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“Full” Reserve Study



Little Elk Creek Village Snowmass, CO

Report #: 28062-0
For Period Beginning: July 1, 2015
Expires: June 30, 2016

Date Revised: May 31, 2016



Hello, and welcome to your Reserve Study!

We don't want you to be surprised. This Report is designed to help you anticipate, and prepare for, the major common area expenses your association will face. Inside you will find:

- 1) **The Reserve Component List** (the “Scope and Schedule” of your Reserve projects) – telling you what your association is Reserving for, what condition they are in now, and what they'll cost to replace.
- 2) **An Evaluation of your current Reserve Fund Size and Strength** (Percent Funded). This tells you your financial starting point, revealing your risk of deferred maintenance and special assessments.
- 3) **A Recommended Multi-Year Reserve Funding Plan**, answering the question... “What do we do now?”

More Questions?

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

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**ASSOCIATION
RESERVES**
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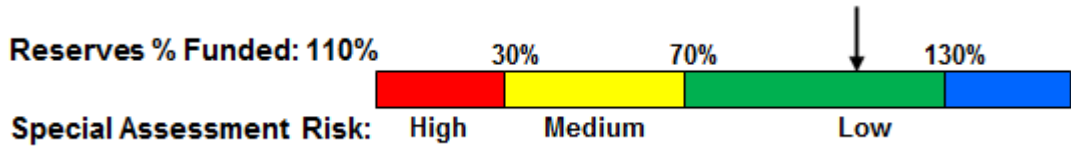
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3- Minute Executive Summary

Association: Little Elk Creek Village **#:** 28062-0
Location: Snowmass, CO **# of Units:** 77
Report Period: July 1, 2015 through June 30, 2016

Findings/Recommendations as-of 7/1/2015:

Projected Starting Reserve Balance:	\$424,507
Current Fully Funded Reserve Balance:	\$385,892
Average Reserve Surplus Per Unit:	\$502
Recommended 2015 Quarterly “Full Funding” Contributions:	\$24,255
Alternate Minimum Contributions to keep Reserves above \$0:	\$22,715
Recommended 2015 Special Assessment for Reserves:	\$0
Most Recent Budgeted Reserve Contribution Rate:	\$12,000



Economic Assumptions:

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

- This is a “Full” Reserve Study (original, created “from scratch”), and is based on our site inspection on April 24, 2015. It was prepared by a credentialed Reserve Specialist (RS #260).
- Your Reserve Fund is currently 110% Funded. This means the association’s special assessment & deferred maintenance risk is currently low. 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 increase your Reserve contributions in order to be within the 70% to 100% level as noted above (see figure 4, page 8). 100% “Full” contribution rates are designed to achieve these funding objectives *by the end of* our 30-year report scope. No assets appropriate for Reserve designation were excluded. See photo appendix for component details; the basis of our assumptions.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
Sites/Grounds				
2111	Playground Equipment - Replace	15	8	\$25,000
2123	Asphalt - Chip Seal	6	5	\$157,500
2125	Asphalt - Mill and Overlay	18	11	\$376,500
2139	Fencing: Wood - Replace	25	0	\$22,000
2163	Ponds - Dredge/Maintain	10	8	\$40,000
2167	Sign/Monument - Refurbish/Replace	12	3	\$2,500
2183	Pipe Replacement - Allowance	1	0	\$25,000
2189	Pump House - Maintain	15	10	\$2,500
Systems				
2517	Wells - Acidize	4	0	\$3,000
2519	Wells - Drill	40	11	\$120,000
2533	Water Storage Tank - Exterior Paint	15	11	\$9,000
2535	Water Storage Tank - Interior Paint	15	0	\$35,000
2537	Water Storage Tank - Inspect	5	0	\$2,500
2567	Booster Pump/Motor (1) - Replace	20	8	\$4,500
2567	Booster Pump/Motor (2) - Replace	20	4	\$4,500
2567	Booster Pump/Motor (3) - Replace	20	16	\$4,500
2569	Well Pump/Motor (1) - Replace	10	4	\$3,000
2569	Well Pump/Motor (2) - Replace	10	8	\$3,000
2569	Well Pump/Motor (3) - Replace	10	3	\$3,000
2571	Irrigation Pump/Motor - Replace	10	0	\$1,500
2579	Submersible Transducer - Replace	10	5	\$1,500
21	Total Funded Components			

Note 1: a Useful Life of "N/A" means a one-time expense, not expected to repeat.

Note 2: Yellow highlighted line items are expected to require attention in the 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

LEVELS OF SERVICE



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 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.



RESERVE COMPONENT "FOUR-PART TEST"

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...

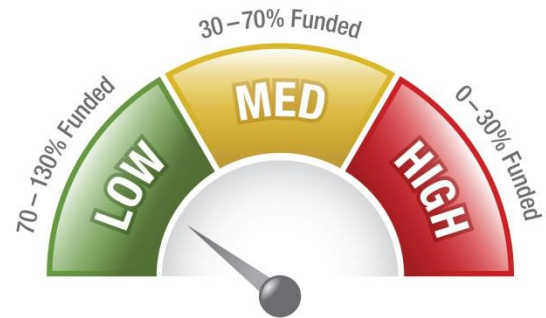
- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

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.



SPECIAL ASSESSMENT RISK

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.*

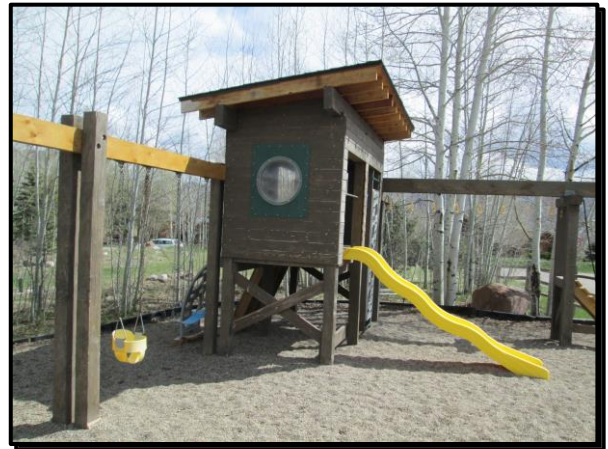


FUNDING OBJECTIVES

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 April 24, 2015, we started with a brief meeting with Keith Edquist, EMRE LLC Association Manager and then started the site inspection beginning with the pump house and water storage tank. We visually inspected the pump house and tot lot, and were able to see the majority of the common areas. We were not able to inspect the interior of the wells or storage tanks.



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. Your *first five years* of projected Reserve expenses total \$214,556. Adding the next five years, your *first ten years* of projected Reserve expenses are \$651,289. 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 expenses are shown in Table 5, while details of the projects that make up these expenses are shown in Table 6.

Annual Reserve Expenses

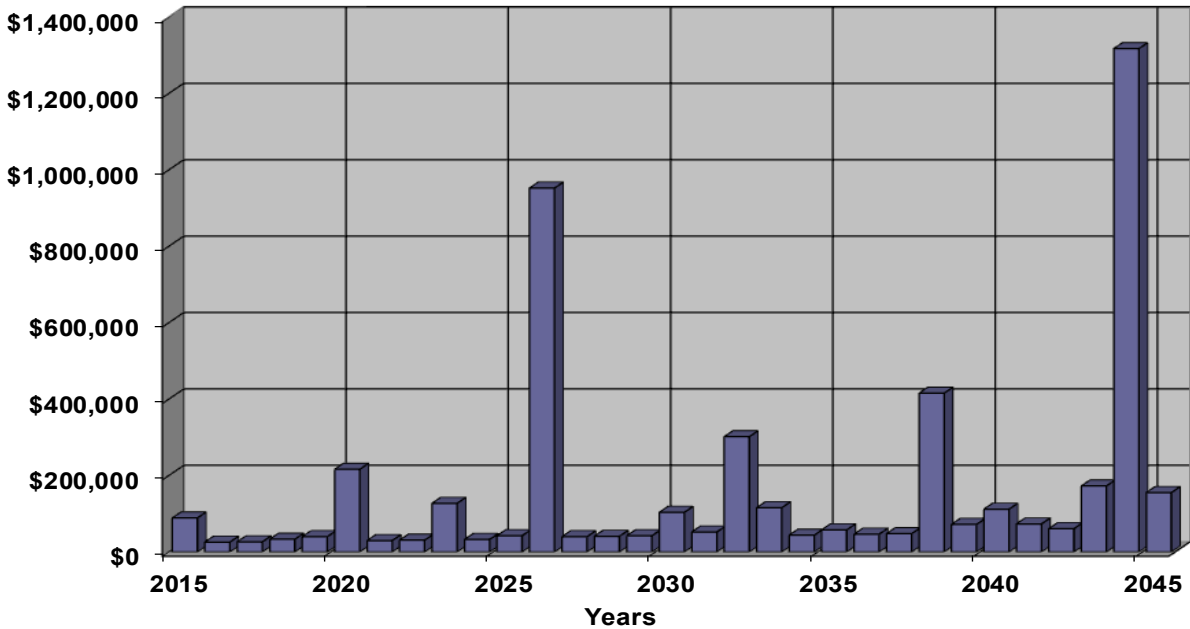


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$424,507 as-of the start of your Fiscal Year on July 1, 2015. The association is planning to chip seal the asphalt in May of 2015. As of July 1, 2015, your Fully Funded Balance is computed to be \$385,892 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 110% Funded. Across the country, under 1% of associations in this range experience special assessments or deferred maintenance.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$24,255/quarter this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both Table 5 and Table 6.

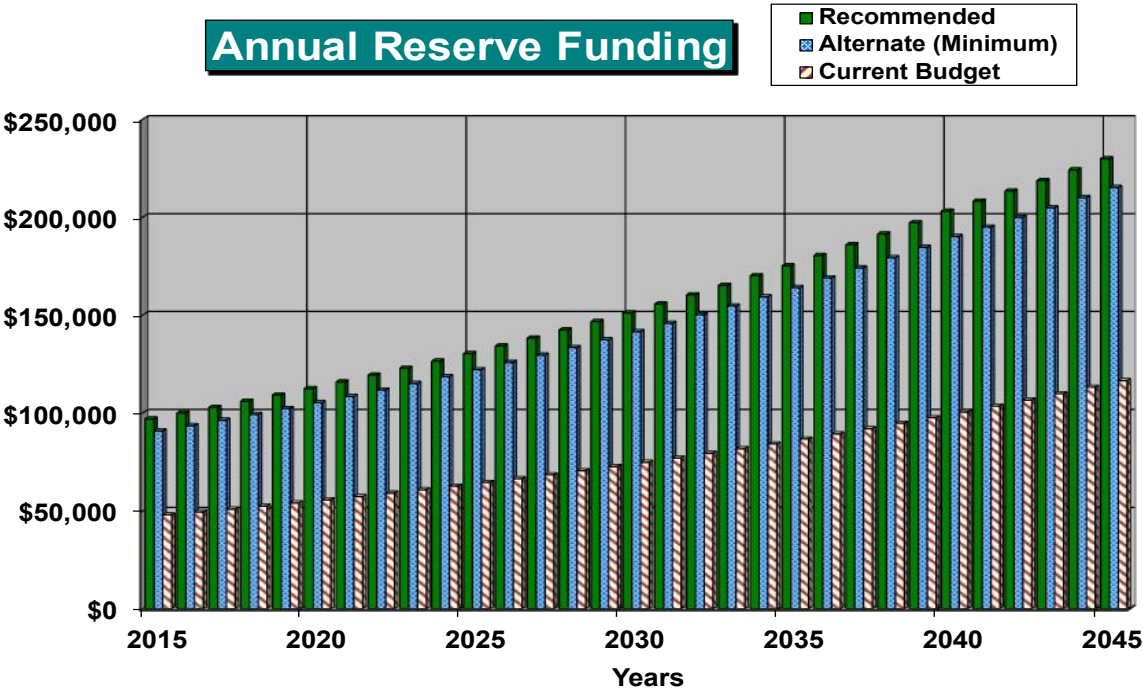


Figure 2

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, compared to your always-changing Fully Funded Balance target.

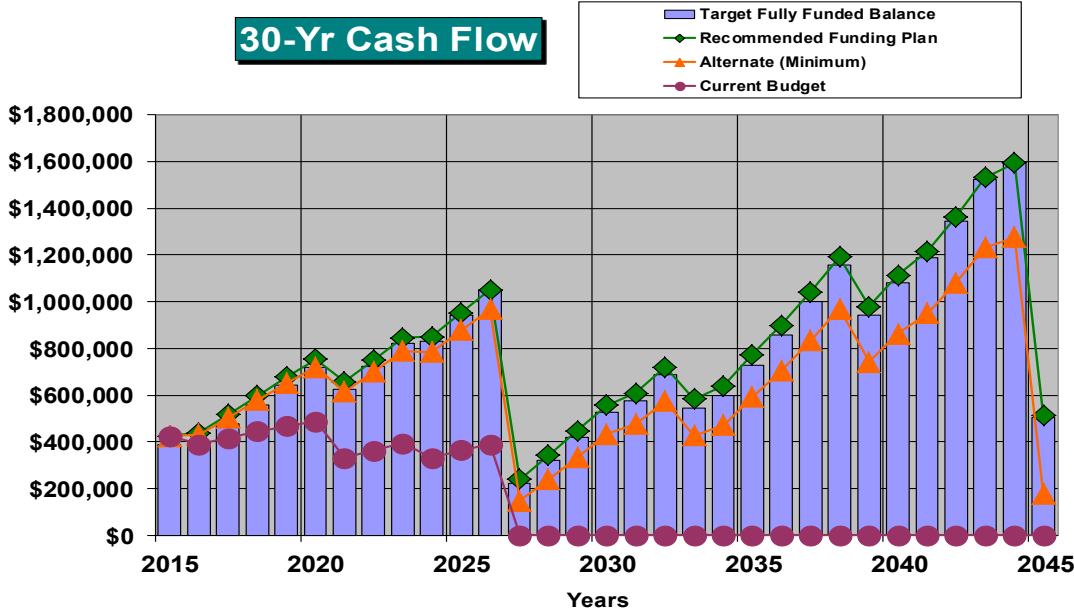


Figure 3

This figure shows this same information, plotted on a [Percent Funded](#) scale.

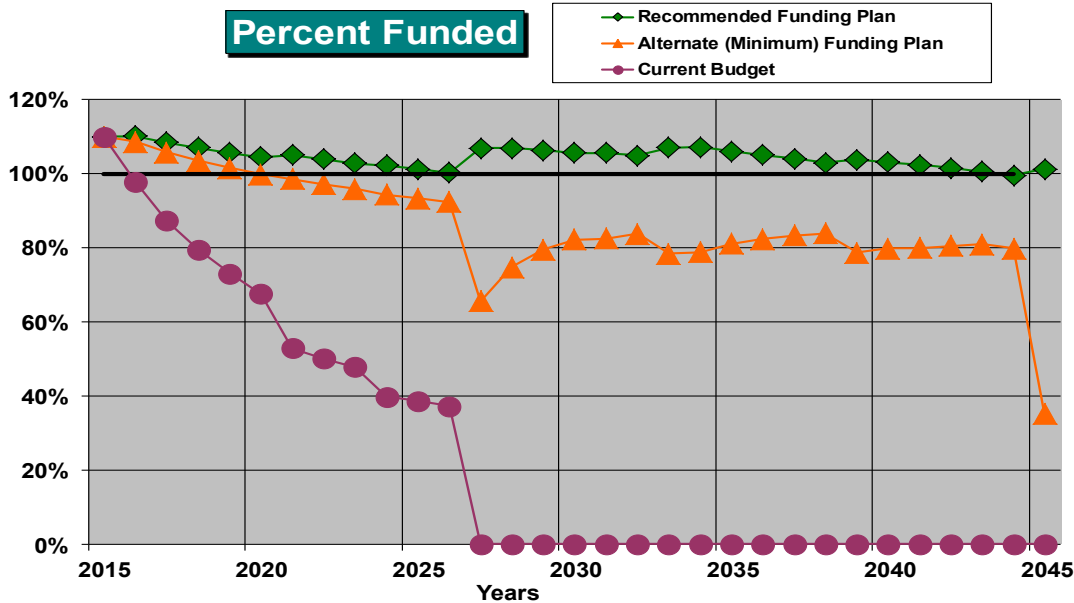


Figure 4

Table Descriptions

The tabular information in this Report is broken down into six tables.

Table 1 is a summary of your Reserve Components (your Reserve Component List), the information found in Table 2.

Table 2 is your Reserve Component List, which forms the foundation of this Reserve Study. This table represents the information from which all other tables are derived.

Table 3 shows the calculation of your Fully Funded Balance, the measure of your current Reserve component deterioration. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Table 4 shows the significance of each component to Reserve needs of the association, 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 Current Replacement Cost by Useful Life, then that component's percentage of the total is displayed.

Table 5: This table 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 for each year.

Table 6: This table shows the cash flow detail for the next 30 years. This table makes it possible to see which components are projected to require repair or replacement each year, and the size of those individual expenses.

Table 2: Reserve Component List Detail

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#	Component	Quantity	Useful Life	Rem. Useful Life	[--- Current Cost Estimate ---]	
					Best Case	Worst Case
Sites/Grounds						
2111	Playground Equipment - Replace	(1) Playground	15	8	\$20,000	\$30,000
2123	Asphalt - Chip Seal	~ 251,000 GSF	6	5	\$155,000	\$160,000
2125	Asphalt - Mill and Overlay	~ 251,000 GSF	18	11	\$251,000	\$502,000
2139	Fencing: Wood - Replace	~ 1,700 LF	25	0	\$20,000	\$24,000
2163	Ponds - Dredge/Maintain	(3) Ponds, (1) Silt Pond	10	8	\$35,000	\$45,000
2167	Sign/Monument - Refurbish/Replace	(1) Wood	12	3	\$2,000	\$3,000
2183	Pipe Replacement - Allowance	Numerous LF	1	0	\$20,000	\$30,000
2189	Pump House - Maintain	(1) 10x20 Building	15	10	\$2,000	\$3,000
Systems						
2517	Wells - Acidize	(3) Wells	4	0	\$2,000	\$4,000
2519	Wells - Drill	(3) Wells	40	11	\$90,000	\$150,000
2533	Water Storage Tank - Exterior Paint	~ 2,200 GSF	15	11	\$8,000	\$10,000
2535	Water Storage Tank - Interior Paint	~ 2,200 GSF	15	0	\$30,000	\$40,000
2537	Water Storage Tank - Inspect	~ 105k Gallons	5	0	\$2,000	\$3,000
2567	Booster Pump/Motor (1) - Replace	(1) 5 HP Pump/Motor	20	8	\$4,000	\$5,000
2567	Booster Pump/Motor (2) - Replace	(1) 5 HP Pump/Motor	20	4	\$4,000	\$5,000
2567	Booster Pump/Motor (3) - Replace	(1) 5 HP Pump/Motor	20	16	\$4,000	\$5,000
2569	Well Pump/Motor (1) - Replace	(1) Motor/Pump	10	4	\$2,000	\$4,000
2569	Well Pump/Motor (2) - Replace	(1) Motor/Pump	10	8	\$2,000	\$4,000
2569	Well Pump/Motor (3) - Replace	(1) Motor/Pump	10	3	\$2,000	\$4,000
2571	Irrigation Pump/Motor - Replace	(1) 2HP-Motor/Pump	10	0	\$1,000	\$2,000
2579	Submersible Transducer - Replace	(1) Unit	10	5	\$1,000	\$2,000
21	Total Funded Components					

Table 3: Fully Funded Balance

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#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Sites/Grounds								
2111	Playground Equipment - Replace	\$25,000	X	7	/	15	=	\$11,667
2123	Asphalt - Chip Seal	\$157,500	X	1	/	6	=	\$26,250
2125	Asphalt - Mill and Overlay	\$376,500	X	7	/	18	=	\$146,417
2139	Fencing: Wood - Replace	\$22,000	X	25	/	25	=	\$22,000
2163	Ponds - Dredge/Maintain	\$40,000	X	2	/	10	=	\$8,000
2167	Sign/Monument - Refurbish/Replace	\$2,500	X	9	/	12	=	\$1,875
2183	Pipe Replacement - Allowance	\$25,000	X	1	/	1	=	\$25,000
2189	Pump House - Maintain	\$2,500	X	5	/	15	=	\$833
Systems								
2517	Wells - Acidize	\$3,000	X	4	/	4	=	\$3,000
2519	Wells - Drill	\$120,000	X	29	/	40	=	\$87,000
2533	Water Storage Tank - Exterior Paint	\$9,000	X	4	/	15	=	\$2,400
2535	Water Storage Tank - Interior Paint	\$35,000	X	15	/	15	=	\$35,000
2537	Water Storage Tank - Inspect	\$2,500	X	5	/	5	=	\$2,500
2567	Booster Pump/Motor (1) - Replace	\$4,500	X	12	/	20	=	\$2,700
2567	Booster Pump/Motor (2) - Replace	\$4,500	X	16	/	20	=	\$3,600
2567	Booster Pump/Motor (3) - Replace	\$4,500	X	4	/	20	=	\$900
2569	Well Pump/Motor (1) - Replace	\$3,000	X	6	/	10	=	\$1,800
2569	Well Pump/Motor (2) - Replace	\$3,000	X	2	/	10	=	\$600
2569	Well Pump/Motor (3) - Replace	\$3,000	X	7	/	10	=	\$2,100
2571	Irrigation Pump/Motor - Replace	\$1,500	X	10	/	10	=	\$1,500
2579	Submersible Transducer - Replace	\$1,500	X	5	/	10	=	\$750
								\$385,892

Table 4: Component Significance**28062-0**

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
Sites/Grounds					
2111	Playground Equipment - Replace	15	\$25,000	\$1,667	1.9%
2123	Asphalt - Chip Seal	6	\$157,500	\$26,250	29.8%
2125	Asphalt - Mill and Overlay	18	\$376,500	\$20,917	23.7%
2139	Fencing: Wood - Replace	25	\$22,000	\$880	1.0%
2163	Ponds - Dredge/Maintain	10	\$40,000	\$4,000	4.5%
2167	Sign/Monument - Refurbish/Replace	12	\$2,500	\$208	0.2%
2183	Pipe Replacement - Allowance	1	\$25,000	\$25,000	28.4%
2189	Pump House - Maintain	15	\$2,500	\$167	0.2%
Systems					
2517	Wells - Acidize	4	\$3,000	\$750	0.9%
2519	Wells - Drill	40	\$120,000	\$3,000	3.4%
2533	Water Storage Tank - Exterior Paint	15	\$9,000	\$600	0.7%
2535	Water Storage Tank - Interior Paint	15	\$35,000	\$2,333	2.6%
2537	Water Storage Tank - Inspect	5	\$2,500	\$500	0.6%
2567	Booster Pump/Motor (1) - Replace	20	\$4,500	\$225	0.3%
2567	Booster Pump/Motor (2) - Replace	20	\$4,500	\$225	0.3%
2567	Booster Pump/Motor (3) - Replace	20	\$4,500	\$225	0.3%
2569	Well Pump/Motor (1) - Replace	10	\$3,000	\$300	0.3%
2569	Well Pump/Motor (2) - Replace	10	\$3,000	\$300	0.3%
2569	Well Pump/Motor (3) - Replace	10	\$3,000	\$300	0.3%
2571	Irrigation Pump/Motor - Replace	10	\$1,500	\$150	0.2%
2579	Submersible Transducer - Replace	10	\$1,500	\$150	0.2%
21	Total Funded Components			\$88,147	100.0%

Fiscal Year Start: 07/01/15

Interest: 1.0%

Inflation: 3.0%

**Reserve Fund Strength Calculations
(All values as of Fiscal Year Start Date)**

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loans or Special Assmts	Interest Income	Reserve Expenses
2015	\$424,507	\$385,892	110.0%	Low	\$97,020	\$0	\$4,305	\$89,000
2016	\$436,832	\$396,589	110.1%	Low	\$99,931	\$0	\$4,761	\$25,750
2017	\$515,774	\$475,479	108.5%	Low	\$102,929	\$0	\$5,565	\$26,523
2018	\$597,745	\$558,746	107.0%	Low	\$106,016	\$0	\$6,370	\$33,328
2019	\$676,803	\$640,390	105.7%	Low	\$109,197	\$0	\$7,147	\$39,956
2020	\$753,192	\$720,634	104.5%	Low	\$112,473	\$0	\$7,045	\$216,205
2021	\$656,505	\$624,814	105.1%	Low	\$115,847	\$0	\$7,027	\$29,851
2022	\$749,528	\$721,221	103.9%	Low	\$119,322	\$0	\$7,975	\$30,747
2023	\$846,078	\$822,850	102.8%	Low	\$122,902	\$0	\$8,478	\$127,310
2024	\$850,147	\$831,417	102.3%	Low	\$126,589	\$0	\$9,013	\$32,619
2025	\$953,130	\$941,223	101.3%	Low	\$130,387	\$0	\$10,017	\$42,333
2026	\$1,051,201	\$1,047,872	100.3%	Low	\$134,298	\$0	\$6,451	\$952,353
2027	\$239,597	\$224,061	106.9%	Low	\$138,327	\$0	\$2,901	\$39,921
2028	\$340,905	\$319,110	106.8%	Low	\$142,477	\$0	\$3,934	\$41,119
2029	\$446,197	\$419,660	106.3%	Low	\$146,751	\$0	\$5,007	\$42,353
2030	\$555,602	\$525,957	105.6%	Low	\$151,154	\$0	\$5,820	\$103,605
2031	\$608,972	\$576,472	105.6%	Low	\$155,689	\$0	\$6,638	\$52,153
2032	\$719,145	\$685,742	104.9%	Low	\$160,359	\$0	\$6,515	\$301,645
2033	\$584,375	\$545,684	107.1%	Low	\$165,170	\$0	\$6,119	\$115,765
2034	\$639,898	\$597,382	107.1%	Low	\$170,125	\$0	\$7,063	\$43,838
2035	\$773,248	\$729,353	106.0%	Low	\$175,229	\$0	\$8,358	\$57,796
2036	\$899,040	\$855,683	105.1%	Low	\$180,486	\$0	\$9,705	\$46,507
2037	\$1,042,723	\$1,002,349	104.0%	Low	\$185,900	\$0	\$11,168	\$47,903
2038	\$1,191,889	\$1,157,045	103.0%	Low	\$191,477	\$0	\$10,849	\$415,440
2039	\$978,775	\$943,037	103.8%	Low	\$197,222	\$0	\$10,461	\$72,164
2040	\$1,114,293	\$1,081,558	103.0%	Low	\$203,138	\$0	\$11,652	\$112,017
2041	\$1,217,066	\$1,188,724	102.4%	Low	\$208,217	\$0	\$12,904	\$73,324
2042	\$1,364,863	\$1,344,661	101.5%	Low	\$213,422	\$0	\$14,477	\$61,085
2043	\$1,531,677	\$1,523,756	100.5%	Low	\$218,758	\$0	\$15,618	\$172,739
2044	\$1,593,314	\$1,599,271	99.6%	Low	\$224,227	\$0	\$10,516	\$1,317,320

Table 6: 30-Year Income/Expense Detail (yrs 0 through 4)

28062-0

Fiscal Year	2015	2016	2017	2018	2019
Starting Reserve Balance	\$424,507	\$436,832	\$515,774	\$597,745	\$676,803
Annual Reserve Contribution	\$97,020	\$99,931	\$102,929	\$106,016	\$109,197
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,305	\$4,761	\$5,565	\$6,370	\$7,147
Total Income	\$525,832	\$541,524	\$624,268	\$710,132	\$793,147
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
2123 Asphalt - Chip Seal	\$0	\$0	\$0	\$0	\$0
2125 Asphalt - Mill and Overlay	\$0	\$0	\$0	\$0	\$0
2139 Fencing: Wood - Replace	\$22,000	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$0	\$0
2167 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$2,732	\$0
2183 Pipe Replacement - Allowance	\$25,000	\$25,750	\$26,523	\$27,318	\$28,138
2189 Pump House - Maintain	\$0	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$3,000	\$0	\$0	\$0	\$3,377
2519 Wells - Drill	\$0	\$0	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$0	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$35,000	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$2,500	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$5,065
2567 Booster Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$3,377
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$3,278	\$0
2571 Irrigation Pump/Motor - Replace	\$1,500	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$89,000	\$25,750	\$26,523	\$33,328	\$39,956
Ending Reserve Balance:	\$436,832	\$515,774	\$597,745	\$676,803	\$753,192

Table 6: 30-Year Income/Expense Detail (yrs 5 through 9)

28062-0

Fiscal Year	2020	2021	2022	2023	2024
Starting Reserve Balance	\$753,192	\$656,505	\$749,528	\$846,078	\$850,147
Annual Reserve Contribution	\$112,473	\$115,847	\$119,322	\$122,902	\$126,589
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,045	\$7,027	\$7,975	\$8,478	\$9,013
Total Income	\$872,710	\$779,379	\$876,825	\$977,458	\$985,749
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$31,669	\$0
2123 Asphalt - Chip Seal	\$182,586	\$0	\$0	\$0	\$0
2125 Asphalt - Mill and Overlay	\$0	\$0	\$0	\$0	\$0
2139 Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$50,671	\$0
2167 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2183 Pipe Replacement - Allowance	\$28,982	\$29,851	\$30,747	\$31,669	\$32,619
2189 Pump House - Maintain	\$0	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$0	\$0	\$0	\$3,800	\$0
2519 Wells - Drill	\$0	\$0	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$0	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$0	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$2,898	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$5,700	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$3,800	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2571 Irrigation Pump/Motor - Replace	\$0	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$1,739	\$0	\$0	\$0	\$0
Total Expenses	\$216,205	\$29,851	\$30,747	\$127,310	\$32,619
Ending Reserve Balance:	\$656,505	\$749,528	\$846,078	\$850,147	\$953,130

Table 6: 30-Year Income/Expense Detail (yrs 10 through 14)

28062-0

Fiscal Year	2025	2026	2027	2028	2029
Starting Reserve Balance	\$953,130	\$1,051,201	\$239,597	\$340,905	\$446,197
Annual Reserve Contribution	\$130,387	\$134,298	\$138,327	\$142,477	\$146,751
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$10,017	\$6,451	\$2,901	\$3,934	\$5,007
Total Income	\$1,093,534	\$1,191,950	\$380,826	\$487,315	\$597,955
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
2123 Asphalt - Chip Seal	\$0	\$218,017	\$0	\$0	\$0
2125 Asphalt - Mill and Overlay	\$0	\$521,164	\$0	\$0	\$0
2139 Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$0	\$0
2167 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2183 Pipe Replacement - Allowance	\$33,598	\$34,606	\$35,644	\$36,713	\$37,815
2189 Pump House - Maintain	\$3,360	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$0	\$0	\$4,277	\$0	\$0
2519 Wells - Drill	\$0	\$166,108	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$12,458	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$0	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$3,360	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$4,538
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$4,406	\$0
2571 Irrigation Pump/Motor - Replace	\$2,016	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$42,333	\$952,353	\$39,921	\$41,119	\$42,353
Ending Reserve Balance:	\$1,051,201	\$239,597	\$340,905	\$446,197	\$555,602

Table 6: 30-Year Income/Expense Detail (yrs 15 through 19)

28062-0

Fiscal Year	2030	2031	2032	2033	2034
Starting Reserve Balance	\$555,602	\$608,972	\$719,145	\$584,375	\$639,898
Annual Reserve Contribution	\$151,154	\$155,689	\$160,359	\$165,170	\$170,125
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$5,820	\$6,638	\$6,515	\$6,119	\$7,063
Total Income	\$712,577	\$771,298	\$886,019	\$755,664	\$817,086
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
2123 Asphalt - Chip Seal	\$0	\$0	\$260,324	\$0	\$0
2125 Asphalt - Mill and Overlay	\$0	\$0	\$0	\$0	\$0
2139 Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$68,097	\$0
2167 Sign/Monument - Refurbish/Replace	\$3,895	\$0	\$0	\$0	\$0
2183 Pipe Replacement - Allowance	\$38,949	\$40,118	\$41,321	\$42,561	\$43,838
2189 Pump House - Maintain	\$0	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$0	\$4,814	\$0	\$0	\$0
2519 Wells - Drill	\$0	\$0	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$0	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$54,529	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$3,895	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (3) - Replace	\$0	\$7,221	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$5,107	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2571 Irrigation Pump/Motor - Replace	\$0	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$2,337	\$0	\$0	\$0	\$0
Total Expenses	\$103,605	\$52,153	\$301,645	\$115,765	\$43,838
Ending Reserve Balance:	\$608,972	\$719,145	\$584,375	\$639,898	\$773,248

Table 6: 30-Year Income/Expense Detail (yrs 20 through 24)

28062-0

Fiscal Year	2035	2036	2037	2038	2039
Starting Reserve Balance	\$773,248	\$899,040	\$1,042,723	\$1,191,889	\$978,775
Annual Reserve Contribution	\$175,229	\$180,486	\$185,900	\$191,477	\$197,222
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$8,358	\$9,705	\$11,168	\$10,849	\$10,461
Total Income	\$956,835	\$1,089,230	\$1,239,791	\$1,394,215	\$1,186,457
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$49,340	\$0
2123 Asphalt - Chip Seal	\$0	\$0	\$0	\$310,840	\$0
2125 Asphalt - Mill and Overlay	\$0	\$0	\$0	\$0	\$0
2139 Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$0	\$0
2167 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
2183 Pipe Replacement - Allowance	\$45,153	\$46,507	\$47,903	\$49,340	\$50,820
2189 Pump House - Maintain	\$0	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$5,418	\$0	\$0	\$0	\$6,098
2519 Wells - Drill	\$0	\$0	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$0	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$0	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$4,515	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$9,148
2567 Booster Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$6,098
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$5,921	\$0
2571 Irrigation Pump/Motor - Replace	\$2,709	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$57,796	\$46,507	\$47,903	\$415,440	\$72,164
Ending Reserve Balance:	\$899,040	\$1,042,723	\$1,191,889	\$978,775	\$1,114,293

Table 6: 30-Year Income/Expense Detail (yrs 25 through 29)

28062-0

Fiscal Year	2040	2041	2042	2043	2044
Starting Reserve Balance	\$1,114,293	\$1,217,066	\$1,364,863	\$1,531,677	\$1,593,314
Annual Reserve Contribution	\$203,138	\$208,217	\$213,422	\$218,758	\$224,227
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$11,652	\$12,904	\$14,477	\$15,618	\$10,516
Total Income	\$1,329,083	\$1,438,187	\$1,592,762	\$1,766,053	\$1,828,057
# Component					
Sites/Grounds					
2111 Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
2123 Asphalt - Chip Seal	\$0	\$0	\$0	\$0	\$371,159
2125 Asphalt - Mill and Overlay	\$0	\$0	\$0	\$0	\$887,247
2139 Fencing: Wood - Replace	\$46,063	\$0	\$0	\$0	\$0
2163 Ponds - Dredge/Maintain	\$0	\$0	\$0	\$91,517	\$0
2167 Sign/Monument - Refurbish/Replace	\$0	\$0	\$5,553	\$0	\$0
2183 Pipe Replacement - Allowance	\$52,344	\$53,915	\$55,532	\$57,198	\$58,914
2189 Pump House - Maintain	\$5,234	\$0	\$0	\$0	\$0
Systems					
2517 Wells - Acidize	\$0	\$0	\$0	\$6,864	\$0
2519 Wells - Drill	\$0	\$0	\$0	\$0	\$0
2533 Water Storage Tank - Exterior Paint	\$0	\$19,409	\$0	\$0	\$0
2535 Water Storage Tank - Interior Paint	\$0	\$0	\$0	\$0	\$0
2537 Water Storage Tank - Inspect	\$5,234	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (1) - Replace	\$0	\$0	\$0	\$10,296	\$0
2567 Booster Pump/Motor (2) - Replace	\$0	\$0	\$0	\$0	\$0
2567 Booster Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (1) - Replace	\$0	\$0	\$0	\$0	\$0
2569 Well Pump/Motor (2) - Replace	\$0	\$0	\$0	\$6,864	\$0
2569 Well Pump/Motor (3) - Replace	\$0	\$0	\$0	\$0	\$0
2571 Irrigation Pump/Motor - Replace	\$0	\$0	\$0	\$0	\$0
2579 Submersible Transducer - Replace	\$3,141	\$0	\$0	\$0	\$0
Total Expenses	\$112,017	\$73,324	\$61,085	\$172,739	\$1,317,320
Ending Reserve Balance:	\$1,217,066	\$1,364,863	\$1,531,677	\$1,593,314	\$510,736

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.

Because we have no control over future events, we do not expect that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect Reserve funds to continue to earn interest, so we believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. We can control measurements, which we attempt to establish within 5% accuracy through a combination of on-site measurements, drawings, and satellite imagery. The starting Reserve Balance and interest rate earned on deposited Reserve funds that you provided to us were considered reliable and were not confirmed independently. We have considered the association's representation of current and historical Reserve projects reliable, and we have considered the representations made by its vendors and suppliers to also be accurate and reliable. Component Useful Life, Remaining Useful Life, and Current Cost estimates assume a stable economic environment and lack of natural disasters.

Because the physical condition of your components, the association's Reserve balance, the economic environment, and legislative environment change each year, this Reserve Study is by nature a "one-year" document. Because a long-term perspective improves the accuracy of near-term planning, this Report projects expenses for the next 30 years. It is our recommendation and that of the Financial Accounting Standards Board (FASB) that your Reserve Study be updated each year as part of the annual budget process.

Association Reserves CO, LLC and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Bryan Farley R.S., company president, is a credentialed Reserve Specialist (#260). All work done by Association Reserves CO, LLC is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association's situation.

Component quantities indicated in this Report were developed by Association Reserves unless otherwise noted. No destructive or intrusive testing was performed. This Report and this site inspection were accomplished only for Reserve budget purposes (to help identify and address the normal deterioration of properly built and installed components with predictable life expectancies). The Funding Plan in this Report was developed using the cash-flow methodology to achieve the specified Funding Objective.

Association Reserves' 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.

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age}) / \text{Useful Life}$$

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 Table 6.

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

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

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

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2100 ---SITE & GROUNDS---

Quantity:

Location :

Funded? : No

History :

Evaluation :

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp # : 2111 Playground Equipment - Replace

Quantity: (1) Playground

Location : Scattered common area locations

Funded? : Yes

History :

Evaluation : Reported that the play set has been repaired as needed to extend the life of the unit. No major issues were noted with the equipment at the time of our inspection. Our inspection is not intended to identify any structural or latent defects, safety hazards, or other liability concerns. Funding recommendation shown here is strictly for budget purposes. As a routine maintenance expense, inspect for stability, damage and excessive wear and utilize maintenance funds for any repairs needed between replacement cycles. Life expectancy can vary depending on the amount of use/abuse. Unless otherwise noted, cost estimates assume replacement would be with comparable size and style of equipment as noted during inspection.

Useful Life:
15 years

Remaining Life:
8 years



Best Case: \$20,000

Worst Case: \$30,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2113 Site Drainage - Clean/Repair Quantity: Moderate Areas

Location : Common area open space tracts throughout community

Funded? : No

History :

Evaluation : Various drainage improvements at this site include drainage culverts with no current problems observed or reported. Annual preventive maintenance work is typically performed as part of an association's general maintenance/operating fund. No reserve funding allocated at this time, however, if a pattern of larger expenses develops, we may recommend including a rotating funding allowance for larger expenses during future Reserve Study updates. Maintain records of any substantial projects so that future funding recommendations can be accurately based on recent project history.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2123 Asphalt - Chip Seal

Quantity: ~ 251,000 GSF

Location : Roadways of association

Funded? : Yes

History : Sealed in May 2015

Evaluation : The asphalt appeared to be dry and weathered. The association is planning to chip seal ~166,428 GSF of asphalt in the spring/summer of 2015. The vendor will be GMCO LLC. Plan to seal within 6-12 months after new asphalt is laid. Regular cycles of seal coating (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. 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 which causes the pavement to become more brittle. As a result, the pavement will be more likely to crack because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process but also helps the pavement to shed water, preventing it from entering the base material. Seal coat also provides uniform appearance, concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt, postponing the asphalt resurfacing, which can be one of the larger cost items in this study (see component #2125 for asphalt resurfacing costs). Repair asphalt before seal coating. Surface preparation and dry weather, during and following application, is key to lasting performance. The ideal conditions are a warm, sunny day with low humidity; rain can cause major problems when seal coating and should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance.

Useful Life:
6 years

Remaining Life:
5 years



Best Case: \$220,000

Lower allowance

Worst Case: \$240,000

Higher allowance

Cost Source: Research with Local Vendor/Contractor - GMCO

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2125 Asphalt - Mill and Overlay

Quantity: ~ 251,000 GSF

Location : Roadways

Funded? : Yes

History :

Evaluation : Vendor recommends that the over a long period of time the association may need to perform a 2" mill and overlay due to damage of the subgrade. No large work expected in the near future. Minor block cracking noted in local areas. We recommend having surface sealed and repaired as directed in component #2123; regular cycles of seal coating are recommended for maximum design life. 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. As timing draws nearer, consult with asphalt vendor/consultant for recommendations and complete scope.

Useful Life:
18 years

Remaining Life:
14 years



Best Case: \$251,000
Lower allowance

Worst Case: \$502,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - GMCO

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2139 Fencing: Wood - Replace Quantity: ~ 1,700 LF

Location : Perimeter of Capitol Creek Rd. and Tot Lot

Funded? : Yes

History : Installed in 1988

Evaluation : Per the contact, the association would like to replace the fence in 2016 or 2017. Costs below were provided by Murillo Fencing Inc. (3) Rail cedar fence. The split rail fence was noted to be in poor condition based. The perimeter fence was noted to be deteriorated and broken. The tot lot fence appeared to be weathered and old, but no broken section seen. The fence along the perimeter of Capitol Creek was ~1,600 LF, the tot lot fence was ~100 LF. As routine maintenance, inspect regularly for any damage, repair as needed and avoid contact with ground and surrounding vegetation wherever possible. Regular cycles of uniform, professional sealing/painting will help to maintain appearance and maximize life. Plan to replace at roughly the time frame below with funding included here for similar wood replacement. At next replacement, association might want to consider replacing with more sturdy, lower-maintenance products like composite, vinyl, etc. Although installation costs are higher, total life cycle cost is lower due to less maintenance and longer design life expectancy.

Useful Life:
25 years

Remaining Life:
0 years



Best Case: \$26,000

Lower allowance

Worst Case: \$30,000

Higher allowance

Cost Source: Research with Local Vendor/Contractor

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2163 Ponds - Dredge/Maintain

Quantity: (3) Ponds, (1) Silt Pond

Location : Common areas

Funded? : Yes

History : Dredged in 2013/2014

Evaluation : No issues were reported at the time of the inspection. Under normal circumstances, well-maintained retention ponds should not require major repair/refurbishing projects. In some cases, large projects such as erosion control, weed abatement or dredging may be required. 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:
10 years

Remaining Life:
8 years



Best Case: \$35,000

Lower allowance

Worst Case: \$45,000

Higher allowance

Cost Source: Client Cost History

Comp # : 2167 Sign/Monument - Refurbish/Replace

Quantity: (1) Wood

Location : Entry location

Funded? : Yes

History :

Evaluation : Fair condition noted. The sign was older and simple. Clear, legible condition with no significant damage/deterioration noted. Funding provided to replace with a similar sign. Plan to replace at the interval below based on typical deterioration caused by constant exposure. Funding allowance here can vary significantly depending on style/type desired. As routine maintenance, inspect regularly, clean/touch up for appearance and repair from operating budget.

Useful Life:
12 years

Remaining Life:
3 years



Best Case: \$2,000

Lower allowance to replace

Worst Case: \$3,000

Higher allowance; more elaborate, better quality

Cost Source: ARI Cost Database: Similar Project Cost History

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2189 Pump House - Maintain

Quantity: (1) 10x20 Building

Location : Adjacent to pond

Funded? : Yes

History :

Evaluation : The building consisted of ~480 GSF of siding. The roof had a pitch of 4/12 and was ~200 GSF. No problems were noted with the building at the time of the inspection. This component represents an allowance for repairs/remodeling of the pump house. The pump house should be inspected, cleaned and small maintenance projects made as an Operating expense. Typical Reserve-funded projects may include exterior painting and roof repairs, interior remodeling, etc. No expectation to completely replace the structure under normal circumstances. Useful life and cost estimates shown here may be updated and adjusted during future Reserve Study updates based on actual project history or new estimates obtained by the association.

Useful Life:
15 years

Remaining Life:
10 years



Best Case: \$2,000
Lower allowance

Worst Case: \$3,000
Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 2500 ---BUILDING SYSTEMS----

Quantity:

Location :

Funded? : No

History :

Evaluation :

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2515 **Water Line - Repair**

Quantity: Numerous LF

Location : Common area

Funded? : Yes

History :

Evaluation : As routine maintenance, inspect regularly, test system and repair as needed from Operating budget. Consult with vendor to determine what types of repairs and replacements are included in the contract. If properly installed without defect, the elements within this system are generally low-cost and have a failure rate that is difficult to predict, making it best-suited to be handled through the Operating budget. At the request of the association, an allowance for ongoing replacements has been added.

Useful Life:
1 years

Remaining Life:
0 years



Best Case: \$20,000

Lower allowance

Worst Case: \$30,000

Higher allowance

Cost Source: Estimate Provided by Client

Comp # : 2517 **Wells - Acidize**

Quantity: (3) Wells

Location : Underground

Funded? : Yes

History :

Evaluation : Reported that the wells should be cleaned and acidized every 3-5 years per Raun Samuelson. Funding provided below.

Useful Life:
4 years

Remaining Life:
0 years



Best Case: \$2,000

Lower average allowance to replace

Worst Case: \$4,000

Higher average allowance to replace

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2519 Wells - Drill

Quantity: (3) Wells

Location : Underground

Funded? : Yes

History : Installed in 1986

Evaluation : No access to inspect the wells at the time of the inspection. At this time, there is no predictable useful life for wells. This item is typically not included on a Reserve Study, however, due to the importance of the functionality of this component to the association, an allowance has been provided. No issues were reported at the time of the inspection. As routine maintenance, inspect regularly, test system and repair as needed from Operating budget.

Useful Life:
40 years

Remaining Life:
11 years



Best Case: \$90,000

Worst Case: \$150,000

Lower average allowance to replace

Higher average allowance to replace

Cost Source: ARI Cost Database: Similar Project Cost History

Comp # : 2521 Agri Drain - Replace

Quantity: (1) Unit

Location : Adjacent to pond

Funded? : No Unpredictable useful life

History : Installed in 2014

Evaluation : The majority of the unit is underground, with no access to inspect the size and distance of the piping. Installation of the unit can cost anywhere from \$1k-\$4k. However, there is no expectation to replace all of the piping at one time. The unit appeared to be a Water Gate. A Water Gate is a float activated head pressure valve. The Water Gate is typically used in conjunction with a Water Level Control Structure, allowing drainage water to be utilized on ground. The main asset in this structure is a small valve with pvc piping underground. Plan to have the valves inspected to prevent clogging.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2523 Cistern - Allowance

Quantity: (1) 5K Gallon Tank

Location : Underground, pump house

Funded? : No

History :

Evaluation : Reported by the contact that the association may have to upgrade this cistern due to new regulation, but this is not yet known for certain, and therefore scope of work and costs are unknown. This unit fills up the large storage tank when water is called. Storage tanks should be inspected for leaks and other problems routinely by servicing vendor or maintenance staff. Small repairs and cleaning should be considered an Operating expense and conducted as needed. No funding provided at this time due to the unpredictable nature of this asset, however, keep track of all expenses and make adjustments as needed during future Reserve Study updates.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp # : 2533 Water Storage Tank - Exterior Paint

Quantity: ~ 2,200 GSF

Location : Sopris Creek Road

Funded? : Yes

History : Painted in 2011

Evaluation : No issues or rust noted. Vandalism was observed on the back side of the tank. Tank should be inspected periodically to identify and weakened/weathered sections which may need to be repairs and painting. Expect to repair as needed and paint at roughly the interval shown here in order to maintain a good, consistent appearance.

Useful Life:

15 years

Remaining Life:

11 years



Best Case: \$8,000

Worst Case: \$10,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2535 **Water Storage Tank - Interior Paint** Quantity: ~ 2,200 GSF

Location : Sopris Creek Road

Funded? : Yes

History :

Evaluation : Reported by EPC that the water that serves Little Elk is highly corrosive and needs to be treated on a regular basis. No access to inspect the condition of the tank. The life of this item should be adjusted as new information becomes available (diver reports). Per Mike McGowan (970) 704-0400 of Mannix Painting (referred by Environmental Process Control), the interior of the tank needs to be painted every 10-20 years. Interior of the tank requires (3) coats of food grade paint, and the exterior requires (2) coats spot prime. Tank should be inspected periodically to identify and weakened/weathered sections which may need to be repairs and painting. Expect to repair as needed and paint at roughly the interval shown here in order to maintain a good, consistent appearance.

Useful Life:
15 years

Remaining Life:
0 years



Best Case: \$30,000

Lower allowance

Worst Case: \$40,000

Higher allowance

Cost Source: Research with Local Vendor/Contractor

Comp # : 2537 **Water Storage Tank - Inspect** Quantity: ~ 105k Gallons

Location : Sopris Creek Road

Funded? : Yes

History : Inspected fully in 2013

Evaluation : Reported by EPC that the tank should be inspected every 5 years by a qualified expert. This component allows funding to be available for repairs needed at the time of the inspection.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$2,000

Lower allowance

Worst Case: \$3,000

Higher allowance

Cost Source: Research with Local Vendor/Contractor

Client: 28062A Little Elk Creek Village

Comp # : 2539 Water Storage Tank - Replace

Quantity: ~ 105k Gallons

Location : Sopris Creek Road

Funded? : No

History :

Evaluation : Typically, if installed per architectural specifications and local building codes, there is no predictable time frame for large scale repair/replacement expenses within the scope of our report. However, it was reported by numerous vendors that if the tank is not maintained on a reoccurring schedule, then the tank may experience a shorter useful life. If leaks, defective material and/or issues become evident, have qualified vendor and/or engineer evaluate in more detail and develop scope of any repair/replacement needed; funding for even one time projects can be incorporated within Reserve Study updates if warranted. If patterns of significant repair costs emerge, funding may be incorporated into future Reserve Study updates to supplement the Operating budget. No basis for Reserve funding at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp # : 2543 Chlorine System - Replace

Quantity: (2) Pumps, (2) Tanks

Location : Pump house

Funded? : No

History :

Evaluation : The (2) tanks were plastic. The (2) pumps were electric Pulsatron motors/pumps. Plan to monitor the units on an ongoing basis. Inspect regularly and repair/replace as needed as an Operating expense. Although eventual replacement will be needed due to parts obsolescence, technological upgrades, etc., cost is not expected to meet threshold for Reserve funding.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2551 Surge Tracker - Replace Quantity: (1) Unit
Location : Pump house
Funded? : No

History :

Evaluation : Serial # -24434 3405 001. Model #-TK-LP120-1S240-FL. Analysis of electrical system(s) beyond visual inspection of readily-visible components is not within the scope of a Reserve Study. Some electrical system components used historically are known to be life limited, but predictability of failures is very difficult to determine. Manufacturing defects may become apparent from time to time and certain site conditions can contribute to premature deterioration of system components. Typically, if installed per architectural specifications and local building codes, there is no predictable time frame for large scale repair/replacement expenses within the scope of our report. In our experience working with similar associations, service life typically lasts well beyond rated life of components. Treat minor repairs as ongoing maintenance expense. Periodic inspections of distribution system by qualified electrician are wise to clean and tighten, exercise breakers, etc. Some associations employ infrared or other testing methodologies to identify trouble spots and potential hazards. Funding may be incorporated into future Reserve Study updates if conditions dictate. Keep track of any relevant expenses and include information during future Reserve Study updates as necessary. No basis for Reserve funding at this time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2561 Fire Hydrants - Replace

Quantity: (18) Hydrants

Location : Common areas

Funded? : No

History :

Evaluation : Fire hydrants were not inspected or tested in the course of our site inspection. Units should experience an extended useful life beyond the scope of this report. Make sure that hydrants are continually inspected and verified by licensed service providers. No recommendation for Reserve funding at this time, but this component should be re-evaluated during future Reserve Study updates if large-scale replacement project is expected.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp # : 2563 Filtration System Tanks - Replace

Quantity: (4) Tanks

Location : Pump house

Funded? : No

History :

Evaluation : Tanks were not inspected or tested in the course of our site inspection. The life of the tanks may last beyond the scope of this report. Most associations budget for ongoing replacement as an Operating expense. Make sure that tanks are continually inspected and verified by licensed service providers. No recommendation for Reserve funding at this time, but this component should be re-evaluated during future Reserve Study updates if large-scale replacement project is expected.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2567 **Booster Pump/Motor (1) - Replace**

Quantity: (1) 5 HP Pump/Motor

Location : Pump house

Funded? : Yes

History : Replaced in 2003

Evaluation : Booster pump. (1) Baldor motor/pump. Serial F1086. Pump systems can have a highly variable life expectancy depending on level of use. Should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$4,000

Worst Case: \$5,000

Lower allowance

Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2567 **Booster Pump/Motor (2) - Replace**

Quantity: (1) 5 HP Pump/Motor

Location : Pump house

Funded? : Yes

History : Replaced in ~1999

Evaluation : Booster pump. (1) Baldor motor/pump. Serial F0210165386. Pump systems can have a highly variable life expectancy depending on level of use. Should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc.

Useful Life:
20 years

Remaining Life:
4 years



Best Case: \$4,000
Lower allowance

Worst Case: \$5,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2567 Booster Pump/Motor (3) - Replace Quantity: (1) 5 HP Pump/Motor
Location : Pump house
Funded? : Yes

History : Replaced in 2013

Evaluation : Booster pump. (1) Baldor motor/pump. Serial # - F1307030065. Pump systems can have a highly variable life expectancy depending on level of use. Should be inspected regularly and repaired as-needed by serving vendor or maintenance staff to ensure proper function and optimal performance. Minor repairs such as pump motor replacements, electronic system parts, etc. should be considered an Operating expense. Plan to replace the entire system at the approximate interval shown below based on our experience and research with similar systems. Total life span can vary based on level of use, preventive maintenance, quality of materials and installation, etc.



Useful Life:
20 years

Remaining Life:
16 years

Best Case: \$4,000
Lower allowance

Worst Case: \$5,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Comp # : 2569 Well Pump/Motor (1) - Replace Quantity: (1) Motor/Pump
Location : Pump house
Funded? : Yes

History : Replaced in 2009

Evaluation : Pump was listed to be a 40510-3. The motor/pump was listed to have ~14920 hours. Minor repair and maintenance projects should be included within the association's Operating budget. Have internal components inspected and evaluated regularly by servicing vendor or maintenance staff to optimize performance.



Useful Life:
10 years

Remaining Life:
4 years

Best Case: \$2,000
Lower allowance

Worst Case: \$4,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2569 Well Pump/Motor (2) - Replace

Quantity: (1) Motor/Pump

Location : Pump house

Funded? : Yes

History : Replaced in 2013

Evaluation : Pump model# -250515. The motor/pump was listed to have ~8290 hours. Minor repair and maintenance projects should be included within the association's Operating budget. Have internal components inspected and evaluated regularly by servicing vendor or maintenance staff to optimize performance.

Useful Life:
10 years

Remaining Life:
8 years



Best Case: \$2,000
Lower allowance

Worst Case: \$4,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Comp # : 2569 Well Pump/Motor (3) - Replace

Quantity: (1) Motor/Pump

Location : Pump house

Funded? : Yes

History : Replaced in 2008

Evaluation : Pump model# -30 SOE07-90. The motor/pump was listed to have ~264490 hours. Minor repair and maintenance projects should be included within the association's Operating budget. Have internal components inspected and evaluated regularly by servicing vendor or maintenance staff to optimize performance.

Useful Life:
10 years

Remaining Life:
3 years



Best Case: \$2,000
Lower allowance

Worst Case: \$4,000
Higher allowance

Cost Source: Research with Local Vendor/Contractor - Samuelson Pump

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2571 Irrigation Pump/Motor - Replace

Quantity: (1) 2HP-Motor/Pump

Location : Adjacent to pump house

Funded? : No Operating

History : Replaced in 2002

Evaluation : Reported to be an operating expense.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp # : 2579 Submersible Transducer - Replace

Quantity: (1) Unit

Location : Water tank/pump house

Funded? : Yes

History : Replaced in ~2010

Evaluation : This unit will relay information from the tank regarding water levels. The transducer will connect to the Water Level Control box located in the pump house. Funding provided for the transducer only.

Useful Life:

10 years

Remaining Life:

5 years



Best Case: \$1,000

Worst Case: \$2,000

Lower allowance

Higher allowance

Cost Source: Research with Local Vendor/Contractor - Kevin Madison

Association Reserves

Component Details

Client: 28062A Little Elk Creek Village

Comp # : 2587 Irrigation Controllers - Replace

Quantity: (1) Rainbird

Location : Pump house

Funded? : No

History :

Evaluation : No problems observed or reported of irrigation clocks throughout community. Inspect regularly and repair/replace as needed. Although eventual replacement will be needed due to parts obsolescence, technological upgrades, etc. best suited to be handled as needed within the operating budget and not anticipated as large scale reserve project.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:
