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Autumn Lakes Homeowners Association, Inc  
Master Association  
*Grimesland, NC*



Report #: 42465-0  
Beginning: January 1, 2022  
Expires: December 31, 2022

**RESERVE STUDY**  
**"Full"**

February 1, 2022

# Welcome to your Reserve Study!

**A** Reserve Study is a valuable tool to help you budget responsibly for your property. This report contains all the information you need to avoid surprise expenses, make informed decisions, save money, and protect property values.

**R**egardless of the property type, it's a fact of life that the very moment construction is completed, every major building component begins a predictable process of physical deterioration. The operative word is "predictable" because planning for the inevitable is what a Reserve Study by **Association Reserves** is all about!

In this Report, you will find three key results:

- **Component List**  
Unique to each property, the Component List serves as the foundation of the Reserve Study and details the scope and schedule of all necessary repairs & replacements.
- **Reserve Fund Strength**  
A calculation that measures how well the Reserve Fund has kept pace with the property's physical deterioration.
- **Reserve Funding Plan**  
A multi-year funding plan based on current Reserve Fund strength that allows for component repairs and replacements to be completed in a timely manner, with an emphasis on fairness and avoiding "catch-up" funding.

## Questions?

Please contact your Project Manager directly.



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Autumn Lakes Homeowners Association, Inc - Master Association  
Grimesland, NC  
Level of Service: "Full"

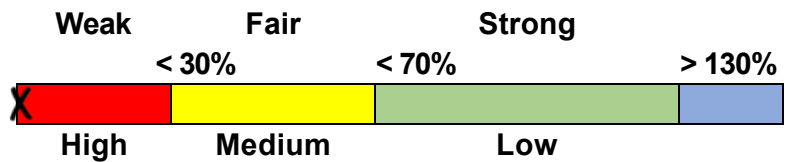
Report #: 42465-0  
# of Units: 82  
January 1, 2022 through December 31, 2022

Findings & Recommendations

as of January 1, 2022

Project Starting Reserve Balance	\$0
Currently Fully Funding Reserve Balance	\$837,915
Average Reserve Deficit (Surplus) Per Unit	\$10,218
Percent Funded	0.0 %
Recommended 2022 Fully Funding Contributions	\$57,400
Recommended 2022 Special Assessments for Reserves	\$0
Most Recent Reserve Contribution Rate	\$0

Reserve Fund Strength: 0.0%



Risk of Special Assessment:

Economic Assumptions:

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

This document is a "Full" Reserve Study which means created from scratch. Based on our site inspection we performed on 1/13/2022

This Reserve Study was prepared or overseen by a credentialed Reserve Specialist (RS). As of the start of the initial fiscal year shown in this study, your Reserve fund is determined to be 0.0 % Funded. Based on this figure, the Client's risk of special assessments & deferred maintenance is currently High. The objective of your multi-year Funding Plan is to Fully Fund your Reserves, where clients enjoy a low risk of such Reserve cash flow problems.

Based on this starting point, your anticipated future expenses, and your historical Reserve contribution rate, our recommendation is to increase your Reserve contributions to \$57,400 in the upcoming fiscal year. Going forward, the contribution rate recommended here should be increased as illustrated on the 30-yr Summary Table.

Reserve Funding Goals and Methodology:

This Reserve Study has been prepared using the "pooled" method of Reserve funding (also known as the cash flow method). The terms "full funding" and/or "fully funding" as used in this Reserve Study are based on the National Reserve Study Standards definition of full funding: "setting a Reserve funding goal to attain and maintain Reserves at or near 100 percent funded." (The definition and means of calculating percent-funded are addressed later in this report.)

In some jurisdictions, the minimum amount of Reserve contributions required when using the pooled method of funding may be less than the amount recommended in this study. In other words, the required contribution must be at least enough to ensure that the total Reserve fund balance does not fall below \$0 at any point in the foreseeable future, based on the current projections. The National Reserve Study Standards label this funding goal as "baseline funding."

In our opinion, the National Reserve Study Standards definition of fully funding not only complies with all relevant jurisdictional requirements, but is also more likely to provide an adequate "cushion" of accumulated funds, which will help mitigate financial risks in the event of higher-than-expected component costs, reduced component life expectancies, or other unforeseen negative circumstances. In our experience, Clients that choose to fund their Reserves using a baseline (or threshold) funding goal are significantly more likely to experience special assessments and deferred maintenance in the event of these circumstances.

For Clients using the "straight-line" method of Reserve funding (also known as the component method), an additional table may be added to the Reserve Study to provide alternate recommendations calculated using this method. By nature, the straight-line method may only be used to generate recommended contribution rates for one fiscal year at a time, and does not include any assumptions for interest earnings or inflationary cost increases. When using this method, the required contribution for each component is calculated by estimating the replacement cost for the component, subtracting any available funds already collected, and dividing the resulting difference (herein labeled as the "unfunded balance," measured in dollars) by the remaining useful life of the component, measured in years. The resulting figure is the required amount to fund that component. For groups of like components (i.e. multiple individual roof components, all falling within a 'roof reserve'), the individual contribution amounts are added together to determine the total amount required to fund the group as a whole.

For additional questions or to request more information about reserve funding goals and methods, please contact our office.

# Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
<b>Site and Grounds</b>			
2107 Concrete Paths - Partial Repair	12	7	\$7,750
2123 Asphalt (All) - Repair	3	2	\$4,700
2125 Asphalt (2008) - Resurface	20	7	\$191,000
2125 Asphalt (2020) - Resurface	20	18	\$173,500
2149 Gazebo - Replace	20	11	\$11,500
2159 Lake Erosion Control - Replace	12	2	\$10,000
2160 Retention Ponds - Maintain	30	15	\$275,000
2161 Bulkhead (Wood)Phase1 - Replace	50	28	\$282,000
2161 Bulkhead (Wood)Phase2 - Replace	50	29	\$280,000
2169 Entry Signs - Refurbish/Replace	35	14	\$38,000
2175 Site Pole Lights - Replace	20	13	\$68,200
2185 Landscaping - Refurbish	25	10	\$65,000
2595 Pond Fountains - Replace	20	7	\$9,500
<b>Pavilion and Main Dock</b>			
2140 Vinyl Railings - Replace	30	8	\$9,300
2181 Furniture - Partial Replace	8	5	\$4,050
2194 Wood Decking/Dock - Replace/Rebuild	25	3	\$22,600
2320 Composite Decking - Resurface	30	8	\$13,250
2381 Roof (Asphalt Shingle) - Replace	25	3	\$3,975
<b>Docks and Bridges</b>			
2191 Bridge - Resurface	25	5	\$86,500
2192 Bridge - Replace/Rebuild	50	28	\$172,000
2192 Small Bridge - Replace/Rebuild	25	13	\$23,050
2194 Dock - Replace/Rebuild	25	0	\$9,700

**22 Total Funded Components**

Note 1: Yellow highlighted line items are expected to require attention in this initial year, light blue 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 [Full Reserve Study](#), we started with a review of your Governing Documents, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We

performed an on-site inspection to quantify and evaluate your common areas, creating your Reserve Component List *from scratch*.

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

There is a national-standard four-part test to determine which expenses should appear in your 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



RESERVE COMPONENT "FOUR-PART TEST"

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.*

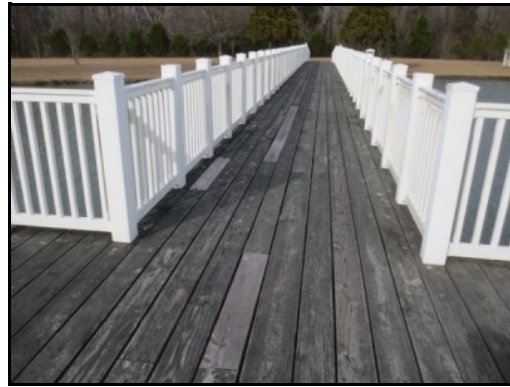


FUNDING OBJECTIVES

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 1/13/2022, we met with the property manager, who was able to explain in detail the recent projects that were recently finished and what projects are expected to occur in the next five years. The bridges and docks were all noted to be aging and expected to require large projects in the upcoming years. It is highly recommended that engineers inspect the bridges and docks to ensure they are safe and possibly identify any hidden deterioration. Missing sections of the dock could be a safety hazard to the unit owners.



