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Update "With-Site-Visit" Reserve Study



Rimrock Cove O.A. Coulee City, WA

Report #: 26309-1
For Period Beginning: January 1, 2020
Expires: December 31, 2020

Date Prepared: January 27, 2020



Hello, and welcome to your Reserve Study!

This Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

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

In this Report, you will find...

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

More Questions?

Visit our website at www.ReserveStudy.com or call us at:

253-661-5437



Table of Contents

3-Minute Executive Summary	1
Reserve Study Summary	1
Executive Summary (Component List)	2
Introduction, Objectives, and Methodology	3
Which Physical Assets are Funded by Reserves?	4
How do we establish Useful Life and Remaining Useful Life estimates?	4
How do we establish Current Repair/Replacement Cost Estimates?	4
How much Reserves are enough?	5
How much should we contribute?	6
What is our Recommended Funding Goal?	6
Site Inspection Notes	7
Projected Expenses	8
Annual Reserve Expenses Graph	8
Reserve Fund Status & Recommended Funding Plan	9
Annual Reserve Funding Graph	9
30-Yr Cash Flow Graph	10
Percent Funded Graph	10
Table Descriptions	11
Reserve Component List Detail	12
Fully Funded Balance	13
Component Significance	14
30-Year Reserve Plan Summary	15
30-Year Reserve Plan Summary (Alternate Funding Plan)	16
30-Year Income/Expense Detail	17
Accuracy, Limitations, and Disclosures	23
Terms and Definitions	24
Component Details	25
Site / Grounds	26
Recreation	39
Buildings	43
Systems / Equipment	50

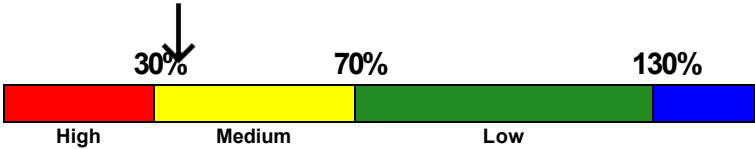
3- Minute Executive Summary

Association: Rimrock Cove O.A. **Assoc. #: 26309-1**
Location: Coulee City, WA **# of Units: 192**
Report Period: January 1, 2020 through December 31, 2020

Findings/Recommendations as-of: January 1, 2020

Starting Reserve Balance	\$320,885
Current Fully Funded Reserve Balance	\$916,114
Percent Funded	35.0 %
Average Reserve (Deficit) or Surplus Per Unit	(\$3,100)
Recommended 2020 100% Monthly "Full Funding" Contributions	\$6,029
2020 "Alternate / Baseline Funding" minimum to keep Reserves above \$0	\$5,835
Most Recent Budgeted Contribution Rate	\$5,433

Reserves % Funded: 35.0%



Special Assessment Risk:

Economic Assumptions:

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

- **This is a Update "With-Site-Visit" Reserve Study, meeting or exceeding all requirements of the RCW. This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).**
- **Your Reserve Fund is currently 35.0 % Funded. This means the association’s special assessment & deferred maintenance risk is currently Medium. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.**
- **Based on this starting point and your anticipated future expenses, our recommendation is to budget Reserve Contributions of \$6,029 per month this fiscal year. The 100% “Full” contribution rate is designed to gradually achieve this funding objective by the end of our 30-year report scope.**
- **No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions. "Alternate Funding" in this report is synonymous with Baseline Funding, as defined within the RCW " to maintain the reserve account balance above zero throughout the thirty-year study period, without special assessments." Funding plan contribution rates are presented as an aggregate total, assuming average percentage of ownership. The actual ownership allocation may vary - refer to your governing documents.**

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site / Grounds				
120	Asphalt - Resurface	30	19	\$276,000
121	Asphalt - Seal Coat	5	4	\$25,800
155	Chain Link Fence - Replace (a)	40	20	\$27,300
155	Chain Link Fence - Replace (b)	40	20	\$10,700
175	Irrigation System - Replace	12	3	\$3,000
190	Poplar Trees - Replace	1	0	\$6,000
191	Trees - Trim/Remove	3	1	\$6,000
Recreation				
335	Basketball Court - Repair/Resurface	50	0	\$17,950
340	Play Sets - Partial Replace	8	6	\$8,000
400	Boat Dock System - Repair/Replace	0	5	\$40,000
405	EZ Swim Docks - Replace	20	5	\$22,000
Buildings				
500	Bathroom Metal Roofs	40	15	\$11,700
550	Office / Mgr Unit - Replace	50	1	\$140,000
600	Maint. Building - Repair/Replace	50	5	\$40,000
755	Restroom Interiors - Refurbish	5	3	\$4,000
760	Resident Managers Unit - Refurbish	10	11	\$4,000
Systems / Equipment				
930	Water System Distribution - Replace	60	19	\$504,000
931	Water System Storage - Replace	60	5	\$50,000
935	Well Pump - Replace	15	11	\$12,000
940	Sewage Lagoon Liners - Replace	30	9	\$170,000
942	Sewer System Piping -Repair/Replace	10	5	\$10,000
945	Sewer Flow Meters - Replace	10	3	\$11,000
975	Ford Ranger - Replace	10	3	\$5,800
977	Kawasaki Mule - Replace	15	5	\$6,000
978	EZ Go Golf Cart - Replace	8	5	\$4,500
978	Yamaha Golf Cart - Replace	8	5	\$4,500
979	John Deere Tractor - Replace	15	8	\$19,500
980	John Deere Mower - Replace	15	1	\$8,150
28 Total Funded Components				

Note 1: Yellow highlighted line items are expected to require attention in this initial year, green highlighted items are expected to occur within the first-five years.

Introduction



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

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



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

Methodology



For this [Update With-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.

Which Physical Assets are Funded by Reserves?

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



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

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

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

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

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

How much Reserves are enough?

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

Adequacy is measured in a two-step process:

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



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

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

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

How much should we contribute?



RESERVE FUNDING PRINCIPLES

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

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

What is our Recommended Funding Goal?

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



FUNDING OBJECTIVES

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

Site Inspection Notes

During our site visit on 10/8/2019, we visually inspected all visible common areas, while compiling a photographic inventory, noting: current condition, make & model information where appropriate, apparent levels of care and maintenance, exposure to weather elements and other factors that may affect the components useful life.

Our source reported that the association was in the process of measuring sludge levels within the sewer ponds to determine whether removal is necessary.



Projected Expenses

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

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

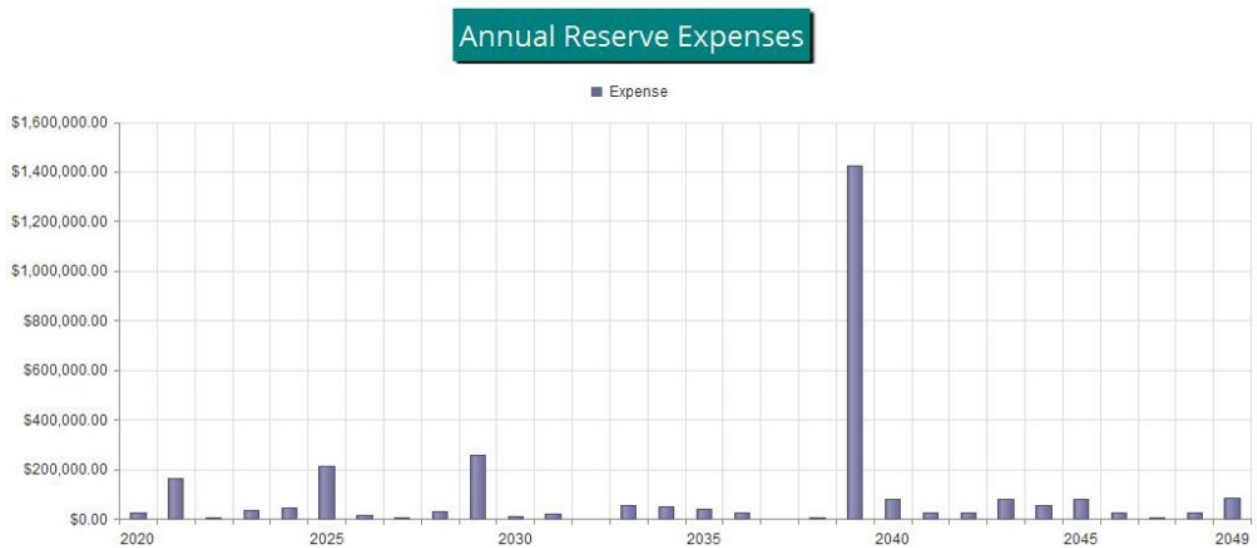


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$320,885 as-of the start of your Fiscal Year on 1/1/2020. As of that date, your Fully Funded Balance is computed to be \$916,114 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$6,029 per month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

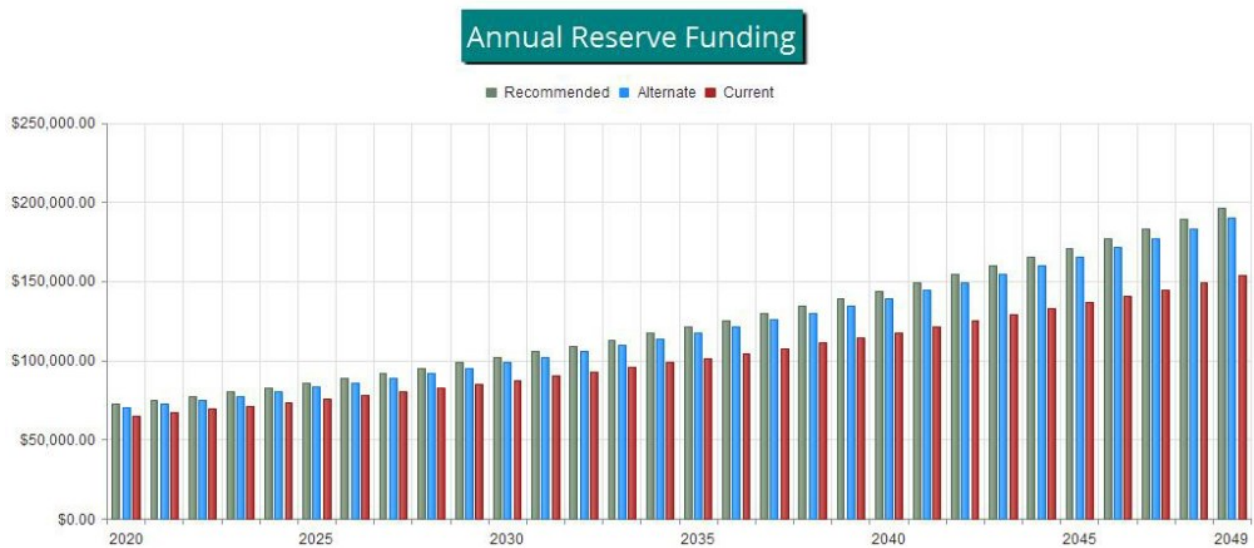


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate (assumes future increases), compared to your always-changing Fully Funded Balance target.

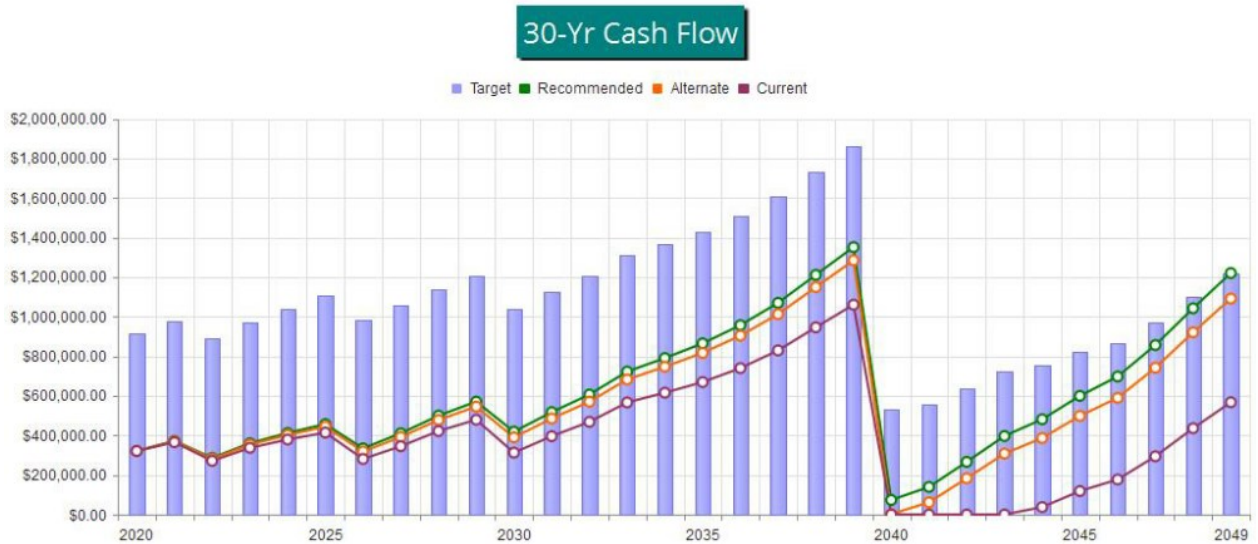


Figure 3

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

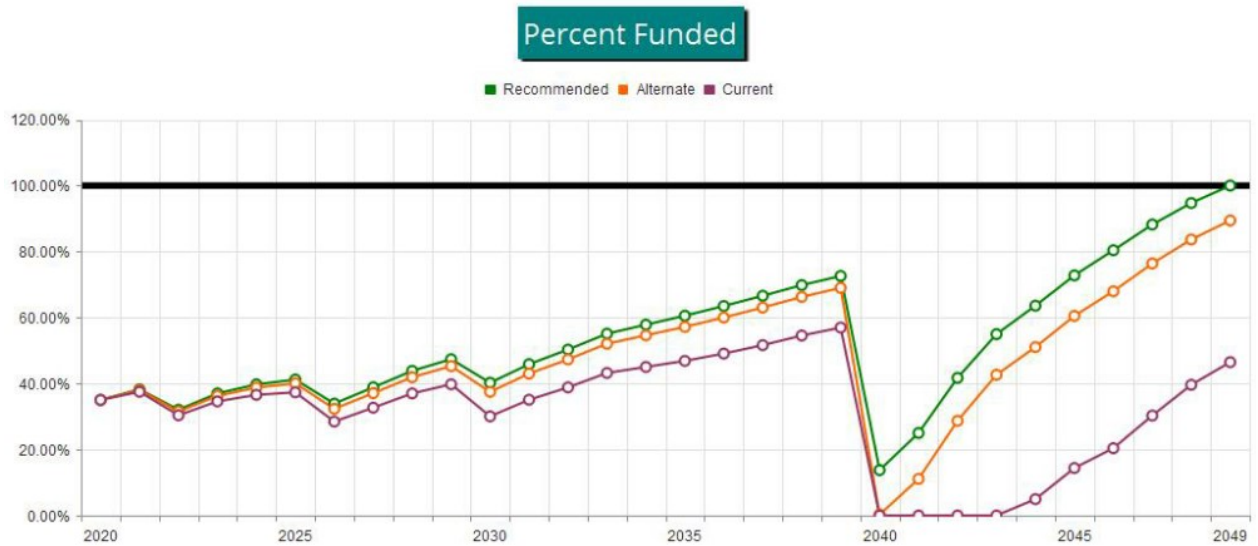


Figure 4

Table Descriptions

Executive Summary is a summary of your Reserve Components

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

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

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

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

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

Reserve Component List Detail

26309-1
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# Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate		
				Best Case	Worst Case	
Site / Grounds						
120	Asphalt - Resurface	~ 138,000 GSF asphalt	30	19	\$241,500	\$310,500
121	Asphalt - Seal Coat	~ 138,000 GSF asphalt	5	4	\$23,800	\$27,800
155	Chain Link Fence - Replace (a)	~ 1,560 LF chain link	40	20	\$23,400	\$31,200
155	Chain Link Fence - Replace (b)	~ 400 LF chain link	40	20	\$9,700	\$11,700
175	Irrigation System - Replace	Extensive system	12	3	\$2,500	\$3,500
190	Poplar Trees - Replace	~ (71) poplar trees	1	0	\$5,000	\$7,000
191	Trees - Trim/Remove	~ (305) various species	3	1	\$5,000	\$7,000
Recreation						
335	Basketball Court - Repair/Resurface	~ 1,280 GSF, (2) hoops	50	0	\$15,400	\$20,500
340	Play Sets - Partial Replace	~ (2) wood, (5) metal	8	6	\$6,000	\$10,000
400	Boat Dock System - Repair/Replace	1660 SF dock, 375 LF beam	0	5	\$35,000	\$45,000
405	EZ Swim Docks - Replace	~ (2) floating swim docks	20	5	\$20,000	\$24,000
Buildings						
500	Bathroom Metal Roofs	~ 1,800 GSF metal	40	15	\$9,000	\$14,400
550	Office / Mgr Unit - Replace	1977 Champion mobile home	50	1	\$130,000	\$150,000
600	Maint. Building - Repair/Replace	~ 1,100 GSF	50	5	\$35,000	\$45,000
755	Restroom Interiors - Refurbish	~ (3) restrooms	5	3	\$3,000	\$5,000
760	Resident Managers Unit - Refurbish	~ 450 GSF	10	11	\$3,000	\$5,000
Systems / Equipment						
930	Water System Distribution - Replace	~ 5800 LF main, 1400 svc	60	19	\$432,000	\$576,000
931	Water System Storage - Replace	~ (1) 8,800 gallon tank	60	5	\$45,000	\$55,000
935	Well Pump - Replace	(1) 15 hp submersible	15	11	\$11,000	\$13,000
940	Sewage Lagoon Liners - Replace	(2) 1/2 acre ponds	30	9	\$140,000	\$200,000
942	Sewer System Piping - Repair/Replace	~ 5,000 LF*	10	5	\$9,000	\$11,000
945	Sewer Flow Meters - Replace	~ (2) ISCO 4210	10	3	\$10,000	\$12,000
975	Ford Ranger - Replace	(1) 2002 Ford Ranger	10	3	\$5,200	\$6,400
977	Kawasaki Mule - Replace	~ (1) 2011 2510 Diesel	15	5	\$5,000	\$7,000
978	EZ Go Golf Cart - Replace	~ (1) EZ Go golf cart	8	5	\$4,000	\$5,000
978	Yamaha Golf Cart - Replace	~ (1) Yamaha golf cart	8	5	\$4,000	\$5,000
979	John Deere Tractor - Replace	~ (1) John Deere 430	15	8	\$17,000	\$22,000
980	John Deere Mower - Replace	(1) 2006 JD zero turn	15	1	\$7,000	\$9,300
28 Total Funded Components						

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Site / Grounds								
120	Asphalt - Resurface	\$276,000	X	11	/	30	=	\$101,200
121	Asphalt - Seal Coat	\$25,800	X	1	/	5	=	\$5,160
155	Chain Link Fence - Replace (a)	\$27,300	X	20	/	40	=	\$13,650
155	Chain Link Fence - Replace (b)	\$10,700	X	20	/	40	=	\$5,350
175	Irrigation System - Replace	\$3,000	X	9	/	12	=	\$2,250
190	Poplar Trees - Replace	\$6,000	X	1	/	1	=	\$6,000
191	Trees - Trim/Remove	\$6,000	X	2	/	3	=	\$4,000
Recreation								
335	Basketball Court - Repair/Resurface	\$17,950	X	50	/	50	=	\$17,950
340	Play Sets - Partial Replace	\$8,000	X	2	/	8	=	\$2,000
400	Boat Dock System - Repair/Replace	\$40,000	X	0	/	0	=	\$6,667
405	EZ Swim Docks - Replace	\$22,000	X	15	/	20	=	\$16,500
Buildings								
500	Bathroom Metal Roofs	\$11,700	X	25	/	40	=	\$7,313
550	Office / Mgr Unit - Replace	\$140,000	X	49	/	50	=	\$137,200
600	Maint. Building - Repair/Replace	\$40,000	X	45	/	50	=	\$36,000
755	Restroom Interiors - Refurbish	\$4,000	X	2	/	5	=	\$1,600
760	Resident Managers Unit - Refurbish	\$4,000	X	0	/	10	=	\$0
Systems / Equipment								
930	Water System Distribution - Replace	\$504,000	X	41	/	60	=	\$344,400
931	Water System Storage - Replace	\$50,000	X	55	/	60	=	\$45,833
935	Well Pump - Replace	\$12,000	X	4	/	15	=	\$3,200
940	Sewage Lagoon Liners - Replace	\$170,000	X	21	/	30	=	\$119,000
942	Sewer System Piping -Repair/Replace	\$10,000	X	5	/	10	=	\$5,000
945	Sewer Flow Meters - Replace	\$11,000	X	7	/	10	=	\$7,700
975	Ford Ranger - Replace	\$5,800	X	7	/	10	=	\$4,060
977	Kawasaki Mule - Replace	\$6,000	X	10	/	15	=	\$4,000
978	EZ Go Golf Cart - Replace	\$4,500	X	3	/	8	=	\$1,688
978	Yamaha Golf Cart - Replace	\$4,500	X	3	/	8	=	\$1,688
979	John Deere Tractor - Replace	\$19,500	X	7	/	15	=	\$9,100
980	John Deere Mower - Replace	\$8,150	X	14	/	15	=	\$7,607
								\$916,114

Component Significance

26309-1
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#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Site / Grounds					
120	Asphalt - Resurface	30	\$276,000	\$9,200	17.40 %
121	Asphalt - Seal Coat	5	\$25,800	\$5,160	9.76 %
155	Chain Link Fence - Replace (a)	40	\$27,300	\$683	1.29 %
155	Chain Link Fence - Replace (b)	40	\$10,700	\$268	0.51 %
175	Irrigation System - Replace	12	\$3,000	\$250	0.47 %
190	Poplar Trees - Replace	1	\$6,000	\$6,000	11.35 %
191	Trees - Trim/Remove	3	\$6,000	\$2,000	3.78 %
Recreation					
335	Basketball Court - Repair/Resurface	50	\$17,950	\$359	0.68 %
340	Play Sets - Partial Replace	8	\$8,000	\$1,000	1.89 %
400	Boat Dock System - Repair/Replace	0	\$40,000	\$0	0.00 %
405	EZ Swim Docks - Replace	20	\$22,000	\$1,100	2.08 %
Buildings					
500	Bathroom Metal Roofs	40	\$11,700	\$293	0.55 %
550	Office / Mgr Unit - Replace	50	\$140,000	\$2,800	5.30 %
600	Maint. Building - Repair/Replace	50	\$40,000	\$800	1.51 %
755	Restroom Interiors - Refurbish	5	\$4,000	\$800	1.51 %
760	Resident Managers Unit - Refurbish	10	\$4,000	\$400	0.76 %
Systems / Equipment					
930	Water System Distribution - Replace	60	\$504,000	\$8,400	15.89 %
931	Water System Storage - Replace	60	\$50,000	\$833	1.58 %
935	Well Pump - Replace	15	\$12,000	\$800	1.51 %
940	Sewage Lagoon Liners - Replace	30	\$170,000	\$5,667	10.72 %
942	Sewer System Piping -Repair/Replace	10	\$10,000	\$1,000	1.89 %
945	Sewer Flow Meters - Replace	10	\$11,000	\$1,100	2.08 %
975	Ford Ranger - Replace	10	\$5,800	\$580	1.10 %
977	Kawasaki Mule - Replace	15	\$6,000	\$400	0.76 %
978	EZ Go Golf Cart - Replace	8	\$4,500	\$563	1.06 %
978	Yamaha Golf Cart - Replace	8	\$4,500	\$563	1.06 %
979	John Deere Tractor - Replace	15	\$19,500	\$1,300	2.46 %
980	John Deere Mower - Replace	15	\$8,150	\$543	1.03 %
28	Total Funded Components			\$52,860	100.00 %

30-Year Reserve Plan Summary

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Fiscal Year Start: 2020	Interest: 1.00 %	Inflation: 3.00 %
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes	

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase		Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual Reserve Contribs.	Reserve Contribs.			
2020	\$320,885	\$916,114	35.0 %	Medium	10.96 %	\$72,348	\$0	\$3,467	\$23,950
2021	\$372,750	\$974,336	38.3 %	Medium	3.50 %	\$74,880	\$0	\$3,292	\$164,955
2022	\$285,967	\$891,864	32.1 %	Medium	3.50 %	\$77,501	\$0	\$3,230	\$6,365
2023	\$360,333	\$973,467	37.0 %	Medium	3.50 %	\$80,214	\$0	\$3,859	\$32,563
2024	\$411,843	\$1,036,129	39.7 %	Medium	3.50 %	\$83,021	\$0	\$4,341	\$42,544
2025	\$456,660	\$1,107,856	41.2 %	Medium	3.50 %	\$85,927	\$0	\$3,954	\$212,147
2026	\$334,393	\$985,698	33.9 %	Medium	3.50 %	\$88,934	\$0	\$3,722	\$16,717
2027	\$410,333	\$1,055,682	38.9 %	Medium	3.50 %	\$92,047	\$0	\$4,547	\$7,379
2028	\$499,548	\$1,139,113	43.9 %	Medium	3.50 %	\$95,269	\$0	\$5,347	\$29,769
2029	\$570,395	\$1,203,765	47.4 %	Medium	3.50 %	\$98,603	\$0	\$4,942	\$255,475
2030	\$418,465	\$1,039,715	40.2 %	Medium	3.50 %	\$102,054	\$0	\$4,676	\$8,063
2031	\$517,132	\$1,127,466	45.9 %	Medium	3.50 %	\$105,626	\$0	\$5,614	\$22,148
2032	\$606,224	\$1,205,289	50.3 %	Medium	3.50 %	\$109,323	\$0	\$6,639	\$0
2033	\$722,186	\$1,310,263	55.1 %	Medium	3.50 %	\$113,149	\$0	\$7,559	\$52,574
2034	\$790,321	\$1,366,300	57.8 %	Medium	3.50 %	\$117,109	\$0	\$8,271	\$51,126
2035	\$864,576	\$1,427,636	60.6 %	Medium	3.50 %	\$121,208	\$0	\$9,101	\$38,482
2036	\$956,403	\$1,506,025	63.5 %	Medium	3.50 %	\$125,450	\$0	\$10,124	\$22,707
2037	\$1,069,271	\$1,605,270	66.6 %	Medium	3.50 %	\$129,841	\$0	\$11,394	\$0
2038	\$1,210,506	\$1,733,204	69.8 %	Medium	3.50 %	\$134,386	\$0	\$12,802	\$6,810
2039	\$1,350,884	\$1,860,355	72.6 %	Low	3.50 %	\$139,089	\$0	\$7,119	\$1,423,496
2040	\$73,596	\$534,598	13.8 %	High	3.50 %	\$143,957	\$0	\$1,063	\$79,469
2041	\$139,148	\$555,956	25.0 %	High	3.50 %	\$148,996	\$0	\$2,025	\$24,184
2042	\$265,984	\$637,514	41.7 %	Medium	3.50 %	\$154,211	\$0	\$3,312	\$26,825
2043	\$396,682	\$721,491	55.0 %	Medium	3.50 %	\$159,608	\$0	\$4,387	\$79,536
2044	\$481,141	\$756,471	63.6 %	Medium	3.50 %	\$165,194	\$0	\$5,400	\$52,446
2045	\$599,289	\$823,260	72.8 %	Low	3.50 %	\$170,976	\$0	\$6,480	\$79,564
2046	\$697,181	\$867,064	80.4 %	Low	3.50 %	\$176,960	\$0	\$7,763	\$25,879
2047	\$856,025	\$970,510	88.2 %	Low	3.50 %	\$183,154	\$0	\$9,486	\$6,664
2048	\$1,042,001	\$1,099,973	94.7 %	Low	3.50 %	\$189,564	\$0	\$11,305	\$22,879
2049	\$1,219,991	\$1,219,835	100.0 %	Low	3.50 %	\$196,199	\$0	\$12,830	\$82,008

30-Year Reserve Plan Summary (Alternate Funding Plan)

26309-1
WSV

Fiscal Year Start: 2020	Interest: 1.00 %	Inflation: 3.00 %
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes	

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase		Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual Reserve Contribs.	Reserve Contribs.			
2020	\$320,885	\$916,114	35.0 %	Medium	7.39 %	\$70,020	\$0	\$3,455	\$23,950
2021	\$370,410	\$974,336	38.0 %	Medium	3.50 %	\$72,471	\$0	\$3,257	\$164,955
2022	\$281,183	\$891,864	31.5 %	Medium	3.50 %	\$75,007	\$0	\$3,170	\$6,365
2023	\$352,994	\$973,467	36.3 %	Medium	3.50 %	\$77,632	\$0	\$3,773	\$32,563
2024	\$401,836	\$1,036,129	38.8 %	Medium	3.50 %	\$80,350	\$0	\$4,227	\$42,544
2025	\$443,868	\$1,107,856	40.1 %	Medium	3.50 %	\$83,162	\$0	\$3,811	\$212,147
2026	\$318,694	\$985,698	32.3 %	Medium	3.50 %	\$86,072	\$0	\$3,550	\$16,717
2027	\$391,599	\$1,055,682	37.1 %	Medium	3.50 %	\$89,085	\$0	\$4,344	\$7,379
2028	\$477,649	\$1,139,113	41.9 %	Medium	3.50 %	\$92,203	\$0	\$5,112	\$29,769
2029	\$545,195	\$1,203,765	45.3 %	Medium	3.50 %	\$95,430	\$0	\$4,673	\$255,475
2030	\$389,824	\$1,039,715	37.5 %	Medium	3.50 %	\$98,770	\$0	\$4,372	\$8,063
2031	\$484,902	\$1,127,466	43.0 %	Medium	3.50 %	\$102,227	\$0	\$5,274	\$22,148
2032	\$570,255	\$1,205,289	47.3 %	Medium	3.50 %	\$105,805	\$0	\$6,260	\$0
2033	\$682,320	\$1,310,263	52.1 %	Medium	3.50 %	\$109,508	\$0	\$7,141	\$52,574
2034	\$746,396	\$1,366,300	54.6 %	Medium	3.50 %	\$113,341	\$0	\$7,811	\$51,126
2035	\$816,422	\$1,427,636	57.2 %	Medium	3.50 %	\$117,308	\$0	\$8,598	\$38,482
2036	\$903,846	\$1,506,025	60.0 %	Medium	3.50 %	\$121,414	\$0	\$9,576	\$22,707
2037	\$1,012,129	\$1,605,270	63.1 %	Medium	3.50 %	\$125,663	\$0	\$10,799	\$0
2038	\$1,148,591	\$1,733,204	66.3 %	Medium	3.50 %	\$130,061	\$0	\$12,158	\$6,810
2039	\$1,284,000	\$1,860,355	69.0 %	Medium	3.50 %	\$134,614	\$0	\$6,425	\$1,423,496
2040	\$1,543	\$534,598	0.3 %	High	3.50 %	\$139,325	\$0	\$316	\$79,469
2041	\$61,715	\$555,956	11.1 %	High	3.50 %	\$144,201	\$0	\$1,223	\$24,184
2042	\$182,955	\$637,514	28.7 %	High	3.50 %	\$149,248	\$0	\$2,453	\$26,825
2043	\$307,831	\$721,491	42.7 %	Medium	3.50 %	\$154,472	\$0	\$3,469	\$79,536
2044	\$386,237	\$756,471	51.1 %	Medium	3.50 %	\$159,879	\$0	\$4,420	\$52,446
2045	\$498,089	\$823,260	60.5 %	Medium	3.50 %	\$165,474	\$0	\$5,435	\$79,564
2046	\$589,435	\$867,064	68.0 %	Medium	3.50 %	\$171,266	\$0	\$6,652	\$25,879
2047	\$741,474	\$970,510	76.4 %	Low	3.50 %	\$177,260	\$0	\$8,306	\$6,664
2048	\$920,376	\$1,099,973	83.7 %	Low	3.50 %	\$183,464	\$0	\$10,053	\$22,879
2049	\$1,091,014	\$1,219,835	89.4 %	Low	3.50 %	\$189,886	\$0	\$11,502	\$82,008

