boat park) - Repl..	1997	2023	25	0	0	160 lf	28.00	4,480
Playground Timber Edging (small park) - Repl..	1997	2025	24	4	2	144 lf	28.00	4,032
Recreation - Benches (wood) - Replace	1997	2023	25	0	0	11 ea	868.88	9,558
Recreation - Picnic Table (wood) - Replace	1997	2023	25	0	0	3 ea	984.73	2,954
Retaining Walls (masonry) - Replace	2014	2054	40	0	31	67 sf	38.00	2,546
Retaining Walls (wood) - Replace	1997	2023	25	0	0	33 sf	28.00	924
Stormwater Pond (NE pond) - Refurbish	1997	2027	30	0	4	1 ea	23,170.23	23,170

Sector 2A Snohomish Cascade Association
The Component List

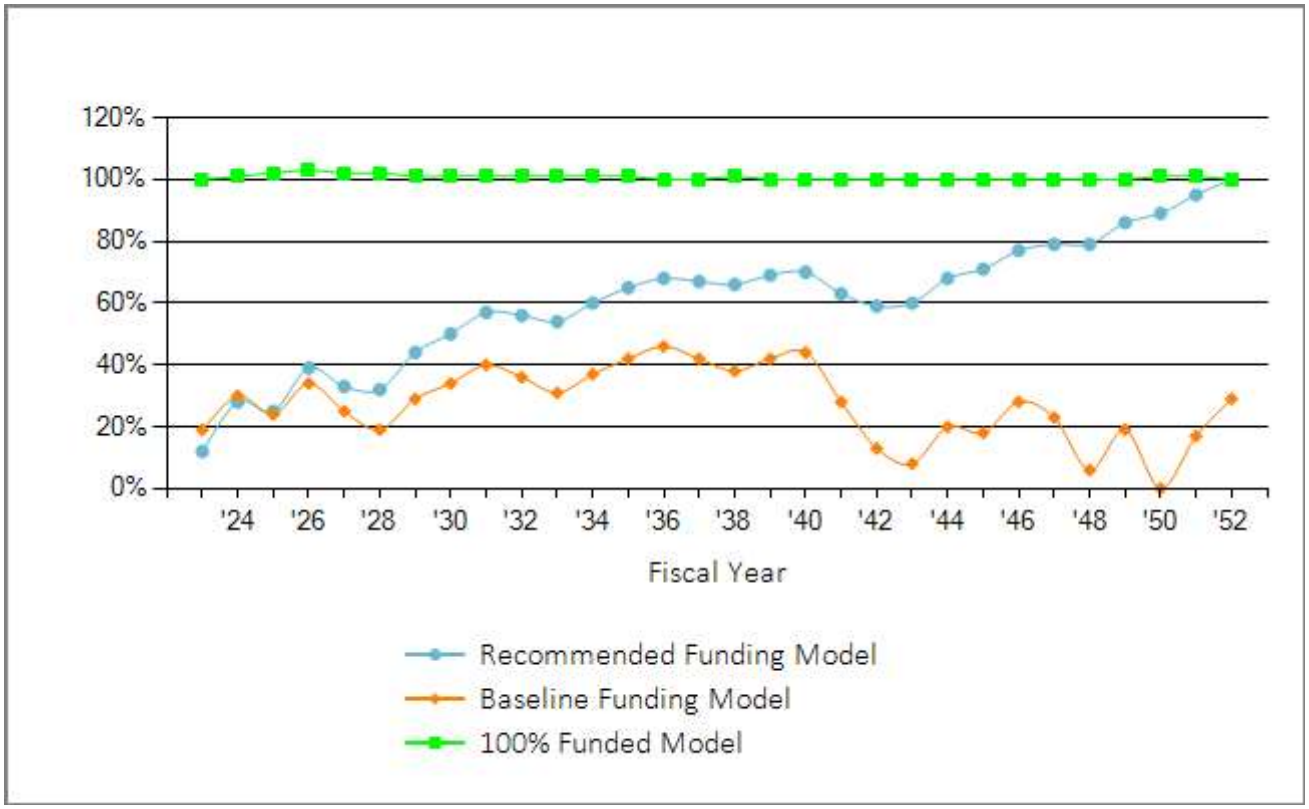
Component Description	Approx. Date In Service	Replacement Year	Useful Life	Adjustment	Remaining UL	Units	Per Unit Cost And Percent Replacement	Current Co
Stormwater Pond (NW pond) - Refurbish	2015	2030	15	0	7	1 ea	13,322.89	13,323
Total Asset Summary								$652,106

Sector 2A Snohomish Cascade Association
Current Cost by Category Chart



The above chart illustrates the current cost breakdown percentage of the Component Categories in this reserve study (highest percentage components listed at top). Special attention should be given to those component categories which take up a bulk of the % of the current cost as these may require significant planning to adequately budget for their replacement. These large expenses may be well into the future during "Peak Year" cycles. Refer to the Cash Flow Projections and the Annual Expenditure Report for the projected timeline of expected expenditures.

Sector 2A Snohomish Cascade Association
Projected Percent Funded Chart



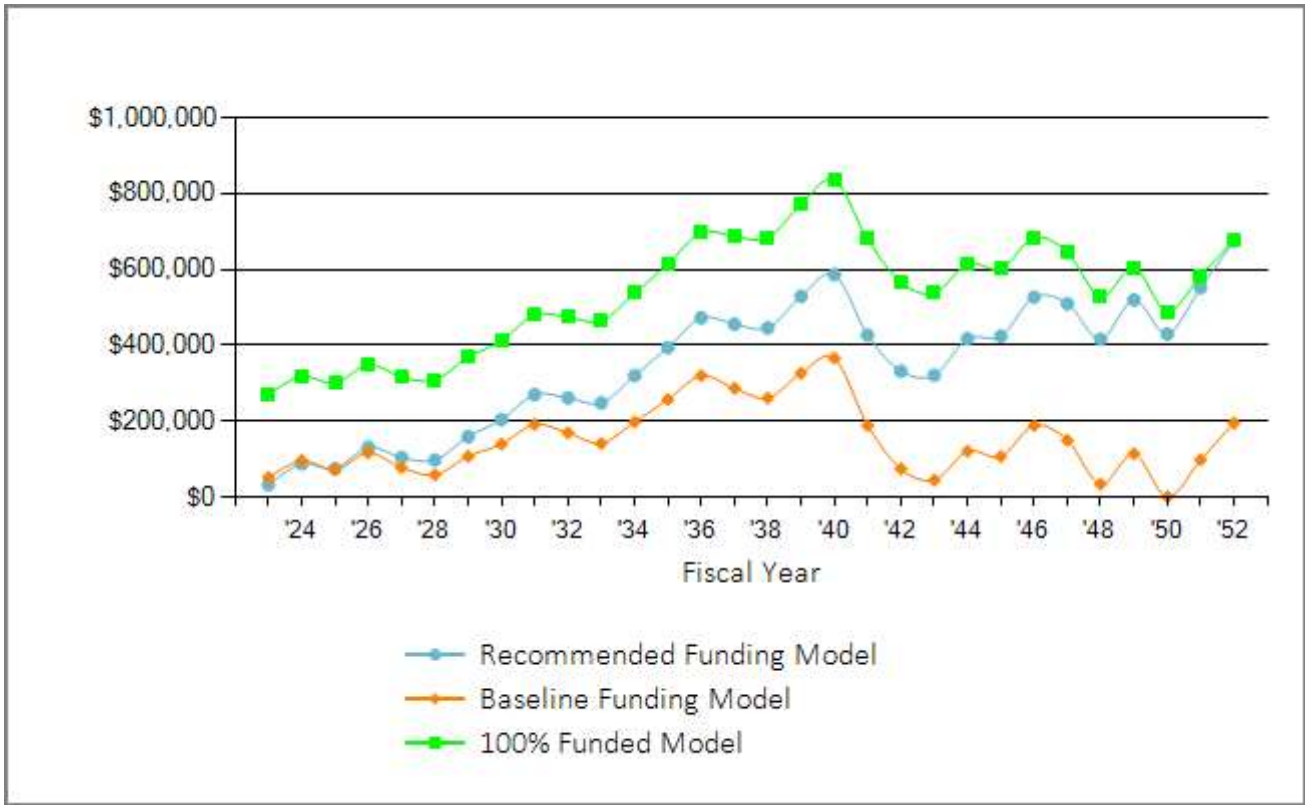
The above chart compares the funding models by the percentage funded levels over the 30-year timeframe of this reserve study, as calculated at the end of each fiscal year.

The *Recommended Funding Model* increase the Client's reserve account Percent Funded Level to 100% funding within the timeframe of this study. Once this 100% funded level is reached it is a good indicator that the Client is on track to meet its future obligations with minimal risk of reliance on emergency financing or having to defer projects that come due.

The *Baseline Funding Model* has only a goal of keeping the reserve account cash positive within the timeframe of the reserve study. This model carries significant risk for reliance on emergency financing and/or having to defer projects due to the common occurrence of components failing earlier than projected or costs increasing more rapidly than projected.

The *100% Funded Model* assumes the reserve account is an average of 100% Funded in each year of the reserve study. This model minimizes risk for reliance on emergency financing and places the reserve account onto a low risk path for budgeting.

Sector 2A Snohomish Cascade Association
Projected Reserve Account Balance Chart



The chart above compares the annual year-end balance of the reserve account for the respective funding models over the 30 years covered in this reserve study. Projected reserve account balances will see large fluctuations from year to year due to projects occurring in any given year.

Sector 2A Snohomish Cascade Association
100% Funded - Summary

Report Date	January 12, 2023
Account Number	17323
Version	Draft1
Budget Year Beginning	January 1, 2023
Budget Year Ending	December 31, 2023
Total Units	247

Report Parameters

Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.03%
Tax Rate Included in Interest Rate	
2023 Beginning Balance	$78,957

This funding model has a goal of being a minimum of 100% funded, annually, over the timeframe of this reserve study. Allocation rates will fluctuate based on the expenditures projected in any given year. The initial year has a much higher allocation rate than subsequent years as the reserve account is currently underfunded and requires a significant cash injection in the initial fiscal year to elevate the reserve account to a 100% Funded track.

The following page provides the 30-year projections for this funding model.

Full Funding Model 30 Year Summary of Calculations

Required Annual Contribution	$293,158.32
Average Net Annual Interest Earned	$94.75
Total Annual Allocation to Reserves	$293,253.07

Sector 2A Snohomish Cascade Association
100% Funded - Year End Projections

Beginning Balance: $78,957

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2023	652,106	293,158	95	101,403	270,807	270,807	100%
2024	671,669	48,984	111	1,551	318,351	316,262	101%
2025	691,819	51,972	105	71,013	299,416	293,010	102%
2026	712,574	53,532	122	3,569	349,501	339,740	103%
2027	733,951	55,137	111	88,762	315,987	311,290	102%
2028	755,969	62,334	108	70,358	308,071	302,526	102%
2029	778,649	64,204	129	3,900	368,504	363,583	101%
2030	802,008	66,130	144	22,512	412,266	408,980	101%
2031	826,068	71,578	168	3,679	480,332	476,867	101%
2032	850,850	73,725	166	80,314	473,909	469,639	101%
2033	876,376	75,937	162	87,100	462,907	457,041	101%
2034	902,667	78,215	188	4,020	537,290	531,528	101%
2035	929,747	80,561	215	4,657	613,409	609,541	101%
2036	957,640	85,976	244	2,212	697,418	694,419	100%
2037	986,369	88,555	240	99,939	686,274	683,250	100%
2038	1,015,960	91,212	239	95,120	682,605	678,838	101%
2039	1,046,439	93,948	270	5,368	771,455	768,930	100%
2040	1,077,832	96,767	292	33,238	835,276	835,275	100%
2041	1,110,167	97,070	238	252,962	679,621	679,621	100%
2042	1,143,472	78,129	198	191,713	566,235	566,235	100%
2043	1,085,055	80,422	188	109,616	537,229	535,918	100%
2044	1,117,607	82,835	215	6,076	614,204	613,306	100%
2045	1,151,135	85,320	210	98,503	601,231	599,843	100%
2046	1,185,669	87,880	239	5,732	683,618	683,618	100%
2047	1,221,239	90,259	226	128,607	645,495	645,495	100%
2048	1,257,876	89,863	184	208,631	526,912	526,020	100%
2049	1,295,613	92,559	212	14,958	604,724	604,724	100%
2050	1,334,481	95,335	171	211,908	488,322	485,280	101%
2051	1,374,515	98,195	204	3,446	583,275	579,390	101%
2052	1,415,751	101,141	441	6,844	678,014	675,317	100%

Sector 2A Snohomish Cascade Association
Recommended Funding - Summary

Report Date	January 12, 2023
Account Number	17323
Version	Draft1
Budget Year Beginning	January 1, 2023
Budget Year Ending	December 31, 2023
Total Units	247

Report Parameters

Inflation	3.00%
Interest Rate on Reserve Deposit	0.03%
Tax Rate Included in Interest Rate	
2023 Beginning Balance	$78,957

We have developed a funding plan which will help steer the reserve account into a high funded range within the 30-year timeframe of this reserve study. This Recommended Funding Model requires the Client to allocate the recommended allocation amount into the reserve account with annual increases thereafter. In the following pages you will find the recommended allocation rates to the reserve account, annual projected expenditures and the percent funded of the reserve account if following this Recommended Funding Model.

In the initial year of this funding model the reserve contribution rate is higher due to the need to fund projects in the near future. After these projects have been adequately funded for the reserve allocation rate can be lowered (still increases annually to offset inflationary factors) while still reaching the goal of this particular funding model.

This Recommended Funding Plan Considers 4 Basic Principles:

1. There are adequate reserves when needed.
2. The budget should remain stable but increasing to offset inflationary factors.
3. The costs are fairly distributed over time.
4. The funding plan must allow the Client to be fiscally responsible.

The following page provides the 30-year projections for this funding model.

Recommended Funding Model Summary of Calculations

Required Annual Contribution	$54,850.00
Average Net Annual Interest Earned	$11.34
Total Annual Allocation to Reserves	$54,861.34

Sector 2A Snohomish Cascade Association
Recommended Funding - Year End Projections

Beginning Balance: $78,957

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2023	652,106	54,850	11	101,403	32,415	270,807	12%
2024	671,669	56,495	31	1,551	87,390	316,262	28%
2025	691,819	58,190	26	71,013	74,594	293,010	25%
2026	712,574	59,936	46	3,569	131,007	339,740	39%
2027	733,951	61,734	36	88,762	104,016	311,290	33%
2028	755,969	63,586	34	70,358	97,278	302,526	32%
2029	778,649	65,494	56	3,900	158,927	363,583	44%
2030	802,008	67,459	71	22,512	203,945	408,980	50%
2031	826,068	69,482	94	3,679	269,843	476,867	57%
2032	850,850	71,567	91	80,314	261,187	469,639	56%
2033	876,376	73,714	87	87,100	247,887	457,041	54%
2034	902,667	75,925	112	4,020	319,904	531,528	60%
2035	929,747	78,203	138	4,657	393,588	609,541	65%
2036	957,640	80,549	165	2,212	472,090	694,419	68%
2037	986,369	82,966	159	99,939	455,276	683,250	67%
2038	1,015,960	85,455	156	95,120	445,767	678,838	66%
2039	1,046,439	88,018	185	5,368	528,602	768,930	69%
2040	1,077,832	90,659	205	33,238	586,227	835,275	70%
2041	1,110,167	93,378	149	252,962	426,793	679,621	63%
2042	1,143,472	96,180	116	191,713	331,375	566,235	59%
2043	1,085,055	99,065	112	109,616	320,937	535,918	60%
2044	1,117,607	102,037	146	6,076	417,044	613,306	68%
2045	1,151,135	105,098	148	98,503	423,787	599,843	71%
2046	1,185,669	108,251	184	5,732	526,491	683,618	77%
2047	1,221,239	111,499	178	128,607	509,561	645,495	79%
2048	1,257,876	114,844	146	208,631	415,920	526,020	79%
2049	1,295,613	118,289	182	14,958	519,432	604,724	86%
2050	1,334,481	121,838	150	211,908	429,512	485,280	89%
2051	1,374,515	125,493	193	3,446	551,752	579,390	95%
2052	1,415,751	129,258	429	6,844	674,594	675,317	100%

Sector 2A Snohomish Cascade Association
Alternate Recommended Model - Summary

Report Date	January 12, 2023
Account Number	17323
Version	Draft1
Budget Year Beginning	January 1, 2023
Budget Year Ending	December 31, 2023
Total Units	247

Report Parameters

Inflation	3.00%
Interest Rate on Reserve Deposit	0.03%
Tax Rate Included in Interest Rate	
2023 Beginning Balance	$78,957

Higher Annual % Allocation Model Summary of Calculations

Required Annual Contribution	$30,875.00
Average Net Annual Interest Earned	$2.95
Total Annual Allocation to Reserves	$30,877.95

Sector 2A Snohomish Cascade Association
Alternate Recommended Model - Year End Projections

Begining Balance: $78,957

Year	Asset Cost	Inflation Rate	Reserve Allocation	Allocation % Change	Net Interest	Projected Expenditures	Year End Acct. Balance	Year End FFB	Year End % Funded
2023	652,106	3.0%	30,875		3	101,403	8,432	270,807	3%
2024	671,669	3.0%	36,741	19.00%	15	1,551	43,637	316,262	14%
2025	691,819	3.0%	43,722	19.00%	6	71,013	16,352	293,010	6%
2026	712,574	3.0%	52,029	19.00%	23	3,569	64,835	339,740	19%
2027	733,951	3.0%	61,915	19.00%	13	88,762	38,002	311,290	12%
2028	755,969	3.0%	65,500	5.79%	12	70,358	33,155	302,526	11%
2029	778,649	3.0%	67,465	3.00%	34	3,900	96,754	363,583	27%
2030	802,008	3.0%	69,489	3.00%	50	22,512	143,781	408,980	35%
2031	826,068	3.0%	71,574	3.00%	74	3,679	211,750	476,867	44%
2032	850,850	3.0%	73,721	3.00%	72	80,314	205,228	469,639	44%
2033	876,376	3.0%	75,932	3.00%	68	87,100	194,128	457,041	42%
2034	902,667	3.0%	78,210	3.00%	94	4,020	268,412	531,528	50%
2035	929,747	3.0%	80,557	3.00%	121	4,657	344,433	609,541	57%
2036	957,640	3.0%	82,973	3.00%	149	2,212	425,344	694,419	61%
2037	986,369	3.0%	85,463	3.00%	144	99,939	411,011	683,250	60%
2038	1,015,960	3.0%	88,027	3.00%	141	95,120	404,059	678,838	60%
2039	1,046,439	3.0%	90,667	3.00%	171	5,368	489,530	768,930	64%
2040	1,077,832	3.0%	93,387	3.00%	192	33,238	549,871	835,275	66%
2041	1,110,167	3.0%	96,189	3.00%	138	252,962	393,235	679,621	58%
2042	1,143,472	3.0%	99,075	3.00%	105	191,713	300,702	566,235	53%
2043	1,085,055	3.0%	102,047	3.00%	103	109,616	293,235	535,918	55%
2044	1,117,607	3.0%	105,108	3.00%	137	6,076	392,405	613,306	64%
2045	1,151,135	3.0%	108,262	3.00%	141	98,503	402,304	599,843	67%
2046	1,185,669	3.0%	111,509	3.00%	178	5,732	508,260	683,618	74%
2047	1,221,239	3.0%	114,855	3.00%	173	128,607	494,680	645,495	77%
2048	1,257,876	3.0%	118,300	3.00%	142	208,631	404,492	526,020	77%
2049	1,295,613	3.0%	121,849	3.00%	179	14,958	511,561	604,724	85%
2050	1,334,481	3.0%	125,505	3.00%	149	211,908	425,306	485,280	88%
2051	1,374,515	3.0%	129,270	3.00%	193	3,446	551,323	579,390	95%
2052	1,415,751	3.0%	133,148	3.00%	430	6,844	678,058	675,317	100%

Sector 2A Snohomish Cascade Association
Baseline Funding - Summary

Report Date	January 12, 2023
Account Number	17323
Version	Draft1
Budget Year Beginning	January 1, 2023
Budget Year Ending	December 31, 2023
Total Units	247

Report Parameters

Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.03%
Tax Rate Included in Interest Rate	
2023 Beginning Balance	$78,957

The Baseline Funding Model is considered a bare minimum approach which has a goal of keeping the reserve account balance above $0 within the 30-year timeframe of this reserve study and *does not* take into consideration projected expenses that fall outside of the 30-year timeframe of the reserve study (i.e. longer life components are simply ignored).

This funding model carries a higher risk for reliance on emergency financing specifically in years when large component expenses occur earlier than projected or costs see significant increases. Additionally, in the future when longer life components come into the 30-year timeframe of future reserve studies their projected expenditures will have a significant impact on the allocation requirements to keep the reserve account cash positive going forward.

Should the Client have an interest in not funding longer life component projects (i.e. projects that are set to occur after the 30 year projections in this study) at this time then we suggest setting a goal of at least funding to the Baseline Funding Model which has the goal of only staying cash positive for the 30 year time-frame of the projections in this study.

In the initial year of this funding model the reserve contribution rate is higher due to the need to fund projects in the near future. After these projects have been adequately funded for the reserve allocation rate can be lowered (still increases annually to offset inflationary factors) while still reaching the goal of this particular funding model.

The following page provides the 30-year projections for this funding model.

Baseline Threshold Funding Model Summary of Calculations

Required Annual Contribution	$74,183.00
Average Net Annual Interest Earned	$18.11
Total Annual Allocation to Reserves	$74,201.11

Sector 2A Snohomish Cascade Association
Baseline Funding - Year End Projections

Beginning Balance: $78,957

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2023	652,106	74,183	18	101,403	51,755	270,807	19%
2024	671,669	45,512	34	1,551	95,750	316,262	30%
2025	691,819	46,878	25	71,013	71,640	293,010	24%
2026	712,574	48,284	41	3,569	116,396	339,740	34%
2027	733,951	49,733	27	88,762	77,394	311,290	25%
2028	755,969	51,225	20	70,358	58,281	302,526	19%
2029	778,649	52,761	37	3,900	107,180	363,583	29%
2030	802,008	54,344	49	22,512	139,061	408,980	34%
2031	826,068	55,975	67	3,679	191,423	476,867	40%
2032	850,850	57,654	59	80,314	168,822	469,639	36%
2033	876,376	59,383	49	87,100	141,154	457,041	31%
2034	902,667	61,165	69	4,020	198,369	531,528	37%
2035	929,747	63,000	90	4,657	256,802	609,541	42%
2036	957,640	64,890	112	2,212	319,592	694,419	46%
2037	986,369	66,837	100	99,939	286,589	683,250	42%
2038	1,015,960	68,842	91	95,120	260,403	678,838	38%
2039	1,046,439	70,907	114	5,368	326,056	768,930	42%
2040	1,077,832	73,034	128	33,238	365,979	835,275	44%
2041	1,110,167	75,225	66	252,962	188,308	679,621	28%
2042	1,143,472	77,482	26	191,713	74,103	566,235	13%
2043	1,085,055	79,806	16	109,616	44,309	535,918	8%
2044	1,117,607	82,201	42	6,076	120,476	613,306	20%
2045	1,151,135	84,667	37	98,503	106,676	599,843	18%
2046	1,185,669	87,207	66	5,732	188,217	683,618	28%
2047	1,221,239	89,823	52	128,607	149,485	645,495	23%
2048	1,257,876	92,517	12	208,631	33,384	526,020	6%
2049	1,295,613	95,293	40	14,958	113,758	604,724	19%
2050	1,334,481	98,152		211,908	1	485,280	0%
2051	1,374,515	101,096	34	3,446	97,686	579,390	17%
2052	1,415,751	104,129	102	6,844	195,074	675,317	29%

Sector 2A Snohomish Cascade Association
Current Funding - Summary

Report Date	January 12, 2023
Account Number	17323
Version	Draft1
Budget Year Beginning	January 1, 2023
Budget Year Ending	December 31, 2023
Total Units	247

Report Parameters

Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.03%
Tax Rate Included in Interest Rate	
2023 Beginning Balance	$78,957

The Current Funding Model is based on the reserve allocation data supplied by the Client; it has not been independently verified and is assumed to be correct.

The following page provides the 30-year projections for this funding model. It is assumed the reserve allocation rate will have annual increases to offset inflationary factors.

