Reserve Study Level II

Prepared for Clearwood HOA

2022 Fiscal Year

Prepared by CEDCORE, LLC
Version 4

Contents

1. Executive Summary

Report Details			
Association Name:	Clearwood HOA		
Location:	Yelm, WA	**Number of Units:**	1,355
Physical Description	PUD/Single Family	**Site Visit Date:**	3/25/2021
Level of Service:	Level II		
Report Period:	FY 2022	**Projection Period:**	2022 - 2051

Reserve Account Snap Shot January 1, 2022	
Projected Reserve Balance:	$1,202,391
Fully Funded Reserve Balance:	$6,063,288
Percent Funded:	20 %
Reserve Surplus or (-) Deficit Per Unit:	($3,587)
Current Monthly Reserve Fund Contribution:	$14,953
Interest Rate	1.00 %
Inflation Rate	3.00 %

2022 Reserve Contribution Requirements (based on the above position)		
Full Funding	Monthly Reserve Contribution:	$44,750
	Monthly Reserve Contribution Per Unit (Average):	$33
	Special Assessment Required for this Plan:	$0
Baseline Funding	Monthly Reserve Contribution:	$42,209
	Monthly Reserve Contribution Per Unit (Average):	$31
	Special Assessment Required for this Plan:	$0

Based upon the budget and maintenance practices of the association we have used a funding threshold of $2,000. Expenses below $2,000 are not funded within this report and best treated as a maintenance expense. We have included comments within the Component Analysis Section of this report.

The projected reserve fund balance is estimated based on the current reserve fund balance adding any remaining budgeted contributions and subtracting any planned projects to be completed prior to the end of the fiscal year.

The Association will need to increase contributions by $15.04 average per Unit per month to get onto the path to becoming Fully Funded in 2040.

1.1 Table 1 - Component List

Component	Quantity	Current Cost	UL	RUL
Caustic Systems: Repair/Replace	2 Units	$26,900	30	8
Cla-Val Valves: Repair/Replace	2 Each	$5,400	7	5
Fence, Reservoir: Replace	500 Linear Feet	$14,000	40	16
Fence, Well Site: Replace	720 Linear Feet	$20,200	40	16
Generator & Controls, Well #1 & 2: Replace	1 Allowance	$47,700	50	42
Generator, Well #4: Replace	1 Allowance	$52,300	50	24
Hydrant - Near Maintenance Bldg	1 Each	$6,000	30	21
Leak Detection	1 Allowance	$9,270	4	3
Project 10A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$41,600	40	7
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$208,000	40	8
Project 11A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$72,900	40	7
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$364,000	40	8
Project 12A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$47,000	40	8
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$235,000	40	9
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$66,400	40	39
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$332,000	40	0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$87,400	40	0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$437,000	40	1
Project 3A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$47,200	40	1
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$236,000	40	2
Project 4A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$59,600	40	1
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$298,000	40	2
Project 5A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$33,600	40	2
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$168,000	40	3
Project 6A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$89,800	40	3
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$449,000	40	4
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$43,200	40	4
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	1 Allowance	$216,000	40	5
Project 8A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$112,400	40	5
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$562,000	40	6
Project 9A: Design - Service Lines, Meter and Roadway Replacement	1 Allowance	$54,000	40	6

Project 9B: Construction - Service Lines, Meter and Roadway Replacement	1 Allowance	$270,000	40	7
Reservoir #2 Ladder - Repaint	1 Each	$13,000	10	5
Reservoir Cathodic Protection 1	1 Each	$16,700	20	11
Reservoir Cathodic Protection 2	1 Allowance	$23,800	20	1
Roads - 10 year Engineering Plan - 50%	1 Allowance	$34,700	10	9
Sanitary Survey	1 Allowance	$6,600	3	0
Source Flow Meters - Replace	4 Each	$8,400	20	9
Storage Reservoirs - Dive Inspection	1 Allowance	$8,100	10	1
Storage Tank #1 - Coat Exterior	1 Each	$32,200	20	9
Storage Tank #1 - Coat Interior	1 Each	$126,000	20	9
Storage Tank #1 - Replace	1 Each	$740,000	80	29
Storage Tank #2 - Coat Exterior	1 Each	$77,700	20	9
Storage Tank #2 - Coat Interior	1 Each	$299,000	20	9
Storage Tank #2 - Replace	1 Each	$1,007,000	80	55
Telemetry System: Replace	1 Allowance	$22,800	30	2
Trailer, Water: Replace	1 Allowance	$6,600	10	3
Truck, Water: Replace	1 Allowance	$21,200	10	7
Water Hammer Surge Tanks	1 Each	$15,500	50	5
Water System Plan - Update	1 Allowance	$36,000	6	4
Well # 1 - Replace	3 Allowance	$161,000	80	79
Well # 1 & 2, Control Systems: Replace	1 Allowance	$40,000	25	3
Well # 1, & #2 House, Electrical	1 Allowance	$5,000		0
Well # 1, 2, House	3 Buildings	$26,800	40	0
Well # 1, Pump / Motor - Replace	1 Each	$13,100	10	6
Well # 2 - Replace	1 Each	$161,000	80	79
Well # 2, Pump / Motor - Replace	1 Each	$19,700	10	8
Well # 4 - Replace / Future Decommission	1 Allowance	$161,000	80	79
Well # 4, Control Systems: Replace	1 Allowance	$24,000	25	3
Well # 4, House	2 Buildings	$13,100	40	5
Well # 4, Pump / Motor - Replace	3 Each	$24,500	10	5
Well # 5 - Install Final Cost	1 Allowance	$678,625	50	0
Well # 5 - Replace	1 Allowance	$161,000	80	79
Well # 5, Control Systems: Replace	1 Allowance	$24,000	25	25
Well # 5, House	2 Buildings	$51,500	40	40
	Total Current Costs	$8,771,495		
	Total Funded Components	65		

Components without a UL are one-time expenses, not expecting to reoccur at this time. It is important to note that actual costs may vary significantly based on scope of work, actual conditions, hidden deterioration, vendor selection, etc. This component list is for budget planning purposes only.

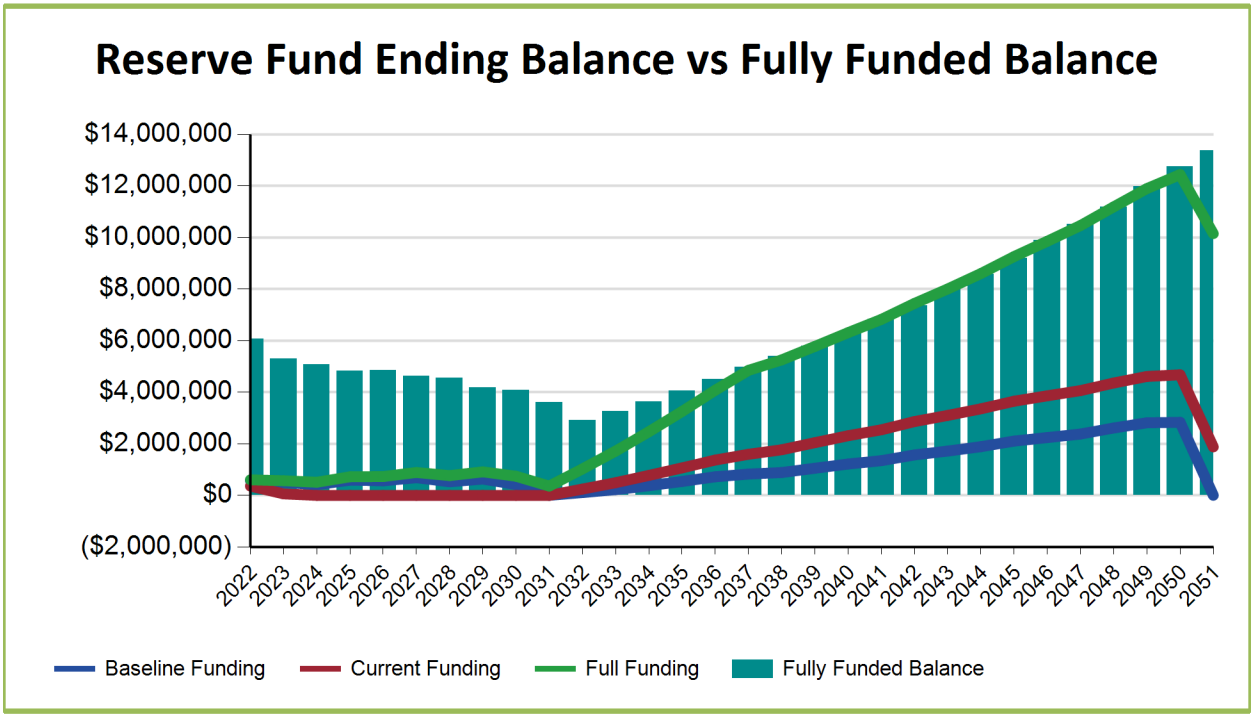
2. Financial Analysis

We have created the financial projections and recommendations based on the component list in Table One and a projected reserve fund balance $1,202,391. For your Association to be 100% funded there should be $6,063,288 in your reserve account(s). Therefore, your Association is projected to be 20.00% funded.

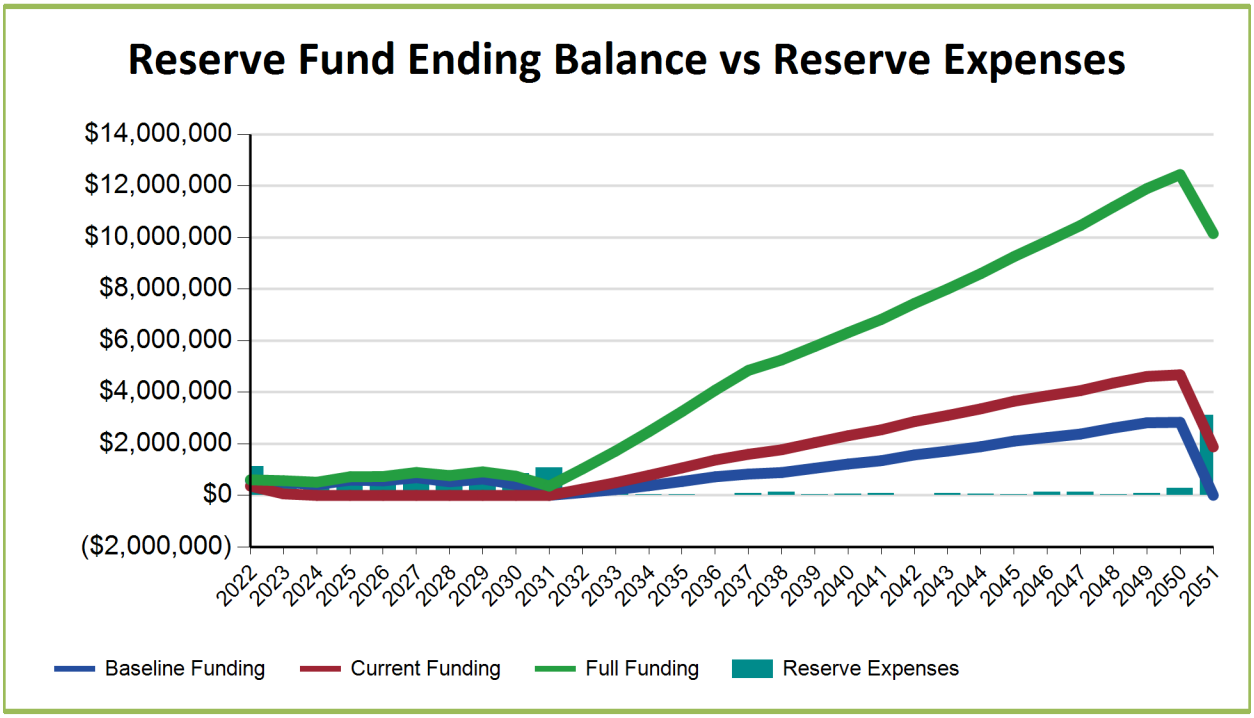
We recommend the Full Funding, which requires a monthly reserve contribution of $44,750 with a 2.78 % increase in contributions each year for the next 16 years.

Currently the Association has monthly reserve contributions of $24,365 and are Not projected to be sufficient over the next 30 years. The Baseline monthly reserve contribution requires $42,209, with a 2.78 % increase in contributions each year for the next 10 years. The baseline funding plan is the lowest contribution amount calculated to prevent the Reserve Fund from dropping below a zero balance.

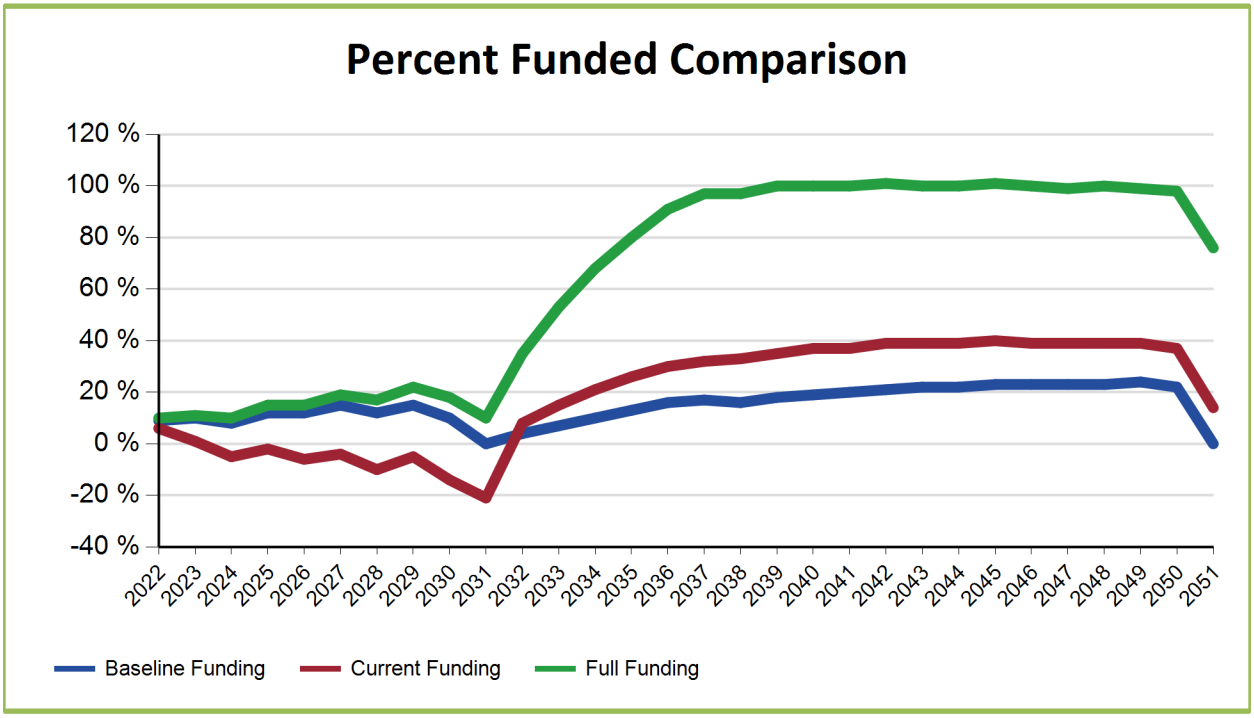
2.1 Figure 1 - Reserve Fund Ending Balance vs Fully Funded Balance



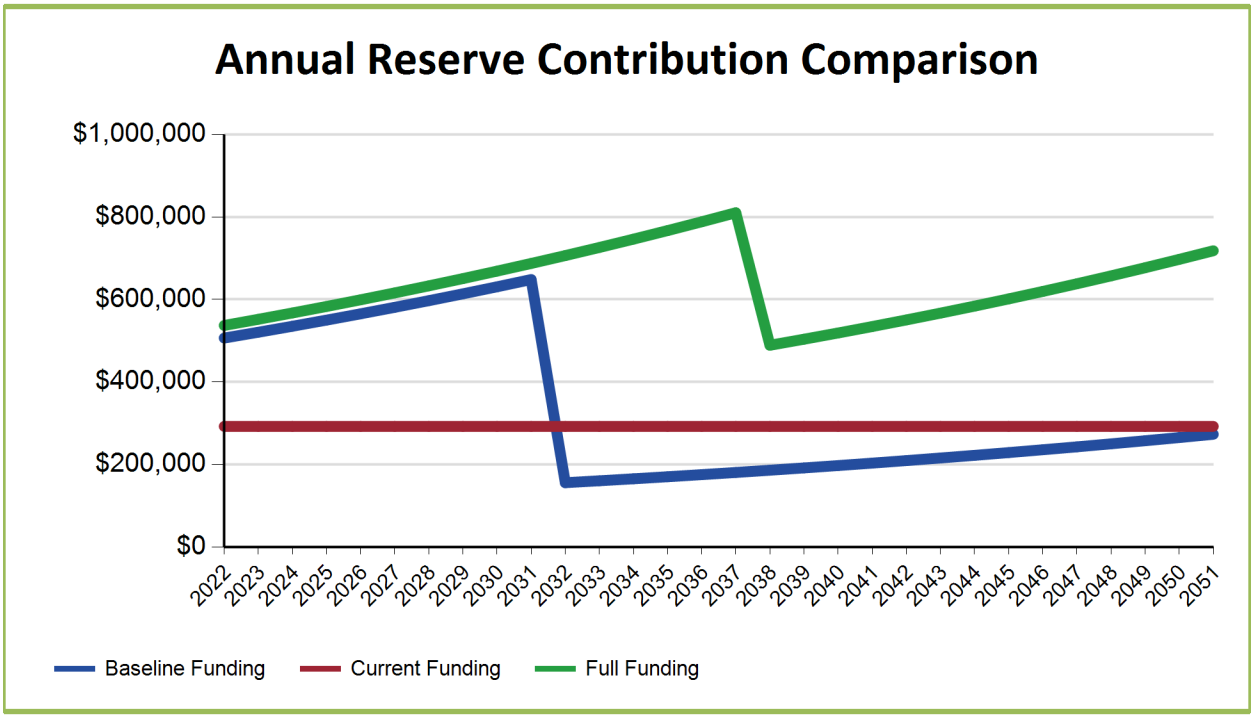
2.2 Figure 2 - Reserve Fund Ending Balance vs Reserve Expenses



2.3 Figure 3 - Percent Funded Comparison



2.4 Figure 4 – Reserve Contribution Comparison



2.5.1 - 30 Year Reserve Fund Projection (Current Funding)

Current Funding Plan

Year	Start Balance	Annual Reserve Contribution	Special Assessments	Additional Assessments Necessary Per Unit /Per Year	Interest Income	Reserve Expenses	Ending Balance	Fully Funded Balance	Ending Percent Funded
2022	$1,202,391	$292,382	$0		$2,122	$1,136,425	$360,470	$6,063,288	5.95 %
2023	$360,470	$292,382	$0		$0	$592,971	$59,881	$5,303,440	1.13 %
2024	$59,881	$292,382	$0	$202	$0	$626,355	$0	$5,087,417	-5.39 %
2025	$0	$292,382	$0	$62	$0	$376,193	$0	$4,837,597	-1.73 %
2026	$0	$292,382	$0	$223	$0	$594,493	$0	$4,845,231	-6.24 %
2027	$0	$292,382	$0	$126	$0	$463,593	$0	$4,635,743	-3.69 %
2028	$0	$292,382	$0	$344	$0	$759,059	$0	$4,562,523	-10.23 %
2029	$0	$292,382	$0	$161	$0	$510,361	$0	$4,190,733	-5.20 %
2030	$0	$292,382	$0	$406	$0	$843,161	$0	$4,072,143	-13.53 %
2031	$0	$292,382	$0	$573	$0	$1,069,393	$0	$3,615,651	-21.49 %
2032	$0	$292,382	$0		$978	$48,381	$244,979	$2,921,141	8.39 %
2033	$244,979	$292,382	$0		$3,440	$47,161	$493,640	$3,266,393	15.11 %
2034	$493,640	$292,382	$0		$6,227	$17,109	$775,140	$3,632,482	21.34 %
2035	$775,140	$292,382	$0		$9,116	$9,692	$1,066,946	$4,050,007	26.34 %
2036	$1,066,946	$292,382	$0		$12,131	$0	$1,371,459	$4,497,483	30.49 %
2037	$1,371,459	$292,382	$0		$14,345	$83,149	$1,595,037	$4,978,444	32.04 %
2038	$1,595,037	$292,382	$0		$16,076	$133,672	$1,769,823	$5,398,573	32.78 %
2039	$1,769,823	$292,382	$0		$18,810	$35,040	$2,045,975	$5,789,959	35.34 %
2040	$2,045,975	$292,382	$0		$21,474	$44,774	$2,315,057	$6,305,690	36.71 %
2041	$2,315,057	$292,382	$0		$23,747	$86,571	$2,544,615	$6,838,211	37.21 %
2042	$2,544,615	$292,382	$0		$26,908	$0	$2,863,905	$7,355,342	38.94 %
2043	$2,863,905	$292,382	$0		$29,273	$82,783	$3,102,777	$7,989,189	38.84 %
2044	$3,102,777	$292,382	$0		$31,800	$68,980	$3,357,979	$8,569,180	39.19 %
2045	$3,357,979	$292,382	$0		$34,728	$31,321	$3,653,768	$9,193,556	39.74 %
2046	$3,653,768	$292,382	$0		$36,802	$119,731	$3,863,221	$9,888,602	39.07 %
2047	$3,863,221	$292,382	$0		$38,806	$128,768	$4,065,641	$10,526,981	38.62 %
2048	$4,065,641	$292,382	$0		$41,719	$39,897	$4,359,845	$11,189,157	38.96 %
2049	$4,359,845	$292,382	$0		$44,237	$82,343	$4,614,121	$11,977,104	38.52 %
2050	$4,614,121	$292,382	$0		$44,864	$273,864	$4,677,503	$12,759,771	36.66 %
2051	$4,677,503	$292,382	$0		$17,177	$3,105,952	$1,881,110	$13,383,895	14.06 %

2.5.2 - 30 Year Reserve Fund Projection (Baseline Funding)

Baseline Funding Plan

Year	Start Balance	Annual Reserve Contribution	Special Assessments	Interest Income	Reserve Expenses	Ending Balance	Fully Funded Balance	Ending Percent Funded
2022	$1,202,391	$506,508	$0	$3,192	$1,136,425	$575,666	$6,063,288	9.49 %
2023	$575,666	$520,589	$0	$2,430	$592,971	$505,714	$5,303,440	9.54 %
2024	$505,714	$535,061	$0	$1,469	$626,355	$415,889	$5,087,417	8.17 %
2025	$415,889	$549,936	$0	$3,147	$376,193	$592,779	$4,837,597	12.25 %
2026	$592,779	$565,224	$0	$2,809	$594,493	$566,319	$4,845,231	11.69 %
2027	$566,319	$580,937	$0	$3,932	$463,593	$687,595	$4,635,743	14.83 %
2028	$687,595	$597,088	$0	$2,271	$759,059	$527,895	$4,562,523	11.57 %
2029	$527,895	$613,687	$0	$3,244	$510,361	$634,465	$4,190,733	15.14 %
2030	$634,465	$630,747	$0	$1,067	$843,161	$423,118	$4,072,143	10.39 %
2031	$423,118	$648,282	$0	$0	$1,069,393	$2,007	$3,615,651	0.06 %
2032	$2,007	$155,808	$0	$315	$48,381	$109,749	$2,921,141	3.76 %
2033	$109,749	$160,482	$0	$1,428	$47,161	$224,498	$3,266,393	6.87 %
2034	$224,498	$165,297	$0	$2,900	$17,109	$375,586	$3,632,482	10.34 %
2035	$375,586	$170,256	$0	$4,510	$9,692	$540,660	$4,050,007	13.35 %
2036	$540,660	$175,363	$0	$6,283	$0	$722,306	$4,497,483	16.06 %
2037	$722,306	$180,624	$0	$7,295	$83,149	$827,076	$4,978,444	16.61 %
2038	$827,076	$186,043	$0	$7,864	$133,672	$887,311	$5,398,573	16.44 %
2039	$887,311	$191,624	$0	$9,481	$35,040	$1,053,376	$5,789,959	18.19 %
2040	$1,053,376	$197,373	$0	$11,073	$44,774	$1,217,048	$6,305,690	19.30 %
2041	$1,217,048	$203,294	$0	$12,321	$86,571	$1,346,092	$6,838,211	19.68 %
2042	$1,346,092	$209,393	$0	$14,508	$0	$1,569,993	$7,355,342	21.34 %
2043	$1,569,993	$215,675	$0	$15,950	$82,783	$1,718,835	$7,989,189	21.51 %
2044	$1,718,835	$222,145	$0	$17,609	$68,980	$1,889,609	$8,569,180	22.05 %
2045	$1,889,609	$228,809	$0	$19,727	$31,321	$2,106,824	$9,193,556	22.92 %
2046	$2,106,824	$235,674	$0	$21,049	$119,731	$2,243,816	$9,888,602	22.69 %
2047	$2,243,816	$242,744	$0	$22,364	$128,768	$2,380,156	$10,526,981	22.61 %
2048	$2,380,156	$250,026	$0	$24,653	$39,897	$2,614,938	$11,189,157	23.37 %
2049	$2,614,938	$257,527	$0	$26,614	$82,343	$2,816,736	$11,977,104	23.52 %
2050	$2,816,736	$265,253	$0	$26,755	$273,864	$2,834,880	$12,759,771	22.22 %
2051	$2,834,880	$273,210	$0	$0	$3,105,952	$2,138	$13,383,895	0.02 %

2.5.3 - 30 Year Reserve Fund Projection (Full Funding)

Full Funding Plan

Year	Start Balance	Annual Reserve Contribution	Special Assessments	Interest Income	Reserve Expenses	Ending Balance	Fully Funded Balance	Ending Percent Funded
2022	$1,202,391	$537,000	$0	$3,345	$1,136,425	$606,311	$6,063,288	10.00 %
2023	$606,311	$551,929	$0	$2,893	$592,971	$568,162	$5,303,440	10.71 %
2024	$568,162	$567,272	$0	$2,254	$626,355	$511,333	$5,087,417	10.05 %
2025	$511,333	$583,042	$0	$4,267	$376,193	$722,449	$4,837,597	14.93 %
2026	$722,449	$599,251	$0	$4,276	$594,493	$731,483	$4,845,231	15.10 %
2027	$731,483	$615,910	$0	$5,758	$463,593	$889,558	$4,635,743	19.19 %
2028	$889,558	$633,032	$0	$4,470	$759,059	$768,001	$4,562,523	16.83 %
2029	$768,001	$650,631	$0	$5,830	$510,361	$914,101	$4,190,733	21.81 %
2030	$914,101	$668,718	$0	$4,053	$843,161	$743,711	$4,072,143	18.26 %
2031	$743,711	$687,309	$0	$180	$1,069,393	$361,807	$3,615,651	10.01 %
2032	$361,807	$706,416	$0	$6,666	$48,381	$1,026,508	$2,921,141	35.14 %
2033	$1,026,508	$726,054	$0	$13,424	$47,161	$1,718,825	$3,266,393	52.62 %
2034	$1,718,825	$746,238	$0	$20,748	$17,109	$2,468,702	$3,632,482	67.96 %
2035	$2,468,702	$766,984	$0	$28,425	$9,692	$3,254,419	$4,050,007	80.36 %
2036	$3,254,419	$788,306	$0	$36,486	$0	$4,079,211	$4,497,483	90.70 %
2037	$4,079,211	$810,221	$0	$44,012	$83,149	$4,850,295	$4,978,444	97.43 %
2038	$4,850,295	$489,000	$0	$49,611	$133,672	$5,255,234	$5,398,573	97.34 %
2039	$5,255,234	$503,670	$0	$54,720	$35,040	$5,778,584	$5,789,959	99.80 %
2040	$5,778,584	$518,780	$0	$59,932	$44,774	$6,312,522	$6,305,690	100.11 %
2041	$6,312,522	$534,344	$0	$64,931	$86,571	$6,825,226	$6,838,211	99.81 %
2042	$6,825,226	$550,374	$0	$71,004	$0	$7,446,604	$7,355,342	101.24 %
2043	$7,446,604	$566,885	$0	$76,473	$82,783	$8,007,179	$7,989,189	100.23 %
2044	$8,007,179	$583,892	$0	$82,301	$68,980	$8,604,392	$8,569,180	100.41 %
2045	$8,604,392	$601,408	$0	$88,738	$31,321	$9,263,217	$9,193,556	100.76 %
2046	$9,263,217	$619,451	$0	$94,532	$119,731	$9,857,469	$9,888,602	99.69 %
2047	$9,857,469	$638,034	$0	$100,477	$128,768	$10,467,212	$10,526,981	99.43 %
2048	$10,467,212	$657,175	$0	$107,559	$39,897	$11,192,049	$11,189,157	100.03 %
2049	$11,192,049	$676,890	$0	$114,482	$82,343	$11,901,078	$11,977,104	99.37 %
2050	$11,901,078	$697,197	$0	$119,758	$273,864	$12,444,169	$12,759,771	97.53 %
2051	$12,444,169	$718,113	$0	$96,973	$3,105,952	$10,153,303	$13,383,895	75.86 %

2.6 Funding Plan Cash Flow Projections

Full Funding Plan					
Year	2022	2023	2024	2025	2026
Percent Funded	10.00 %	10.71 %	10.05 %	14.93 %	15.10 %
Fully Funded Balance	$6,063,288	$5,303,440	$5,087,417	$4,837,597	$4,845,231
Beginning Balance	$1,202,391	$606,311	$568,162	$511,333	$722,449
Annual Contributions	$537,000	$551,929	$567,272	$583,042	$599,251
Interest Earnings	$3,345	$2,893	$2,254	$4,267	$4,276
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$1,136,425	$592,971	$626,355	$376,193	$594,493
Ending Balance	$606,311	$568,162	$511,333	$722,449	$731,483

Expenses by Component & Year					
Components	2022	2023	2024	2025	2026
Caustic Systems: Repair/Replace	$0	$0	$0	$0	$0
Cla-Val Valves: Repair/Replace	$0	$0	$0	$0	$0
Fence, Reservoir: Replace	$0	$0	$0	$0	$0
Fence, Well Site: Replace	$0	$0	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$0
Hydrant - Near Maintenance Bldg	$0	$0	$0	$0	$0
Leak Detection	$0	$0	$0	$10,130	$0
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$332,000	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$87,400	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$450,110	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$48,616	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$250,372	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$61,388	$0	$0	$0

Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$316,148	$0	$0
Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$35,646	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$183,578	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$98,127	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$505,353
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$48,622
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Reservoir #2 Ladder - Repaint	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$24,514	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$0
Sanitary Survey	$6,600	$0	$0	$7,212	$0
Source Flow Meters - Replace	$0	$0	$0	$0	$0
Storage Reservoirs - Dive Inspection	$0	$8,343	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #1 - Replace	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$24,189	$0	$0
Trailer, Water: Replace	$0	$0	$0	$7,212	$0
Truck, Water: Replace	$0	$0	$0	$0	$0
Water Hammer Surge Tanks	$0	$0	$0	$0	$0
Water System Plan - Update	$0	$0	$0	$0	$40,518
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$43,709	$0
Well # 1, & #2 House, Electrical	$5,000	$0	$0	$0	$0
Well # 1, 2, House	$26,800	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0

Well # 4, Control Systems: Replace	$0	$0	$0	$26,225	$0
Well # 4, House	$0	$0	$0	$0	$0
Well # 4, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 5 - Install Final Cost	$678,625	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

Full Funding Plan					
Year	2027	2028	2029	2030	2031
Percent Funded	19.19 %	16.83 %	21.81 %	18.26 %	10.01 %
Fully Funded Balance	$4,635,743	$4,562,523	$4,190,733	$4,072,143	$3,615,651
Beginning Balance	$731,483	$889,558	$768,001	$914,101	$743,711
Annual Contributions	$615,910	$633,032	$650,631	$668,718	$687,309
Interest Earnings	$5,758	$4,470	$5,830	$4,053	$180
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$463,593	$759,059	$510,361	$843,161	$1,069,393
Ending Balance	$889,558	$768,001	$914,101	$743,711	$361,807

Expenses by Component & Year					
Components	2027	2028	2029	2030	2031
Caustic Systems: Repair/Replace	$0	$0	$0	$34,076	$0
Cla-Val Valves: Repair/Replace	$6,260	$0	$0	$0	$0
Fence, Reservoir: Replace	$0	$0	$0	$0	$0
Fence, Well Site: Replace	$0	$0	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$0
Hydrant - Near Maintenance Bldg	$0	$0	$0	$0	$0
Leak Detection	$0	$0	$11,401	$0	$0
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$51,163	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$263,488	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$89,658	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$461,104	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$59,538	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$306,622
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0

Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$250,403	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$130,302	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$671,057	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$64,479	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$332,066	$0	$0
Reservoir #2 Ladder - Repaint	$15,071	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$0	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$45,276
Sanitary Survey	$0	$7,881	$0	$0	$8,612
Source Flow Meters - Replace	$0	$0	$0	$0	$10,960
Storage Reservoirs - Dive Inspection	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$42,014
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$164,401
Storage Tank #1 - Replace	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$101,381
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$390,127
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$0	$0	$0
Trailer, Water: Replace	$0	$0	$0	$0	$0
Truck, Water: Replace	$0	$0	$26,073	$0	$0
Water Hammer Surge Tanks	$17,969	$0	$0	$0	$0
Water System Plan - Update	$0	$0	$0	$0	$0
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 1, & #2 House, Electrical	$0	$0	$0	$0	$0
Well # 1, 2, House	$0	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$15,642	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$24,955	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0
Well # 4, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 4, House	$15,186	$0	$0	$0	$0

Well # 4, Pump / Motor - Replace	$28,402	$0	$0	$0	$0
Well # 5 - Install Final Cost	$0	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

Full Funding Plan					
Year	2032	2033	2034	2035	2036
Percent Funded	35.14 %	52.62 %	67.96 %	80.36 %	90.70 %
Fully Funded Balance	$2,921,141	$3,266,393	$3,632,482	$4,050,007	$4,497,483
Beginning Balance	$361,807	$1,026,508	$1,718,825	$2,468,702	$3,254,419
Annual Contributions	$706,416	$726,054	$746,238	$766,984	$788,306
Interest Earnings	$6,666	$13,424	$20,748	$28,425	$36,486
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$48,381	$47,161	$17,109	$9,692	$0
Ending Balance	$1,026,508	$1,718,825	$2,468,702	$3,254,419	$4,079,211

Expenses by Component & Year					
Components	2032	2033	2034	2035	2036
Caustic Systems: Repair/Replace	$0	$0	$0	$0	$0
Cla-Val Valves: Repair/Replace	$0	$0	$7,699	$0	$0
Fence, Reservoir: Replace	$0	$0	$0	$0	$0
Fence, Well Site: Replace	$0	$0	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$0
Hydrant - Near Maintenance Bldg	$0	$0	$0	$0	$0
Leak Detection	$0	$12,832	$0	$0	$0
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0

Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Reservoir #2 Ladder - Repaint	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$23,117	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$0	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$0
Sanitary Survey	$0	$0	$9,410	$0	$0
Source Flow Meters - Replace	$0	$0	$0	$0	$0
Storage Reservoirs - Dive Inspection	$0	$11,212	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #1 - Replace	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$0	$0	$0
Trailer, Water: Replace	$0	$0	$0	$9,692	$0
Truck, Water: Replace	$0	$0	$0	$0	$0
Water Hammer Surge Tanks	$0	$0	$0	$0	$0
Water System Plan - Update	$48,381	$0	$0	$0	$0
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 1, & #2 House, Electrical	$0	$0	$0	$0	$0
Well # 1, 2, House	$0	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0
Well # 4, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 4, House	$0	$0	$0	$0	$0

Well # 4, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 5 - Install Final Cost	$0	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

Full Funding Plan					
Year	2037	2038	2039	2040	2041
Percent Funded	97.43 %	97.34 %	99.80 %	100.11 %	99.81 %
Fully Funded Balance	$4,978,444	$5,398,573	$5,789,959	$6,305,690	$6,838,211
Beginning Balance	$4,079,211	$4,850,295	$5,255,234	$5,778,584	$6,312,522
Annual Contributions	$810,221	$489,000	$503,670	$518,780	$534,344
Interest Earnings	$44,012	$49,611	$54,720	$59,932	$64,931
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$83,149	$133,672	$35,040	$44,774	$86,571
Ending Balance	$4,850,295	$5,255,234	$5,778,584	$6,312,522	$6,825,226

Expenses by Component & Year					
Components	2037	2038	2039	2040	2041
Caustic Systems: Repair/Replace	$0	$0	$0	$0	$0
Cla-Val Valves: Repair/Replace	$0	$0	$0	$0	$9,469
Fence, Reservoir: Replace	$0	$22,466	$0	$0	$0
Fence, Well Site: Replace	$0	$32,415	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$0
Hydrant - Near Maintenance Bldg	$0	$0	$0	$0	$0
Leak Detection	$14,442	$0	$0	$0	$16,255
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0

Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Reservoir #2 Ladder - Repaint	$20,254	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$0	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$60,847
Sanitary Survey	$10,283	$0	$0	$11,236	$0
Source Flow Meters - Replace	$0	$0	$0	$0	$0
Storage Reservoirs - Dive Inspection	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #1 - Replace	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$0	$0	$0
Trailer, Water: Replace	$0	$0	$0	$0	$0
Truck, Water: Replace	$0	$0	$35,040	$0	$0
Water Hammer Surge Tanks	$0	$0	$0	$0	$0
Water System Plan - Update	$0	$57,769	$0	$0	$0
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 1, & #2 House, Electrical	$0	$0	$0	$0	$0
Well # 1, 2, House	$0	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$21,022	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$33,538	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0
Well # 4, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 4, House	$0	$0	$0	$0	$0

Well # 4, Pump / Motor - Replace	$38,170	$0	$0	$0	$0
Well # 5 - Install Final Cost	$0	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

Full Funding Plan					
Year	2042	2043	2044	2045	2046
Percent Funded	101.24 %	100.23 %	100.41 %	100.76 %	99.69 %
Fully Funded Balance	$7,355,342	$7,989,189	$8,569,180	$9,193,556	$9,888,602
Beginning Balance	$6,825,226	$7,446,604	$8,007,179	$8,604,392	$9,263,217
Annual Contributions	$550,374	$566,885	$583,892	$601,408	$619,451
Interest Earnings	$71,004	$76,473	$82,301	$88,738	$94,532
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$0	$82,783	$68,980	$31,321	$119,731
Ending Balance	$7,446,604	$8,007,179	$8,604,392	$9,263,217	$9,857,469

Expenses by Component & Year					
Components	2042	2043	2044	2045	2046
Caustic Systems: Repair/Replace	$0	$0	$0	$0	$0
Cla-Val Valves: Repair/Replace	$0	$0	$0	$0	$0
Fence, Reservoir: Replace	$0	$0	$0	$0	$0
Fence, Well Site: Replace	$0	$0	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$106,315
Hydrant - Near Maintenance Bldg	$0	$11,162	$0	$0	$0
Leak Detection	$0	$0	$0	$18,295	$0
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0

Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Reservoir #2 Ladder - Repaint	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$44,275	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$0
Sanitary Survey	$0	$12,278	$0	$0	$13,416
Source Flow Meters - Replace	$0	$0	$0	$0	$0
Storage Reservoirs - Dive Inspection	$0	$15,068	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #1 - Replace	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$0
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$0
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$0	$0	$0
Trailer, Water: Replace	$0	$0	$0	$13,026	$0
Truck, Water: Replace	$0	$0	$0	$0	$0
Water Hammer Surge Tanks	$0	$0	$0	$0	$0
Water System Plan - Update	$0	$0	$68,980	$0	$0
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 1, & #2 House, Electrical	$0	$0	$0	$0	$0
Well # 1, 2, House	$0	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0
Well # 4, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 4, House	$0	$0	$0	$0	$0

Well # 4, Pump / Motor - Replace	$0	$0	$0	$0	$0
Well # 5 - Install Final Cost	$0	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$0	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

Full Funding Plan					
Year	2047	2048	2049	2050	2051
Percent Funded	99.43	100.03	99.37	97.53	75.86
Fully Funded Balance	$10,526,981	$11,189,157	$11,977,104	$12,759,771	$13,383,895
Beginning Balance	$9,857,469	$10,467,212	$11,192,049	$11,901,078	$12,444,169
Annual Contributions	$638,034	$657,175	$676,890	$697,197	$718,113
Interest Earnings	$100,477	$107,559	$114,482	$119,758	$96,973
Special Assessment	$0	$0	$0	$0	$0
Reserve Expenses	$128,768	$39,897	$82,343	$273,864	$3,105,952
Ending Balance	$10,467,212	$11,192,049	$11,901,078	$12,444,169	$10,153,303

Expenses by Component & Year					
Components	2047	2048	2049	2050	2051
Caustic Systems: Repair/Replace	$0	$0	$0	$0	$0
Cla-Val Valves: Repair/Replace	$0	$11,646	$0	$0	$0
Fence, Reservoir: Replace	$0	$0	$0	$0	$0
Fence, Well Site: Replace	$0	$0	$0	$0	$0
Generator & Controls, Well #1 & 2: Replace	$0	$0	$0	$0	$0
Generator, Well #4: Replace	$0	$0	$0	$0	$0
Hydrant - Near Maintenance Bldg	$0	$0	$0	$0	$0
Leak Detection	$0	$0	$20,591	$0	$0
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0

Project 5A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$0	$0	$0	$0	$0
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$0	$0	$0	$0	$0
Reservoir #2 Ladder - Repaint	$27,219	$0	$0	$0	$0
Reservoir Cathodic Protection 1	$0	$0	$0	$0	$0
Reservoir Cathodic Protection 2	$0	$0	$0	$0	$0
Roads - 10 year Engineering Plan - 50%	$0	$0	$0	$0	$81,773
Sanitary Survey	$0	$0	$14,661	$0	$0
Source Flow Meters - Replace	$0	$0	$0	$0	$19,795
Storage Reservoirs - Dive Inspection	$0	$0	$0	$0	$0
Storage Tank #1 - Coat Exterior	$0	$0	$0	$0	$75,881
Storage Tank #1 - Coat Interior	$0	$0	$0	$0	$296,927
Storage Tank #1 - Replace	$0	$0	$0	$0	$1,743,858
Storage Tank #2 - Coat Exterior	$0	$0	$0	$0	$183,105
Storage Tank #2 - Coat Interior	$0	$0	$0	$0	$704,613
Storage Tank #2 - Replace	$0	$0	$0	$0	$0
Telemetry System: Replace	$0	$0	$0	$0	$0
Trailer, Water: Replace	$0	$0	$0	$0	$0
Truck, Water: Replace	$0	$0	$47,091	$0	$0
Water Hammer Surge Tanks	$0	$0	$0	$0	$0
Water System Plan - Update	$0	$0	$0	$82,365	$0
Well # 1 - Replace	$0	$0	$0	$0	$0
Well # 1 & 2, Control Systems: Replace	$0	$0	$0	$91,517	$0
Well # 1, & #2 House, Electrical	$0	$0	$0	$0	$0
Well # 1, 2, House	$0	$0	$0	$0	$0
Well # 1, Pump / Motor - Replace	$0	$28,251	$0	$0	$0
Well # 2 - Replace	$0	$0	$0	$0	$0
Well # 2, Pump / Motor - Replace	$0	$0	$0	$45,072	$0
Well # 4 - Replace / Future Decommission	$0	$0	$0	$0	$0
Well # 4, Control Systems: Replace	$0	$0	$0	$54,910	$0
Well # 4, House	$0	$0	$0	$0	$0

Well # 4, Pump / Motor - Replace	$51,298	$0	$0	$0	$0
Well # 5 - Install Final Cost	$0	$0	$0	$0	$0
Well # 5 - Replace	$0	$0	$0	$0	$0
Well # 5, Control Systems: Replace	$50,251	$0	$0	$0	$0
Well # 5, House	$0	$0	$0	$0	$0

3. Physical Analysis

We completed a site visit as part of this reserve study on 3/25/2021. Table 2 below shows all the components considered for funding and explains the basis of the funding decision.

3.1 Table 2: Component Funding Basis

Component	Condition	Funding Basis
Caustic Systems: Repair/Replace		Funded based on prior reserve study
Cla-Val Valves: Repair/Replace		Funded based on prior reserve study
Fence, Reservoir: Replace		Funded based on the typical life expectancy
Fence, Well Site: Replace	Good	Funded based on the typical life expectancy
Generator & Controls, Well #1 & 2: Replace		Funded based on prior reserve study
Generator, Well #4: Replace		Funded based on prior reserve study
Hydrant - Near Maintenance Bldg		Funded based on prior reserve study
Leak Detection	Unknown	Funded based on prior reserve study
Project 10A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association direction
Project 11A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 12A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association records
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	Not Applicable	Funded based on Association records
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	Not Applicable	Funded based on Association records
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	Not Applicable	Funded based on prior reserve study
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 3A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association records
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 4A: Design - Service Lines, Meter and Roadway Replacement		Funded based on Association records
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 5A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association records
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 6A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association records
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association records

Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	Not Applicable	Funded based on Association records
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 8A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association records
Project 9A: Design - Service Lines, Meter and Roadway Replacement	Not Applicable	Funded based on Association direction
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	Assorted Condition	Funded based on Association direction
Reservoir #2 Ladder - Repaint		Funded based on prior reserve study
Reservoir Cathodic Protection 1		Funded based on prior reserve study
Reservoir Cathodic Protection 2		Funded based on prior reserve study
Roads - 10 year Engineering Plan - 50%	Not Applicable	Funded based on Association direction
Sanitary Survey	Not Applicable	Funded based on prior reserve study
Source Flow Meters - Replace		Funded based on prior reserve study
Storage Reservoirs - Dive Inspection	Not Applicable	Funded based on prior reserve study
Storage Tank #1 - Coat Exterior		Funded based on prior reserve study
Storage Tank #1 - Coat Interior		Funded based on prior reserve study
Storage Tank #1 - Replace	Unknown	Funded based on prior reserve study
Storage Tank #2 - Coat Exterior		Funded based on Association direction
Storage Tank #2 - Coat Interior		Funded based on prior reserve study
Storage Tank #2 - Replace		Funded based on prior reserve study
Telemetry System: Replace		Funded based on prior reserve study
Trailer, Water: Replace		Funded based on prior reserve study
Truck, Water: Replace		Funded based on prior reserve study
Water Hammer Surge Tanks	Functional	Funded based on Association direction
Water System Plan - Update	Not Applicable	Funded based on Association records
Well # 1 - Replace	Functional	Funded based on Association direction
Well # 1 & 2, Control Systems: Replace		Funded based on prior reserve study
Well # 1, & #2 House, Electrical	Unknown	Funded based on Association direction
Well # 1, 2, House		Funded based on prior reserve study
Well # 1, Pump / Motor - Replace	Good	Funded based on prior reserve study
Well # 2 - Replace	Good	Funded based on Association direction
Well # 2, Pump / Motor - Replace	Good	Funded based on prior reserve study
Well # 4 - Replace / Future Decommission	Functional	Funded based on prior reserve study
Well # 4, Control Systems: Replace		Funded based on prior reserve study
Well # 4, House		Funded based on prior reserve study
Well # 4, Pump / Motor - Replace	Good	Funded based on prior reserve study
Well # 5 - Install Final Cost	Unknown	Funded based on prior reserve study
Well # 5 - Replace	Excellent	Funded based on prior reserve study
Well # 5, Control Systems: Replace		Funded based on prior reserve study
Well # 5, House		Funded based on prior reserve study

3.2 Table 3: Component Metrics

Component	FFB	% FFB	Annual Cost	% Annual Cost
Caustic Systems: Repair/Replace	$19,727	0.33%	$897	0.40%
Cla-Val Valves: Repair/Replace	$1,543	0.03%	$771	0.35%
Fence, Reservoir: Replace	$8,400	0.14%	$350	0.16%
Fence, Well Site: Replace	$12,120	0.20%	$505	0.23%
Generator & Controls, Well #1 & 2: Replace	$7,632	0.13%	$954	0.43%
Generator, Well #4: Replace	$27,196	0.45%	$1,046	0.47%
Hydrant - Near Maintenance Bldg	$1,800	0.03%	$200	0.09%
Leak Detection	$2,318	0.04%	$2,318	1.04%
Project 10A: Design - Service Lines, Meter and Roadway Replacement	$34,320	0.57%	$1,040	0.47%
Project 10B: Construction - Service Lines, Meter and Roadway Replacement	$166,400	2.74%	$5,200	2.34%
Project 11A: Design - Service Lines, Meter and Roadway Replacement	$60,143	0.99%	$1,823	0.82%
Project 11B: Construction - Service Lines, Meter and Roadway Replacement	$291,200	4.80%	$9,100	4.10%
Project 12A: Design - Service Lines, Meter and Roadway Replacement	$37,600	0.62%	$1,175	0.53%
Project 12B: Construction - Service Lines, Meter and Roadway Replacement	$182,125	3.00%	$5,875	2.65%
Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$1,660	0.03%	$1,660	0.75%
Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$332,000	5.48%	$8,300	3.74%
Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$87,400	1.44%	$2,185	0.98%
Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$426,075	7.03%	$10,925	4.92%
Project 3A: Design - Service Lines, Meter and Roadway Replacement	$46,020	0.76%	$1,180	0.53%
Project 3B: Construction - Service Lines, Meter and Roadway Replacement	$224,200	3.70%	$5,900	2.66%
Project 4A: Design - Service Lines, Meter and Roadway Replacement	$58,110	0.96%	$1,490	0.67%
Project 4B: Construction - Service Lines, Meter and Roadway Replacement	$283,100	4.67%	$7,450	3.35%
Project 5A: Design - Service Lines, Meter and Roadway Replacement	$31,920	0.53%	$840	0.38%
Project 5B: Construction - Service Lines, Meter and Roadway Replacement	$155,400	2.56%	$4,200	1.89%
Project 6A: Design - Service Lines, Meter and Roadway Replacement	$83,065	1.37%	$2,245	1.01%
Project 6B: Construction - Service Lines, Meter and Roadway Replacement	$404,100	6.66%	$11,225	5.05%
Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement	$38,880	0.64%	$1,080	0.49%
Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement	$189,000	3.12%	$5,400	2.43%
Project 8A: Design - Service Lines, Meter and Roadway Replacement	$98,350	1.62%	$2,810	1.27%
Project 8B: Construction - Service Lines, Meter and Roadway Replacement	$477,700	7.88%	$14,050	6.33%
Project 9A: Design - Service Lines, Meter and Roadway Replacement	$45,900	0.76%	$1,350	0.61%
Project 9B: Construction - Service Lines, Meter and Roadway Replacement	$222,750	3.67%	$6,750	3.04%

Reservoir #2 Ladder - Repaint	$6,500	0.11%	$1,300	0.59%
Reservoir Cathodic Protection 1	$7,515	0.12%	$835	0.38%
Reservoir Cathodic Protection 2	$22,610	0.37%	$1,190	0.54%
Roads - 10 year Engineering Plan - 50%	$3,470	0.06%	$3,470	1.56%
Sanitary Survey	$6,600	0.11%	$2,200	0.99%
Source Flow Meters - Replace	$4,620	0.08%	$420	0.19%
Storage Reservoirs - Dive Inspection	$7,290	0.12%	$810	0.36%
Storage Tank #1 - Coat Exterior	$17,710	0.29%	$1,610	0.72%
Storage Tank #1 - Coat Interior	$69,300	1.14%	$6,300	2.84%
Storage Tank #1 - Replace	$471,750	7.78%	$9,250	4.16%
Storage Tank #2 - Coat Exterior	$42,735	0.70%	$3,885	1.75%
Storage Tank #2 - Coat Interior	$164,450	2.71%	$14,950	6.73%
Storage Tank #2 - Replace	$314,688	5.19%	$12,588	5.67%
Telemetry System: Replace	$21,280	0.35%	$760	0.34%
Trailer, Water: Replace	$4,620	0.08%	$660	0.30%
Truck, Water: Replace	$6,360	0.10%	$2,120	0.95%
Water Hammer Surge Tanks	$13,950	0.23%	$310	0.14%
Water System Plan - Update	$12,000	0.20%	$6,000	2.70%
Well # 1 - Replace	$2,013	0.03%	$2,013	0.91%
Well # 1 & 2, Control Systems: Replace	$35,200	0.58%	$1,600	0.72%
Well # 1, & #2 House, Electrical	$5,000	0.08%		
Well # 1, 2, House	$26,800	0.44%	$670	0.30%
Well # 1, Pump / Motor - Replace	$5,240	0.09%	$1,310	0.59%
Well # 2 - Replace	$2,013	0.03%	$2,013	0.91%
Well # 2, Pump / Motor - Replace	$3,940	0.06%	$1,970	0.89%
Well # 4 - Replace / Future Decommission	$2,013	0.03%	$2,013	0.91%
Well # 4, Control Systems: Replace	$21,120	0.35%	$960	0.43%
Well # 4, House	$11,463	0.19%	$328	0.15%
Well # 4, Pump / Motor - Replace	$12,250	0.20%	$2,450	1.10%
Well # 5 - Install Final Cost	$678,625	11.19%	$13,573	6.11%
Well # 5 - Replace	$2,013	0.03%	$2,013	0.91%
Well # 5, Control Systems: Replace	$0	0.00%	$960	0.43%
Well # 5, House	$0	0.00%	$1,288	0.58%
Current Fully Funded Balance	$6,063,288		$222,108	Per Year
Current Reserve Fund Deficit/Surplus	($4,860,897)		$18,509	Per Month

This table shows metric information regarding the influence each component has on the fully funded balance and contribution requirements.

3.3 Component Details

Mechanical & Equipment - Caustic Systems: Repair/Replace

Quantity: 2 Units
UL: 30
RUL: 8
Funding Basis: Funded based on prior reserve study
Current Cost: $26,900.00

Sodium Hydroxide systems installed in 2000.

Mechanical & Equipment - Cla-Val Valves: Repair/Replace

Quantity: 2 Each
UL: 7
RUL: 5
Funding Basis: Funded based on prior reserve study
Current Cost: $5,400.00

(2) Cla-Val flow control

Site/Grounds - Fence, Reservoir: Replace

Quantity: 500 Linear Feet
UL: 40
RUL: 16
Funding Basis: Funded based on the typical life expectancy
Current Cost: $14,000.00

Site/Grounds - Fence, Well Site: Replace

Quantity: 720 Linear Feet
UL: 40
RUL: 16
Current Cost: $20,200
Condition: Good
Funding Basis: Funded based on the typical life expectancy

Mechanical & Equipment - Generator & Controls, Well #1 & 2: Replace

Location: Well #1 & 2
Quantity: 1 Allowance
UL: 50
RUL: 42
Current Cost: $47,700
Funding Basis: Funded based on prior reserve study

Installed in 2014.

Mechanical & Equipment - Generator, Well #4: Replace

Quantity: 1 Allowance
UL: 50

		RUL:	24
Funding Basis:	Funded based on prior reserve study	Current Cost:	$52,300.00

100 kw Detroit Diesel installed in 1996.

Site/Grounds - Hydrant - Near Maintenance Bldg

Quantity:	1 Each	UL:	30
		RUL:	21
Funding Basis:	Funded based on prior reserve study	Current Cost:	$6,000.00

Site/Grounds - Leak Detection

Quantity:	1 Allowance	UL:	4
Condition:	Unknown	RUL:	3
Funding Basis:	Funded based on prior reserve study	Current Cost:	$9,270.00

Planned for 2021. Scheduled for a 4 year cycle. Was overdue, with last time done was in 2016.

Mechanical & Equipment - Project 10A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	7
Funding Basis:	Funded based on Association direction	Current Cost:	$41,600.00

Mechanical & Equipment - Project 10B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	8
Funding Basis:	Funded based on Association direction	Current Cost:	$208,000.00

Mechanical & Equipment - Project 11A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	7
Funding Basis:	Funded based on Association direction	Current Cost:	$72,900.00

Mechanical & Equipment - Project 11B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	8
Funding Basis:	Funded based on Association direction	Current Cost:	$364,000.00

Mechanical & Equipment - Project 12A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	8
Funding Basis:	Funded based on Association records	Current Cost:	$47,000.00

Mechanical & Equipment - Project 12B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	9
Funding Basis:	Funded based on Association direction	Current Cost:	$235,000.00

Mechanical & Equipment - Project 1A: Design - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	39
Funding Basis:	Funded based on Association records	Current Cost:	$66,400.00

Planned for 2021.

Mechanical & Equipment - Project 1B: Construction - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	0
Funding Basis:	Funded based on Association records	Current Cost:	$332,000.00

Planned for 2022.

Mechanical & Equipment - Project 2A: Design - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	0
Funding Basis:	Funded based on prior reserve study	Current Cost:	$87,400.00

Planned for 2022

Mechanical & Equipment - Project 2B: Construction - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	1
Funding Basis:	Funded based on Association records	Current Cost:	$437,000.00

Planned for 2023

Mechanical & Equipment - Project 3A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	1
Funding Basis:	Funded based on Association records	Current Cost:	$47,200.00

Mechanical & Equipment - Project 3B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	2
Funding Basis:	Funded based on Association records	Current Cost:	$236,000.00

Mechanical & Equipment - Project 4A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
		RUL:	1
Funding Basis:	Funded based on Association records	Current Cost:	$59,600.00

Mechanical & Equipment - Project 4B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	2
Funding Basis:	Funded based on Association records	Current Cost:	$298,000.00

Mechanical & Equipment - Project 5A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	2
Funding Basis:	Funded based on Association records	Current Cost:	$33,600.00

Mechanical & Equipment - Project 5B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	3
Funding Basis:	Funded based on Association records	Current Cost:	$168,000.00

Mechanical & Equipment - Project 6A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	3
Funding Basis:	Funded based on Association records	Current Cost:	$89,800.00

Mechanical & Equipment - Project 6B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	4
Funding Basis:	Funded based on Association records	Current Cost:	$449,000.00

Mechanical & Equipment - Project 7A: Design - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	4
Funding Basis:	Funded based on Association records	Current Cost:	$43,200.00

Mechanical & Equipment - Project 7B: Construction - Service Lines, Meter, Culvert and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	5
Funding Basis:	Funded based on Association records	Current Cost:	$216,000.00

Mechanical & Equipment - Project 8A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	5
Funding Basis:	Funded based on Association direction	Current Cost:	$112,400.00

Mechanical & Equipment - Project 8B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	6
Funding Basis:	Funded based on Association records	Current Cost:	$562,000.00

Mechanical & Equipment - Project 9A: Design - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Not Applicable	RUL:	6
Funding Basis:	Funded based on Association direction	Current Cost:	$54,000.00

Mechanical & Equipment - Project 9B: Construction - Service Lines, Meter and Roadway Replacement

Quantity:	1 Allowance	UL:	40
Condition:	Assorted Condition	RUL:	7
Funding Basis:	Funded based on Association direction	Current Cost:	$270,000.00

Mechanical & Equipment - Reservoir #2 Ladder - Repaint

Quantity:	1 Each	UL:	10
		RUL:	5
Funding Basis:	Funded based on prior reserve study	Current Cost:	$13,000.00

Mechanical & Equipment - Reservoir Cathodic Protection 1

Quantity:	1 Each	UL:	20
		RUL:	11
Funding Basis:	Funded based on prior reserve study	Current Cost:	$16,700.00

Mechanical & Equipment - Reservoir Cathodic Protection 2

Quantity:	1 Allowance	UL:	20
		RUL:	1
Funding Basis:	Funded based on prior reserve study	Current Cost:	$23,800.00

Mechanical & Equipment - Roads - 10 year Engineering Plan - 50%

Quantity:	1 Allowance	UL:	10
Condition:	Not Applicable	RUL:	9
Funding Basis:	Funded based on Association direction	Current Cost:	$34,700.00

Planned completion in 2021. 10 year plan for Roads/Water System. 50% of cost in each of General and Water System Reserve Studies.

General - Sanitary Survey

Quantity:	1 Allowance	UL:	3
Condition:	Not Applicable	RUL:	0
Funding Basis:	Funded based on prior reserve study	Current Cost:	$6,600.00

State mandated survey.

Mechanical & Equipment - Source Flow Meters - Replace

Quantity:	4 Each	UL:	20
		RUL:	9
Funding Basis:	Funded based on prior reserve study	Current Cost:	$8,400.00

Last replaced in 2011

Mechanical & Equipment - Storage Reservoirs - Dive Inspection

Quantity:	1 Allowance	UL:	10
Condition:	Not Applicable	RUL:	1
Funding Basis:	Funded based on prior reserve study	Current Cost:	$8,100.00

Overdue. Previous cycle was 5 years. Last inspection and cleaning was 2010 then 2015. Scheduled for 2023.

Mechanical & Equipment - Storage Tank #1 - Coat Exterior

Quantity:	1 Each	UL:	20
		RUL:	9
Funding Basis:	Funded based on prior reserve study	Current Cost:	$32,200.00

Last done in 2011

Mechanical & Equipment - Storage Tank #1 - Coat Interior

Quantity:	1 Each	UL:	20
		RUL:	9
Funding Basis:	Funded based on prior reserve study	Current Cost:	$126,000.00

Last done in 2011.

Mechanical & Equipment - Storage Tank #1 - Replace

Quantity:	1 Each	UL:	80
Condition:	Unknown	RUL:	29
Funding Basis:	Funded based on prior reserve study	Current Cost:	$740,000.00

182,000 gallon steel installed in 1975

Mechanical & Equipment - Storage Tank #2 - Coat Exterior

Quantity:	1 Each	UL:	20

		RUL:	9
Funding Basis:	Funded based on Association direction	Current Cost:	$77,700.00

Last recoated in 2011.

Mechanical & Equipment - Storage Tank #2 - Coat Interior

Quantity:	1 Each	UL:	20
		RUL:	9
Funding Basis:	Funded based on prior reserve study	Current Cost:	$299,000.00

Last coated in 2011.

Mechanical & Equipment - Storage Tank #2 - Replace

Quantity:	1 Each	UL:	80
		RUL:	55
Funding Basis:	Funded based on prior reserve study	Current Cost:	$1,007,000.00

423,000 gallon steel installed in 1997.

Mechanical & Equipment - Telemetry System: Replace

Quantity:	1 Allowance	UL:	30
		RUL:	2
Funding Basis:	Funded based on prior reserve study	Current Cost:	$22,800.00

Mechanical & Equipment - Trailer, Water: Replace

Quantity:	1 Allowance	UL:	10
		RUL:	3
Funding Basis:	Funded based on prior reserve study	Current Cost:	$6,600.00

Mechanical & Equipment - Truck, Water: Replace

Quantity:	1 Allowance	UL:	10
		RUL:	7
Funding Basis:	Funded based on prior reserve study	Current Cost:	$21,200.00

1993 Ford Ranger purchased used in 2005.

Mechanical & Equipment - Water Hammer Surge Tanks

Quantity: 1 Each

UL: 50

RUL: 5

Current Cost: $15,500

Condition: Functional

Funding Basis: Funded based on Association direction

General - Water System Plan - Update

Quantity: 1 Allowance

UL: 6

Condition: Not Applicable

RUL: 4

Funding Basis: Funded based on Association records

Current Cost: $36,000.00

Required every 6 years. Previously updated in 2005 & 2011. Presumed to have been updated in 2017.

Mechanical & Equipment - Well # 1 - Replace

Quantity: 3 Allowance

UL: 80

RUL: 79

Current Cost: $161,000

Condition: Functional

Funding Basis: Funded based on Association direction

8" steel, 60' depth

Mechanical & Equipment - Well # 1 & 2, Control Systems: Replace

Quantity: 1 Allowance

UL: 25

RUL: 3

Funding Basis: Funded based on prior reserve study

Current Cost: $40,000.00

Installed around 2000.

Mechanical & Equipment - Well # 1, & #2 House, Electrical

Quantity: 1 Allowance

Condition: Unknown

RUL: 0

Funding Basis: Funded based on Association direction

Current Cost: $5,000.00

Placeholder pending scope of work and/or quotes.

Building Exterior - Well # 1, 2, House

Location: Division 1

Quantity: 3 Buildings

UL: 40

RUL: 0

Current Cost: $26,800

Funding Basis: Funded based on prior reserve study

Mechanical & Equipment - Well # 1, Pump / Motor - Replace

Quantity: 1 Each

Condition: Good

Funding Basis: Funded based on prior reserve study

UL: 10

RUL: 6

Current Cost: $13,100.00

7.5 hp submersible 4". Last replaced in 2005. Presumed to have been replaced in 2018.

Mechanical & Equipment - Well # 2 - Replace

Quantity: 1 Each

UL: 80

RUL: 79

Current Cost: $161,000

Condition: Good

Funding Basis: Funded based on Association direction

10" steel, 67' depth. Installed in 1975

Mechanical & Equipment - Well # 2, Pump / Motor - Replace

Quantity: 1 Each

Condition: Good

Funding Basis: Funded based on prior reserve study

UL: 10

RUL: 8

Current Cost: $19,700.00

30 hp submersible 6". Last replaced in 2020.

Mechanical & Equipment - Well # 4 - Replace / Future Decommission

Quantity: 1 Allowance

Condition: Functional

Funding Basis: Funded based on prior reserve study

UL: 80

RUL: 79

Current Cost: $161,000.00

12" steel, 45' depth. Installed in 2001.

Mechanical & Equipment - Well # 4, Control Systems: Replace

Quantity: 1 Allowance

UL: 25

RUL: 3

Funding Basis:	Funded based on prior reserve study	Current Cost:	$24,000.00

Installed around 2000.

Building Exterior - Well # 4, House

Quantity:	2 Buildings	UL:	40
		RUL:	5
Funding Basis:	Funded based on prior reserve study	Current Cost:	$13,100.00

Mechanical & Equipment - Well # 4, Pump / Motor - Replace

Quantity:	3 Each	UL:	10
Condition:	Good	RUL:	5
Funding Basis:	Funded based on prior reserve study	Current Cost:	$24,500.00

25 hp submersible 6"

Mechanical & Equipment - Well # 5 - Install Final Cost

Quantity:	1 Allowance	UL:	50
Condition:	Unknown	RUL:	0
Funding Basis:	Funded based on prior reserve study	Current Cost:	$678,625.00

Multi-year project started in 2018. $20,000 planned to be spent in 2021 with the remainder in 2022.

Mechanical & Equipment - Well # 5 - Replace

Quantity:	1 Allowance	UL:	80
Condition:	Excellent	RUL:	79
Funding Basis:	Funded based on prior reserve study	Current Cost:	$161,000.00

8" diameter to unknown depth.

Mechanical & Equipment - Well # 5, Control Systems: Replace

Quantity:	1 Allowance	UL:	25
		RUL:	25
Funding Basis:	Funded based on prior reserve study	Current Cost:	$24,000.00

To be installed in 2022.

Building Exterior - Well # 5, House

Quantity:	2 Buildings	UL:	40
		RUL:	40
Funding Basis:	Funded based on prior reserve study	Current Cost:	$51,500.00

4. How to Read Your Reserve Study

This reserve study is an important planning tool that contains long-term common area replacement and financial recommendations for your Association. In order to accomplish this, we provide you with critical information that should be considered when evaluating the current health of your reserve fund, future maintenance, repair and replacement expenses and reserve contribution rates to include within the regular unit owner assessments. With the use of this reserve study your Association will be better prepared for present and future expenses.

We have worked to identify your common area assets, called **components**, which have maintenance or replacement expenses that can be anticipated. Our recommendations should help to minimize deferred maintenance and special assessments, as well as maximize your property value.

Having properly funded reserves enables the Association to keep the common area assets in good condition. When potential buyers consider which association to purchase a home in, the overall condition of the association and reserve fund may be considered. Having good financials, maintenance, and curb appeal, all work together to increase your property value.

We know that your needs are different from the needs of others. Therefore, we have created this report specifically for your Association. When possible, we have had discussions with the Association Board of Directors, vendors and professional management to provide recommendations that will help you meet your Association's goals and objectives.

4.1 About Reserve Studies

By definition a reserve study is a budget planning tool. It identifies the current status of the reserve fund with a stable and equitable funding plan, to offset the anticipated future major common area expenditures. Plainly, a reserve study is a long term plan that indicates how much money needs to be set aside to pay for future expenses. The reserve study consists of two parts: the physical analysis and financial analysis.

The **physical analysis** identifies which components are appropriate for reserve funding and the current physical condition assessment of each asset; then indicates the life expectancy or useful life of the component as well as the life remaining or remaining useful life of each component. The physical analysis is concluded with the current cost to replace each component. The physical analysis information is used within the financial analysis. Therefore, it generally contains many recommendations and justifications regarding component repair, maintenance and replacement recommendations as well as cost and life cycles.

The **financial analysis** includes two results. First, it reveals the health of the reserve fund. This is completed by determining the current status of the reserve fund known as percent funded. The second result is the reserve contribution recommendation. Using the information contained within the physical analysis, the future expected expenses are analyzed and reviewed. Then multi-year funding plans are developed to meet various funding goals. The reserve contributions required to meet the funding goal desired is then presented and recommended to the Association.

4.2 Reserve Study Levels

- **Level I:** Full Reserve Study Funding Analysis and Plan. This is the most labor intensive reserve study, as it includes both a physical and financial analysis. The component inventory list and current component condition assessments with life and valuation estimates are determined from an on-site visual inspection. This information is used to conduct the financial analysis, which includes the current fund status and a recommended funding plan. A "Full Reserve Study" is recommended when a previous reserve study is not available, a substantial time has elapsed since the last study (7-10

years), or there are concerns with an existing reserve study's component inventory or measurements.

- **Level II:** Update with Visual Site Inspection. This report updates both the physical analysis and financial analysis of an existing report. An on-site visual inspection is conducted to verify and/or make adjustments to the existing component list, condition assessments, useful life and component valuation estimates. The financial analysis is also updated, including the current fund status and recommended funding plan. A level II report is recommended at least every three years, before and after major projects and as required by state law.
- **Level III:** Update with No Visual Site Inspection. This report updates the financial analysis of an existing reserve study only. No on-site visual inspection is completed. An existing fund status and funding plan is updated using research conducted with board members, vendors, association managers and information contained within a prior reserve study. A level III report is recommended to review, adjust and verify that the existing funding plan is accurate and suitable for current economic conditions. A level III report is recommended at least annually.

4.3 Percent Funded

Percent funded is a way to measure the strength of the reserve fund. The Community Associations Institute (CAI) defines "Percent Funded" as "the ratio, at a particular point of time, of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage." The **fully funded balance** is the total accrued depreciation or deterioration of the component(s). This balance is the cost of how much life has been used up. The fully funded balance is then used as an indicator against which the actual (or projected) reserve fund balance can be compared; known as percent funded.

For example, if an association were to replace interior carpeting in 10 years at an expense of $10,000; then each year the cost of deterioration is 1/10th of the replacement cost. Therefore, each year $1,000 of cost is accrued. In year 2, the fully funded balance would be $2,000. In year 5, the cost of existing deterioration is $5,000, and so on. To determine the percent funded, the FFB is compared to the reserve fund balance. To continue the above example, the association has $2,000 in their reserve fund in year 2. The total accrued deterioration or FFB is $2,000, therefore they are 100% funded. The association has saved 100% of the accrued deterioration or fully funded balance. If they have set aside only $1,000, the association is 50% funded, having saved 50% of the existing deterioration or cost.

Using Percent Funded to Measure Strength

- **0-30% Funded is a "weak" status.** There is a lack of funds reserved toward the amount of accrued deterioration. Whenever an association has a weak status there is an increased possibility of requiring special assessments, loans or deferred maintenance.
- **31-69% Funded is a "fair" status.** There is a decreased chance of requiring special assessments or deferred maintenance, however, cash flow problems may very easily arise.
- **70-100% Funded is a "strong" status.** Associations in this range generally have financial stability. There are generally no cash flow issues, special assessments or deferred maintenance necessary.
- **100% Funded is known as "ideal."** The reserve fund balance equals the fully funded balance. This is "ideal" because funds are reserved as components are used. It is thought to be the most fair for members because they pay as they go, or they pay their share.

Use Caution When Using Percent Funded

Percent funded is a ratio and therefore does not convey the urgency that is often times required. There are two aspects that need to be considered when evaluating the urgency of the current situation, the time remaining before an expense is scheduled to occur, as well as the cost of the expense.

The first aspect that percent funded does not consider is the time remaining before the expense is to occur. Use the same carpet replacement example ($10,000 carpet expense to be saved over 10 years). If, in year 5 they have only saved $2,500 they are 50% funded (remember the total accrued deterioration or FFB would be $5,000). To have the capital required to complete the project as scheduled in year 10 for $10,000, they would need to save $1,500 each year for the next 5 years.

Changing the time frames, if in year 10 they have set aside $5,000, they would still be 50% funded (having saved 50% of the total accrued deterioration of $10,000). However, they now need to attain $5,000 of the required $10,000 expense immediately rather than over a period of time.

These examples show that the percent funded ratio lacks the urgency that each association may have in attaining the rest of the financing.

Percent funded also does not consider the cost of the expense. Using the same 10 year cycle, changing the cost of the required expense from $10,000 to a $30,000 paint project, in year 5 the association is 50% funded by having set aside $15,000. In this case, they must save $3,000 each year, not $1,500. If in year 10, they are 50% funded, they would need to save $15,000 not $5,000. Notice how the percent funded is the same, but the amount needed to meet the financial obligation is very different.

Percent funded is a very useful ratio, however, it must be placed in context. Remember to evaluate not only the percent funded but also the cash balance and size of the upcoming expenditures as well.

4.4 Reserve Funding Plans & Goals

To determine the contribution rate to the reserve fund, the association needs to determine their reserve fund goal. This may be based on a number of objectives and analysis' corresponding to the reserve fund. There are three different funding goals associations may choose based on their risk tolerance:

- **Baseline Funding Goal** – This sets the reserve contribution amount as low as possible without the reserve fund dropping below a zero balance. This is the most risky method with the least contributed to the reserve fund. If an expense arrives early, or unexpected, there is a significant chance of needing a special assessment or loan.
- **Threshold Funding Goal** - The goal of Threshold Funding is to set the reserve contribution amount to meet a specified goal. Common goals to achieve and maintain are 70 Percent Funded, to maintain a cash-balance of 15% of the prior year's expenses, or to maintain a minimum cash-balance of the prior year's reserve contribution amount.
- **Full Funding Goal** – Sets the goal at being fully funded. This plan sets the reserve contribution amount to achieve a fully funded balance. Fully funded is achieved when the percent funded is 100%. It requires the largest contribution to the reserve fund of the three goals, but is also the least risky.

4.5 Reserve Contributions

There are three ways to contribute to your Reserve Account:

- **Regular Contributions:** If adequate regular contributions are not established the reserve fund will eventually be underfunded. An underfunded reserve account leads to deferred maintenance and potentially extensive repair. As already mentioned, the effects of deferred maintenance and extensive repair are significantly more than routine or preventative maintenance. Additionally, it is the most fair and equitable to the association members. If reserve contributions are not set properly, whether too high or low, the individuals who use the asset will not be paying for it. If the contributions are set too high, current owners are paying for what future owners should pay for.

Likewise, when contributions are set too low, future owners will pay for what current owners should have paid for. Having properly set reserve contributions is the most fair for everyone involved.

- **Special Assessments:** If the reserve fund is underfunded at the time an expense is required, the association is forced to hold a special assessment. Most often, this occurs when deferred maintenance catches up and the association is forced to deal with it. It is better to have a small monthly increase now rather than a very large and unexpected increase later.
- **Loans:** If the association members do not have the finances to contribute to a special assessment or the required repairs are too extensive and costly for a special assessment, a loan may be required. This not only requires a monthly increase in dues, but members are then paying for past as well as future expenses, rather than just future expenses. The future still needs to be anticipated and saved for.

4.6 Reserve Components

The components of a reserve study have significant impact on the accuracy of the report. If items are improperly included or excluded from the reserve study, then the projected expenses and subsequent required reserve contributions will likewise be affected. Before a component is included within the reserve study, it is evaluated and qualified using a nationally recognized four-part test:

- **Common Area:** The component must be association responsibility; limited common areas may be included.
- **Limited Useful Life:** The life of the component must be limited.
- **Predictable Life:** The limited life must be predictable.
- **Minimum Threshold Cost:** Generally greater than 1% of the annual operating budget or $1,000 whichever is greater.

Repairs or replacements of components that are predicted to have an estimated remaining useful life exceeding this 30-year report period are generally not included. Items that are below the minimum threshold cost, or reoccur annually are generally included within the annual operating budget. Expenses that are necessitated by acts of nature, accidents or other occurrences that are more properly insured for, rather than reserved for, are also excluded.

Maintaining Components

There are three ways to manage capital reserve expenses:

- **Preventative Maintenance:** This is the most effective way to extend the useful life of components and save money in the long run, as it is a proactive maintaining of components. The cost of maintaining the condition and quality of a component is much less than repair or replacing the component to bring it back to a usable condition and may also prolong the life expectancy of an asset.
- **Deferred Maintenance:** This is deferring routine maintenance rather than completing maintenance as recommended. A common household example of this is deferring the oil changes in a vehicle. Deferred maintenance is likely the first indication of, and results in, having inadequate reserve funds. While in the short run the association is contributing less money, the effects of deferring maintenance and the costs associated with it are far greater than the cost of preventative maintenance.
- **Extensive Repair or Replacement:** This is when a component needs to have significant repair(s) completed or even replacement prior than anticipated. While not always, this is generally a result of deferred maintenance. The cost of significant repair or advanced replacement is not only expensive, it also decreases association morale through poor association management, poor curb appeal and out of commission assets.

4.7 Implementing Your Reserve Study

- **Step 1 - Understand:** The board of directors has the responsibility to lead the association, therefore, the first step is for the board to hold a meeting. This meeting should discuss the results of the reserve study in order for the Board to better understand the current position of the association and the upcoming reserve requirements of the association.
- **Step 2 - Plan:** The board should then create a plan to determine how best to manage the association's common area assets and financial position. Using this reserve study as a guide, the board should make the adjustments required to meet the needs of the association and its members. This includes setting the reserve contribution amount.
- **Step 3 - Communicate:** After the board has determined the best course of action, the plan needs to be communicated to the association members. This can be accomplished through the distribution of the results of this reserve study and/or through association meetings. This allows them to ask questions and understand the direction the association will be heading.
- **Step 4 - Update and Adjust:** Reserve studies are a one-year document, and need to be updated and adjusted annually. We recommend additional collaboration with specialized professionals to provide the expertise and adjustments to this reserve study. Additionally, we recommend the board review and make minor adjustments of this plan before and after reserve projects throughout the year.

5. Supplemental Report Information

5.1 Definitions

COMPONENT: The individual line items in the Reserve Study developed or updated in the Physical Analysis. These elements form the building blocks for the Reserve Study. Components are defined as being:

1. Association responsibility
2. Having a limited Useful Life expectancy
3. Predictable Remaining Useful Life expectancies
4. Above a minimum threshold cost
5. As required by law

DEFICIT/SURPLUS: The Reserve Balance less the Fully Funded Balance.

FULLY FUNDED BALANCE (FFB): Equivalent to Total Accrued Depreciation. This represents the deteriorated or used portion of the component. This is calculated for each component, then summed together for a total FFB.
FFB = Current Cost X Effective Age / Useful Life

PERCENT FUNDED: The ratio at a particular point of time of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

PROJECTED RESERVE BALANCE: The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared. This is based upon information provided and not audited.

REMAINING USEFUL LIFE (RUL): The estimated time, in years, that a reserve component can be expected to continue to serve its intended function.

REPLACEMENT COST: The cost of replacing, repairing, or restoring a Reserve Component to its original functional condition. The Current Replacement Cost would be the cost to replace, repair, or restore the component during that particular year.

USEFUL LIFE (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

5.2 Table 4 - RCW Required Information & Location

RCW Required Information	Report Location
(a) A reserve component list, including any reserve component that would cost more than one percent of the annual budget of the association, not including the reserve account, for major maintenance, repair, or replacement. If one of these reserve components is not included in the reserve study, the study should provide commentary explaining the basis for its exclusion. The study must also include quantities and estimates for the useful life of each reserve component, remaining useful life of each reserve component, and current major maintenance, repair, or replacement cost for each reserve component;	Table 1 Table 4
(b) The date of the study and a statement that the study meets the requirements of this section;	Disclosure Page
(c) The level of reserve study performed:	Cover Page
(d) The association's reserve account balance;	Executive Summary
(e) The percentage of the fully funded balance that the reserve account is funded;	Executive Summary Financial Summary
(f) Special assessments already implemented or planned;	Executive Summary Financial Summary
(g) Interest and inflation assumptions;	Executive Summary Financial Summary
(h) Current reserve account contribution rate;	Executive Summary Financial Summary
(i) Recommended reserve account contribution rate; a contribution rate for a full funding plan to achieve one hundred percent fully funded reserves by the end of the thirty-year study period, a baseline funding plan to maintain the reserve balance above zero throughout the thirty-year study period without special assessments, and a contribution rate recommended by the reserve study professional;	Executive Summary Financial Summary
(j) Projected reserve account balance for thirty years and a funding plan to pay for projected costs from those reserves without reliance on future unplanned special assessments;	Spread Sheet of Reserve Expenses
(k) Whether the reserve study was prepared with the assistance of a reserve study professional.	Executive Summary
(3) A reserve study shall include the following disclosure: "This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component."	Disclosure Page

5.3 Reserve Study Disclosure

This document is the sole opinion of CEDCORE, LLC and has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of CEDCORE. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialists and independent contractors. The site visit is a limited scope visual observation of the surface condition of identified and exposed components. Hidden systems including but not limited to mechanical, electrical, structural, plumbing, storm water, sewer, water supply, foundations, etc. are beyond the scope of a reserve study. No destructive testing was undertaken, nor does this study purport to address any latent and/or patent defects or life expectancies which are abnormally short due to either improper design and/or installation or due to subsequent improper maintenance. It is assumed that all components are to be reasonably maintained for the remainder of their life expectancy.

Various construction pricing and scheduling manuals may be used as well as costs and life expectancies obtained from numerous vendors, vendor catalogues, actual quotations or historical costs, and our own experience in the field of Reserve Study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated Useful Life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your Reserve Study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the useful life and cost of many of the assets under consideration.

This Reserve Study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described. Additionally, other unanticipated expenses may arise that are not included within this reserve study. This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.
This Reserve Study was prepared by or under the direct supervision of a Reserve Study Professional following National Reserve Study Standards and complies with RCW 64.34.382 and 64.90.550. The Reserve Study Professional is independent from the Association, and has no other involvement with the Association which would result in actual or perceived conflicts of interest. This Reserve Study needs to be updated annually as well as when any new material information is obtained.

P.O. Box 1208
Spanaway, WA 98387
253-292-2125
www.cedcore.com