## Projected Expenses

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

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

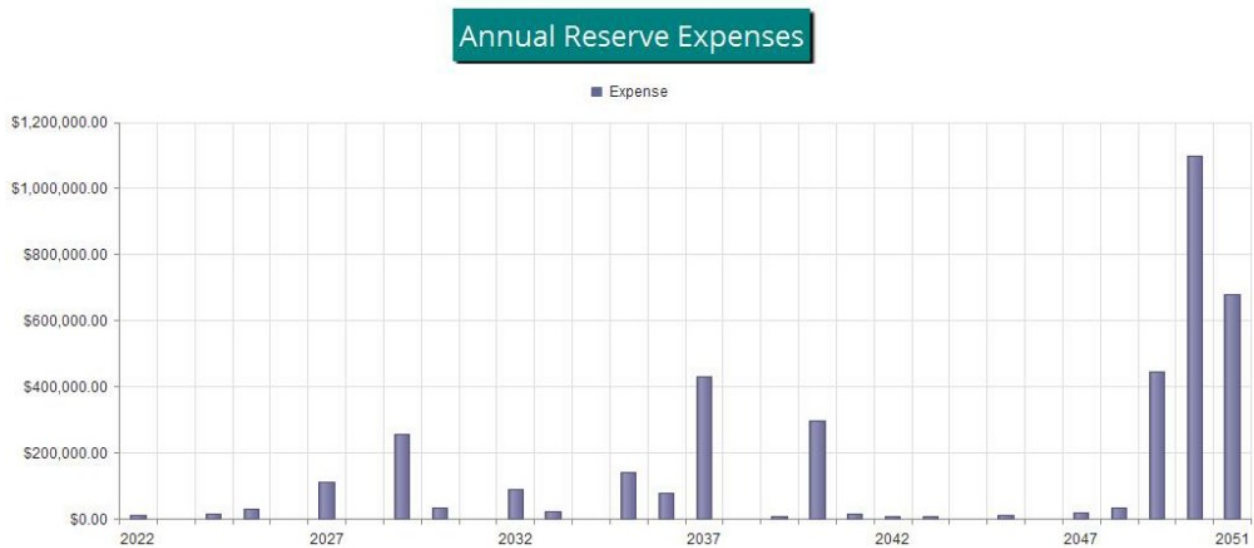


Figure 1

## Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$0 as-of the start of your Fiscal Year on 1/1/2022. As of your Fiscal Year Start, your Fully Funded Balance is computed to be \$837,915. This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 0.0 % Funded.

## Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$57,400 this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary and the Cash Flow Detail tables.

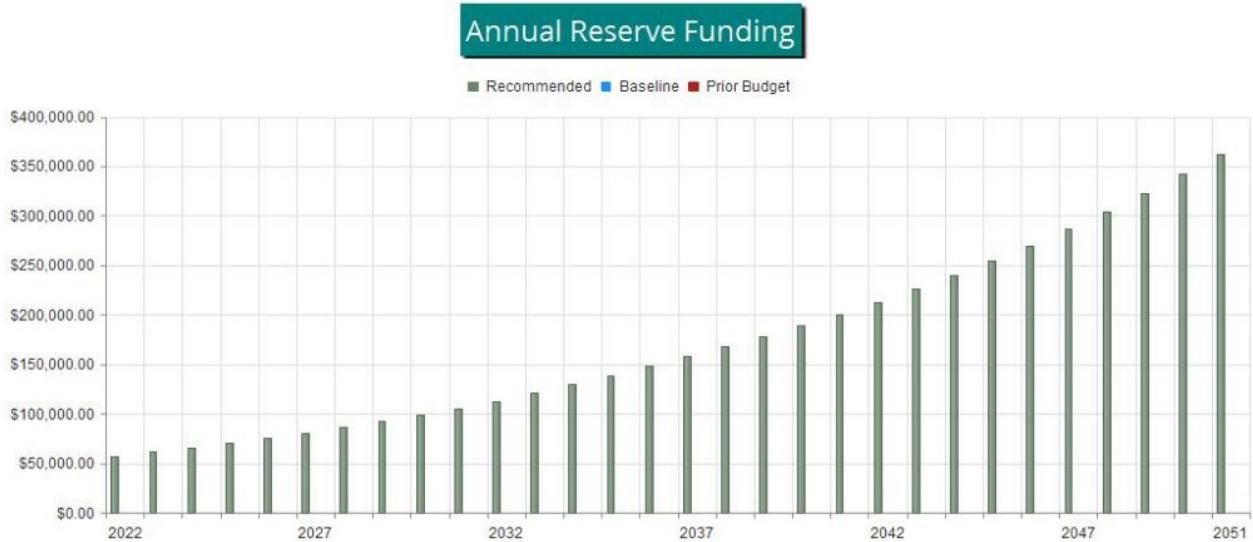


Figure 2

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

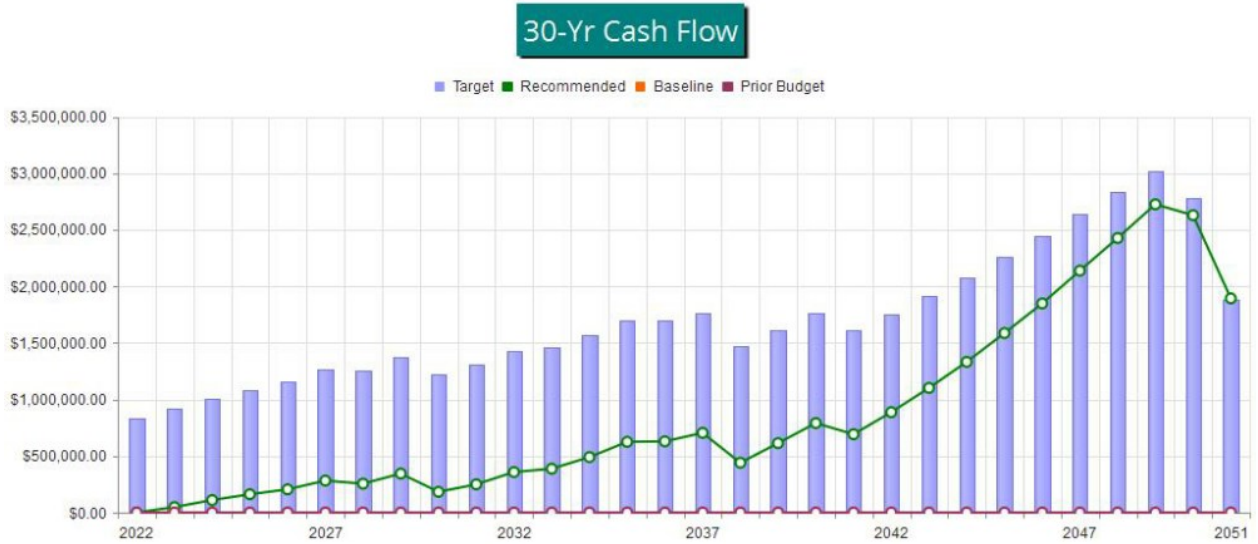


Figure 3

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

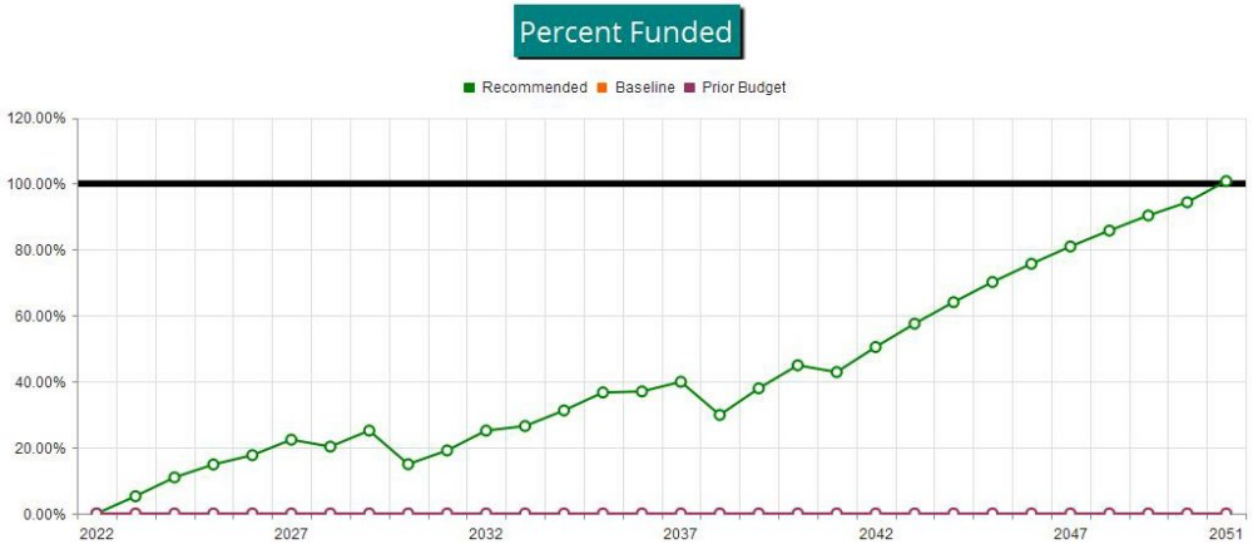


Figure 4



Executive Summary is a summary of your Reserve Components

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

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

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.



	Useful Life		2022 Rem. Useful Life		Estimated Replacement Cost in 2022	2022 Expenditures	01/01/2022 Fully Funded Balance	Remaining Bal. to be Funded	2022 Contributions
	Min	Max	Min	Max					
Site and Grounds	3	50	2	29	\$1,416,150	\$0	\$630,829	\$1,416,150	\$47,385
Pavilion and Main Dock	8	30	3	8	\$53,175	\$0	\$41,441	\$53,175	\$2,207
Docks and Bridges	25	50	0	28	\$291,250	\$9,700	\$165,644	\$291,250	\$7,808
					<b>\$1,760,575</b>	<b>\$9,700</b>	<b>\$837,915</b>	<b>\$1,760,575</b>	<b>\$57,400</b>

**Percent Funded: 0.0%**



#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate
<b>Site and Grounds</b>					
2107	Concrete Paths - Partial Repair	Approx 14,000 SF	12	7	\$7,750
2123	Asphalt (All) - Repair	Approx 131,200 SF	3	2	\$4,700
2125	Asphalt (2008) - Resurface	Approx 68,500 SF	20	7	\$191,000
2125	Asphalt (2020) - Resurface	Approx 62,700 SF	20	18	\$173,500
2149	Gazebo - Replace	(1) Gazebo	20	11	\$11,500
2159	Lake Erosion Control - Replace	Isolated Areas	12	2	\$10,000
2160	Retention Ponds - Maintain	Approx 54.50 Acres	30	15	\$275,000
2161	Bulkhead (Wood)Phase1 - Replace	Approx 50% of 7,500 LF	50	28	\$282,000
2161	Bulkhead (Wood)Phase2 - Replace	Approx 50% of 7,500 LF	50	29	\$280,000
2169	Entry Signs - Refurbish/Replace	(4) Signs	35	14	\$38,000
2175	Site Pole Lights - Replace	(31) Lights	20	13	\$68,200
2185	Landscaping - Refurbish	Numerous Areas	25	10	\$65,000
2595	Pond Fountains - Replace	(2) Fountains	20	7	\$9,500
<b>Pavilion and Main Dock</b>					
2140	Vinyl Railings - Replace	Approx 265 LF	30	8	\$9,300
2181	Furniture - Partial Replace	(21) Pieces	8	5	\$4,050
2194	Wood Decking/Dock - Replace/Rebuild	Approx 780 SF	25	3	\$22,600
2320	Composite Decking - Resurface	Approx 480 GSF	30	8	\$13,250
2381	Roof (Asphalt Shingle) - Replace	Approx 760 SF	25	3	\$3,975
<b>Docks and Bridges</b>					
2191	Bridge - Resurface	Approx 2,650 SF	25	5	\$86,500
2192	Bridge - Replace/Rebuild	Approx 2,650 SF	50	28	\$172,000
2192	Small Bridge - Replace/Rebuild	Approx 549 GSF	25	13	\$23,050
2194	Dock - Replace/Rebuild	Approx 290 SF	25	0	\$9,700
22	Total Funded Components				

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
<b>Site and Grounds</b>					
2107	Concrete Paths - Partial Repair	12	\$7,750	\$646	1.07 %
2123	Asphalt (All) - Repair	3	\$4,700	\$1,567	2.60 %
2125	Asphalt (2008) - Resurface	20	\$191,000	\$9,550	15.82 %
2125	Asphalt (2020) - Resurface	20	\$173,500	\$8,675	14.37 %
2149	Gazebo - Replace	20	\$11,500	\$575	0.95 %
2159	Lake Erosion Control - Replace	12	\$10,000	\$833	1.38 %
2160	Retention Ponds - Maintain	30	\$275,000	\$9,167	15.19 %
2161	Bulkhead (Wood)Phase1 - Replace	50	\$282,000	\$5,640	9.34 %
2161	Bulkhead (Wood)Phase2 - Replace	50	\$280,000	\$5,600	9.28 %
2169	Entry Signs - Refurbish/Replace	35	\$38,000	\$1,086	1.80 %
2175	Site Pole Lights - Replace	20	\$68,200	\$3,410	5.65 %
2185	Landscaping - Refurbish	25	\$65,000	\$2,600	4.31 %
2595	Pond Fountains - Replace	20	\$9,500	\$475	0.79 %
<b>Pavilion and Main Dock</b>					
2140	Vinyl Railings - Replace	30	\$9,300	\$310	0.51 %
2181	Furniture - Partial Replace	8	\$4,050	\$506	0.84 %
2194	Wood Decking/Dock - Replace/Rebuild	25	\$22,600	\$904	1.50 %
2320	Composite Decking - Resurface	30	\$13,250	\$442	0.73 %
2381	Roof (Asphalt Shingle) - Replace	25	\$3,975	\$159	0.26 %
<b>Docks and Bridges</b>					
2191	Bridge - Resurface	25	\$86,500	\$3,460	5.73 %
2192	Bridge - Replace/Rebuild	50	\$172,000	\$3,440	5.70 %
2192	Small Bridge - Replace/Rebuild	25	\$23,050	\$922	1.53 %
2194	Dock - Replace/Rebuild	25	\$9,700	\$388	0.64 %
22	Total Funded Components			\$60,354	100.00 %