Current Assessment Funding Model Summary of Calculations

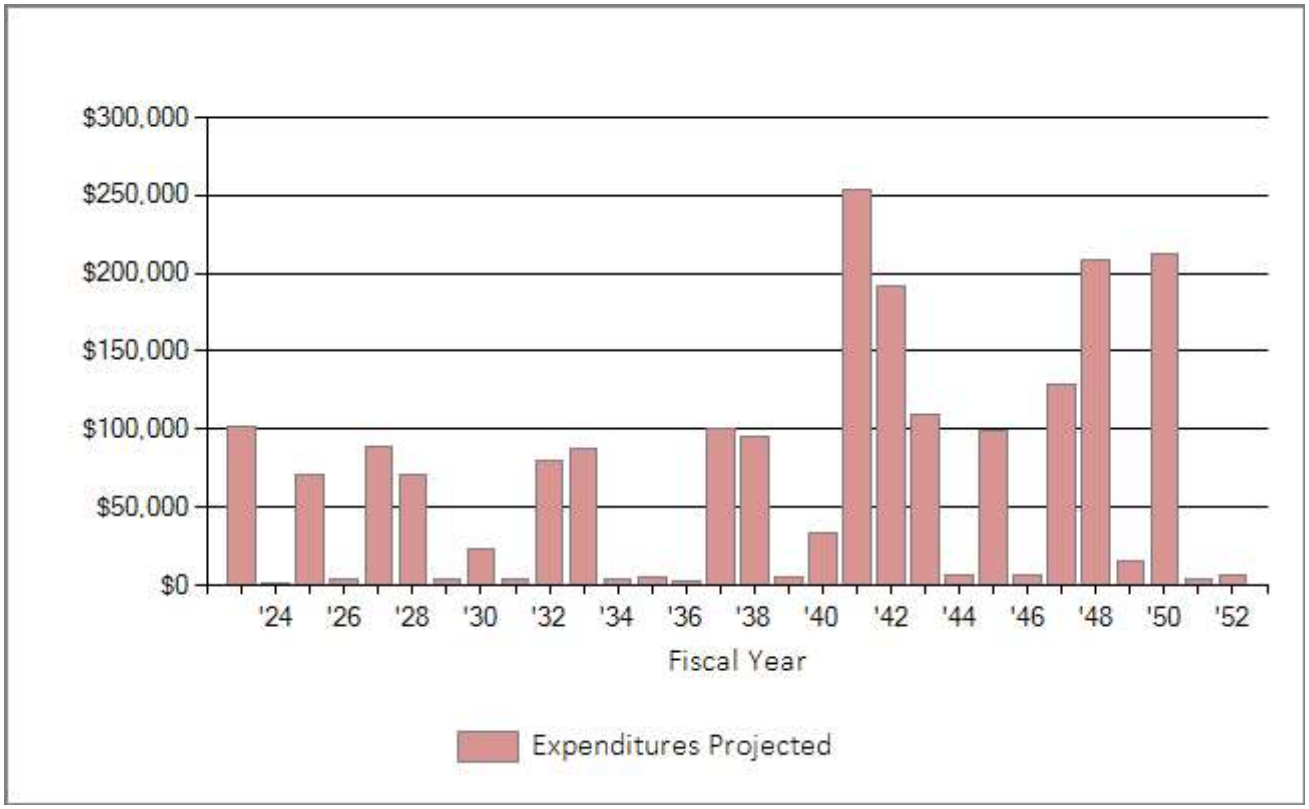
Required Annual Contribution	$30,875.00
Average Net Annual Interest Earned	$2.95
Total Annual Allocation to Reserves	$30,877.95

Sector 2A Snohomish Cascade Association
Current Funding - Year End Projections

Beginning Balance: $78,957

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2023	652,106	30,875	3	101,403	8,432	270,807	3%
2024	671,669	31,801	14	1,551	38,695	316,262	12%
2025	691,819	32,755		71,013	438	293,010	0%
2026	712,574	33,738	11	3,569	30,618	339,740	9%
2027	733,951	34,750		88,762	-23,394	311,290	
2028	755,969	35,793		70,358	-57,959	302,526	
2029	778,649	36,866		3,900	-24,993	363,583	
2030	802,008	37,972		22,512	-9,533	408,980	
2031	826,068	39,112	9	3,679	25,909	476,867	5%
2032	850,850	40,285		80,314	-14,121	469,639	
2033	876,376	41,493		87,100	-59,728	457,041	
2034	902,667	42,738		4,020	-21,009	531,528	
2035	929,747	44,020	6	4,657	18,361	609,541	3%
2036	957,640	45,341	22	2,212	61,512	694,419	9%
2037	986,369	46,701	3	99,939	8,276	683,250	1%
2038	1,015,960	48,102		95,120	-38,741	678,838	
2039	1,046,439	49,545	2	5,368	5,438	768,930	1%
2040	1,077,832	51,032	8	33,238	23,240	835,275	3%
2041	1,110,167	52,563		252,962	-177,160	679,621	
2042	1,143,472	54,139		191,713	-314,734	566,235	
2043	1,085,055	55,764		109,616	-368,586	535,918	
2044	1,117,607	57,437		6,076	-317,225	613,306	
2045	1,151,135	59,160		98,503	-356,569	599,843	
2046	1,185,669	60,934		5,732	-301,366	683,618	
2047	1,221,239	62,763		128,607	-367,210	645,495	
2048	1,257,876	64,645		208,631	-511,196	526,020	
2049	1,295,613	66,585		14,958	-459,569	604,724	
2050	1,334,481	68,582		211,908	-602,896	485,280	
2051	1,374,515	70,640		3,446	-535,702	579,390	
2052	1,415,751	72,759		6,844	-469,787	675,317	

Sector 2A Snohomish Cascade Association
Projected Expenditures Chart



The above chart provides a visual of the reserve account projected expenditures over the 30 years covered in this study. We suggest making a note of large expenditure years (peak years) when there will be significant projected expenditures related to one or more component projects that will require repair/replacement. These large but infrequent component expenses during “peak” years are typically the most difficult to budget for as they are often overlooked or ignored due to the perception that the expenses are far in the future and there will be time to budget for them later.

Sector 2A Snohomish Cascade Association
Projected Expenditures Report

	Description	Expenditures
Replacement Year 2023		
1001	Asphalt - Overlay	10,488
1002	Asphalt - Sealcoat	1,440
1005	Concrete Curb - 20% Repair	1,946
1009	Fence (sno-cascade drive) - Paint/Stain	37,599
1011	Fence (wood - NW Pond) - Paint/Stain	1,998
1012	Fence (wood - NW Pond) - Replace	7,525
1013	Irrigation Backflow Valve - Replace	1,738
1017	Irrigation Valves (in-ground) - 10% Replace	1,506
1019	Landscaping (gravel) - Replenish	3,554
1020	Landscaping - 25% Tree Care	11,252
1028	Pavers (sand set) - Replace	2,682
1031	Playground Surface (boat park) - Replenish	1,760
1033	Playground Timber Edging (boat park) - Replace	4,480
1035	Recreation - Benches (wood) - Replace	9,558
1036	Recreation - Picnic Table (wood) - Replace	2,954
1038	Retaining Walls (wood) - Replace	924
Total for 2023		**$101,403**
Replacement Year 2024		
1017	Irrigation Valves (in-ground) - 10% Replace	1,551
Total for 2024		**$1,551**
Replacement Year 2025		
1017	Irrigation Valves (in-ground) - 10% Replace	1,598
1030	Playground Structure (small park) - Replace	63,654
1032	Playground Surface (small park) - Replenish	1,483
1034	Playground Timber Edging (small park) - Replace	4,278
Total for 2025		**$71,013**
Replacement Year 2026		
1017	Irrigation Valves (in-ground) - 10% Replace	1,646
1031	Playground Surface (boat park) - Replenish	1,923
Total for 2026		**$3,569**
Replacement Year 2027		
1016	Irrigation Piping - 25% Replace	57,780

	Description	Expenditures
Replacement Year 2027 continued...		
1017	Irrigation Valves (in-ground) - 10% Replace	1,695
1021	Lights (pole) - Replace	3,208
1039	Stormwater Pond (NE pond) - Refurbish	26,078
Total for 2027		**$88,762**
Replacement Year 2028		
1002	Asphalt - Sealcoat	1,669
1005	Concrete Curb - 20% Repair	2,256
1009	Fence (sno-cascade drive) - Paint/Stain	43,587
1011	Fence (wood - NW Pond) - Paint/Stain	2,316
1017	Irrigation Valves (in-ground) - 10% Replace	1,746
1019	Landscaping (gravel) - Replenish	4,120
1020	Landscaping - 25% Tree Care	13,044
1032	Playground Surface (small park) - Replenish	1,621
Total for 2028		**$70,358**
Replacement Year 2029		
1017	Irrigation Valves (in-ground) - 10% Replace	1,798
1031	Playground Surface (boat park) - Replenish	2,102
Total for 2029		**$3,900**
Replacement Year 2030		
1015	Irrigation Controllers - Replace	4,274
1017	Irrigation Valves (in-ground) - 10% Replace	1,852
1040	Stormwater Pond (NW pond) - Refurbish	16,385
Total for 2030		**$22,512**
Replacement Year 2031		
1017	Irrigation Valves (in-ground) - 10% Replace	1,908
1032	Playground Surface (small park) - Replenish	1,771
Total for 2031		**$3,679**
Replacement Year 2032		
1014	Irrigation Controller Panels - Replace	4,535

Description		Expenditures
Replacement Year 2032 continued...		
1016	Irrigation Piping - 25% Replace	66,983
1017	Irrigation Valves (in-ground) - 10% Replace	1,965
1027	Parking Bollards (boat park) - Replace	4,535
1031	Playground Surface (boat park) - Replenish	2,296
Total for 2032		**$80,314**
Replacement Year 2033		
1002	Asphalt - Sealcoat	1,935
1005	Concrete Curb - 20% Repair	2,615
1009	Fence (sno-cascade drive) - Paint/Stain	50,529
1011	Fence (wood - NW Pond) - Paint/Stain	2,684
1017	Irrigation Valves (in-ground) - 10% Replace	2,024
1019	Landscaping (gravel) - Replenish	4,776
1020	Landscaping - 25% Tree Care	15,122
1022	Mailbox Cluster (2009) - Replace	7,415
Total for 2033		**$87,100**
Replacement Year 2034		
1017	Irrigation Valves (in-ground) - 10% Replace	2,085
1032	Playground Surface (small park) - Replenish	1,935
Total for 2034		**$4,020**
Replacement Year 2035		
1017	Irrigation Valves (in-ground) - 10% Replace	2,147
1031	Playground Surface (boat park) - Replenish	2,509
Total for 2035		**$4,657**
Replacement Year 2036		
1017	Irrigation Valves (in-ground) - 10% Replace	2,212
Total for 2036		**$2,212**
Replacement Year 2037		
1008	Fence (chn link baseball 3.5') - Replace	15,113
1016	Irrigation Piping - 25% Replace	77,652

Description		Expenditures
Replacement Year 2037 continued...		
1017	Irrigation Valves (in-ground) - 10% Replace	2,278
1023	Mailbox Cluster (2013) - Replace	2,782
1032	Playground Surface (small park) - Replenish	2,115
Total for 2037		**$99,939**
Replacement Year 2038		
1002	Asphalt - Sealcoat	2,243
1005	Concrete Curb - 20% Repair	3,032
1009	Fence (sno-cascade drive) - Paint/Stain	58,577
1011	Fence (wood - NW Pond) - Paint/Stain	3,112
1017	Irrigation Valves (in-ground) - 10% Replace	2,346
1019	Landscaping (gravel) - Replenish	5,537
1020	Landscaping - 25% Tree Care	17,530
1031	Playground Surface (boat park) - Replenish	2,742
Total for 2038		**$95,120**
Replacement Year 2039		
1017	Irrigation Valves (in-ground) - 10% Replace	2,417
1024	Mailbox Cluster (2015) - Replace	2,951
Total for 2039		**$5,368**
Replacement Year 2040		
1017	Irrigation Valves (in-ground) - 10% Replace	2,489
1018	Landscape Drainage (boat park) - Refurbish	28,438
1032	Playground Surface (small park) - Replenish	2,311
Total for 2040		**$33,238**
Replacement Year 2041		
1010	Fence (sno-cascade drive) - Replace	241,140
1017	Irrigation Valves (in-ground) - 10% Replace	2,564
1025	Mailbox Cluster (2017) - Replace	6,262
1031	Playground Surface (boat park) - Replenish	2,996
Total for 2041		**$252,962**

Sector 2A Snohomish Cascade Association
Projected Expenditures Report

Description		Expenditures
Replacement Year 2042		
1003	Baseball Backstop (chain link) - Replace	16,252
1004	Baseball Infield Fence (chain link) - Replace	12,660
1016	Irrigation Piping - 25% Replace	90,020
1017	Irrigation Valves (in-ground) - 10% Replace	2,641
1041	Landscape Drainage (small park) - Refurbish	70,140
Total for 2042		**$191,713**
Replacement Year 2043		
1002	Asphalt - Sealcoat	2,600
1005	Concrete Curb - 20% Repair	3,514
1009	Fence (sno-cascade drive) - Paint/Stain	67,907
1011	Fence (wood - NW Pond) - Paint/Stain	3,608
1017	Irrigation Valves (in-ground) - 10% Replace	2,720
1019	Landscaping (gravel) - Replenish	6,419
1020	Landscaping - 25% Tree Care	20,322
1032	Playground Surface (small park) - Replenish	2,525
Total for 2043		**$109,616**
Replacement Year 2044		
1017	Irrigation Valves (in-ground) - 10% Replace	2,802
1031	Playground Surface (boat park) - Replenish	3,274
Total for 2044		**$6,076**
Replacement Year 2045		
1015	Irrigation Controllers - Replace	6,659
1017	Irrigation Valves (in-ground) - 10% Replace	2,886
1026	Mailbox Clusters (2021) - Replace	63,430
1040	Stormwater Pond (NW pond) - Refurbish	25,528
Total for 2045		**$98,503**
Replacement Year 2046		
1017	Irrigation Valves (in-ground) - 10% Replace	2,972
1032	Playground Surface (small park) - Replenish	2,759
Total for 2046		**$5,732**

Sector 2A Snohomish Cascade Association
Projected Expenditures Report

Description		Expenditures
Replacement Year 2047		
1017	Irrigation Valves (in-ground) - 10% Replace	3,062
1029	Playground Structure (boat park) - Replace	121,968
1031	Playground Surface (boat park) - Replenish	3,578
Total for 2047		**$128,607**
Replacement Year 2048		
1001	Asphalt - Overlay	21,960
1002	Asphalt - Sealcoat	3,014
1005	Concrete Curb - 20% Repair	4,074
1009	Fence (sno-cascade drive) - Paint/Stain	78,723
1011	Fence (wood - NW Pond) - Paint/Stain	4,182
1012	Fence (wood - NW Pond) - Replace	15,756
1013	Irrigation Backflow Valve - Replace	3,639
1017	Irrigation Valves (in-ground) - 10% Replace	3,153
1019	Landscaping (gravel) - Replenish	7,441
1020	Landscaping - 25% Tree Care	23,559
1028	Pavers (sand set) - Replace	5,617
1033	Playground Timber Edging (boat park) - Replace	9,380
1035	Recreation - Benches (wood) - Replace	20,012
1036	Recreation - Picnic Table (wood) - Replace	6,185
1038	Retaining Walls (wood) - Replace	1,935
Total for 2048		**$208,631**
Replacement Year 2049		
1017	Irrigation Valves (in-ground) - 10% Replace	3,248
1032	Playground Surface (small park) - Replenish	3,015
1034	Playground Timber Edging (small park) - Replace	8,695
Total for 2049		**$14,958**
Replacement Year 2050		
1006	Fence (chn link - NE Pond) - Replace	71,376
1017	Irrigation Valves (in-ground) - 10% Replace	3,345
1030	Playground Structure (small park) - Replace	133,277
1031	Playground Surface (boat park) - Replenish	3,909
Total for 2050		**$211,908**

Sector 2A Snohomish Cascade Association
Projected Expenditures Report

Description		Expenditures
Replacement Year 2051		
1017	Irrigation Valves (in-ground) - 10% Replace	3,446
Total for 2051		**$3,446**
Replacement Year 2052		
1017	Irrigation Valves (in-ground) - 10% Replace	3,549
1032	Playground Surface (small park) - Replenish	3,295
Total for 2052		**$6,844**

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Beginning Balance		78,957	32,415	87,390	74,594	131,007	104,016	97,278	158,927	203,945	269,843
Annual Reserve Account Contribution		54,850	56,495	58,190	59,936	61,734	63,586	65,494	67,459	69,482	71,567
Interest Earned		11	31	26	46	36	34	56	71	94	91
Expenditures		101,403	1,551	71,013	3,569	88,762	70,358	3,900	22,512	3,679	80,314
Fully Funded Balance		270,807	316,262	293,010	339,740	311,290	302,526	363,583	408,980	476,867	469,639
Percent Funded		12%	28%	25%	39%	33%	32%	44%	50%	57%	56%
Ending Reserve Account Balance		32,415	87,390	74,594	131,007	104,016	97,278	158,927	203,945	269,843	261,187
ID	**Description**										
1001	Asphalt - Overlay	10,488									
1002	Asphalt - Sealcoat	1,440					1,669				
1003	Baseball Backstop (chain link) - Replace										
1004	Baseball Infield Fence (chain link) - Replace										
1005	Concrete Curb - 20% Repair	1,946					2,256				
1006	Fence (chn link - NE Pond) - Replace										
1007	Fence (chn link - NW Pond) - Replace										
1008	Fence (chn link baseball 3.5') - Replace										
1009	Fence (sno-cascade drive) - Paint/Stain	37,599					43,587				
1010	Fence (sno-cascade drive) - Replace										
1011	Fence (wood - NW Pond) - Paint/Stain	1,998					2,316				
1012	Fence (wood - NW Pond) - Replace	7,525									
1013	Irrigation Backflow Valve - Replace	1,738									
1014	Irrigation Controller Panels - Replace										4,535
1015	Irrigation Controllers - Replace								4,274		
1016	Irrigation Piping - 25% Replace					57,780					66,983
1017	Irrigation Valves (in-ground) - 10% Replace	1,506	1,551	1,598	1,646	1,695	1,746	1,798	1,852	1,908	1,965
1018	Landscape Drainage (boat park) - Refurbish										
1041	Landscape Drainage (small park) - Refurbish										
1019	Landscaping (gravel) - Replenish	3,554					4,120				
1020	Landscaping - 25% Tree Care	11,252					13,044				
1021	Lights (pole) - Replace					3,208					
1022	Mailbox Cluster (2009) - Replace										
1023	Mailbox Cluster (2013) - Replace										

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

ID	Description	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
1024	Mailbox Cluster (2015) - Replace										
1025	Mailbox Cluster (2017) - Replace										
1026	Mailbox Clusters (2021) - Replace										
1027	Parking Bollards (boat park) - Replace										4,535
1028	Pavers (sand set) - Replace	2,682									
1029	Playground Structure (boat park) - Replace										
1030	Playground Structure (small park) - Replace			63,654							
1031	Playground Surface (boat park) - Replenish	1,760			1,923			2,102			2,296
1032	Playground Surface (small park) - Replenish			1,483			1,621			1,771	
1033	Playground Timber Edging (boat park) - Repla..	4,480									
1034	Playground Timber Edging (small park) - Repl..			4,278							
1035	Recreation - Benches (wood) - Replace	9,558									
1036	Recreation - Picnic Table (wood) - Replace	2,954									
1037	Retaining Walls (masonry) - Replace										
1038	Retaining Walls (wood) - Replace	924									
1039	Stormwater Pond (NE pond) - Refurbish					26,078					
1040	Stormwater Pond (NW pond) - Refurbish								16,385		
Year Total:		**101,403**	**1,551**	**71,013**	**3,569**	**88,762**	**70,358**	**3,900**	**22,512**	**3,679**	**80,314**

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

		2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Beginning Balance		261,187	247,887	319,904	393,588	472,090	455,276	445,767	528,602	586,227	426,793
Annual Reserve Account Contribution		73,714	75,925	78,203	80,549	82,966	85,455	88,018	90,659	93,378	96,180
Interest Earned		87	112	138	165	159	156	185	205	149	116
Expenditures		87,100	4,020	4,657	2,212	99,939	95,120	5,368	33,238	252,962	191,713
Fully Funded Balance		457,041	531,528	609,541	694,419	683,250	678,838	768,930	835,275	679,621	566,235
Percent Funded		54%	60%	65%	68%	67%	66%	69%	70%	63%	59%
Ending Reserve Account Balance		247,887	319,904	393,588	472,090	455,276	445,767	528,602	586,227	426,793	331,375
ID	**Description**										
1001	Asphalt - Overlay										
1002	Asphalt - Sealcoat	1,935					2,243				
1003	Baseball Backstop (chain link) - Replace										16,252
1004	Baseball Infield Fence (chain link) - Replace										12,660
1005	Concrete Curb - 20% Repair	2,615					3,032				
1006	Fence (chn link - NE Pond) - Replace										
1007	Fence (chn link - NW Pond) - Replace										
1008	Fence (chn link baseball 3.5') - Replace					15,113					
1009	Fence (sno-cascade drive) - Paint/Stain	50,529					58,577				
1010	Fence (sno-cascade drive) - Replace									241,140	
1011	Fence (wood - NW Pond) - Paint/Stain	2,684					3,112				
1012	Fence (wood - NW Pond) - Replace										
1013	Irrigation Backflow Valve - Replace										
1014	Irrigation Controller Panels - Replace										
1015	Irrigation Controllers - Replace										
1016	Irrigation Piping - 25% Replace					77,652					90,020
1017	Irrigation Valves (in-ground) - 10% Replace	2,024	2,085	2,147	2,212	2,278	2,346	2,417	2,489	2,564	2,641
1018	Landscape Drainage (boat park) - Refurbish								28,438		
1041	Landscape Drainage (small park) - Refurbish										70,140
1019	Landscaping (gravel) - Replenish	4,776					5,537				
1020	Landscaping - 25% Tree Care	15,122					17,530				
1021	Lights (pole) - Replace										
1022	Mailbox Cluster (2009) - Replace	7,415									
1023	Mailbox Cluster (2013) - Replace					2,782					

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

ID	Description	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1024	Mailbox Cluster (2015) - Replace							2,951			
1025	Mailbox Cluster (2017) - Replace									6,262	
1026	Mailbox Clusters (2021) - Replace										
1027	Parking Bollards (boat park) - Replace										
1028	Pavers (sand set) - Replace										
1029	Playground Structure (boat park) - Replace										
1030	Playground Structure (small park) - Replace										
1031	Playground Surface (boat park) - Replenish			2,509			2,742			2,996	
1032	Playground Surface (small park) - Replenish		1,935			2,115			2,311		
1033	Playground Timber Edging (boat park) - Repla..										
1034	Playground Timber Edging (small park) - Repl..										
1035	Recreation - Benches (wood) - Replace										
1036	Recreation - Picnic Table (wood) - Replace										
1037	Retaining Walls (masonry) - Replace										
1038	Retaining Walls (wood) - Replace										
1039	Stormwater Pond (NE pond) - Refurbish										
1040	Stormwater Pond (NW pond) - Refurbish										
Year Total:		**87,100**	**4,020**	**4,657**	**2,212**	**99,939**	**95,120**	**5,368**	**33,238**	**252,962**	**191,713**

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

		2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Beginning Balance		331,375	320,937	417,044	423,787	526,491	509,561	415,920	519,432	429,512	551,752
Annual Reserve Account Contribution		99,065	102,037	105,098	108,251	111,499	114,844	118,289	121,838	125,493	129,258
Interest Earned		112	146	148	184	178	146	182	150	193	429
Expenditures		109,616	6,076	98,503	5,732	128,607	208,631	14,958	211,908	3,446	6,844
Fully Funded Balance		535,918	613,306	599,843	683,618	645,495	526,020	604,724	485,280	579,390	675,317
Percent Funded		60%	68%	71%	77%	79%	79%	86%	89%	95%	100%
Ending Reserve Account Balance		320,937	417,044	423,787	526,491	509,561	415,920	519,432	429,512	551,752	674,594
ID	**Description**										
1001	Asphalt - Overlay						21,960				
1002	Asphalt - Sealcoat	2,600					3,014				
1003	Baseball Backstop (chain link) - Replace										
1004	Baseball Infield Fence (chain link) - Replace										
1005	Concrete Curb - 20% Repair	3,514					4,074				
1006	Fence (chn link - NE Pond) - Replace								71,376		
1007	Fence (chn link - NW Pond) - Replace										
1008	Fence (chn link baseball 3.5') - Replace										
1009	Fence (sno-cascade drive) - Paint/Stain	67,907					78,723				
1010	Fence (sno-cascade drive) - Replace										
1011	Fence (wood - NW Pond) - Paint/Stain	3,608					4,182				
1012	Fence (wood - NW Pond) - Replace						15,756				
1013	Irrigation Backflow Valve - Replace						3,639				
1014	Irrigation Controller Panels - Replace										
1015	Irrigation Controllers - Replace			6,659							
1016	Irrigation Piping - 25% Replace										
1017	Irrigation Valves (in-ground) - 10% Replace	2,720	2,802	2,886	2,972	3,062	3,153	3,248	3,345	3,446	3,549
1018	Landscape Drainage (boat park) - Refurbish										
1041	Landscape Drainage (small park) - Refurbish										
1019	Landscaping (gravel) - Replenish	6,419					7,441				
1020	Landscaping - 25% Tree Care	20,322					23,559				
1021	Lights (pole) - Replace										
1022	Mailbox Cluster (2009) - Replace										
1023	Mailbox Cluster (2013) - Replace										

Sector 2A Snohomish Cascade Association
Spreadsheet - Component Expenditures

ID	Description	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
1024	Mailbox Cluster (2015) - Replace										
1025	Mailbox Cluster (2017) - Replace										
1026	Mailbox Clusters (2021) - Replace			63,430							
1027	Parking Bollards (boat park) - Replace										
1028	Pavers (sand set) - Replace						5,617				
1029	Playground Structure (boat park) - Replace					121,968					
1030	Playground Structure (small park) - Replace								133,277		
1031	Playground Surface (boat park) - Replenish		3,274			3,578			3,909		
1032	Playground Surface (small park) - Replenish	2,525			2,759			3,015			3,295
1033	Playground Timber Edging (boat park) - Repla..						9,380				
1034	Playground Timber Edging (small park) - Repl..							8,695			
1035	Recreation - Benches (wood) - Replace						20,012				
1036	Recreation - Picnic Table (wood) - Replace						6,185				
1037	Retaining Walls (masonry) - Replace										
1038	Retaining Walls (wood) - Replace						1,935				
1039	Stormwater Pond (NE pond) - Refurbish										
1040	Stormwater Pond (NW pond) - Refurbish			25,528							
Year Total:		**109,616**	**6,076**	**98,503**	**5,732**	**128,607**	**208,631**	**14,958**	**211,908**	**3,446**	**6,844**

Sector 2A Snohomish Cascade Association
Fully Funded Balance Calculations (Beginning Fiscal Year)

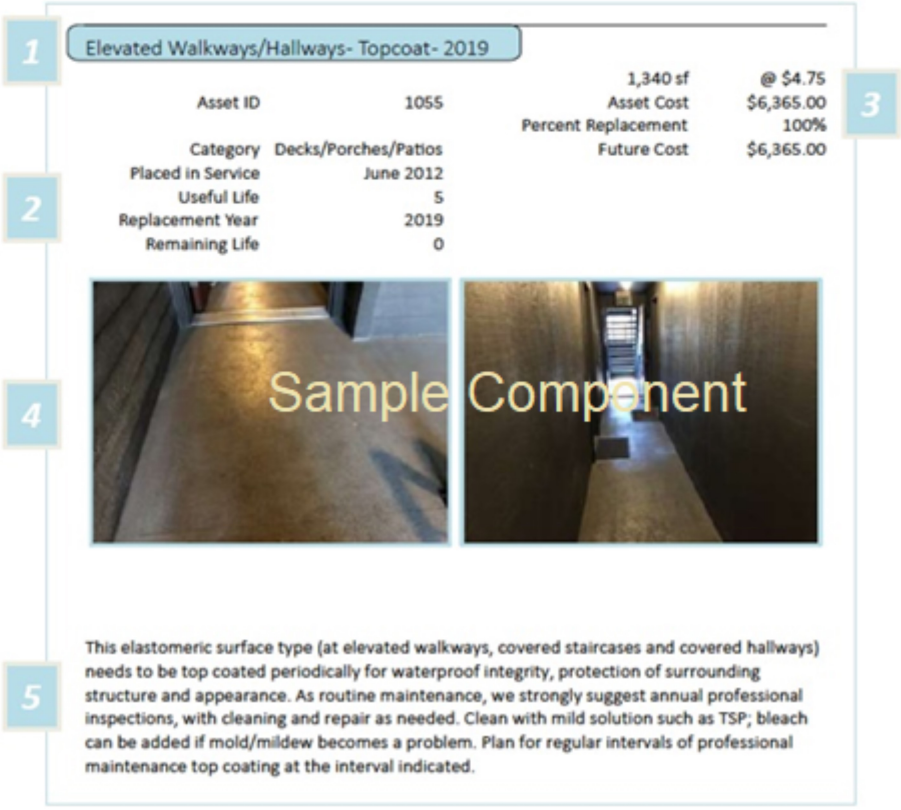
Asset ID	Description	Current Cost	x	Age	/	Useful Life	=	Fully Funded
1001	Asphalt - Overlay	$10,488	x	25	/	25	=	$10,488
1002	Asphalt - Sealcoat	$1,440	x	5	/	5	=	$1,440
1003	Baseball Backstop (chain link...	$9,268	x	26	/	45	=	$5,355
1004	Baseball Infield Fence (chain ...	$7,220	x	26	/	45	=	$4,172
1005	Concrete Curb - 20% Repair	$1,946	x	20	/	20	=	$1,946
1006	Fence (chn link - NE Pond) - ...	$32,133	x	13	/	40	=	$10,443
1007	Fence (chn link - NW Pond) - ...	$18,180	x	7	/	40	=	$3,182
1008	Fence (chn link baseball 3.5')...	$9,991	x	26	/	40	=	$6,494
1009	Fence (sno-cascade drive) - P...	$37,599	x	5	/	5	=	$37,599
1010	Fence (sno-cascade drive) - R...	$141,644	x	7	/	25	=	$39,660
1011	Fence (wood - NW Pond) - P...	$1,998	x	5	/	5	=	$1,998
1012	Fence (wood - NW Pond) - R...	$7,525	x	25	/	25	=	$7,525
1013	Irrigation Backflow Valve - R...	$1,738	x	25	/	25	=	$1,738
1014	Irrigation Controller Panels - ...	$3,476	x	26	/	35	=	$2,582
1015	Irrigation Controllers - Replace	$3,476	x	8	/	15	=	$1,854
1016	Irrigation Piping - 25% Replace	$51,337	x	26	/	30	=	$44,492
1017	Irrigation Valves (in-ground) ...	$1,506	x	1	/	1	=	$1,506
1018	Landscape Drainage (boat pa...	$17,206	x	3	/	20	=	$2,581
1041	Landscape Drainage (small p...	$40,000	x	1	/	20	=	$2,000
1019	Landscaping (gravel) - Reple...	$3,554	x	5	/	5	=	$3,554
1020	Landscaping - 25% Tree Care	$11,252	x	25	/	25	=	$11,252
1021	Lights (pole) - Replace	$2,850	x	26	/	30	=	$2,470
1022	Mailbox Cluster (2009) - Repl...	$5,517	x	14	/	24	=	$3,218
1023	Mailbox Cluster (2013) - Repl...	$1,839	x	10	/	24	=	$766
1024	Mailbox Cluster (2015) - Repl...	$1,839	x	8	/	24	=	$613
1025	Mailbox Cluster (2017) - Repl...	$3,678	x	6	/	24	=	$920
1026	Mailbox Clusters (2021) - Re...	$33,104	x	2	/	24	=	$2,759
1027	Parking Bollards (boat park) -...	$3,476	x	26	/	35	=	$2,582
1028	Pavers (sand set) - Replace	$2,683	x	25	/	25	=	$2,683
1029	Playground Structure (boat p...	$60,000	x	1	/	25	=	$2,400
1030	Playground Structure (small ...	$60,000	x	26	/	28	=	$55,714
1031	Playground Surface (boat pa...	$1,760	x	3	/	3	=	$1,760
1032	Playground Surface (small pa...	$1,398	x	1	/	3	=	$466
1033	Playground Timber Edging (b...	$4,480	x	25	/	25	=	$4,480
1034	Playground Timber Edging (s...	$4,032	x	26	/	28	=	$3,744

Sector 2A Snohomish Cascade Association
Fully Funded Balance Calculations (Beginning Fiscal Year)

Asset ID	Description	Current Cost	x	Age	/	Useful Life	=	Fully Funded
1035	Recreation - Benches (wood)...	$9,558	x	25	/	25	=	$9,558
1036	Recreation - Picnic Table (wo...	$2,954	x	25	/	25	=	$2,954
1037	Retaining Walls (masonry) - ...	$2,546	x	9	/	40	=	$573
1038	Retaining Walls (wood) - Rep...	$924	x	25	/	25	=	$924
1039	Stormwater Pond (NE pond) ...	$23,170	x	26	/	30	=	$20,081
1040	Stormwater Pond (NW pond...	$13,323	x	8	/	15	=	$7,106
Total Asset Summary:								$327,629

Sector 2A Snohomish Cascade Association
About the Component Detail Reports Section

In the following Component Details Section of this reserve study you will find each component that has been listed within the Component List. This section has more detailed information for each component and reviewing it will often answer questions that arise regarding specific components within this reserve study. Below you will find an explanation of what and where this information is located.



1. Component Name and next Replacement Year as well as a unique Asset ID to cross reference with other sections within this reserve study.

2. This area has the category of the component, estimated placed in-service date (when last installed), the estimated useful life of the component (estimate of how long the component will last), the next replacement year in this reserve study and the remaining useful life (how many years before replacement is estimated to occur).

3. The area has the total measurement/unit count of the component, the cost per unit, the total asset cost (unit count X unit cost), the percent replacement (amount funded to be replaced in a cycle), and the future cost (estimated cost at the next replacement date).

4. Pictures of the component are included for Level I studies unless the Client has requested fewer pages in the study in which case we will omit them.

5. Specific comments about this component which can include explanations for adjustments to the useful life, phasing, maintenance of the component, Vendor recommendations, etc.

Asphalt - Overlay - 2023

		4,113 sf	@ $2.55
Asset ID	1001	Asset Actual Cost	$10,488.15
		Percent Replacement	100%
Category	Asphalt Surfaces	Future Cost	$10,488.15
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurfacing (overlay).

If properly built, asphalt surfaces will deteriorate from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire surface, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life.

Cost estimate assumes a 2 inch overlay over existing surfaces.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Asphalt - Sealcoat - 2023

		4,113 sf	@ $0.35
Asset ID	1002	Asset Actual Cost	$1,439.55
		Percent Replacement	100%
Category	Asphalt Surfaces	Future Cost	$1,439.55
Placed in Service	June 2015		
Useful Life	5		
Replacement Year	2023		
Remaining Life	0		

The primary reason to seal-coat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize; the pavement turns brittle. The seal-coat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Proper drainage is vital for the longevity of asphalt surfaces. Standing water can seep through the asphalt and get into the sub-base and sub-grade below, significantly weakening the structural integrity of the road and causing premature failure.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually where needed and treated as an operating expense.

Cost estimate includes crack filling and 2 coats are to be applied. In years when an Overlay/Replacement project is set to occur sealcoats will typically be applied 12 months after the project is completed. We typically recommend funding for this component within the same year as the Overlay/Replacement project for cost efficiency with the Vendor.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Baseball Backstop (chain link) - Replace - 2042

		1 ea	@ $9,268.09
Asset ID	1003	Asset Actual Cost	$9,268.09
		Percent Replacement	100%
Category	Recreation	Future Cost	$16,251.65
Placed in Service	June 1997		
Useful Life	45		
Replacement Year	2042		
Remaining Life	19		

Baseball backstop appears to be deteriorating at a rate typical of its age. We recommend budgeting for replacement at the timeframe indicated. Wood areas should be replaced repairs as need from the Operating Account.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Baseball Infield Fence (chain link) - Replace - 2042

		152 lf	@ $47.50
Asset ID	1004	Asset Actual Cost	$7,220.00
		Percent Replacement	100%
Category	Fencing	Future Cost	$12,660.31
Placed in Service	June 1997		
Useful Life	45		
Replacement Year	2042		
Remaining Life	19		

Appears to be deteriorating at a rate typical of its age. Sturdy component that can last for extended period of time if not damaged or abused. Clean, repair as needed from operating funds. Best to plan for eventual replacement at roughly the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Concrete Curb - 20% Repair - 2023

		227 lf	@ $42.86
Asset ID	1005	Asset Actual Cost	$1,945.84
		Percent Replacement	20%
Category	Concrete Surfaces	Future Cost	$1,945.84
Placed in Service	June 1997		
Useful Life	5		
Adjustment	15		
Replacement Year	2023		
Remaining Life	0		

Concrete curbs appear to be deteriorating at a rate typical of their age. This repair contingency has been included due to the likelihood of additional damage from roots and vehicles.

This component has been set to cycle at 5 year increments after 20 years of age (typically when roots and vehicles have caused significant damage).

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (chn link - NE Pond) - Replace - 2050

Asset ID	1006	760 lf	@ $42.28
		Asset Actual Cost	$32,132.80
		Percent Replacement	100%
Category	Fencing	Future Cost	$71,376.23
Placed in Service	June 2010		
Useful Life	40		
Replacement Year	2050		
Remaining Life	27		

Appears to be deteriorating at a rate typical of its age. Sturdy component that can last for extended period of time if not damaged or abused. Clean, repair as needed from operating funds. Best to plan for eventual replacement at roughly the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (chn link - NW Pond) - Replace - 2056

		430 lf	@ $42.28
Asset ID	1007	Asset Actual Cost	$18,180.40
		Percent Replacement	100%
Category	Fencing	Future Cost	$48,220.51
Placed in Service	June 2016		
Useful Life	40		
Replacement Year	2056		
Remaining Life	33		

Appears to be deteriorating at a rate typical of its age. Sturdy component that can last for extended period of time if not damaged or abused. Clean, repair as needed from operating funds. Best to plan for eventual replacement at roughly the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (chn link baseball 3.5') - Replace - 2037

		345 lf	@ $28.96
Asset ID	1008	Asset Actual Cost	$9,991.20
		Percent Replacement	100%
Category	Fencing	Future Cost	$15,112.59
Placed in Service	June 1997		
Useful Life	40		
Replacement Year	2037		
Remaining Life	14		

Chain link fence (3.5' high) at the baseball outfield appears to be deteriorating at a rate typical of its age. Sturdy component that can last for extended period of time if not damaged or abused. Clean, repair as needed from operating funds. Best to plan for eventual replacement at roughly the time frame indicated.

Damaged observed in numerous areas.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (sno-cascade drive) - Paint/Stain - 2023

		3,821 lf	@ $9.84
Asset ID	1009	Asset Actual Cost	$37,598.64
		Percent Replacement	100%
Category	Fencing	Future Cost	$37,598.64
Placed in Service	January 2016		
Useful Life	5		
Replacement Year	2023		
Remaining Life	0		

Regular sealer applications (stain/paint, etc.) on the timeline indicated are strongly recommended for appearance and protection of wood fencing. Remove any contact with ground and surrounding landscape and sprinkler patterns, repair as needed and clean prior to sealer application. Life of finish will vary depending upon surface preparation, material quality, application method and weather conditions.

Cost estimate assumes both sides of the fence will be coated to adequately protect from the elements.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (sno-cascade drive) - Replace - 2041

		3,821 lf	@ $37.07
Asset ID	1010	Asset Actual Cost	$141,644.47
		Percent Replacement	100%
Category	Fencing	Future Cost	$241,140.23
Placed in Service	January 2016		
Useful Life	25		
Replacement Year	2041		
Remaining Life	18		

Wood fencing (at Snohomish Cascade Drive) appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly for any damage, repair as needed. Avoid contact with ground and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance and maximize life. Plan to replace at roughly the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (wood - NW Pond) - Paint/Stain - 2023

		203 lf	@ $9.84
Asset ID	1011	Asset Actual Cost	$1,997.52
		Percent Replacement	100%
Category	Fencing	Future Cost	$1,997.52
Placed in Service	January 2017		
Useful Life	5		
Replacement Year	2023		
Remaining Life	0		

Regular sealer applications (stain/paint, etc.) on the timeline indicated are strongly recommended for appearance and protection of wood fencing. Remove any contact with ground and surrounding landscape and sprinkler patterns, repair as needed and clean prior to sealer application. Life of finish will vary depending upon surface preparation, material quality, application method and weather conditions.

Cost estimate assumes both sides of the fence will be coated to adequately protect from the elements.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Fence (wood - NW Pond) - Replace - 2023

		203 lf	@ $37.07
Asset ID	1012	Asset Actual Cost	$7,525.21
		Percent Replacement	100%
Category	Fencing	Future Cost	$7,525.21
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

Wood fencing (at NW Pond) appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly for any damage, repair as needed. Avoid contact with ground and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance and maximize life. Plan to replace at roughly the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Irrigation Backflow Valve - Replace - 2023

		1 ea	@ $1,737.77
Asset ID	1013	Asset Actual Cost	$1,737.77
		Percent Replacement	100%
Category	Plumbing	Future Cost	$1,737.77
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

Reportedly in functional and in operating condition. As routine maintenance, inspect regularly, test system, repair as needed from operating budget. We recommend funding for this component at the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Irrigation Controller Panels - Replace - 2032

		4 ea	@ $868.88
Asset ID	1014	Asset Actual Cost	$3,475.52
		Percent Replacement	100%
Category	Irrigation Systems	Future Cost	$4,534.76
Placed in Service	June 1997		
Useful Life	35		
Replacement Year	2032		
Remaining Life	9		

Reported to be functioning properly with no significant repair/replacement history. We recommend funding for replacement at the timeframe indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Irrigation Controllers - Replace - 2030

Asset ID	1015
Category	Irrigation Systems
Placed in Service	June 2015
Useful Life	15
Replacement Year	2030
Remaining Life	7

4 ea	@ $868.88
Asset Actual Cost	$3,475.52
Percent Replacement	100%
Future Cost	$4,274.45

Reported to be functioning properly with no significant repair/replacement history. We recommend funding for replacement at the timeframe indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Irrigation Piping - 25% Replace - 2027

		105,307 sf	@ $1.95
Asset ID	1016	Asset Actual Cost	$51,337.16
		Percent Replacement	25%
Category	Irrigation Systems	Future Cost	$57,780.43
Placed in Service	June 1997		
Useful Life	5		
Adjustment	25		
Replacement Year	2027		
Remaining Life	4		

No reported problems with the irrigation distribution piping at this time. As routine maintenance, inspect and test system regularly, perform any minor repairs as necessary from maintenance budget. Although the failure rate of the elements within this component are typically difficult to predict, prudent planning suggests setting aside funding, for larger scale refurbishing of irrigation systems (i.e. piping, valves, etc.), on a cyclical basis.

This component is for the replacement of the underground irrigation piping. Note that ongoing repairs and replacement of sprinkler heads are assumed to be paid from the Operating Account as needed.

This component has been set to cycle at 5 year increments after 30 years of age (typically when roots begin to cause significant damage) so that that there is a total replacement cycles within a 40 year time period.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Irrigation Valves (in-ground) - 10% Replace - 2023

		52 ea	@ $289.63
Asset ID	1017	Asset Actual Cost	$1,506.08
		Percent Replacement	10%
Category	Landscaping	Future Cost	$1,506.08
Placed in Service	June 2019		
Useful Life	1		
Replacement Year	2023		
Remaining Life	0		

The Client has stated that historically they replace about 5 in-ground irrigation valves per year. We recommend budgeting for this component at a timeframe and percentage that has been historically typical in the community.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Landscape Drainage (boat park) - Refurbish - 2040

		1 ls	@ $17,205.62
Asset ID	1018	Asset Actual Cost	$17,205.62
		Percent Replacement	100%
Category	Landscaping	Future Cost	$28,438.27
Placed in Service	June 2020		
Useful Life	20		
Replacement Year	2040		
Remaining Life	17		

Assumed to have been properly designed with adequate provisions for the site drainage needs. This component is for a refurbishment of the current drainage system which will tend to clog and have root intrusion issues with time; these drainage systems typically require periodic refurbishment to adequately operate as designed. If after invasive testing is completed a larger scale replacement project is determined more appropriate then the costs can be included in future reserve studies. Cost estimate based on past experiences with similar sized communities.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Landscape Drainage (small park) - Refurbish - 2042

		1 ls	@ $40,000.00
Asset ID	1041	Asset Actual Cost	$40,000.00
		Percent Replacement	100%
Category	Landscaping	Future Cost	$70,140.24
Placed in Service	June 2022		
Useful Life	20		
Replacement Year	2042		
Remaining Life	19		

Assumed to have been properly designed with adequate provisions for the site drainage needs. This component is for a refurbishment of the current drainage system which will tend to clog and have root intrusion issues with time; these drainage systems typically require periodic refurbishment to adequately operate as designed. If after invasive testing is completed a larger scale replacement project is determined more appropriate then the costs can be included in future reserve studies. Cost estimate based on past experiences with similar sized communities.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Landscaping (gravel) - Replenish - 2023

Asset ID	1019	2,451 sf	@ $1.45
		Asset Actual Cost	$3,553.95
		Percent Replacement	100%
Category	Landscaping	Future Cost	$3,553.95
Placed in Service	June 2017		
Useful Life	5		
Replacement Year	2023		
Remaining Life	0		

Gravel areas require regular cycles of replenishment. Inspect regularly, maintain any containment borders, control vegetation and fill in any low spots which may develop as needed using operating/maintenance funds. Plan for larger scale refurbish project with gravel at the time frame indicated.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Landscaping - 25% Tree Care - 2023

		111 ea	@ $405.48
Asset ID	1020	Asset Actual Cost	$11,252.07
		Percent Replacement	25%
Category	Landscaping	Future Cost	$11,252.07
Placed in Service	June 1997		
Useful Life	5		
Adjustment	20		
Replacement Year	2023		
Remaining Life	0		

This component may be utilized for medium to large tree care projects which do not occur on an annual basis. If the Client has not already done so, we recommend consulting with a qualified arborist for a long term plan for the care and management of the trees on site; balancing aesthetics with protection of asset as well as following a plan which is most cost effective for long term budgeting of the reserve account.

These trees require regular trimming/thinning/root control and/or removal as they mature to prevent damage to nearby walkways, roads, structures and underground piping. The provided cost estimate is based on our estimation for the total expected cost for each tree on site and based on similar sized sites (and tree count) we have worked with in the past. We suggest updating future reserve studies with actual cost figures and timeframes for projects.

This component has been set to cycle at 5 year increments after 25 years of age, when trees and roots have grown large enough that the cost to maintain the limbs and roots is significant. Cost assumes a qualified, licensed and insured professional complete the work.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Lights (pole) - Replace - 2027

		1 ea	@ $2,850.00
Asset ID	1021	Asset Actual Cost	$2,850.00
		Percent Replacement	100%
Category	Lighting	Future Cost	$3,207.70
Placed in Service	June 1997		
Useful Life	30		
Replacement Year	2027		
Remaining Life	4		

Pole lights appear to be deteriorating at a rate typical of their age. Observed during daylight hours and assumed to be in functional operating condition. As routine maintenance, inspect, repair/change bulbs as needed. Best to plan for large scale replacement at roughly the time frame below, for cost efficiency and consistent quality/appearance. Cost estimated based on a licensed professional completing this replacement project.

This expense is only to replacement the pole and fixtures, not to rewire the whole system. It is assumed the wiring was appropriately installed and buried to a depth that has minimized the deterioration/damage to it. Should it be determined that the wiring also need to be redone this can be added into an update to this reserve study.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Mailbox Cluster (2009) - Replace - 2033

		3 ea	@ $1,839.09
Asset ID	1022	Asset Actual Cost	$5,517.27
		Percent Replacement	100%
Category	Mailboxes	Future Cost	$7,414.75
Placed in Service	January 2009		
Useful Life	24		
Replacement Year	2033		
Remaining Life	10		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Mailbox Cluster (2013) - Replace - 2037

		1 ea	@ $1,839.09
Asset ID	1023	Asset Actual Cost	$1,839.09
		Percent Replacement	100%
Category	Mailboxes	Future Cost	$2,781.79
Placed in Service	January 2013		
Useful Life	24		
Replacement Year	2037		
Remaining Life	14		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Mailbox Cluster (2015) - Replace - 2039

		1 ea	@ $1,839.09
Asset ID	1024	Asset Actual Cost	$1,839.09
		Percent Replacement	100%
Category	Mailboxes	Future Cost	$2,951.20
Placed in Service	January 2015		
Useful Life	24		
Replacement Year	2039		
Remaining Life	16		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Mailbox Cluster (2017) - Replace - 2041

		2 ea	@ $1,839.09
Asset ID	1025	Asset Actual Cost	$3,678.18
		Percent Replacement	100%
Category	Mailboxes	Future Cost	$6,261.85
Placed in Service	September 2017		
Useful Life	24		
Replacement Year	2041		
Remaining Life	18		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Mailbox Clusters (2021) - Replace - 2045

		18 ea	@ $1,839.09
Asset ID	1026	Asset Actual Cost	$33,103.62
		Percent Replacement	100%
Category	Mailboxes	Future Cost	$63,429.96
Placed in Service	June 2021		
Useful Life	24		
Replacement Year	2045		
Remaining Life	22		

Appears to be deteriorating at a rate typical of its age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

These mailboxes are still functional but dated looking and are no longer approved by the USPS. We recommend budgeting for replacement of all over the next 6 years, replacing with USPS approved mailbox clusters.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Parking Bollards (boat park) - Replace - 2032

		3 ea	@ $1,158.51
Asset ID	1027	Asset Actual Cost	$3,475.53
		Percent Replacement	100%
Category	Fencing	Future Cost	$4,534.78
Placed in Service	June 1997		
Useful Life	35		
Replacement Year	2032		
Remaining Life	9		

Parking bollards at Boat Park were recently installed. We recommend budgeting for eventual replacement due to exposure to the elements and the likelihood that they will receive vehicular damage over time.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Pavers (sand set) - Replace - 2023

		145 sf	@ $18.50
Asset ID	1028	Asset Actual Cost	$2,682.50
		Percent Replacement	100%
Category	Landscaping	Future Cost	$2,682.50
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

We recommend budgeting for replacement at the timeframe indicated as these sand set paver systems will typically become uneven with time due to settling, root intrusion, drainage issues and use.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Playground Structure (boat park) - Replace - 2047

		1 ea	@ $60,000.00
Asset ID	1029	Asset Actual Cost	$60,000.00
		Percent Replacement	100%
Category	Recreation	Future Cost	$121,967.64
Placed in Service	June 2022		
Useful Life	25		
Replacement Year	2047		
Remaining Life	24		

We recommend budgeting for replacement at the timeframe indicated to limit liability issues that arise from old structures that require ongoing repairs and have safety issues and before actual failure of the structure. There is a very wide range in cost figures for this type of component due to significant quality variations. The estimate in this reserve study is based on replacement with a similar quality structure.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Playground Structure (small park) - Replace - 2025

		1 ea	@ $60,000.00
Asset ID	1030	Asset Actual Cost	$60,000.00
		Percent Replacement	100%
Category	Recreation	Future Cost	$63,654.00
Placed in Service	June 1997		
Useful Life	25		
Adjustment	3		
Replacement Year	2025		
Remaining Life	2		

Play structure appears to be deteriorating at a rate typical of its age. We recommend budgeting for replacement at the timeframe indicated to limit liability issues that arise from old structures that require ongoing repairs and have safety issues and before actual failure of the structure. There is a very wide range in cost figures for this type of component due to significant quality variations. The estimate in this reserve study is based on replacement with a similar quality structure.

Slight life adjustment as Client stated they will be replacing large Boat Park structures first then the Smaller Park play structures second at a later date.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Playground Surface (boat park) - Replenish - 2023

		1,600 sf	@ $1.10
Asset ID	1031	Asset Actual Cost	$1,760.00
		Percent Replacement	100%
Category	Recreation	Future Cost	$1,760.00
Placed in Service	June 2023		
Useful Life	3		
Replacement Year	2023		
Remaining Life	0		

We recommend budgeting for replenishment at the time scale indicated to limit liability and safety issues.

The second play area at Boat Park is reportedly not being replaced and has not been included in this measurement.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Playground Surface (small park) - Replenish - 2025

		1,271 sf	@ $1.10
Asset ID	1032	Asset Actual Cost	$1,398.10
		Percent Replacement	100%
Category	Recreation	Future Cost	$1,483.24
Placed in Service	June 2022		
Useful Life	3		
Replacement Year	2025		
Remaining Life	2		

We recommend budgeting for replenishment at the time scale indicated to limit liability and safety issues.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Playground Timber Edging (boat park) - Replace - 2023

		160 lf	@ $28.00
Asset ID	1033	Asset Actual Cost	$4,480.00
		Percent Replacement	100%
Category	Landscaping	Future Cost	$4,480.00
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

We recommend budgeting for replacement of these wood surfaces at the time frame indicated due to constant exposure to the elements.

The second play area at Boat Park is reportedly not being replaced and has not been included in this measurement.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Playground Timber Edging (small park) - Replace - 2025

		144 lf	@ $28.00
Asset ID	1034	Asset Actual Cost	$4,032.00
		Percent Replacement	100%
Category	Landscaping	Future Cost	$4,277.55
Placed in Service	June 1997		
Useful Life	24		
Adjustment	4		
Replacement Year	2025		
Remaining Life	2		

We recommend budgeting for replacement of these wood surfaces at the time frame indicated due to constant exposure to the elements.

Adjustment given so this cycles with the playground structure replacement component.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Recreation - Benches (wood) - Replace - 2023

		11 ea	@ $868.88
Asset ID	1035	Asset Actual Cost	$9,557.68
		Percent Replacement	100%
Category	Recreation	Future Cost	$9,557.68
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

We recommend planning for replacement at the time frame indicated due to constant exposure. Clean and inspect annually - paint/stain from paid for from the Operating budget as necessary.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Recreation - Picnic Table (wood) - Replace - 2023

		3 ea	@ $984.73
Asset ID	1036	Asset Actual Cost	$2,954.19
		Percent Replacement	100%
Category	Recreation	Future Cost	$2,954.19
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

Picnic tables appear to be deteriorating at a rate typical of their age. We recommend for eventual replacement at the time frame indicated due to constant exposure. We recommend cleaning and inspecting annually - paint/stain and repair as needed paid for from the Operating account.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Retaining Walls (masonry) - Replace - 2054

Asset ID	1037	67 sf	@ $38.00
		Asset Actual Cost	$2,546.00
		Percent Replacement	100%
Category	Landscaping	Future Cost	$6,365.20
Placed in Service	June 2014		
Useful Life	40		
Replacement Year	2054		
Remaining Life	31		

Masonry retaining walls on site appear to be in generally fair and stable condition; no significant instability noted. We assume that retaining walls were designed and installed properly with adequate base and surrounding drainage. Monitor closely and if areas of instability emerge, consult with civil or geotechnical engineer for repair scope.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Retaining Walls (wood) - Replace - 2023

Asset ID	1038	33 sf	@ $28.00
		Asset Actual Cost	$924.00
		Percent Replacement	100%
Category	Landscaping	Future Cost	$924.00
Placed in Service	June 1997		
Useful Life	25		
Replacement Year	2023		
Remaining Life	0		

Wood retaining walls on site appear to be deteriorating at a rate typical of their age. We assume that these were designed and installed properly with adequate base and surrounding drainage. Monitor closely and if areas of deterioration emerge, consult with civil or geotechnical engineer for repair scope.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Stormwater Pond (NE pond) - Refurbish - 2027

		1 ea	@ $23,170.23
Asset ID	1039	Asset Actual Cost	$23,170.23
		Percent Replacement	100%
Category	Stormwater Facilities	Future Cost	$26,078.30
Placed in Service	June 1997		
Useful Life	30		
Replacement Year	2027		
Remaining Life	4		

The stormwater facilities are assumed to be functioning as designed. It has been our experience that it is best to budget for periodic refurbishment of these stormwater ponds which can include reseeding, regrading, sediment removal, vegetation removal, rodent control, concrete repair, invasive testing of the elements, etc. It has been our experience with similar size system that without periodic refurbishment there is a strong likelihood of much larger scale repairs/replacement of the elements of these systems at a much greater expense.

*Cost Source: Reserve Data Analyst In-House Research & Cost Records

Stormwater Pond (NW pond) - Refurbish - 2030

		1 ea	@ $13,322.89
Asset ID	1040	Asset Actual Cost	$13,322.89
		Percent Replacement	100%
Category	Stormwater Facilities	Future Cost	$16,385.47
Placed in Service	June 2015		
Useful Life	15		
Replacement Year	2030		
Remaining Life	7		

The stormwater facilities are assumed to be functioning as designed. It has been our experience that it is best to budget for periodic refurbishment of these stormwater ponds which can include reseeding, regrading, sediment removal, vegetation removal, rodent control, concrete repair, invasive testing of the elements, etc. It has been our experience with similar size system that without periodic refurbishment there is a strong likelihood of much larger scale repairs/replacement of the elements of these systems at a much greater expense.

Cost estimate from prior work performed by the county.

*Cost Source: Client Historical Records – Inflated to Current Estimate

Definitions Index

Abbreviations

ea = each	FY = fiscal year	lf or lin ft = lineal feet	ls = lump sum
RL = remaining life	sf or sq ft = square feet	sy or sq yd= square yard	
UL = useful life	100 sq ft = 1 square)	% = percent	

1. **Allocation %**
   A percentage of the total Reserve Allocation. See - Calculations Appendix
2. **Allocation Increase Rate**
   Expressed as a percentage rate that reflects the increase of a given year's Reserve Allocation over the previous year's Reserve Allocation and utilized only in the Cash Flow Analysis.
3. **Base Year**
   The year in which the governing documents were recorded and/or the buildings constructed (average year may be used for phases built over a period) and utilized to determine the approximate complex age. This parameter is provided for information only.
4. **Common Interest Development (CID)**
   Defined by shared property and restrictions in the deed on use of the property. A CID is governed by a mandatory Association of homeowners which administers the property and enforces its restrictions. The following are two typical CID subdivision types:
   - Condominium- In general, the recorded owner has title to the unit (or airspace). They are typically responsible for the interior of their individual unit/garage, all utilities that service their unit and any exclusive use common area associated with their unit.
   - Planned Development- In general, the recorded owner has title to the lot. They are typically responsible for the maintenance and repair of any structure or improvement located on their respective lot.

   **Note- CIDs & subdivision types are general and may not apply or may vary, based on your local.*
5. **Component Inventory**
   The task of selecting and quantifying reserve items. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of established association precedents, and discussion with appropriate association representatives.
6. **Condition Assessment**
   The task of evaluating the current condition of the component based on observed or reported characteristics and normal documented in the field report for a Level 1 or Level 2 Reserve Study.
7. **Contingency Rate**
   Expressed as a percentage rate that reflects a factor added to the unit cost to prepare for an event that is liable to occur, but not with certainty.
8. **Current Cost**
   The current fiscal year's estimated cost to maintain, replace, repair, or restore a reserve component to its original functional condition. Sources utilized to obtain estimates may include: the association, its contractors, other contractors, specialists and independent consultants, the State department of Real Estate (or other state department as applicable), construction pricing and estimating manuals, and the preparer's own experience and/or database of costs formulated in the preparation of other reserve study reports. See - Calculations Appendix.
9. **Disbursement / Expenditures**
   The funds expected to be paid or expended from the Reserve Balance.
10. **Extended Cost**
    See - Calculations Appendix.
11. **Fiscal Year (FY)**
    A twelve-month period for which an organization plans the use of its funds. There are two distinct types:
    - Calendar Fiscal Year (ends December 31)
    - Non-Calendar Fiscal Year (does not end December 31)
12. **Full Funded Balance (FFB)**
    Total Accrued Depreciation. An indicator against which the FY Start Balance can be compared. The balance that is in direct proportion to the fraction of life "used up" of the cost. See - Calculations Appendix.
13. **Funding Goal**
    Independent of methodology utilized, the following represents the basic categories of funding plan goals:
    - Baseline Funding- Maintaining a Net Reserve Balance above zero for length of the study.
    - Full Funding- Maintaining a Reserve Balance at or near Percent Funded of 100%.
    - Statutory Funding- Maintaining a specified Reserve Balance/Percent Funded per statutes.
    - Threshold Funding- Establishing and maintaining a set predetermined Reserve Balance or Percent Funded.
14. **Funding Method (or Funding Plan)**
    An Association's plan to provide income to the reserve fund to offset expected disbursements from that fund. The following represents two (2) basic methodologies used to fund reserves:
    - Cash Flow Method- A method of developing a reserve funding plan where allocations to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.
    - Component Method- The component method develops a reserve-funding plan where the total contribution is based on the sum of contributions for individual components. The component method is the more conservative (typically higher reserve account balance) of the two funding options and assures that the association will achieve and maintain an ideal level of reserves over time. This method also allows for computations on individual components in the analysis. However, this method has also limitations with respects to variations in actual useful life of components and is much more time intensive to accurately follow this funding strategy.

15. **Funding Plan**
The combined Funding Method & Funding Goal.
16. **FY End Balance (same as next FY Start Balance)**
The balance in reserves at end of applicable fiscal year. See - Calculations Appendix.
17. **FY Start Balance (same as prior year FY End Balance)**
The balance in reserves at start of applicable fiscal year.
18. **Inflation Rate**
Expressed as a percentage rate that reflects the increase of this year's costs over the previous year's costs. Also known as a 'cost increase factor'.
19. **Interest Earned**
The annual earning of reserve funds that have been deposited into certificates of deposit (CDs), money market accounts or other investment vehicles. See - Calculations Appendix.
20. **Interest Rate**
The ratio of the gain received from an investment and the investment over a period (usually one year), prior to any federal or state-imposed taxes.
21. **Interest Rate (net effective)**
The ratio of the gain received from an investment and the investment over a period (usually one year), after any federal or state-imposed taxes.
22. **Levels of Service**

Level 1 Reserve Study (Full or Comprehensive)- A Reserve Study in which the following five Reserve Study tasks are performed:

- Component Inventory
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

Level 2 Reserve Study (Update, With-Site-Visit/On-Site Review)- A Reserve Study update in which the following five tasks are performed:

- Component Inventory (from prior study)
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

*Note- Updates are reliant on the validity of prior Reserve Studies.

Level 3 Reserve Study (Update, No-Site-Visit/Off-Site Review)- A Reserve Study update with no on-site visual observations in which the following three tasks are performed:

- Component Inventory (from prior study)
- Condition Assessment (based upon on-site visual observations)
- Life and Valuation Estimates
- Fund Status
- Funding Plan

*Note- Updates are reliant on the validity of prior Reserve Studies.

23. **Percent Funded**
A comparison of the Fully Funded Balance (ideal balance) to the Fiscal Year Actual Start Balance expressed as a percentage and used to provide a 'general indication' of reserve strength. See Calculations Appendix.
24. **Quantity**
The number or amount of a reserve component or subcomponent.
25. **Remaining Life (RL)**
The estimated time, in years, that a reserve component can be expected to continue to serve its intended function.
26. **Replacement %**
A percentage of the total replacement for a reserve component or subcomponent. This parameter is normally 100%.
27. **Reserve Allocation**
The amount to be annually budgeted towards reserves based on a Funding Plan.
28. **Reserve Component (or subcomponent)**
The individual line items in the reserve study, developed or updated in the physical analysis that form the building blocks of the reserve study. They typically are:

- an association responsibility,
- with limited useful life expectancies,
- predictable remaining useful life expectancies,
- above a minimum threshold cost,
- and, as required by statutes.

29. **Restoration**
Defined as to bring back to an unimpaired or improved condition. General types follow:

- Building- In general, funding utilized to defray the cost (in whole or part) of major building components that are not necessarily included as line items and may include termite treatment.
- Irrigation System- In general, funding utilized to defray the cost (in whole or part) of sectional irrigation system areas including modernization to improve water management.
- Landscape- In general, funding utilized to defray the cost (in whole or part) of sectional landscape areas including modernization to improve water conservation & drainage.

30. **Risk Factor (Percent Funded)**
The associated risk of the availability of reserves to fund expenditures by interpreting the Percent Funded parameter as follows:

- 70% and above - LOW
- 30% to 70% - MODERATE
- 30% and below - HIGH

*High risk is associated with a higher risk for reliance on special assessments, loans and litigation.

31. **Unit Cost**
The current fiscal year's estimated cost to maintain, replace, repair, or restore an individual "unit of measure" of a reserve component or subcomponent to its original functional condition.
32. **Unit of Measure**
A system of units used in measuring a reserve component or subcomponent (i.e. each, lineal feet, square feet, etc.).
33. **Useful Life (UL)**
Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve item can be expected to serve its intended function if properly constructed and maintained in its present application or installation.

Disclosures Index

The below disclosures are in accordance with reserve study standards developed by CAI, APRA and statutory requirements.

1. **Items Beyond the Scope of this Report**
   This reserve study has been conducted to outline a financial plan for the proper and adequate budgeting of the Association component repair and/or replacement. This report should not be utilized for any other purpose and should not be considered or deemed appropriate or reliable for, but not limited to, any of the following:

   - Building or land appraisals for any purpose
   - State or local zoning ordinance violations
   - Building code violations
   - Soils conditions, soils contamination or geological stability of site
   - Engineering analysis or structural stability of site
   - Air quality, asbestos, electromagnetic radiation, formaldehyde, lead, mercury, or radon
   - Water quality or other environmental hazards
   - Invasions by termites and any or all other destroying organisms or insects
   - Damage or destruction due to pests, birds, bats or animals to buildings or site
   - Adequacy or efficiency of any system or component on site
   - Specifically excluded reserve items
   - Septic systems and septic tanks
   - Buried or concealed portions of swing pools, pool liners, Jacuzzis/spas or similar items
   - Items concealed by signs, carpets or other things
   - Missing or omitted information supplied by the Association for the purposes of reserve study preparation
   - Hidden improvements such as sewer lines, water lines, or other buried or concealed items

2. **Qualifications**
   We are a professional business in the market to prepare Reserve Studies. Our Reserve Analysts' are either designated with or working towards the RS and/or PRA designations which are given by the two leading industry organizations which require peer review, continuing education and provide resources to stay on top of industry trends.
3. **Invasive Testing**
   Estimated life expectancies and life cycles are based upon conditions that were readily accessible and visible at the time of the site visit. We did not destroy any landscape work, building walls, or perform any methods of intrusive/invasive testing during the site visit. In these cases, information may have been obtained by contacting the contractor or vendor that has worked on the property. The physical analysis performed during this site visit is not intended to be exhaustive in nature and may include representative sampling.
4. **Conflicts of Interests**
   As the preparer of this reserve study; the Reserve Analyst certifies that we do not have any vested interests, financial interests, or other interests that would cause a conflict of interest in the preparation of this reserve study.
5. **Representative Sampling**
   This study and report is based on observations of the visible and apparent conditions of a reasonable representative sampling of the property's elements at the time of inspection. Although due diligence was performed during the inspection phase, we make no representations regarding latent or concealed defects that may exist. The inspection did not constitute any invasive investigations and was not intended to determine whether applicable building components, systems, or equipment are adequate or in compliance with any specific or commonly accepted design requirement, building code, or specification. Such tasks as material testing, engineering analysis, destructive testing, or performance testing of building systems, components, or equipment are not considered as part of the scope of work, nor are they considered by the reserve study industry standard.
6. **Reliance on Client & Vendor Data Provided**
   Information provided to the preparer of a reserve study by an official representative of the association regarding financial, historical, physical, quantitative or reserve project issues will be deemed reliable by the preparer. A reserve study will reflect information provided to the preparer of the reserve study. The total of actual or projected reserves required as presented in the reserve study is based upon information provided that was not audited. A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. The results of this study are based on the independent opinion of the preparer and their experience and research during their career in preparing Reserve Studies. In addition, the opinions of experts on certain components have been gathered through research within their industry and with client's actual vendors. There is no implied warrantee or guarantee regarding our life and cost estimates/predictions. There is no implied warrantee or guarantee in any of our work product. Our results and findings will vary from another preparer's results and findings. A Reserve Study is necessarily a work in progress and subsequent Reserve Studies will vary from prior studies.
7. **Update to Prior Reserve Studies**
   Level II Studies: Quantities of major components as reported in previous reserve studies are deemed to be accurate and reliable. The reserve study relies upon the validity of previous reserve studies. Level III Studies: In addition to the above we have not visited the property when completing a Level III "No Site Visit" study. Therefore, we have not verified the current condition of the common area components. It is assumed all prior study component information related to quantities, condition assessments, useful life and remaining useful life are accurate.
8. **Assumption Regarding Ongoing Maintenance**
   The projected life expectancy of the major components and the funding needs of the reserves of the association are based upon the association performing appropriate routine and preventative maintenance for each major component. Failure to perform such maintenance can negatively impact the remaining useful life of the major components.

9. Assumptions Regarding Defect in Design or Construction

This Reserve Study assumes that all construction assemblies and components identified herein are built properly and are free from defects in materials and/or workmanship. Defects can lead to reduced useful life and premature failure. It was not the intent of this Reserve Study to inspect for or to identify defects. If defects exist, repairs should be made so that the construction components and assemblies at the community reach their full and expected useful lives. We have assumed all components have been properly built and will reach normal, typical life expectancies. In general, a reserve study is not intended to identify or fund for construction defects. We did not and will not look for or identify construction defects during our site visit.

10. Basis of Cost Estimates

Pricing used for the repair or replacement costs indicated in this report are derived from a variety of sources, e.g., recent contractor bids received by subject property HOA or prior clients, construction product vendor catalogs, internet, or national construction cost estimating publishers (RS Means / Marshall & Swift). The material and labor pricing provided are estimates and have been augmented, as necessary, to account for specific site conditions (i.e. material handling, scaffolding, etc.). The total expenses represent a useful guideline whereby reserve funds can be accumulated for future repairs and replacements. The estimated repair and replacement expenses, unless otherwise noted, do not include allowances for architectural, engineering, or permitting fees.

11. Limitations on Report Use

A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. This Reserve Study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described. Additionally, other unanticipated expenses may arise that are not included within this reserve study. This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

12. State Specific Disclosures

Washington State

RCW 64.34.382 & WA State RCW 64.38.070

This reserve study includes all aspects required per WA State RCW requirements outlined in the Washington Condominium Act and the Homeowners' Association Act.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

Washington State

Disclosures Required by RCW 64.90.550.

This Reserve Study meets all requirements of the Washington Uniform Common Interest Ownership Act.

a) This Reserve Study was prepared with the assistance of a reserve study professional and that professional was independent;
b) This Reserve Study includes all information required by RCW 64.90.550 Reserve Study – Contents; and
c) This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

Calculations Index

1. **Allocation % =**

   Reserve Allocation (Component Method) / Total Reserve Allocation (Component Method) x 100

2. **Current Cost =**

   Extended Cost (for a component without subcomponents)

   i. -or-

   Sum of subcomponent Extended Costs (for a component with subcomponents)

3. **Extended Cost =**

   Quantity x Unit Cost x Replacement % x (1+Contingency Rate)

4. **FY End Balance (same as Next FY Start Balance) =**

   Initial or current fiscal year-

   Current Reserve Balance + Interest Earned + Reserve Allocation to Fund + Special Assessment to Fund + Funds Due from Operating - Approved Funds to Disburse - Disbursements

   Subsequent fiscal years-

   FY Start Balance + Interest Earned + (Reserve Allocation (from previous year) x (1 + Reserve Allocation Rate) - Disbursements

5. **Interest Earned=**

   Initial fiscal year-

   Current Reserve Balance x (Interest Rate (net effective)/12 x Number of funding months remaining in current fiscal year)

   Subsequent fiscal years-

   FY Start Balance x Interest Rate (net effective)

   Accumulation Function and Amount Function

   https://www.reservedataanalyst.com/int

6. **Percent Funded =**

   (Reserve Account Balance / Fully Funded Balance) x 100

7. **Reserve Allocation (Component Method) =**

   Current Cost / Useful Life

8. **Fully Funded Balance (FFB) =**

   Basic Fully Funded

   Fully Funded = Age/Useful Life * Cost

   Note that "Age" is adjusted for each year of the study (e.g. one year later also equates to an Age which is one year greater). We do not use the age from the first year of the study for future FFB calculations as this would not appropriately address the deterioration of the component over time (i.e. when providing future projections one can make a valid assumption that a component will deteriorate by one year if providing projections for one year later).

   Cost (component project cost) is inflated for each year based on an annual inflation rate (compounding) given in this reserve study (e.g. a paint project "cost" may be $1,000 in Year 1 of the study but will have a "cost" of $1,030 in Year 2 of the study, and $1,060.90 in Year 3 of the study, when utilizing an annual 3% inflation rate. Note that we do not use the "cost" (current project cost) from the first year of the study for future year's FFB calculations as this approach does not consider the impact of inflation on the project cost and will usually result in a significantly underfunded reserve account over time. This is also known as the Inflation Adjusted Cost Method

   ***Unless specifically noted otherwise we have utilized the above FFB formula and methodology in this reserve study.*

   Community Association Institute FFB Formula

   The Community Association Institute published the below FFB formula to account for inflation and interest earned on deposit ("present value" is based on the current cost only - with no inflation of the project cost) the writers of 'RESERVE FUNDS: How & Why community Associations Invest Assets' published:

$$Basic\_FF = (\ Age/\ Useful\ Life\ ) * Present\ Value$$

$$\begin{aligned} CAI\_FF = {} & Basic\_FF \\ & + Basic\_FF/(1+interest)^{Remaining\ Life} \\ & - Basic\_FF/(1+inflation)^{Remaining\ Life} \end{aligned}$$

   More mathematical information can be found at the following link: www.reservedataanalyst.com/math

Sector 2A Snohomish Cascade Association
Component Index

Sector 2A Snohomish Cascade Association
Component Index

Total Funded Assets	41
Total Unfunded Assets	0
Total Assets	41