30-Year Income/Expense Detail

26309-1
WSV

Fiscal Year	2020	2021	2022	2023	2024
Starting Reserve Balance	\$320,885	\$372,750	\$285,967	\$360,333	\$411,843
Annual Reserve Contribution	\$72,348	\$74,880	\$77,501	\$80,214	\$83,021
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$3,467	\$3,292	\$3,230	\$3,859	\$4,341
Total Income	\$396,700	\$450,922	\$366,699	\$444,406	\$499,204
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$29,038
155 Chain Link Fence - Replace (a)	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$0	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$0	\$0	\$0	\$3,278	\$0
190 Poplar Trees - Replace	\$6,000	\$6,180	\$6,365	\$6,556	\$6,753
191 Trees - Trim/Remove	\$0	\$6,180	\$0	\$0	\$6,753
Recreation					
335 Basketball Court - Repair/Resurface	\$17,950	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$0	\$0	\$0	\$0
400 Boat Dock System - Repair/Replace	\$0	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$0	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$0	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$144,200	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$0	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$4,371	\$0
760 Resident Managers Unit - Refurbish	\$0	\$0	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$0
931 Water System Storage - Replace	\$0	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$0	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$0
942 Sewer System Piping -Repair/Replace	\$0	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$12,020	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$6,338	\$0
977 Kawasaki Mule - Replace	\$0	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$0	\$0	\$0	\$0	\$0
978 Yamaha Golf Cart - Replace	\$0	\$0	\$0	\$0	\$0
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$0	\$0
980 John Deere Mower - Replace	\$0	\$8,395	\$0	\$0	\$0
Total Expenses	\$23,950	\$164,955	\$6,365	\$32,563	\$42,544
Ending Reserve Balance	\$372,750	\$285,967	\$360,333	\$411,843	\$456,660

Fiscal Year	2025	2026	2027	2028	2029
Starting Reserve Balance	\$456,660	\$334,393	\$410,333	\$499,548	\$570,395
Annual Reserve Contribution	\$85,927	\$88,934	\$92,047	\$95,269	\$98,603
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$3,954	\$3,722	\$4,547	\$5,347	\$4,942
Total Income	\$546,540	\$427,050	\$506,927	\$600,164	\$673,940
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$33,663
155 Chain Link Fence - Replace (a)	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$0	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$0	\$0	\$0	\$0	\$0
190 Poplar Trees - Replace	\$6,956	\$7,164	\$0	\$0	\$0
191 Trees - Trim/Remove	\$0	\$0	\$7,379	\$0	\$0
Recreation					
335 Basketball Court - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$9,552	\$0	\$0	\$0
400 Boat Dock System - Repair/Replace	\$46,371	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$25,504	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$0	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$0	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$46,371	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$5,067	\$0
760 Resident Managers Unit - Refurbish	\$0	\$0	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$0
931 Water System Storage - Replace	\$57,964	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$0	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$221,811
942 Sewer System Piping -Repair/Replace	\$11,593	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$0	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$0	\$0
977 Kawasaki Mule - Replace	\$6,956	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$5,217	\$0	\$0	\$0	\$0
978 Yamaha Golf Cart - Replace	\$5,217	\$0	\$0	\$0	\$0
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$24,702	\$0
980 John Deere Mower - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$212,147	\$16,717	\$7,379	\$29,769	\$255,475
Ending Reserve Balance	\$334,393	\$410,333	\$499,548	\$570,395	\$418,465

Fiscal Year	2030	2031	2032	2033	2034
Starting Reserve Balance	\$418,465	\$517,132	\$606,224	\$722,186	\$790,321
Annual Reserve Contribution	\$102,054	\$105,626	\$109,323	\$113,149	\$117,109
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,676	\$5,614	\$6,639	\$7,559	\$8,271
Total Income	\$525,195	\$628,372	\$722,186	\$842,895	\$915,701
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$39,025
155 Chain Link Fence - Replace (a)	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$0	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$0	\$0	\$0	\$0	\$0
190 Poplar Trees - Replace	\$0	\$0	\$0	\$0	\$0
191 Trees - Trim/Remove	\$8,063	\$0	\$0	\$8,811	\$0
Recreation					
335 Basketball Court - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$0	\$0	\$0	\$12,101
400 Boat Dock System - Repair/Replace	\$0	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$0	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$0	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$0	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$0	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$5,874	\$0
760 Resident Managers Unit - Refurbish	\$0	\$5,537	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$0
931 Water System Storage - Replace	\$0	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$16,611	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$0
942 Sewer System Piping -Repair/Replace	\$0	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$16,154	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$8,517	\$0
977 Kawasaki Mule - Replace	\$0	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$0	\$0	\$0	\$6,608	\$0
978 Yamaha Golf Cart - Replace	\$0	\$0	\$0	\$6,608	\$0
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$0	\$0
980 John Deere Mower - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$8,063	\$22,148	\$0	\$52,574	\$51,126
Ending Reserve Balance	\$517,132	\$606,224	\$722,186	\$790,321	\$864,576

Fiscal Year	2035	2036	2037	2038	2039
Starting Reserve Balance	\$864,576	\$956,403	\$1,069,271	\$1,210,506	\$1,350,884
Annual Reserve Contribution	\$121,208	\$125,450	\$129,841	\$134,386	\$139,089
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$9,101	\$10,124	\$11,394	\$12,802	\$7,119
Total Income	\$994,885	\$1,091,978	\$1,210,506	\$1,357,694	\$1,497,092
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$483,968
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$45,240
155 Chain Link Fence - Replace (a)	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$0	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$4,674	\$0	\$0	\$0	\$0
190 Poplar Trees - Replace	\$0	\$0	\$0	\$0	\$0
191 Trees - Trim/Remove	\$0	\$9,628	\$0	\$0	\$10,521
Recreation					
335 Basketball Court - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$0	\$0	\$0	\$0
400 Boat Dock System - Repair/Replace	\$0	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$0	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$18,228	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$0	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$0	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$6,810	\$0
760 Resident Managers Unit - Refurbish	\$0	\$0	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$883,767
931 Water System Storage - Replace	\$0	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$0	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$0
942 Sewer System Piping -Repair/Replace	\$15,580	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$0	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$0	\$0
977 Kawasaki Mule - Replace	\$0	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$0	\$0	\$0	\$0	\$0
978 Yamaha Golf Cart - Replace	\$0	\$0	\$0	\$0	\$0
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$0	\$0
980 John Deere Mower - Replace	\$0	\$13,078	\$0	\$0	\$0
Total Expenses	\$38,482	\$22,707	\$0	\$6,810	\$1,423,496
Ending Reserve Balance	\$956,403	\$1,069,271	\$1,210,506	\$1,350,884	\$73,596

Fiscal Year	2040	2041	2042	2043	2044
Starting Reserve Balance	\$73,596	\$139,148	\$265,984	\$396,682	\$481,141
Annual Reserve Contribution	\$143,957	\$148,996	\$154,211	\$159,608	\$165,194
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,063	\$2,025	\$3,312	\$4,387	\$5,400
Total Income	\$218,617	\$290,168	\$423,507	\$560,677	\$651,735
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$52,446
155 Chain Link Fence - Replace (a)	\$49,307	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$19,325	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$0	\$0	\$0	\$0	\$0
190 Poplar Trees - Replace	\$0	\$0	\$0	\$0	\$0
191 Trees - Trim/Remove	\$0	\$0	\$11,497	\$0	\$0
Recreation					
335 Basketball Court - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$0	\$15,329	\$0	\$0
400 Boat Dock System - Repair/Replace	\$0	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$0	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$0	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$0	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$0	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$7,894	\$0
760 Resident Managers Unit - Refurbish	\$0	\$7,441	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$0
931 Water System Storage - Replace	\$0	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$0	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$0
942 Sewer System Piping -Repair/Replace	\$0	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$21,709	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$11,447	\$0
977 Kawasaki Mule - Replace	\$10,837	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$0	\$8,371	\$0	\$0	\$0
978 Yamaha Golf Cart - Replace	\$0	\$8,371	\$0	\$0	\$0
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$38,485	\$0
980 John Deere Mower - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$79,469	\$24,184	\$26,825	\$79,536	\$52,446
Ending Reserve Balance	\$139,148	\$265,984	\$396,682	\$481,141	\$599,289

Fiscal Year	2045	2046	2047	2048	2049
Starting Reserve Balance	\$599,289	\$697,181	\$856,025	\$1,042,001	\$1,219,991
Annual Reserve Contribution	\$170,976	\$176,960	\$183,154	\$189,564	\$196,199
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,480	\$7,763	\$9,486	\$11,305	\$12,830
Total Income	\$776,745	\$881,904	\$1,048,665	\$1,242,871	\$1,429,020
# Component					
Site / Grounds					
120 Asphalt - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Seal Coat	\$0	\$0	\$0	\$0	\$60,799
155 Chain Link Fence - Replace (a)	\$0	\$0	\$0	\$0	\$0
155 Chain Link Fence - Replace (b)	\$0	\$0	\$0	\$0	\$0
175 Irrigation System - Replace	\$0	\$0	\$6,664	\$0	\$0
190 Poplar Trees - Replace	\$0	\$0	\$0	\$0	\$0
191 Trees - Trim/Remove	\$12,563	\$0	\$0	\$13,728	\$0
Recreation					
335 Basketball Court - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
340 Play Sets - Partial Replace	\$0	\$0	\$0	\$0	\$0
400 Boat Dock System - Repair/Replace	\$0	\$0	\$0	\$0	\$0
405 EZ Swim Docks - Replace	\$46,063	\$0	\$0	\$0	\$0
Buildings					
500 Bathroom Metal Roofs	\$0	\$0	\$0	\$0	\$0
550 Office / Mgr Unit - Replace	\$0	\$0	\$0	\$0	\$0
600 Maint. Building - Repair/Replace	\$0	\$0	\$0	\$0	\$0
755 Restroom Interiors - Refurbish	\$0	\$0	\$0	\$9,152	\$0
760 Resident Managers Unit - Refurbish	\$0	\$0	\$0	\$0	\$0
Systems / Equipment					
930 Water System Distribution - Replace	\$0	\$0	\$0	\$0	\$0
931 Water System Storage - Replace	\$0	\$0	\$0	\$0	\$0
935 Well Pump - Replace	\$0	\$25,879	\$0	\$0	\$0
940 Sewage Lagoon Liners - Replace	\$0	\$0	\$0	\$0	\$0
942 Sewer System Piping -Repair/Replace	\$20,938	\$0	\$0	\$0	\$0
945 Sewer Flow Meters - Replace	\$0	\$0	\$0	\$0	\$0
975 Ford Ranger - Replace	\$0	\$0	\$0	\$0	\$0
977 Kawasaki Mule - Replace	\$0	\$0	\$0	\$0	\$0
978 EZ Go Golf Cart - Replace	\$0	\$0	\$0	\$0	\$10,605
978 Yamaha Golf Cart - Replace	\$0	\$0	\$0	\$0	\$10,605
979 John Deere Tractor - Replace	\$0	\$0	\$0	\$0	\$0
980 John Deere Mower - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$79,564	\$25,879	\$6,664	\$22,879	\$82,008
Ending Reserve Balance	\$697,181	\$856,025	\$1,042,001	\$1,219,991	\$1,347,011

Accuracy, Limitations, and Disclosures

"The 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."

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James Talaga, company President, is a credentialed Reserve Specialist (#066). All work done by Association Reserves WA, LLC is performed under his responsible charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

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

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

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

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

Terms and Definitions

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

Component Details

The primary purpose of the Component Details appendix is to provide the reader with the basis of our funding assumptions resulting from our research and analysis. The information presented here represents a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

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

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

Site / Grounds

Comp #: 100 Concrete - Repair/Replace

Quantity: Stairs, concrete pads

Location: Bathrooms, site stairs

Funded?: No. Useful life not predictable

History: None known

Comments: No wide scale damage or deterioration observed at sample concrete areas viewed during our limited visual review.

Annual repair needs below the reserve funding threshold (1% or more of total annual expenses) should be factored in the operating budget. In our experience, larger repair/replacement expenses may emerge as the community ages that cannot be comfortably absorbed in the operating budget. Currently, it is difficult to predict timing, scope and costs of larger repairs. Monitor concrete annually and if conditions deteriorate leading to larger repair needs, funding can be included within a reserve study update.

As routine maintenance, inspect regularly and pressure wash for appearance. Repair any trip hazards (1/2" difference in height) immediately to ensure safety. Repair promptly as needed to prevent water penetrating into the base, which can cause further damage. Factors affecting the quality, service life of the concrete include; the preparation of the underlying soil and drainage, thickness and strength of concrete used, steel reinforcement (none likely), amount and weight of vehicle traffic, if any and tree roots nearby.

Additional Resources:

<http://www.mrsc.org/subjects/pubworks/sidew.aspx>

http://www.sakrete.com/media-center/blog-detail.cfm/bp_alias/Placing-Concrete-in-hot-or-cold-weather

<http://www.concretenetwork.com/cold-weather-concrete/weather.html>

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 106 Gravel Areas - Refurbish

Quantity: ~ 50,000 GSF gravel

Location: Marina, park area

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Generally adequate coverage observed. Extra gravel was observed onsite.

Ongoing refurbishing/replenishment and local grading should be part of annual maintenance program - no predictable expectation for large scale funding needs at this time. Track expenses and make adjustments to this component in reserve study updates if needed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 112 Metal Site Rail - Repair/Replace

Quantity: ~ 80 LF metal

Location: Adjacent to site stairs across from playground

Funded?: No. Useful life not predictable

History: None known

Comments: Galvanized rail and wood system appeared generally intact with no significant deterioration and/or damage evident.

Metal poles are a sturdy item that can typically last for an extended period with ordinary care and maintenance. Replace wood cross bars as needed through operating budget as cost projected to be too small to qualify for reserve funding. No reserve funding suggested at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 120 Asphalt - Resurface

Quantity: ~ 138,000 GSF asphalt

Location: Roadway of association

Funded?: Yes.

History: Installed between 2004 and 2006 with electrical work

Comments: While local deterioration and tree root uplift was observed in areas, asphalt appeared overall to be in generally intact condition.

Useful life below assumes regular seal coating and repairs (see component #121). The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years, consult with geotechnical engineer for recommendations, specifications/scope of work and project oversight.

As routine maintenance, keep surfaces clean and free of debris, ensure that drains are free flowing, repair cracks, and clean oil stains promptly. Assuming proactive maintenance, plan to resurface at roughly the time frame below.

Further resources:

Pavement Surface Condition Field Rating Manual for Asphalt Pavement.

<http://www.wsdot.wa.gov/NR/rdonlyres/4FE2F96D-BFE0-4484-812E-DD5164EB34F5/0/AsphaltPavementBook.pdf>

Washington Asphalt Pavement Association

<http://www.asphaltwa.com/>

Useful Life:
30 years

Remaining Life:
19 years



Best Case: \$ 241,500

Worst Case: \$ 310,500

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History, 5% per year

Comp #: 121 Asphalt - Seal Coat

Quantity: ~ 138,000 GSF asphalt

Location: Roadway of association

Funded?: Yes.

History: 2013, 2019 \$25,809.69

Comments: Generally, the surface condition of the asphalt coating appeared to be in intact condition during our visual review. Our source reported that asphalt was sealed in 2019 at a cost of \$25,809.69.

Regular cycles of seal coating, along with needed repairs is a best practice for the long term care of lower traffic asphalt areas to extend the useful life.

The State of Washington Department of Transportation (WSDOT) recommends regular cycles of seal coating for the long-term care of asphalt paving with low traffic and low speed. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed, the asphalt oxidizes or hardens, and this causes the pavement to become increasingly brittle. As a result, the pavement will become more likely to crack, as it is unable to bend and flex when subjected to traffic (weight) and temperature changes (thermal expansion and contraction). A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process, but also helps the pavement shed water. Seal coating also provides uniform appearance, and conceals the inevitable patching and repairs which accumulate over time, ultimately extending the useful life of asphalt before more costly resurfacing is needed (see component #120).

Repairing asphalt before seal coating is imperative. Surface preparation and dry weather during and following application is key to lasting performance.

For further resources:

Best Practices Handbook on Asphalt Pavement Maintenance

<http://www.cee.mtu.edu/~balkire/CE5403/AsphaltPaveMaint.pdf>

For a general overview of Asphalt Seal Coat Treatments review this publication:

<http://www.wsdot.wa.gov/NR/rdonlyres/4A21ECE8-114B-434D-B967-0927541CE042/0/AsphaltSealCoats.pdf>

Other references:

<http://www.pavementinteractive.org/article/bituminous-surface-treatments/>

Useful Life:
5 years

Remaining Life:
4 years



Best Case: \$ 23,800

Worst Case: \$ 27,800

Lower allowance

Higher allowance

Cost Source: Client Cost History

Comp #: 155 Chain Link Fence - Replace (a)

Quantity: ~ 1,560 LF chain link

Location: Perimeter of sewage treatment ponds

Funded?: Yes.

History: Assumed installed ~ 2000

Comments: Chain link fence at sewage treatment ponds appeared in generally intact condition. No reports of previous large scale repairs. See next component for chain link fencing that was recently installed near shop area.

For financial planning purposes, plan on replacing at roughly the time frame shown below. Evaluate fence as remaining useful life approaches zero years, and adjust life accordingly.

Chain link fencing is generally a low maintenance item. Inspect periodically, and repair as needed. If corrosion is observed, apply rust inhibitor to prevent corrosion from decreasing the useful life.

Useful Life:
40 years

Remaining Life:
20 years



Best Case: \$ 23,400

Worst Case: \$ 31,200

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 155 Chain Link Fence - Replace (b)

Quantity: ~ 400 LF chain link

Location: Partial property perimeter near shop area

Funded?: Yes.

History: T-post fence replaced with chain link 2017 \$10,736.05

Comments: This component represents the chain link fencing near the shop area that was installed in 2017 at a cost of \$10,736.05. This fencing replaced the previously existing t-post and wire fence. Our source reported there are no plans to install additional chain link fencing at this time.

See prior component for additional fencing and fence replacement details.

Useful Life:
40 years

Remaining Life:
20 years



Best Case: \$ 9,700

Worst Case: \$ 11,700

Lower allowance

Higher allowance

Cost Source: Client Cost History

Comp #: 156 Shoreline Protection-Repair/Replace

Quantity: ~ 1,575 LF

Location: Beach and marina

Funded?: No. Cost and timing not predictable at this time

History: None known

Comments: As reported in prior studies, there are a variety of shoreline protection measures employed at Rimrock Cove beach and marina perimeters, including: floating log (~100 LF), boulder / rubble (~630 LF), concrete block (~ 420 LF) and fixed log bulkhead (~ 425 LF). It was previously reported that erosion has occurred in areas and can be filled in with rock by hand under existing permit.

Continue to evaluate erosion and update future reserve studies as needed. Concrete bulkhead may be a possibility. Costs this project can vary widely, and are not yet defined enough for inclusion in the Rimrock Cove reserve plan. Project is large scale, and likely that significant portion, or all, funded by special assessment.

Inspect regularly, repair as needed, install rock infill - fund within operating budget.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 160 Site Lighting - Replace

Quantity: Assorted fixtures

Location: Scattered common areas throughout association

Funded?: No. Cost projected to be too small for reserve funding

History: None known

Comments: Observed during daylight hours therefore unable to confirm functional operating condition.

Minimal quantity does not merit cyclical reserve funding status. As routine maintenance, inspect, repair/change bulbs and fixtures as needed through operating budget.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 170 Landscape - Refurbish

Quantity: Trees, shrubs, turf

Location: Common area open space tracts throughout community

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Extensive landscape area consisting of primarily mature trees, shrubs and turf.

Currently, landscaping maintenance is funded out of the operating budget. As associations age, many find the need or desire for larger scale refurbish projects not covered within the maintenance contract, and they allocate funds within reserves. These types of projects can include: bed renovations, major replanting, large scale bark or mulch replacements, turf renovations, drainage improvements, irrigation system extensions/replacement, etc.

Walk area each year with landscape contractor, and perhaps a landscape architect, to assess the overall health, function, and future needs of maintenance and refurbish to determine if supplemental reserve funding should be planned for.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 175 Irrigation System - Replace

Quantity: Extensive system

Location: Along south tree line

Funded?: Yes.

History: 2015 \$8,524.10, 2018 \$1,251.39

Comments: Our visual observation of the irrigation system was limited as the majority of system components are below grade. Our source reported that all system expansions have been completed since our last 2014 site visit. At the time of this study, no information (plans and/or specifications) was provided to us regarding the extent of the irrigation system.

No predictable large-scale costs at this time, however we noted a Century booster pump near the main entrance that is reportedly the association's responsibility to maintain, repair and replace. Cost to replace this pump may not be insignificant, therefore we have included funding for periodic cycles of replacement. Age of pump is unknown, therefore we have used a 3 year remaining useful life for financial planning. Sometimes, pumps can be rebuilt rather than replaced. Have your landscaper or irrigation specialist periodically unearth sections to check lines for any damage or deterioration. PVC can eventually become brittle and leak (typically not before the 40 year mark of life).

As routine maintenance, inspect, test, and repair the system as needed from the operating budget. Follow proper winterization and spring startup procedures. If properly installed and bedded without defect, the lines could last for many years. Controls for the system can vary greatly in number, cost, and life expectancy - typically each controller is less than \$500. Other elements (i.e. sprinkler heads, valves) within this system are generally lower cost, and have a failure rate that is difficult to predict. These elements are better suited to be handled through the maintenance and operating budget, not reserves.

Useful Life:
12 years

Remaining Life:
3 years



Best Case: \$ 2,500

Worst Case: \$ 3,500

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 190 Poplar Trees - Replace

Quantity: ~ (71) poplar trees

Location: Common areas

Funded?: Yes.

History: 13 poplar trees planned for replacement 2019 \$4,900, 12 poplar trees planned for replacement \$6k per year for years 2020-2026

Comments: Our source reported that the association is in the process of removing poplar trees and installing maple trees as a replacement. Thirteen trees were planned for replacement in 2019 at a cost of ~ \$4,900, with 6 subsequent phases of tree removal/replacement planned for years 2020-2026 at a cost of \$6k per year to replace 12 trees.

Funding within this component factors the 2020-2025 poplar tree replacement cycles, and terminates after the year 2025. See next component for reoccurring cycles of tree trimming and replacement.

Useful Life:
1 years

Remaining Life:
0 years



Best Case: \$ 5,000

Worst Case: \$ 7,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client

Comp #: 191 Trees - Trim/Remove

Quantity: ~ (305) various species

Location: Throughout common areas

Funded?: Yes.

History: Trees replaced 2016 \$1,741.72, trimmed 2018 \$4,181.13

Comments: Trees are generally mature throughout the community. Our source reported that trees were last trimmed in 2018 at a cost of \$4,181.13. See prior component for ongoing replacement project of poplar trees.

It was reported in prior studies that an arborist review and report was compiled in 2012, identifying 14 species in the common areas, counting 305 trees with trunks 6" and larger. Of those, Lombardy Poplar is the predominate species (151) and also noted as the most problematic / high-risk to threaten adjacent property and sewer and water lines below surface from root damage. Many trees were noted to have been incorrectly topped, and were in poor condition as a result. Recommendation by arborist at that time was to remove all Lombardy Poplar trees and stumps (estimated at 195 trees).

This component may be utilized for larger tree removal/trimming projects which do not occur on an annual basis. If the community has not already done so, consult with a qualified arborist to assess the appropriateness of current plantings, and for a long term plan for the care and management of the trees within the community, balancing aesthetic with protection of association assets. Tree roots can be damaging to walkways, irrigation, underground utilities, and building structure. Track actual expenses, and adjust in reserve study updates if needed.

Useful Life:
3 years

Remaining Life:
1 years



Best Case: \$ 5,000

Worst Case: \$ 7,000

Lower allowance

Higher allowance

Cost Source: Estimated Provided By Client

Comp #: 195 Water Feature - Refurbish

Quantity: Bed, pump, etc.

Location: Common area near entrance

Funded?: No. No predictable large scale expenses affecting reserves

History: None known

Comments: Water feature was not operating during our off-season site visit, however no specific problems observed or reported to us.

Pumps typically have unpredictable service life and are lower cost (<\$500), thus does not merit reserve funding. Base material appears to be low maintenance concrete with no predictable large scale refurbishing anticipated at this time. Overall, no components in this area appearing to merit large scale reserve funding.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 200 Site Signage - Replace

Quantity: Assorted wood/metal

Location: Entry locations, misc.

Funded?: No. Cost projected to be individually too small for reserve funding

History: None known

Comments: The sample signs viewed appeared generally intact and legible, with no major damage or deterioration observed.

No expectation for need of large scale funding to replace all at once. Plan to replace as needed individually using operating funds.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 205 Mailboxes - Replace

Quantity: Individual boxes

Location: Adjacent to roadway within community
Funded?: No. Useful life not predictable
History: None known
Comments: Mailboxes varied in age, style and condition.

No predictable expectation for large scale replacement expense all at once. Inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair / replace as needed from operating budget.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Recreation

Comp #: 335 Basketball Court - Repair/Resurface

Quantity: ~ 1,280 GSF, (2) hoops

Location: Common area

Funded?: Yes.

History: None known

Comments: Cracking was noted of concrete sports court at the time of our site visit. Our source reported that the association is researching options to relocate court to beach area. If court cannot be relocated, our source reported that complete replacement of concrete will be required due to failures at base.

Funding for complete replacement of concrete is included herein. As routine maintenance, keep clean and seal cracks as they appear to keep water from penetrating into the base and causing further damage. Repair/replace basketball standards as needed as individually, cost is projected to be too small to qualify for reserve funding.

Useful Life:
50 years

Remaining Life:
0 years



Best Case: \$ 15,400

Worst Case: \$ 20,500

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 340 Play Sets - Partial Replace

Quantity: ~ (2) wood, (5) metal

Location: Park area

Funded?: Yes.

History: Refurbished 2018

Comments: Wood play equipment appeared generally intact at the time of our site visit, with new paint/stain observed. Our source reported equipment was refurbished in 2018.

Replacement cycles vary depending on the amount of use/abuse, exposure, etc. Generally plan for periodic large repair / partial replacement. Budget allowance below for one of the sets in like-kind at 8 year cycles, for a total useful life of 16 years per set. At the time of replacement, consider optimizing commercial play equipment; while the initial installation cost will be higher, equipment will last substantially longer and will likely require less maintenance over time.

Inspect regularly for stability, damage and excessive wear and utilize maintenance funds for any local repairs and minor replacement (i.e. swings, base, hardware) needed between replacement cycles.

Useful Life:
8 years

Remaining Life:
6 years



Best Case: \$ 6,000

Worst Case: \$ 10,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 400 Boat Dock System - Repair/Replace

Quantity: 1660 SF dock, 375 LF beam

Location: Common dock area

Funded?: Yes.

History: None known

Comments: As reported in prior studies, recent replacement of wood decking with composite material has occurred. Steel supports in water appeared stable during our limited visual review. Anchoring / tie system of docks is not an engineered system; steel cables were encased in (14) concrete piers which are attached to the side of ~375 LF of wood beam. Most are not level and one dock finger was observed to be partially submerged. Dock adjacent to boat launch was observed to be leaning.

Eventual replacement should be anticipated; no scope is available at this time, and could vary based on requirements of regulatory agencies and recommendations by contractors/professional consultants. Dock system is aging and showing signs of deterioration, therefore we recommend that the association research replacement of this system now to determine scope and costs, and to firm up a timeline for replacement. Cost allowances below are preliminary and may vary significantly based on actual scope of work.

Useful Life:
0 years

Remaining Life:
5 years



Best Case: \$ 35,000

Worst Case: \$ 45,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 405 EZ Swim Docks - Replace

Quantity: ~ (2) floating swim docks

Location: Beach area

Funded?: Yes.

History: Placed into service ~ 2004 (~\$9k)

Comments: It was reported in prior studies that EZ Dock floating docks were purchased around 2004 at a cost of approximately \$9k.

This component factors replacement at roughly 20 year intervals. Inspect docks as they reach the end of their useful life and adjust future reserve studies accordingly.

Useful Life:
20 years

Remaining Life:
5 years



Best Case: \$ 20,000

Worst Case: \$ 24,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Buildings

Comp #: 500 Bathroom Metal Roofs

Quantity: ~ 1,800 GSF metal

Location: Restroom building roofs (3)

Funded?: Yes.

History: None known

Comments: Generally stable condition of field observed during our limited visual review - no visible compromise of seams, damage or advanced rust, etc. It was reported in prior studies that manager does not think metal is original roof.

Typical life of metal is in the 40 year range. As routine maintenance, inspect closely at least twice annually (once in the fall before the rainy season and again in the spring) and after large storm events. Promptly replace any damaged/missing sections, fasteners and grommets or any other repair needed to ensure waterproof integrity of roof.

The National Roofing Contractors Association (NRCA) has additional information available on their web site <http://www.nrca.net/Consumers/>

Useful Life:
40 years

Remaining Life:
15 years



Best Case: \$ 9,000

Worst Case: \$ 14,400

Lower allowance to replace

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 523 Siding - Maintain/Repair

Quantity: ~ 2,000 GSF, varied

Location: Exterior walls of shop, storage, gables of restrooms
Funded?: No. Annual cost; best handled as operating expense
History: None known
Comments: Various types of wood siding present at shop, storage and restroom gables: plywood, T-111, channel, battens. Peeling paint was noted at shop.

These are utility areas and it is our expectation that repair needs as they arise and regular painting can be funded within the general maintenance operating budget. No recommendation for reserves at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 535 Rest Windows/Doors - Repair/Replace

Quantity: ~ (22) wndws (7) doors

Location: Restroom exterior walls
Funded?: No. Annual cost; best handled as operating expense
History: None known
Comments: No problems observed or reported of windows at the time of our site visit. Somewhat protected by roof overhang. Windows are non-thermal aluminum frame.

These are utility areas and it is our expectation that local repair/replacement needs as they arise can be funded within the operating budget. No recommendation for reserves at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 550 Office / Mgr Unit - Replace

Quantity: 1977 Champion mobile home

Location: Near main entrance of community
Funded?: Yes.

History: Unknown install date (~\$30k), planned for replacement 2021 ~ \$140k

Comments: Manager's unit appeared dated, with roof problems reported, and concrete blocks placed on roof. Unit featured wood skirt, metal siding and aluminum frame windows. Our source reported that the association was in the process of combining two lots, and is planning to replace the manager's unit/office in 2021 at a cost of approximately \$140k.

Funding for replacement is included herein. Cost could vary significantly based on size, quality and options chosen.

Useful Life:
50 years

Remaining Life:
1 years



Best Case: \$ 130,000

Worst Case: \$ 150,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client

Comp #: 560 Office Wood Deck - Replace

Quantity: ~ 400 GSF wood

Location: Adjacent to office

Funded?: No. Funding removed pending 2021 replacement of manager's unit/office

History: Office planned for replacement 2021

Comments: Our source reported that the manager's unit/office was planned for complete replacement in 2021. No information was available as to whether new unit will feature deck, and if so, what material deck will be constructed of (wood, composite, etc.). As a result, we have removed funding for replacement of existing deck accordingly; update future reserve studies once office is replaced and new layout is known.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 600 Maint. Building - Repair/Replace

Quantity: ~ 1,100 GSF

Location: SW quadrant of property

Funded?: Yes.

History:

Comments: The maintenance building does not rest upon a foundation, appears out of plumb, and areas of repair needs / deterioration were observed. This is a utility area, but is essential function to house and protect maintenance equipment and tools. Our recommendation would be to eventually replace with a heated metal storage building on concrete slab and we have factored replacement at the 50 year mark accordingly.

Useful Life:
50 years

Remaining Life:
5 years



Best Case: \$ 35,000

Worst Case: \$ 45,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 605 Sheds, Well House - Repair/Replace

Quantity: ~ (3) small structures

Location: Scattered common areas

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Sheds and well house varied in condition, with fading and peeling paint observed in areas.

It is our expectation that local repair / replacement of these small structures will be funded through annual operating / maintenance budget based upon need that year. No reserve funding for large scale repair / replace suggested at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 650 Building Exteriors - Paint

Quantity: Moderate GSF

Location: Restrooms, shop, sheds, etc.

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Painted surfaces were noted to be in generally deteriorated condition, with fading and peeling present.

Regular cycles of painting are recommended to maintain appearance and protect surfaces, however we assume this is handled through the annual operating / maintenance budget. No reserve funding suggested at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 710 Interior Walls & Ceilings - Paint

Quantity: Moderate GSF

Location: Interior wall and ceiling surfaces: restrooms, office area, etc.

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Painted interior surfaces were noted to be in generally intact condition.

Regular cycles of painting are recommended to maintain appearance and protect surfaces, however we assume this is handled through the annual operating / maintenance budget. No reserve funding suggested at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 755 Restroom Interiors - Refurbish

Quantity: ~ (3) restrooms

Location: Restroom areas

Funded?: Yes.

History: None known

Comments: Restroom interiors consisted of basic plumbing fixtures, wood stall dividers, concrete floor and CMU walls.

These areas are utility in nature, but it is likely that some larger repair / replacement projects will be needed, and therefore reserve funding is suggested to supplement the operating budget that covers the annual needs at smaller expense.

Prudent planning suggests setting aside funds for periodic refurbishing which may include items such as: plumbing fixtures, stalls, wall repairs, showers, vanity area, lighting, heating, ventilation, accessories, décor, etc. As routine maintenance, inspect regularly, perform any needed local repairs promptly utilizing general operating funds.

Funding is included here to remodel one restroom every 5 years, for a total useful life of 15 years per restroom.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 3,000

Worst Case: \$ 5,000

Lower allowance to refurbish one of three restrooms

Higher allowance; more extensive

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 760 Resident Managers Unit - Refurbish

Quantity: ~ 450 GSF

Location: Adjacent to office

Funded?: Yes.

History: Unit planned for replacement 2021

Comments: Our source reported that manager's unit was planned for complete replacement in 2021 (see component # 550).

This component factors periodic updating of interior of manager's unit. Projects may include carpet, paint, appliances, etc. We have set remaining useful life so that this component next occurs 10 years after replacement of unit.

Useful Life:
10 years

Remaining Life:
11 years



Best Case: \$ 3,000

Worst Case: \$ 5,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Systems / Equipment

Comp #: 773 Washer/Dryers - Repair/Replace

Quantity: ~ (2) washers (2) dryers

Location: Laundry rooms

Funded?: No. Cost projected to be too small for reserve funding

History: None known

Comments: Washers and dryers assumed to be functioning and in operating order, no problems reported. Too small of an asset to merit reserve funding for repair / replacement. Use maintenance funds as needed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 775 Water Heaters - Replace

Quantity: ~ (3) water heaters

Location: Restrooms

Funded?: No. Cost projected to be too small for reserve funding

History: None known

Comments: No reported problems or signs of leaks, corrosion, etc. Best to plan for replacement as needed within the operating / maintenance budget, not as cyclical capital reserve projects.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 780 Office Furn & Equip - Replace

Quantity: Desk, chairs, etc...

Location: Building office

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: Office furniture and equipment appeared to be in functional condition with no problems reported.

Anticipate periodic replacement will be funded as general operating/maintenance expense as individually these are typically smaller in cost. No reserve funding suggested

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 905 Electrical System - Repair/Replace

Quantity: Electrical distribution

Location: Throughout association

Funded?: No. Useful life not predictable

History: Phased (III) replacement ~ 2004 - 2006 (~\$710k)

Comments: It was reported in prior studies that distribution system was replaced in the mid 2000's due to failures of the original direct burial cable, and the community's need for increased service capacity, among other issues. The project was overseen by a professional engineer and there are currently no significant problems reported, or predictable expectation for large scale cyclical repair / replacement expenses within the 30-year scope of our report, therefore no reserve funding included.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 930 Water System Distribution - Replace

Quantity: ~ 5800 LF main,1400 svc

Location: Throughout community

Funded?: Yes.

History: Assumed original - 1970's

Comments: No significant replacement history reported. It was reported in prior studies that mains and lines are PVC.

PVC is generally thought to last between 60 and 75 years. Timing can vary significantly depending on a number of factors. Consistent monitoring of condition by engineer is best practice to detect early signs of failure. We have aligned useful life with road resurfacing for cost efficiencies.

Useful Life:
60 years

Remaining Life:
19 years



Best Case: \$ 432,000

Worst Case: \$ 576,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 931 Water System Storage - Replace

Quantity: ~ (1) 8,800 gallon tank

Location: Hillside location

Funded?: Yes.

History: Assumed original to 1970's construction

Comments: Our source reported that water tank is a below ground tank. Low water pressure reported at upper homes, and our source indicated that tank may require replacement sooner than anticipated by our prior study.

Tank is reportedly a steel tank, which typically has a useful life of approximately 60 years. We have set remaining useful life to 5 years due to concerns reported by client. We recommend researching this project well in advance to determine scope, costs and timeframe for replacement.

Useful Life:
60 years

Remaining Life:
5 years



Best Case: \$ 45,000

Worst Case: \$ 55,000

Lower allowance to replace

Higher allowance

Cost Source: Estimate Provided By Client

Comp #: 935 Well Pump - Replace

Quantity: (1) 15 hp submersible

Location: Within well

Funded?: Yes.

History: Replacement records 1978, 1990, 2016 \$10,725.12

Comments: Our source reported submersible well pump was replaced in 2016 at a cost of \$10,725.12.

Typically, replacement of pumps is more cost effective than refurbishing due to cost of pulling pump. Plan for a total useful life of approximately 15-20 years.

Useful Life:
15 years

Remaining Life:
11 years



Best Case: \$ 11,000

Worst Case: \$ 13,000

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 938 Chlorination System - Replace

Quantity: ~ (1) chlorination system

Location: Within pump house

Funded?: No. Cost projected to be too small to qualify for reserve funding

History: None known

Comments: Chlorination system consists of electric chemical feed pump, batch tank and connection piping. No problems were reported.

Our experience has shown that the average useful life of chlorine pump is approximately 5 years, however cost is projected to be too low to qualify for reserve funding. As a result, treat replacement as general maintenance operating expense.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 940 Sewage Lagoon Liners - Replace

Quantity: (2) 1/2 acre ponds

Location: SW of community

Funded?: Yes.

History: Installed ~1999 (~\$250k total project)

Comments: Material unknown - appears that it may be typical HDPE (high-density polyethylene). The small areas of the perimeter we visually inspected appeared intact with no noticeable punctures or breach of welded seams. Perimeters are fully exposed to weather.

Geoelectric leach location can detect any holes in liner. Liner service life can vary widely, depending upon a number of factors. We have used 30 years as a beginning point - we highly recommend you contact Dept. Of Ecology for assistance with geoelectric testing to assess the current condition of the liner, then incorporate any change in estimated remaining life into reserve study update.

Have professionally evaluated on regular basis. Maintain area surrounding, including fence (wildlife can cause great damage), and take care when removing any sludge not to damage liner.

DOE indicates current permit expires in Oct. Of 2015 and new must be applied for by April 2015. Their records indicate there is not a certified operator in place, and that is first priority. Contact Andy Oneal at DOE (operator assistance tech) at 509.329.3465 for certification process when person is identified that will be RRC operator.

Online RRC documents: https://fortress.wa.gov/ecy/wqreports/public/f?p=110:302:4065015441284010::NO::P302_PERMIT_NUMBER:ST0005395

DOE suggested that formation of a Public Utility District may be beneficial to the association, including access to grant monies. Contact Cynthia Wall 509.329.3537.

Useful Life:
30 years

Remaining Life:
9 years



Best Case: \$ 140,000

Worst Case: \$ 200,000

Lower allowance

Higher allowance

Cost Source: Prior Research with Local Vendor/Contractor, Dept of Ecology, Inflated

Comp #: 941 Sewage Lagoons - Maintain, Repair

Quantity: (2) 1/2 acre ponds

Location: SW of property

Funded?: No. Useful life not predictable

History: Renovated ~1999

Comments: Color of lagoon water was bright green, indicating algae, good healthy condition. Partial perimeter that was observed did not exhibit holes or breaches in the liner. Regular maintenance should include inspection and local repair, management of vegetation - see resources below. Periodic measurement of sludge depth needs to be conducted, maintaining at least 18" of water above sludge. When less, some of the sludge needs to be removed and disposed of at approved location. Our source reported that the association was in the process of measuring sludge levels and determining whether removal is necessary. No additional information is known at the time of this report. Cost can vary widely based on quantity of sludge removed, and is difficult to predict, therefore no reserve funding included at this time. Sludge removal at time of membrane replacement is included within prior component.

Resources:

<http://www.ianrpubs.unl.edu/pages/publicationD.jsp?publicationId=195#target2>

<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>

Online RRC documents: https://fortress.wa.gov/ecy/wqreports/public/f?p=110:302:4065015441284010::NO::P302_PERMIT_NUMBER:ST0005395

DOE suggested that formation of a Public Utility District may be beneficial to the association, including access to grant monies. Contact Cynthia Wall 509.329.3537.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 942 Sewer System Piping -Repair/Replace

Quantity: ~ 5,000 LF*

Location: Sewage conveyance system throughout community

Funded?: Yes. Total life of pipe unpredictable. Lined portions expected to have 50 yrs or more of life

History: 2002 repairs / CIPP liner (~\$25k), video inspect & clean 2014, cleaning/lining 2015 \$42,612.08

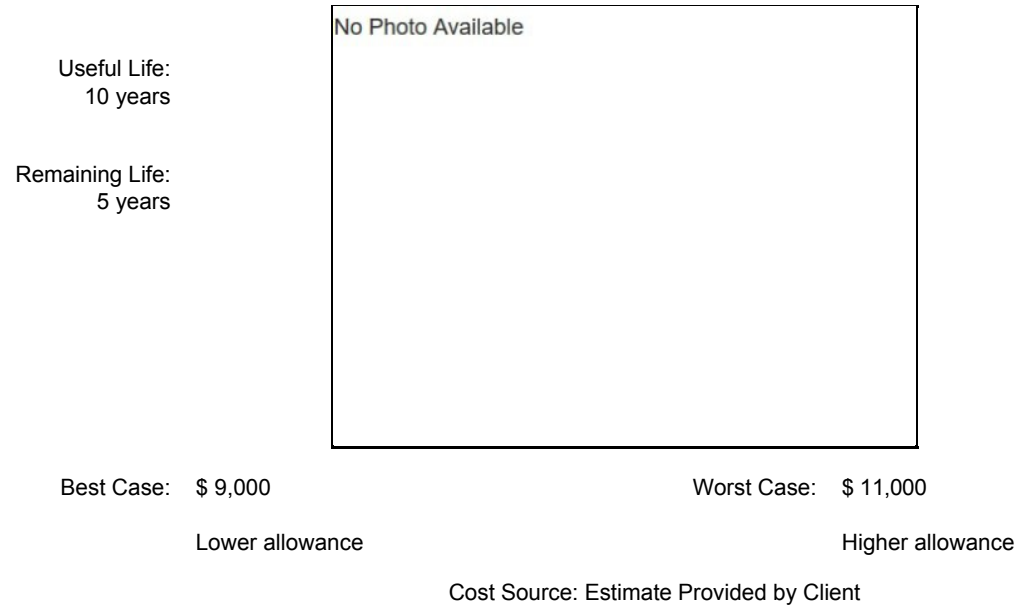
Comments: Tree root invasion was reported in prior studies. Our source reported that following the 2014 video inspection, the association cleaned and lined portions of the lines in 2015 at a cost of \$42,612.08. Only the worst areas were addressed, however, and our source reported that leaching of water during wet times still continues but the source is not known to the association.

Online RRC documents: https://fortress.wa.gov/ecy/wqreports/public/f?p=110:302:4065015441284010::NO::P302_PERMIT_NUMBER:ST0005395

In our prior research, the Department of Ecology suggested that formation of a Public Utility District may be beneficial to the association, including access to grant monies.

We have included funding for periodic repairs/lining of sewer lines based on research with client representative.

*Quantity above per vendor Trenchless Pipe Repair



Comp #: 945 Sewer Flow Meters - Replace

Quantity: ~ (2) ISCO 4210

Location: Lower restroom area, lagoon

Funded?: Yes.

History: None known

Comments: No problems reported of sewer flow meters at the time of our site visit. Based on information provided in prior studies, lagoon meter is now approximately ~ 15 years old, other ~ 9 years old.

Typical Useful Life is 10 or more years per our research with manufacturer.

Useful Life:
10 years

Remaining Life:
3 years



Best Case: \$ 10,000

Worst Case: \$ 12,000

Lower allowance

Higher allowance

Cost Source: Prior Research with Manufacturer, Inflated

Comp #: 955 Surveillance System - Replace

Quantity: Cameras, DVR, etc.

Location: Common area surveillance system

Funded?: No. Cost projected to be too small to qualify for reserve funding

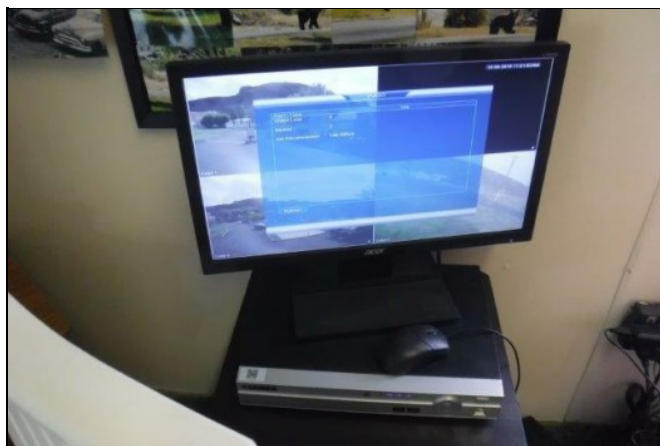
History: Installed ~ 2017 \$1k

Comments: Our source reported that a small surveillance camera system was installed in 2017, at a cost of approximately \$1k.

Due to the small nature of this system and the minimal cost, no reserve funding included. Repair/replace system as needed utilizing general maintenance operating funds. Update future reserve studies as needed should desire for larger camera system arise.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 975 Ford Ranger - Replace

Quantity: (1) 2002 Ford Ranger

Location: All purpose

Funded?: Yes.

History: Purchased used in 2013 ~\$5,000

Comments: No problems reported of Ford Ranger at the time of our site visit.

This component factors replacement about every 10 years with a used vehicle.

Useful Life:
10 years

Remaining Life:
3 years



Best Case: \$ 5,200

Worst Case: \$ 6,400

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 977 Kawasaki Mule - Replace

Quantity: ~ (1) 2011 2510 Diesel

Location: Maintenance yard

Funded?: Yes.

History: 2011

Comments: No problems reported of diesel Kawasaki Mule at the time of our site visit.

Plan for eventual replacement. Cost below factors replacement with used vehicle. Treat repairs, parts, etc. as maintenance expense.

Useful Life:
15 years

Remaining Life:
5 years



Best Case: \$ 5,000

Worst Case: \$ 7,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 978 EZ Go Golf Cart - Replace

Quantity: ~ (1) EZ Go golf cart

Location: All purpose

Funded?: Yes.

History: Purchased used 2014

Comments: Our source reported that the 1994 Yamaha Club Car was replaced with an EZ Go golf cart in 2014. Purchase price was not available for our report.

Plan for cyclical replacement. Cost below factors replacement with used vehicle. Repair, replace batteries and other work using maintenance funds.

Useful Life:
8 years

Remaining Life:
5 years



Best Case: \$ 4,000

Worst Case: \$ 5,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 978 Yamaha Golf Cart - Replace

Quantity: ~ (1) Yamaha golf cart

Location: All purpose

Funded?: Yes.

History: Purchased ~ 2011 or 2012

Comments: Our source reported that a green Yamaha golf cart was purchased around 2011 or 2012. Purchase price was not available for our report.

Plan for cyclical replacement. Cost below factors replacement with used vehicle. Repair, replace batteries and other work using maintenance funds.

Useful Life:
8 years

Remaining Life:
5 years



Best Case: \$ 4,000

Worst Case: \$ 5,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 979 John Deere Tractor - Replace

Quantity: ~ (1) John Deere 430

Location: Maintenance yard

Funded?: Yes.

History: Purchased 2013 (sed, 2002)

Comments: No problems reported of John Deere tractor at the time of our site visit.

Plan to replace at roughly the time frame below. Treat any repair needs as maintenance expense.

Useful Life:
15 years

Remaining Life:
8 years



Best Case: \$ 17,000

Worst Case: \$ 22,000

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 980 John Deere Mower - Replace

Quantity: (1) 2006 JD zero turn

Location: Maintenance yard

Funded?: Yes.

History: Motor replaced ~ 2012

Comments: No problems reported of John Deere zero turn mower at the time of our site visit.

Plan to replace at roughly the time frame below to maintain function.

Useful Life:
15 years

Remaining Life:
1 years



Best Case: \$ 7,000

Worst Case: \$ 9,300

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

Comp #: 985 Maintenance Equipment - Replace

Quantity: Misc. equipment, tools

Location: Maintenance area

Funded?: No. Annual cost; best handled as operating expense

History: None known

Comments: No equipment individually valued > \$2,000 to meet the criteria for reserve funding. Include expense within annual operating / maintenance budget process when replacement pieces are needed or desired.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 999 Reserve Study - Annual Update

Quantity: Annual update

Location: Common and limited common elements

Funded?: No. Annual cost; best handled as operating expense

History: 2015 FULL, 2020 WSV

Comments: Per Washington law (RCW), reserve studies are to be updated annually, with site inspections by an independent reserve study professional to occur no less than every three years to assess changes in condition (i.e. physical, economic, governmental, etc.), and the resulting effect on the community's long-term reserve plan. Most appropriately factored within operating budget, not as reserve component.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source: