

**Executive Summary
Wateredge Estates Homeowners Association
Reserve Study 2023**

The Wateredge Estates Homeowners Association (WEHOA) conducted a Reserve Study in the summer of 2023 in compliance with guidance published in 2019 by the Commonwealth of Virginia. The study was conducted in two parts: 1) Physical Analysis, and 2) Financial Analysis.

The Physical Analysis identified capital components that the association is obligated to maintain, repair, or replace. These components consist of 5 polyvinyl fences, 2 wood signs, and stone walls. The study estimated the remaining life, replacement cost, and refurbish cost for all components as summarized in the table below.

Component	Date Installed	Original Cost	Refurbish Cost	Age (years)	Expected Remaining		Replacement Cost
					Life (years)	Life (years)	
Polyvinyl Fences	9/1/2000	\$3,502	\$1,600	23	30 - 100	7 - 93	\$16,500
Sign - Abel Dr.	7/1/2017	\$3,851	\$3,000	6	5	3	\$9,000
Sign - Mintleaf St.	7/1/2017	\$1,283	\$1,000	6	5	3	\$4,735
Stone Walls	1990	Unknown	\$3,410	32	25	12	\$26,000

Table 1. Physical Analysis Summary

The Financial Analysis examined our recent fiscal records and projected the end of year balance for FY 2023, as summarized below.

Year	End Year Total Balance	Total Expenses	Total Income	Dues Per Lot
2019	\$13,699	\$3,337	\$5,600	\$100
2020	\$10,831	\$8,619	\$5,750	\$100
2021	\$10,815	\$6,223	\$6,206	\$110
2022	\$11,398	\$7,867	\$8,451	\$150
2023*	\$4,448	\$16,295	\$9,345	\$165

Table 2. Fiscal Summary 2019-2023

Using the Physical Analysis and projected FY2023 budget data, the Financial Analysis examined projected funding requirements and revenue from dues over a 24-year period from 2024 through 2047 using a deterministic cash-flow spreadsheet model, assuming an average annual inflation rate of 3%. The study analyzed 5 funding options across 2 scenarios to account for uncertainty and gain additional insights.

The scenarios examined are:

- A. Replace All (Worst Case) – replace all components at end of remaining life
- B. Repair or Replace (Best Case) – repair walls and fences as needed; replace signs at the end of remaining life

The main difference between the two cases is that Scenario A assumes that no component is repairable meaning that all must be replaced. Over a 24-year period, Scenario A (Replace All) requires \$168,321 of reserve fund expenditures. Scenario B (Repair or Replace) over the same period requires \$77,264, only 45.9% of the Scenario A expenditures.

The five funding options that were analyzed in detail are:

- 1. Fix Dues at \$165 each year
- 2. Increase Dues 10% each year
- 3. Tailored Option to illustrate one feasible option
- 4. Board Directed Option – add \$135 Assessment in 2024
- 5. Board Directed Option – add \$ 65 Assessment in 2027

Results

Option 1 (Fix dues @ \$165) was not a feasible option in either scenario. The Reserve Fund quickly goes negative in 2026 and operating expenses exceed revenues by 2027 due to inflation.

Option 2 (Increase dues 10% per year) was closer to being feasible, but there are insufficient funds available to relace the signs in 2026 at the end of their remaining life. After several years, this option vastly increased annual dues, generating excessive revenue that were unnecessary.

Option 3 (Tailored Option), which was designed to address the problems and shortfalls of Option 2, increases dues 10% only when necessary and delays replacing the signs by two years until 2028.

Option 4 (\$135 Assessment in 2024) is similar to Option 3, but it provides sufficient funding to replace the signs in 2026 at the end of their estimated remaining life.

Option 5 (\$65 Assessment in 2027) is also similar to Options 3 & 4, but provides additional funding to replace the signs in 2027, a one-year delay.

Insights

- Consider gradually raising dues 10% a year for the next 5 years, reaching annual dues of \$266 in 2028 (an increase of ~\$100 spread over 5 years).
- Options for replacing signs in 2026 (end of estimated remaining life):
 - Assessment of \$135 in 2024 (or any year up through 2026),
 - Assessment of \$65 in 2027, delaying replacement by 1 year, or
 - Delaying replacement by 2 years.
- Need to fully reassess components and finances in 2028 by conducting another full Reserve Study