Fiscal Year Start: 2022

Interest: 1.00 %

Inflation: 3.00 %

Reserve Fund Strength: as-of Fiscal Year Start Date					Projected Reserve Balance Changes			
Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2022	\$0	\$837,915	0.0 %	High	\$57,400	\$0	\$240	\$9,700
2023	\$47,940	\$915,226	5.2 %	High	\$61,418	\$0	\$790	\$0
2024	\$110,148	\$1,006,712	10.9 %	High	\$65,717	\$0	\$1,358	\$15,595
2025	\$161,628	\$1,086,801	14.9 %	High	\$70,317	\$0	\$1,831	\$29,039
2026	\$204,737	\$1,157,424	17.7 %	High	\$75,240	\$0	\$2,435	\$0
2027	\$282,412	\$1,262,114	22.4 %	High	\$80,506	\$0	\$2,687	\$110,421
2028	\$255,184	\$1,258,309	20.3 %	High	\$86,142	\$0	\$2,996	\$0
2029	\$344,322	\$1,370,287	25.1 %	High	\$92,172	\$0	\$2,636	\$256,121
2030	\$183,009	\$1,224,045	15.0 %	High	\$98,624	\$0	\$2,160	\$34,519
2031	\$249,273	\$1,303,960	19.1 %	High	\$105,528	\$0	\$3,034	\$0
2032	\$357,835	\$1,424,190	25.1 %	High	\$112,914	\$0	\$3,723	\$87,355
2033	\$387,118	\$1,460,484	26.5 %	High	\$120,819	\$0	\$4,383	\$22,425
2034	\$489,895	\$1,567,252	31.3 %	Medium	\$129,276	\$0	\$5,571	\$0
2035	\$624,742	\$1,702,902	36.7 %	Medium	\$138,325	\$0	\$6,268	\$139,951
2036	\$629,384	\$1,701,130	37.0 %	Medium	\$148,008	\$0	\$6,666	\$79,713
2037	\$704,344	\$1,764,089	39.9 %	Medium	\$158,368	\$0	\$5,719	\$428,441
2038	\$439,991	\$1,472,568	29.9 %	High	\$168,029	\$0	\$5,264	\$0
2039	\$613,284	\$1,616,501	37.9 %	Medium	\$178,279	\$0	\$7,017	\$7,768
2040	\$790,811	\$1,759,744	44.9 %	Medium	\$189,154	\$0	\$7,411	\$295,372
2041	\$692,004	\$1,614,134	42.9 %	Medium	\$200,692	\$0	\$7,892	\$13,590
2042	\$886,998	\$1,757,567	50.5 %	Medium	\$212,934	\$0	\$9,938	\$8,489
2043	\$1,101,381	\$1,913,827	57.5 %	Medium	\$225,923	\$0	\$12,161	\$7,534
2044	\$1,331,931	\$2,079,126	64.1 %	Medium	\$239,705	\$0	\$14,585	\$0
2045	\$1,586,221	\$2,260,614	70.2 %	Low	\$254,327	\$0	\$17,166	\$9,276
2046	\$1,848,437	\$2,441,566	75.7 %	Low	\$269,840	\$0	\$19,925	\$0
2047	\$2,138,202	\$2,641,181	81.0 %	Low	\$286,301	\$0	\$22,816	\$20,310
2048	\$2,427,010	\$2,829,657	85.8 %	Low	\$303,765	\$0	\$25,748	\$31,702
2049	\$2,724,821	\$3,015,958	90.3 %	Low	\$322,295	\$0	\$26,755	\$445,368
2050	\$2,628,503	\$2,785,793	94.4 %	Low	\$341,955	\$0	\$22,601	\$1,099,521
2051	\$1,893,537	\$1,879,089	100.8 %	Low	\$362,814	\$0	\$17,427	\$680,458

Fiscal Year	2022	2023	2024	2025	2026
Starting Reserve Balance	\$0	\$47,940	\$110,148	\$161,628	\$204,737
Annual Reserve Contribution	\$57,400	\$61,418	\$65,717	\$70,317	\$75,240
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$240	\$790	\$1,358	\$1,831	\$2,435
<b>Total Income</b>	<b>\$57,640</b>	<b>\$110,148</b>	<b>\$177,223</b>	<b>\$233,777</b>	<b>\$282,412</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$0	\$0	\$0
2123 Asphalt (All) - Repair	\$0	\$0	\$4,986	\$0	\$0
2125 Asphalt (2008) - Resurface	\$0	\$0	\$0	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$0	\$0
2149 Gazebo - Replace	\$0	\$0	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$0	\$10,609	\$0	\$0
2160 Retention Ponds - Maintain	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$0
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
2185 Landscaping - Refurbish	\$0	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$0	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$0	\$0
2181 Furniture - Partial Replace	\$0	\$0	\$0	\$0	\$0
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$24,696	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$0	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$4,344	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$0	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2194 Dock - Replace/Rebuild	\$9,700	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$9,700</b>	<b>\$0</b>	<b>\$15,595</b>	<b>\$29,039</b>	<b>\$0</b>
Ending Reserve Balance	\$47,940	\$110,148	\$161,628	\$204,737	\$282,412

<b>Fiscal Year</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>
Starting Reserve Balance	\$282,412	\$255,184	\$344,322	\$183,009	\$249,273
Annual Reserve Contribution	\$80,506	\$86,142	\$92,172	\$98,624	\$105,528
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,687	\$2,996	\$2,636	\$2,160	\$3,034
<b>Total Income</b>	<b>\$365,605</b>	<b>\$344,322</b>	<b>\$439,130</b>	<b>\$283,793</b>	<b>\$357,835</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$9,532	\$0	\$0
2123 Asphalt (All) - Repair	\$5,449	\$0	\$0	\$5,954	\$0
2125 Asphalt (2008) - Resurface	\$0	\$0	\$234,906	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$0	\$0
2149 Gazebo - Replace	\$0	\$0	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$0	\$0	\$0	\$0
2160 Retention Ponds - Maintain	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$0
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
2185 Landscaping - Refurbish	\$0	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$11,684	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$11,781	\$0
2181 Furniture - Partial Replace	\$4,695	\$0	\$0	\$0	\$0
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$16,785	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$0	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$100,277	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2194 Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$110,421</b>	<b>\$0</b>	<b>\$256,121</b>	<b>\$34,519</b>	<b>\$0</b>
Ending Reserve Balance	\$255,184	\$344,322	\$183,009	\$249,273	\$357,835

<b>Fiscal Year</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>
Starting Reserve Balance	\$357,835	\$387,118	\$489,895	\$624,742	\$629,384
Annual Reserve Contribution	\$112,914	\$120,819	\$129,276	\$138,325	\$148,008
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$3,723	\$4,383	\$5,571	\$6,268	\$6,666
<b>Total Income</b>	<b>\$474,473</b>	<b>\$512,320</b>	<b>\$624,742</b>	<b>\$769,335</b>	<b>\$784,058</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$0	\$0	\$0
2123 Asphalt (All) - Repair	\$0	\$6,506	\$0	\$0	\$7,109
2125 Asphalt (2008) - Resurface	\$0	\$0	\$0	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$0	\$0
2149 Gazebo - Replace	\$0	\$15,919	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$0	\$0	\$0	\$15,126
2160 Retention Ponds - Maintain	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$0
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$57,478
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$100,154	\$0
2185 Landscaping - Refurbish	\$87,355	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$0	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$0	\$0
2181 Furniture - Partial Replace	\$0	\$0	\$0	\$5,948	\$0
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$0	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$0	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$0	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$33,850	\$0
2194 Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$87,355</b>	<b>\$22,425</b>	<b>\$0</b>	<b>\$139,951</b>	<b>\$79,713</b>
<b>Ending Reserve Balance</b>	<b>\$387,118</b>	<b>\$489,895</b>	<b>\$624,742</b>	<b>\$629,384</b>	<b>\$704,344</b>

<b>Fiscal Year</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
Starting Reserve Balance	\$704,344	\$439,991	\$613,284	\$790,811	\$692,004
Annual Reserve Contribution	\$158,368	\$168,029	\$178,279	\$189,154	\$200,692
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$5,719	\$5,264	\$7,017	\$7,411	\$7,892
<b>Total Income</b>	<b>\$868,432</b>	<b>\$613,284</b>	<b>\$798,580</b>	<b>\$987,376</b>	<b>\$900,588</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$0	\$0	\$13,590
2123 Asphalt (All) - Repair	\$0	\$0	\$7,768	\$0	\$0
2125 Asphalt (2008) - Resurface	\$0	\$0	\$0	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$295,372	\$0
2149 Gazebo - Replace	\$0	\$0	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$0	\$0	\$0	\$0
2160 Retention Ponds - Maintain	\$428,441	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$0
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
2185 Landscaping - Refurbish	\$0	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$0	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$0	\$0
2181 Furniture - Partial Replace	\$0	\$0	\$0	\$0	\$0
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$0	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$0	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$0	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2194 Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$428,441</b>	<b>\$0</b>	<b>\$7,768</b>	<b>\$295,372</b>	<b>\$13,590</b>
<b>Ending Reserve Balance</b>	<b>\$439,991</b>	<b>\$613,284</b>	<b>\$790,811</b>	<b>\$692,004</b>	<b>\$886,998</b>

<b>Fiscal Year</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Starting Reserve Balance	\$886,998	\$1,101,381	\$1,331,931	\$1,586,221	\$1,848,437
Annual Reserve Contribution	\$212,934	\$225,923	\$239,705	\$254,327	\$269,840
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$9,938	\$12,161	\$14,585	\$17,166	\$19,925
<b>Total Income</b>	<b>\$1,109,870</b>	<b>\$1,339,466</b>	<b>\$1,586,221</b>	<b>\$1,857,713</b>	<b>\$2,138,202</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$0	\$0	\$0
2123 Asphalt (All) - Repair	\$8,489	\$0	\$0	\$9,276	\$0
2125 Asphalt (2008) - Resurface	\$0	\$0	\$0	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$0	\$0
2149 Gazebo - Replace	\$0	\$0	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$0	\$0	\$0	\$0
2160 Retention Ponds - Maintain	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$0
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
2185 Landscaping - Refurbish	\$0	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$0	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$0	\$0
2181 Furniture - Partial Replace	\$0	\$7,534	\$0	\$0	\$0
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$0	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$0	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$0	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2194 Dock - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$8,489</b>	<b>\$7,534</b>	<b>\$0</b>	<b>\$9,276</b>	<b>\$0</b>
<b>Ending Reserve Balance</b>	<b>\$1,101,381</b>	<b>\$1,331,931</b>	<b>\$1,586,221</b>	<b>\$1,848,437</b>	<b>\$2,138,202</b>



<b>Fiscal Year</b>	<b>2047</b>	<b>2048</b>	<b>2049</b>	<b>2050</b>	<b>2051</b>
Starting Reserve Balance	\$2,138,202	\$2,427,010	\$2,724,821	\$2,628,503	\$1,893,537
Annual Reserve Contribution	\$286,301	\$303,765	\$322,295	\$341,955	\$362,814
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$22,816	\$25,748	\$26,755	\$22,601	\$17,427
<b>Total Income</b>	<b>\$2,447,319</b>	<b>\$2,756,523</b>	<b>\$3,073,871</b>	<b>\$2,993,058</b>	<b>\$2,273,778</b>
# Component					
<b>Site and Grounds</b>					
2107 Concrete Paths - Partial Repair	\$0	\$0	\$0	\$0	\$0
2123 Asphalt (All) - Repair	\$0	\$10,136	\$0	\$0	\$11,076
2125 Asphalt (2008) - Resurface	\$0	\$0	\$424,266	\$0	\$0
2125 Asphalt (2020) - Resurface	\$0	\$0	\$0	\$0	\$0
2149 Gazebo - Replace	\$0	\$0	\$0	\$0	\$0
2159 Lake Erosion Control - Replace	\$0	\$21,566	\$0	\$0	\$0
2160 Retention Ponds - Maintain	\$0	\$0	\$0	\$0	\$0
2161 Bulkhead (Wood)Phase1 - Replace	\$0	\$0	\$0	\$645,196	\$0
2161 Bulkhead (Wood)Phase2 - Replace	\$0	\$0	\$0	\$0	\$659,838
2169 Entry Signs - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2175 Site Pole Lights - Replace	\$0	\$0	\$0	\$0	\$0
2185 Landscaping - Refurbish	\$0	\$0	\$0	\$0	\$0
2595 Pond Fountains - Replace	\$0	\$0	\$21,102	\$0	\$0
<b>Pavilion and Main Dock</b>					
2140 Vinyl Railings - Replace	\$0	\$0	\$0	\$0	\$0
2181 Furniture - Partial Replace	\$0	\$0	\$0	\$0	\$9,544
2194 Wood Decking/Dock - Replace/Rebuild	\$0	\$0	\$0	\$51,707	\$0
2320 Composite Decking - Resurface	\$0	\$0	\$0	\$0	\$0
2381 Roof (Asphalt Shingle) - Replace	\$0	\$0	\$0	\$9,095	\$0
<b>Docks and Bridges</b>					
2191 Bridge - Resurface	\$0	\$0	\$0	\$0	\$0
2192 Bridge - Replace/Rebuild	\$0	\$0	\$0	\$393,524	\$0
2192 Small Bridge - Replace/Rebuild	\$0	\$0	\$0	\$0	\$0
2194 Dock - Replace/Rebuild	\$20,310	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$20,310</b>	<b>\$31,702</b>	<b>\$445,368</b>	<b>\$1,099,521</b>	<b>\$680,458</b>
Ending Reserve Balance	\$2,427,010	\$2,724,821	\$2,628,503	\$1,893,537	\$1,593,320



## Accuracy, Limitations, and Disclosures

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

Per NRSS, information provided by official representatives 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

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



## Site and Grounds

**Comp #: 2107 Concrete Paths - Partial Repair**

**Quantity: Approx 14,000 SF**

Location: Common areas

Funded?: Yes.

History:

Comments: There were no consistent issues with cracking or erosion throughout the property. Concrete sidewalks determined to be in fair condition typically exhibit minor changes in slope and a moderate percentage of cracking and surface wear. Trip hazards may be increasing in frequency and severity and should be closely monitored to prevent further risks. Repair any trip and fall hazards immediately to ensure safety. As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. In our experience, larger repair/replacement expenses emerge as the community ages, especially as trees adjacent to sidewalks continue to grow. Although difficult to predict timing, cost and scope, we suggest a rotating funding allowance to supplement the operating/maintenance budget for periodic larger repairs. Adjust as conditions, actual expense patterns dictate within future Reserve Study updates.

Useful Life:  
12 years

Remaining Life:  
7 years



Best Case: \$ 6,700

Worst Case: \$ 8,800

Cost Source:

**Comp #: 2113 Site Drainage System - Clean/Repair**

**Quantity: (1) System**

Location: Throughout development

Funded?: No.

History:

Comments: No access to inspect in-ground drainage infrastructure. Annual preventive maintenance work is typically performed as part of an Association's general maintenance/operating fund. Under normal circumstances, site drainage components are constructed of very durable materials which should have an very long useful life (often assumed to be 50 years or more). Repairs may occasionally be required, but timing and scope of work is too unpredictable for Reserve funding in accordance with National Reserve Study Standards. If there are specific, known concerns with drainage system, we recommend further investigation using cameras or other means to document and identify conditions. Some Associations consult with civil and/or geotechnical engineers in order to develop scopes of work for repair/replacement. If more comprehensive analysis becomes available, findings should be incorporated into Reserve Study updates as appropriate.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 2123 Asphalt (All) - Repair**

**Quantity: Approx 131,200 SF**

Location: Roadways throughout development

Funded?: Yes.

History:

Comments: Repairs will be required in between the larger resurfacing projects. This is a small allowance for these projects.

Useful Life:  
3 years

Remaining Life:  
2 years



Best Case: \$ 3,600

Worst Case: \$ 5,800

Lower estimate to seal/repair

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2125 Asphalt (2008) - Resurface**

**Quantity: Approx 68,500 SF**

Location: Southwest side of the property

Funded?: Yes.

History: Built in 2008

Comments: This section of asphalt is overall aging well. A resurfacing will likely have to be completed in 5-10 years. Asphalt pavement determined to be in fair condition typically exhibits a mostly uniform surface but with minor to moderate raveling and surface wear. If present, crack patterns are normal for the age of the asphalt and not extreme, and there are no signs of advanced deterioration, such as large block cracking patterns, "alligatoring" or potholes. Overall appears to be aging normally and still up to an appropriate aesthetic standard. As routine maintenance, keep roadway clean, free of debris and well drained; fill/seal cracks to prevent water from penetrating into the sub-base and accelerating damage. Even with ordinary care and maintenance, plan for eventual large scale resurface (milling and overlay of all asphalt surfaces is recommended here, unless otherwise noted) at roughly the time frame below. Take note of any areas of ponding water or other drainage concerns, and incorporate repairs into scope of work for resurfacing. Our inspection is visual only and does not incorporate any core sampling or other testing, which may be advisable when asphalt is nearing end of useful life. Some communities choose to work with independent paving consultants or engineering firms in order to identify any hidden concerns and develop scope of work prior to bidding. If more comprehensive analysis becomes available, incorporate findings into future Reserve Study updates as appropriate.

Useful Life:  
20 years

Remaining Life:  
7 years



Best Case: \$ 140,000

Worst Case: \$ 242,000

Lower estimate to resurface

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2125 Asphalt (2020) - Resurface**

**Quantity: Approx 62,700 SF**

Location: Northeast side of the property

Funded?: Yes.

History: Resurfaced in 2020

Comments: Asphalt pavement determined to be in good condition typically exhibits a consistent appearance with uniform coloring and relatively smooth texture with only light to moderate signs of wear or age. If present, cracking and raveling or other signs of wear are sporadic in nature, and asphalt is still up to aesthetic standards for the development. No unusual signs of wear considering the age of the asphalt surface. As routine maintenance, keep roadway clean, free of debris and well drained; fill/seal cracks to prevent water from penetrating into the sub-base and accelerating damage. Even with ordinary care and maintenance, plan for eventual large scale resurface (milling and overlay of all asphalt surfaces is recommended here, unless otherwise noted) at roughly the time frame below. Take note of any areas of ponding water or other drainage concerns, and incorporate repairs into scope of work for resurfacing. Our inspection is visual only and does not incorporate any core sampling or other testing, which may be advisable when asphalt is nearing end of useful life. Some communities choose to work with independent paving consultants or engineering firms in order to identify any hidden concerns and develop scope of work prior to bidding. If more comprehensive analysis becomes available, incorporate findings into future Reserve Study updates as appropriate.

Useful Life:  
20 years

Remaining Life:  
18 years



Best Case: \$ 124,000

Worst Case: \$ 223,000

Lower estimate to resurface

Higher estimate

Cost Source: AR Cost Database



**Comp #: 2149 Gazebo - Replace**

**Quantity: (1) Gazebo**

Location: Common area across the large bridge

Funded?: Yes.

History: Built in 2013

Comments: Overall this gazebo was aging normally. Only minor surface wear was noticed. Powerwashing and reseal would help this gazebo maintain a more welcoming appearance. Routine maintenance and repair should be considered an Operating expense. This component represents an allowance for complete rebuilding/replacement at longer intervals. Costs are shown here assume replacement with comparable size, style, etc.

Useful Life:  
20 years

Remaining Life:  
11 years



Best Case: \$ 9,200

Worst Case: \$ 13,800

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2159 Lake Erosion Control - Replace**

**Quantity: Isolated Areas**

Location: Waterline at retention ponds

Funded?: Yes.

History:

Comments: There were numerous but isolated areas that were noticed to have erosion issues. There are a variety of lake erosion control measures in use today. Some methods include installation of rock revetments and/or rip-rap. Increasingly, many developments are utilizing various geotextile fabric products, which are placed along shorelines and typically covered over with turf and/or rock. In our experience, once installed, these types of materials should have an indefinite lifespan with no predictable need to completely replace all areas at one time. In some cases, repairs to individual sections may be required and should be completed as needed. We recommend budgeting for major repairs/restoration or complete replacement at the approximate interval shown here.

Useful Life:  
12 years

Remaining Life:  
2 years



Best Case: \$ 8,000

Worst Case: \$ 12,000

Cost Source: AR Cost Database

**Comp #: 2160 Retention Ponds - Maintain**

**Quantity: Approx 54.50 Acres**

Location: Throughout development

Funded?: Yes.

History:

Comments: There were no reported issues with the depth of these ponds. It is highly recommended to have pond vendors to complete bathymetry studies to figure out how quickly the sediment is building up. Under normal circumstances, well-maintained retention ponds should not require major repair/refurbishing projects on a predictable timeline. In some cases, large projects such as weed abatement or dredging may be required, but the scope and frequency of such projects is very unpredictable. As a precaution, the association may want to budget an "allowance" for repairs to the ponds. The association should consult with pond service vendor on a regular basis to identify any necessary projects, which may be included within future Reserve Study updates as needed.

Useful Life:  
30 years

Remaining Life:  
15 years



Best Case: \$ 200,000

Worst Case: \$ 350,000

Cost Source: AR Cost Database

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**Comp #: 2161 Bulkhead (Wood)Phase1 - Replace**

**Quantity: Approx 50% of 7,500 LF**

Location: Waterfront border of development

Funded?: Yes.

History:

Comments: Some sections had erosion issues behind the wooden bulken. However, the wood bulkhead appears to be aging normally. Wood bulkheads determined to be in fair condition typically exhibit moderate amounts of deterioration and surface wear on exposed sections. Filter cloth (Geotextile) and tie rods, may have deteriorated or shifted out of place. Visible hardware components show minor to moderate wear, corrosion or rust. Possible erosion or flushing through or beneath structure, but limited to isolated areas. Generally believed to be aging normally. Bulkheads should be inspected periodically as a routine maintenance task. If present, cracks, sagging or bulging sections, seepage through the wall and erosion at land-side are all causes for concern and should be investigated more thoroughly by a qualified engineer, experienced marine contractor or other professional. Our evaluation is based on a visual inspection of accessible areas only and is not intended to be for anything other than budgeting and planning purposes. In our experience, complete replacement is often required at the approximate interval shown here, but actual life expectancy can vary greatly between properties, depending on original construction method, material quality, environmental exposure, etc. Keep track of any significant repair projects or other inspection results, and incorporate information as needed into future Reserve Study updates.

Useful Life:  
50 years

Remaining Life:  
28 years



Best Case: \$ 244,000

Worst Case: \$ 320,000

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2161 Bulkhead (Wood)Phase2 - Replace**

**Quantity: Approx 50% of 7,500 LF**

Location: Waterfront border of development

Funded?: Yes.

History:

Comments: Please refer to the prior component in this series for more general information. Useful life, remaining useful life and cost ranges for this specific component are provided below.

Useful Life:  
50 years

Remaining Life:  
29 years



Best Case: \$ 240,000

Worst Case: \$ 320,000

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2163 Bulkhead (Brick) - Repair**

**Quantity: Approx 505 LF**

Location: Waterfront border of development

Funded?: No.

History:

Comments: Under normal circumstances, properly designed and constructed brick bulkheads could have a very long useful life, sometimes with no predictable need for complete replacement. Repairs are often required as a development age, but the nature of the repairs, including scope and frequency, can vary greatly based on many factors. Comprehensive inspection of all wall components, including sub-surface elements is not included within the scope of this engagement. We recommend periodic professional inspections by a qualified engineer, marine contractor or other professional to identify any urgent problems. In general, costs related to this component are expected to be included in the Association's Operating budget. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 2169 Entry Signs - Refurbish/Replace**

**Quantity: (4) Signs**

Location: Main entries to community

Funded?: Yes.

History:

Comments: Monument signage determined to be in fair condition typically exhibits acceptable appearance and aesthetics in keeping with local area, but with more weathering and wear showing on surfaces. If present, landscaping and lighting are still in serviceable condition. At this stage, signage may be becoming more dated and diminishing in appeal. As routine maintenance, inspect regularly, clean/touch-up and repair as an Operating expense. Plan to refurbish or replace at the interval below. Timing and scope of refurbishing or replacement projects is subjective but should always be scheduled in order to maintain good curb appeal. In our experience, most Associations choose to refurbish or replace signage periodically in order to maintain good appearance and aesthetics in keeping with local area, often before signage is in poor physical condition. If present, concrete walls are expected to be painted and repaired as part of refurbishing, but not fully replaced unless otherwise noted. Costs can vary significantly depending on style/type desired, and may include additional costs for design work, landscaping, lighting, water features, etc. Reserve Study updates should incorporate any estimates or information collected regarding potential projects.

Useful Life:  
35 years

Remaining Life:  
14 years



Best Case: \$ 28,000

Worst Case: \$ 48,000

Lower estimate to refurbish/replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2171 Light Poles (Wood) - Replace**

**Quantity: (2) Light Poles**

Location: Near pavilion

Funded?: No. Too small for Reserve designation.

History:

Comments: These are in fair condition overall. Replacement costs should be handled as an operating cost when needed for replacement.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 2175 Site Pole Lights - Replace**

**Quantity: (31) Lights**

Location: Common areas throughout development

Funded?: Yes.

History:

Comments: Pole lights determined to be in fair condition typically exhibit somewhat faded/worn appearance but overall assembly is sturdy and aging normally. Serviceable physical condition and still appropriate for aesthetic standards. Observed during daylight hours; assumed to be in functional operating condition. As routine maintenance, inspect, repair/change bulbs as needed. Best to plan for large scale replacement at roughly the time frame below for cost efficiency and consistent quality/appearance throughout Association. Replacement costs can vary greatly; estimates shown here are based on replacement with a comparable size and design, unless otherwise noted.

Useful Life:  
20 years

Remaining Life:  
13 years



Best Case: \$ 55,800

Worst Case: \$ 80,600

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2185 Landscaping - Refurbish**

**Quantity: Numerous Areas**

Location: Landscaped common areas

Funded?: Yes.

History:

Comments: Routine daily/weekly/monthly maintenance is expected to be funded through the Operating budget. However, this component represents a supplemental "allowance" for larger projects which may occur periodically, such as renovation/restoration of landscaped areas, new trees, hedges, flower beds, etc. Timing and costs of such projects are very subjective. Estimates shown here should be re-evaluated by the Association over time and adjusted as needed during future Reserve Study updates.

Useful Life:  
25 years

Remaining Life:  
10 years



Best Case: \$ 50,000

Worst Case: \$ 80,000

Cost Source: AR Cost Database

**Comp #: 2595 Pond Fountains - Replace**

**Quantity: (2) Fountains**

Location: Pond areas

Funded?: Yes.

History:

Comments: Fountains were noticed to be working during the site visit. No issues were reported with these systems. Fountains are primarily aesthetic in nature and there are many different types available for replacement. Fountains should be inspected and maintained regularly by servicing vendor or maintenance staff to ensure proper function and maximize life expectancy. Consult with lake/pond vendor to ensure that fountains are properly-sized and positioned for the body of water. Costs to replace are based on similar size and features.

Useful Life:  
20 years

Remaining Life:  
7 years



Best Case: \$ 7,000

Worst Case: \$ 12,000

Cost Source: AR Cost Database

## Pavilion and Main Dock

**Comp #: 2140 Vinyl Railings - Replace**

**Quantity: Approx 265 LF**

Location: Pavilion and dock area

Funded?: Yes.

History:

Comments: These railings had some wear and tear. However, there were no sections that were noticed to be broken. As routine maintenance, inspect regularly for any damage and repair as needed from Operating budget; pressure-clean as a general maintenance item or along with larger building projects, not as separate Reserve item. Even with proactive maintenance, plan to replace at roughly the time frame below due to damage/deterioration that will result from constant exposure.

Useful Life:  
30 years

Remaining Life:  
8 years



Best Case: \$ 6,700

Worst Case: \$ 11,900

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database



**Comp #: 2148 Pavilion- Repair**

**Quantity: (1) Pavilion**

Location: Center of the property

Funded?: No.

History: 2013 installed

Comments: This pavilion is determined to be in fair condition typically exhibits more wear and tear, possibly including some brick deterioration and minor weathering on most surfaces. Framework/structure should still be sturdy but may have sections showing minor leaning or damage. Routine maintenance and repair should be considered an Operating expense. Should be inspected periodically for damaged or deteriorated sections. Costs to maintain are not expected to meet threshold for Reserve funding. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 2181 Furniture - Partial Replace**

**Quantity: (21) Pieces**

Location: Common areas near pavilion

Funded?: Yes.

History:

Comments: (8) loveseat rocking chairs, (2) drink tables, (8) metal chairs, (2) metal tables, and (1) wooden picnic tables. Inspect regularly, clean for appearance and repair as needed from general Operating funds. Cost to replace individual pieces may not meet threshold for Reserve funding. We recommend planning for regular intervals of complete replacement at the time frame indicated below, to maintain a good, consistent appearance in the common areas. Costs shown are based on replacement with comparable types unless otherwise noted.

Useful Life:  
8 years

Remaining Life:  
5 years



Best Case: \$ 3,200

Worst Case: \$ 4,900

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2194 Wood Decking/Dock - Replace/Rebuild**

**Quantity: Approx 780 SF**

Location: Waterfront area

Funded?: Yes.

History:

Comments: The wooden decking was noticed to be damaged and age in most areas. There was one area on the steps that was breaking and collapsing that should be repaired immediately. Most surfaces were in fair condition but isolated areas were noticed to be in poor condition. Total replacement is expected in the next 5 years.

Fair condition: Dock structures determined to be in fair condition typically exhibit more moderate signs of exposure and wear to structural elements. Structure should be mostly level and stable, but at this stage, more exposed components may begin to wear at an accelerated pace. Still generally sturdy, but likely to require more frequent repairs and maintenance.

Poor condition: Dock structures determined to be in poor condition typically exhibit more advanced or unusual wear to underlying framework and/or hardware. Materials clearly show signs of significant deterioration, possibly including warping, cracking, or decrease in diameter of any pilings. Hardware may be showing signs of rust or corrosion. If present, leaning, sagging or tilting sections are all clear signs of concern. At this stage, we strongly recommend thorough inspection to determine any need for immediate repairs, and formulation of scope of work for complete replacement or reconstruction.

Assuming normal wear and tear and good preventive maintenance, complete replacement or reconstruction may be required at longer intervals, including some or all components of structural framework, pilings, etc. If present, reconstruction may also need to include replacement of electrical infrastructure or other features. In our experience, all such projects are unique, and we strongly recommend consulting with engineers or experienced contractors to properly determine existing conditions and required scope of work. Our inspection is visual only and limited to accessible areas, and does not incorporate any specific testing or thorough structural evaluation. Life and cost estimates shown here are intended for planning and budgeting purposes, and may need to be re-evaluated in light of any more thorough analysis or other outside information.

Useful Life:  
25 years

Remaining Life:  
3 years



Best Case: \$ 17,900

Worst Case: \$ 27,300

Lower estimate to replace/rebuild

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2320 Composite Decking - Resurface**

**Quantity: Approx 480 GSF**

Location: Near pavilion area

Funded?: Yes.

History:

Comments: This composite decking was aging normally and in fair condition overall.

Useful Life:  
30 years

Remaining Life:  
8 years



Best Case: \$ 10,600

Worst Case: \$ 15,900

Lower estimate to resurface

Higher estimate

Cost Source: AR Cost Database

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**Comp #: 2381 Roof (Asphalt Shingle) - Replace**

**Quantity: Approx 760 SF**

Location: Rooftop pavilion

Funded?: Yes.

History:

Comments: Shingles appeared weather but overall were in fair condition. Asphalt shingle roofs determined to be in fair condition typically exhibit normal signs of wear and deterioration, including some loss of granule cover, and light to moderate curling/lifting, especially in most exposed areas. Overall believed to be aging normally. Dimensional shingles typically have longer useful lives and are generally considered to be more valuable from an aesthetic standpoint. We recommend budgeting to replace with dimensional shingles upon failure. Also known as architectural shingles, these types of roofs are typically more durable and wind-resistant than 3-tab shingles. Unless otherwise noted, costs shown here assume that only a minimal amount of substrate/decking repairs or replacement will be required. For very old roofs or those with significant leak problems, additional repair costs may be incurred. As routine maintenance, many manufacturers recommend inspections at least twice annually and after large storm events. Promptly replace any damaged/missing sections or conduct any other repair needed to ensure waterproof integrity of roof. Keep roof surface, gutters and downspouts clear and free of moss or debris. Moss growth can decrease the life of the roofing shingles and should be removed promptly. We recommend having roof inspected in greater detail (including conditions of sub-surface materials) by an independent roofing consultant prior to replacement. There is a wealth of information available through organizations such as the Roof Consultant Institute <http://www.rci-online.org/> and the National Roofing Contractors Association (NRCA) <http://www.nrca.net/>. If the roof has a warranty, be sure to review terms and conduct proper inspections/repairs as needed to keep warranty in force.

Useful Life:  
25 years

Remaining Life:  
3 years



Best Case: \$ 2,850

Worst Case: \$ 5,100

Lower estimate to replace

Higher estimate

Cost Source: AR Cost Database

## Docks and Bridges

**Comp #: 2191 Bridge - Resurface**

**Quantity: Approx 2,650 SF**

Location: North side of property

Funded?: Yes.

History:

Comments: The bridge surface was worn and aged throughout. It is expected that it will be replaced within the next 5-7 years. Should be inspected, cleaned and repaired regularly as part of the association's Operating budget. Funding recommendation shown here provides for replacement of decking and handrails (if present), and may include an allowance for additional repairs that are often required when these types of structures are resurfaced. Should be inspected regularly for safety hazards such as loose or lifting boards, splintering, trip hazards, lifting nails/screws, etc. Depending on the material used, useful life can sometimes be prolonged by using sealers or other coatings to provide additional protection from the elements.

Useful Life:  
25 years

Remaining Life:  
5 years



Best Case: \$ 67,000

Worst Case: \$ 106,000

Lower estimate to resurface

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2192 Bridge - Replace/Rebuild**

**Quantity: Approx 2,650 SF**

Location: North side of property

Funded?: Yes.

History: Built in 2000

Comments: Bridge structures determined to be in fair condition typically exhibit more moderate signs of exposure and wear to structural elements. Structure should be mostly level and stable, but at this stage, more exposed components may begin to wear at an accelerated pace. Still generally sturdy, but likely to require more frequent repairs and maintenance. Assuming normal wear and tear and good preventive maintenance, complete replacement or reconstruction may be required at longer intervals, including some or all components of structural framework, pilings, etc. If present, reconstruction may also need to include the replacement of electrical infrastructure or other features. In our experience, all such projects are unique, and we strongly recommend consulting with engineers or experienced contractors to properly determine existing conditions and required scope of work. Our inspection is visual only and limited to accessible areas, and does not incorporate any specific testing or thorough structural evaluation. It is highly recommended that this bridge is inspected by a structural engineer. Life and cost estimates shown here are intended for planning and budgeting purposes, and may need to be re-evaluated in light of any more thorough analysis or other outside information. This also includes approx 600 LF of vinyl railings.

Useful Life:  
50 years

Remaining Life:  
28 years



Best Case: \$ 119,000

Worst Case: \$ 225,000

Lower estimate to replace/rebuild

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2192 Small Bridge - Replace/Rebuild**

**Quantity: Approx 549 GSF**

Location: North side of the property

Funded?: Yes.

History: 2009

Comments: This smaller bridge was not reported to have much use but is weather and aging. Bridge structures determined to be in fair condition typically exhibit more moderate signs of exposure and wear to structural elements. The structure should be mostly level and stable, but at this stage, more exposed components may begin to wear at an accelerated pace. Still generally sturdy, but likely to require more frequent repairs and maintenance. Assuming normal wear and tear and good preventive maintenance, complete replacement or reconstruction may be required at longer intervals, including some or all components of structural framework, pilings, etc. If present, reconstruction may also need to include the replacement of electrical infrastructure or other features. In our experience, all such projects are unique, and we strongly recommend consulting with engineers or experienced contractors to properly determine existing conditions and the required scope of work. Our inspection is visual only and limited to accessible areas, and does not incorporate any specific testing or thorough structural evaluation. Life and cost estimates shown here are intended for planning and budgeting purposes, and may need to be re-evaluated in light of any more thorough analysis or other outside information. It is highly recommended that this bridge is inspected by qualified engineers along with the larger bridge that extends across the lake.

Useful Life:  
25 years

Remaining Life:  
13 years



Best Case: \$ 18,100

Worst Case: \$ 28,000

Lower estimate to replace/rebuild

Higher estimate

Cost Source: AR Cost Database

**Comp #: 2194 Dock - Replace/Rebuild**

**Quantity: Approx 290 SF**

Location: Adjacent to large bridge

Funded?: Yes.

History:

Comments: This dock was missing sections and most of the wood was breaking down to the point of failure. Dock structures determined to be in poor condition typically exhibit more advanced or unusual wear to underlying framework and/or hardware. Materials clearly show signs of significant deterioration, possibly including warping, cracking, or decrease in diameter of any pilings. Hardware may be showing signs of rust or corrosion. If present, leaning, sagging or tilting sections are all clear signs of concern. At this stage, we strongly recommend thorough inspection to determine any need for immediate repairs, and formulation of scope of work for complete replacement or reconstruction. Assuming normal wear and tear and good preventive maintenance, complete replacement or reconstruction may be required at longer intervals, including some or all components of structural framework, pilings, etc. If present, reconstruction may also need to include replacement of electrical infrastructure or other features. In our experience, all such projects are unique, and we strongly recommend consulting with engineers or experienced contractors to properly determine existing conditions and required scope of work. Our inspection is visual only and limited to accessible areas, and does not incorporate any specific testing or thorough structural evaluation. Life and cost estimates shown here are intended for planning and budgeting purposes, and may need to be re-evaluated in light of any more thorough analysis or other outside information.

Useful Life:  
25 years

Remaining Life:  
0 years



Best Case: \$ 8,100

Worst Case: \$ 11,300

Lower estimate to replace/rebuild

Higher estimate

Cost Source: AR Cost Database



**Comp #: 2304 Ext. Lights (Utility) - Replace**

**Quantity: Minimal Lights**

Location: Main bridge

Funded?: No.

History:

Comments: There were a few of these lights that were noticed to be broken. Generic utility lights are typically replaced on an as-needed basis when individual fixtures fail. Lower aesthetic priority, and do not have the same need for consistency in appearance as decorative lighting. Most often replaced as an Operating expense.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source: