

REPLACEMENT RESERVE REPORT FY 2010

ANNA COVES PROPERTY OWNERS ASSOCIATION



Prepared for:

Anna Coves POA

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REPLACEMENT RESERVE REPORT

ANNA COVES PROPERTY OWNERS ASSOCIATION

MINERAL, VIRGINIA

REVISED JUNE 2, 2010



Scope. Anna Coves is a home owners association located in Mineral, Virginia. Anna Coves was constructed beginning in the early 80's. The community consists of 115 lots for single family homes. The survey examined the common elements of the property, including:

- Entrance monuments.
- Gravel drive.
- Boat ramp, boat launch dock, and boat dock.
- Sand beach.
- Open sided picnic shelter.

Level of Service. This study has been performed as a Level I, Full Service Reserve Study as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, a complete component inventory was established based on information regarding commonly-owned components provided by the community manager and upon quantities derived from field measurement and/or quantity takeoffs from to-scale engineering drawings. The condition of all commonly-owned components was ascertained from a site visit and the visual inspection of each component by the Analyst. The life expectancy and the value of the components are provided based in part on these observations. The fund status and funding plan have been derived from analysis of this data.

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Replacement Reserve Analysis

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Purpose. The purpose of this Replacement Reserve Study is to provide Anna Coves (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Association.** Section B Replacement Reserve Inventory lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.
- **Condition of Items Owned by the Association.** Section B Replacement Reserve Inventory includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C Calendar of Projected Annual Replacements provides a year-by-year listing of the projected replacements. Section D Condition Assessment provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this Study.
- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Section A Replacement Reserve Analysis includes graphic and tabular presentations of these methods and current Association funding. An Executive Summary of these calculations is provided on Page A1.

Basis. The data contained in this Replacement Reserve Study is based upon the following:

- The Request for Proposal submitted and executed by the Association.
- Our visual evaluation and measurements on May 14, 2010. Miller - Dodson Associates has visually inspected the common elements of the property in order to ascertain the remaining useful life and the replacement costs of these components.

Engineering Drawings. No architectural drawings or engineering site plans were available for review in connection with this study. We recommend the Association assemble a library of site and building plans of the entire community. Reproducible drawings should be stored and kept in a secure fireproof location. The Association will find these drawings to be a valuable resource in planning and executing future projects.

Current Funding. This reserve study has been prepared for Fiscal Year 2010 covering the period from January 1, 2010 to December 31, 2010. The Replacement Reserves on deposit as of January 1, 2010 are reported to be \$11,841.26. The planned contribution for the fiscal year is \$8,325.00.

The balance and contribution figures have been supplied by the property management agent and confirmation or audit of these figures is beyond the scope of the study. For the purposes of this study, it is assumed that the annual contribution will be deposited at the end of each month.

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of Mr. Michael Austin. He provided very helpful insight into the current operations at the property.

Analyst's Credentials. Mr. Eric D. Kinder holds a Bachelor of Architecture from Virginia Tech. Mr. Kinder has been a Registered Professional Architect in the Commonwealth of Virginia since 1996. Since 2002, Mr. Kinder has provided commercial and residential architectural services in the Richmond area

through the firm of Eric D. Kinder Architect. He is currently a Reserve Analyst for Miller - Dodson Associates, Inc.

Respectfully submitted,
MILLER - DODSON ASSOCIATES, INC.

Eric D. Kinder
Reserve Analyst

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EXECUTIVE SUMMARY

The Anna Coves POA Replacement Reserve Inventory identifies 21 Projected Replacements for funding from Replacement Reserves, with an estimated one-time replacement cost of \$105,388.

The Replacement Reserve Analysis calculates recommended funding of Replacement Reserves by the two generally accepted methods, the Cash Flow Method and the Component Method. The Analysis also evaluates current funding of Replacement Reserves, as reported by the Association. The calculations and evaluation are summarized below:

\$14,535 CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2010.

\$10.53 Per unit (average), minimum monthly funding of Replacement Reserves

The Cash Flow Method (CFM) calculates Minimum Annual Funding of Replacement Reserves that will fund Projected Replacements identified in the Replacement Reserve Inventory from a common pool of Replacement Reserves and prevent Replacement Reserves from dropping below a Minimum Recommended Balance.

CFM - Minimum Annual Funding remains the same between peaks in cumulative expenditures called Peak Years.

The first Peak Year occurs in 2013 and the CFM - Minimum Annual Funding of Replacement Reserves in 2014 declines to \$5,418 (\$3.93 per unit, per month), after the completion of \$64,710 of replacements in 2010 to 2013.

After 2013 the CFM - Minimum Annual Funding remains constant for the remainder of the Study Period.

\$17,287 COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2010.

\$12.53 Per unit (average), recommended monthly funding of Replacement Reserves

The Component Method is a time tested and very conservative funding model developed by HUD in the early 1980's.

The Component Method treats each projected replacement in the Replacement Reserve Inventory as a separate account. Deposits are made to each individual account, where funds are held for exclusive use by that item.

Based on this funding model, the Association has a Current Funding Objective of \$63,891.

The Association reports having \$11,841 on deposit, which is 18.5% funded.

\$8,325 CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES (as reported by the Association).

\$6.03 Per unit (average), reported current monthly funding of Replacement Reserves

The evaluation of Current Funding, as reported by the Association, has calculated that if the Association continues to fund Replacement Reserves at the current level, there will NOT be adequate funds for Projected Replacements in 4 years of the 30-year Study Period, and a maximum shortfall of \$-19,569 occurs in 2013.

Pages A2 and A3 explain the Study Year, Study Period, Adjustments (interest & inflation), Beginning Balance, and Projected Replacements. Pages A4 to A9 explain in more detail the calculations associated with the Cash Flow Method, Component Method, and Current Funding.

REPLACEMENT RESERVE STATUS AND FUNDING PLAN

Current funding of Replacement Reserves is inadequate to fund Projected Replacements.

We recommend the Association adopt a Replacement Reserve Funding Plan based on the Cash Flow Method or the Component Method, to ensure that adequate funding is available throughout the 30-Year Study Period for the \$152,935 of Projected Replacements listed in the Anna Coves POA Replacement Reserve Inventory.

The Funding Plan should be professionally evaluated every three to five years or after completion of each major replacement project. The Board of Directors has a fiduciary responsibility to review the Funding Plan annually and should consider annual increases in Replacement Reserve funding at least equal to the Consumer Price Index.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Anna Coves POA Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method and the Component Method, and the evaluation of the Current Funding, are based upon the same General Information; including the Study Year, Study Period, Adjustments (for interest, inflation, and/or a constant increase in annual funding), Beginning Balance, and Projected Replacements:

STUDY YEAR

The Association reports that their accounting year begins on January 1, and the Study Year, the first year evaluated by the Replacement Reserve Analysis, begins on January 1, 2010.

STUDY PERIOD

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 30-year Study Period that begins on January 1, 2010.

ADJUSTMENTS

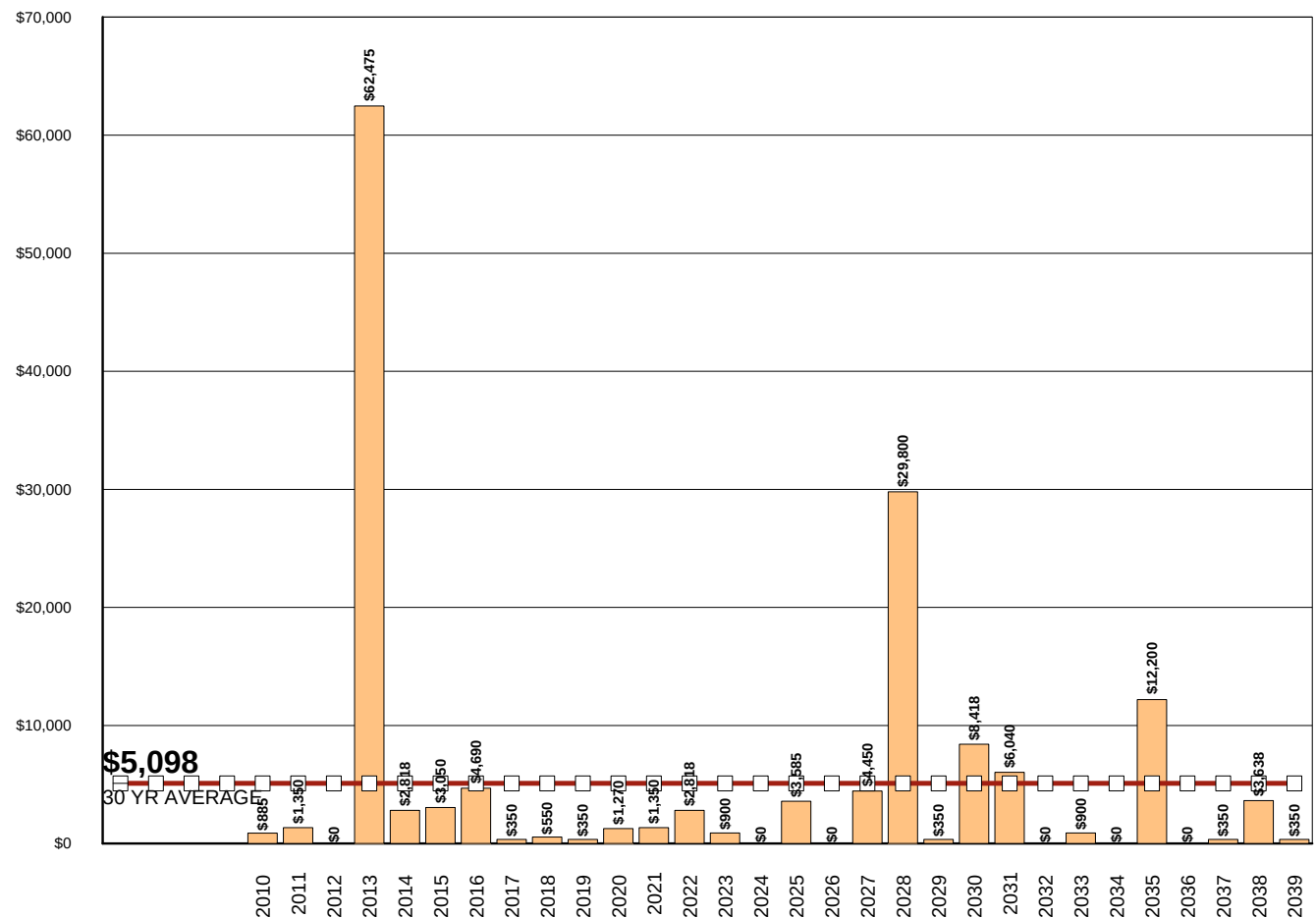
The calculations in this Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation on the costs of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves. If requested, we will provide a Replacement Reserve Analysis with adjustments for inflation, interest, and/or a constant annual increase in funding, using values provided by the Association.

BEGINNING BALANCE

The Association reports Replacement Reserves on Deposit totaling \$11,841 at the start of the Study Year.

Graph #1. Annual Expenditures for Projected Replacements

This bar graph summarizes annual expenditures for the \$152,935 of Projected Replacements identified in the Replacement Reserve Inventory over the 30-year Study Period. The red line shows the average annual expenditure of \$5,098.



PROJECTED REPLACEMENTS

The Anna Coves POA Replacement Reserve Inventory (Section B) identifies 21 Projected Replacements with a one-time Replacement Cost of \$105,388 and replacements totaling \$152,935 over the 30-year Study Period. Projected Replacements are the replacement of commonly-owned items that:

- require periodic replacement and
- whose replacement is to be funded from Replacement Reserves.

The Replacement Reserve Inventory also identifies 14 Excluded Items. Expenditures for the replacement of these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The rationale behind these exclusions is discussed in detail on Page B1.

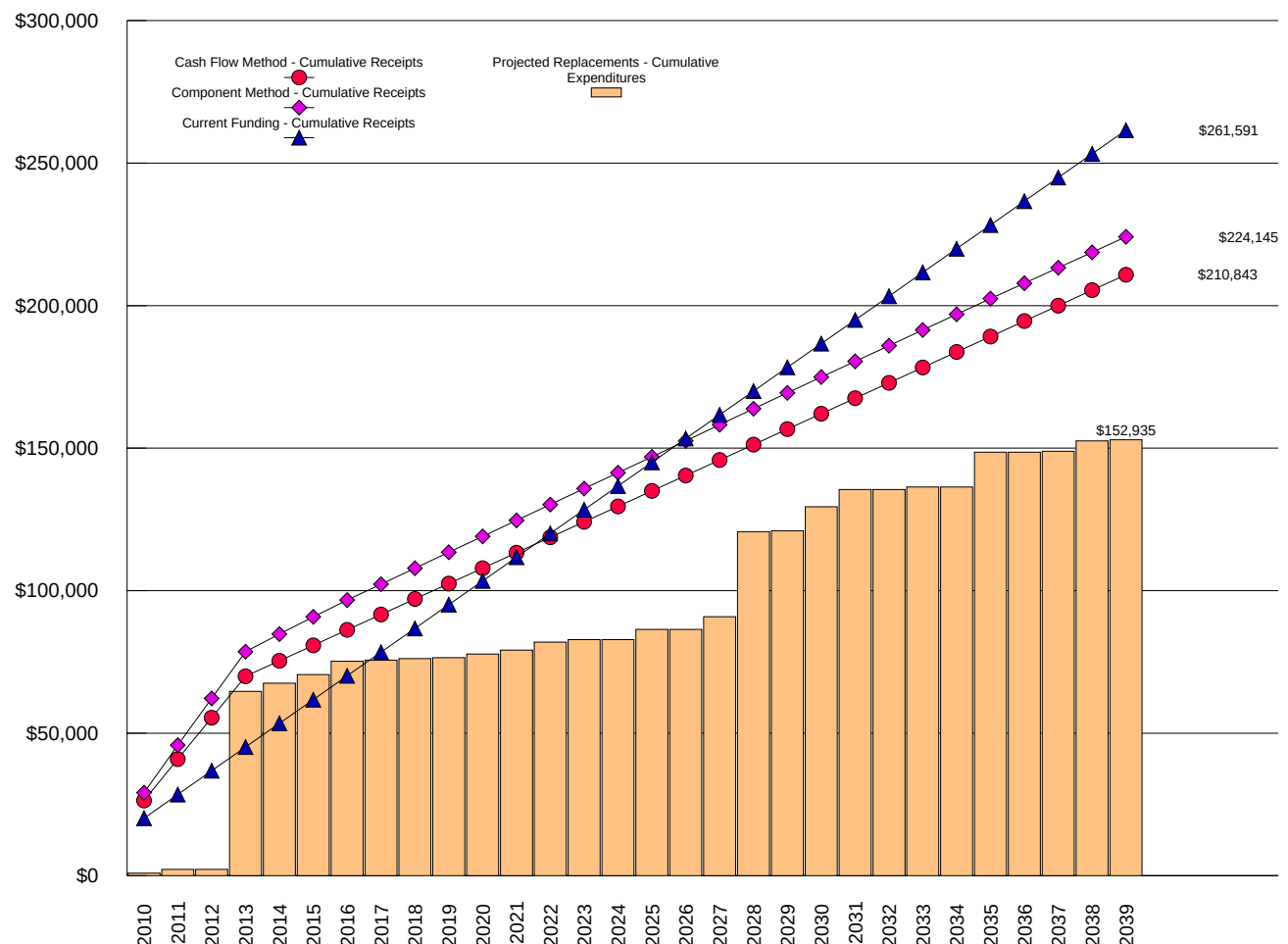
Expenditures from Replacements Reserves should be made only after consultation with an accounting professional.

The Section B - Replacement Reserve Inventory, contains Tables that list each Projected Replacement (and any Excluded Items) broken down into 8 major categories (Pages B3 to B9). Tables are also included that list each Projected Replacement by year for each of the 30 years of the Study Period beginning on Page C1.

The accuracy of this Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made only for the Projected Replacements specifically listed in the Replacement Reserve Inventory.

Graph #2. Comparison of Cumulative Replacement Reserve Funding and Expenditures

The line graph shows Replacement Reserves - Cumulative Receipts over the 30-year Study Period by the Cash Flow Method (red circles), Component Method (purple diamonds), and the Current Funding Plan as reported by the Association (blue triangles). The bar graph shows the Cumulative Expenditures necessary to fund the Project Replacements listed in the Replacement Reserve Inventory (Section B) and summarized in Graph #1.



CASH FLOW METHOD

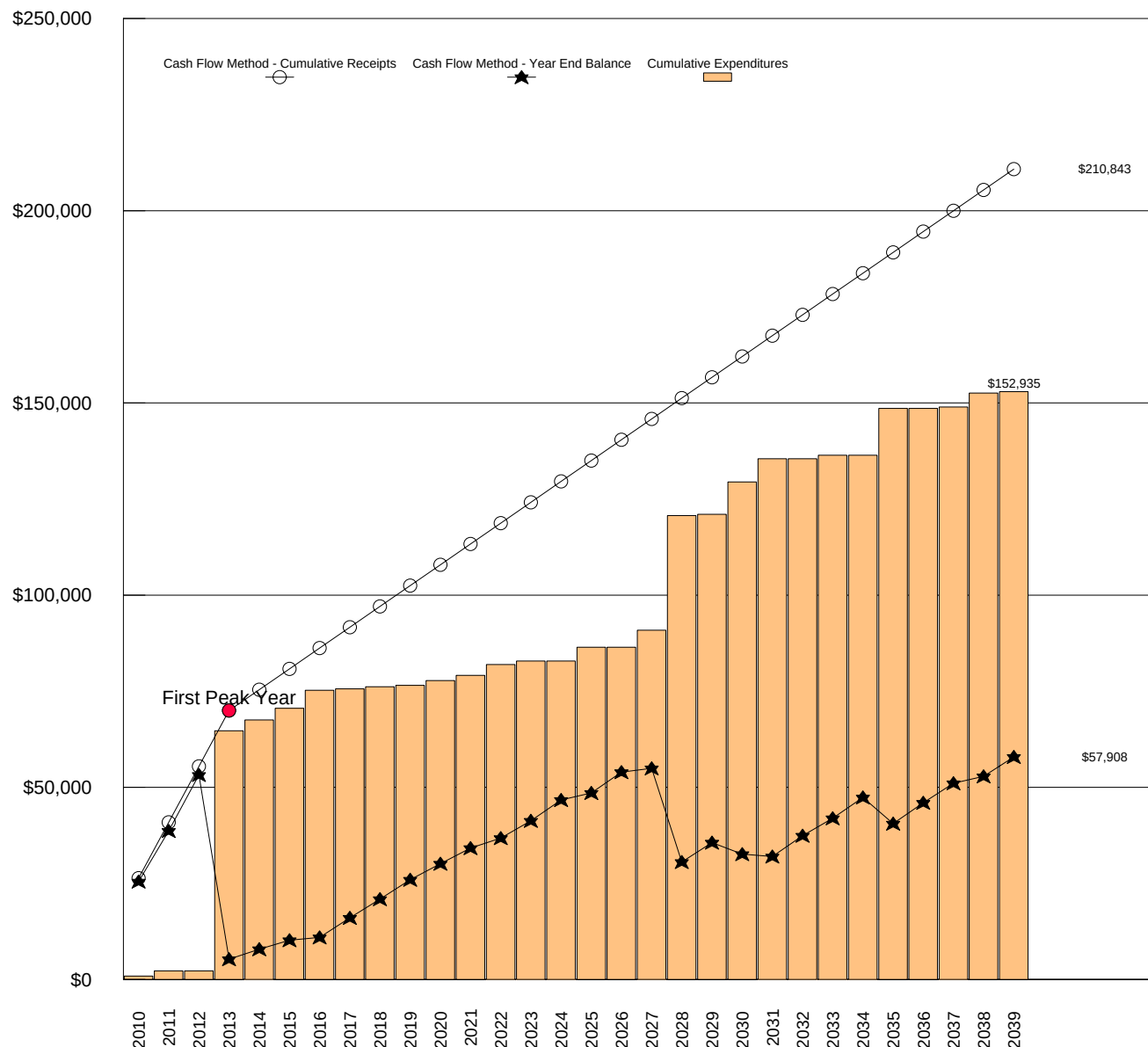
\$14,535 CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2010.

\$10.53 Per unit (average), minimum monthly funding of Replacement Reserves

General. The Cash Flow Method is founded on the concept that the Replacement Reserve Account is solvent if cumulative receipts always exceed cumulative expenses. The Cash Flow Method calculates a MINIMUM annual deposit to Replacement Reserves that will:

- Fund all Projected Replacements listed in the Replacement Reserve Inventory (see Section B)
- Prevent Replacement Reserves from dropping below the Minimum Recommended Balance (see Page A-5)
- Allow a constant annual funding level between peaks in cumulative expenditures

Graph #3. Cash Flow Method - Cumulative Receipts and Expenditures Graph



CASH FLOW METHOD (cont'd)

- Replacement Reserves - Minimum Recommended Balance. The Minimum Recommended Balance is \$5,269, which is 5.0 percent of the one-time replacement cost of the Projected Replacements listed in the Replacement Reserve Inventory. Unless otherwise noted in the Comments on Page A-9, the Minimum Recommended Balance has been established by the Analyst based upon an evaluation of the types of items included in the Replacement Reserve Inventory.
- Peak Years. The Cash Flow Method calculates a constant annual funding of Replacement Reserves between peaks in cumulative expenditures called Peak Years. In Peak Years, Replacement Reserves on Deposit decline to the Replacement Reserves - Minimum Recommended Balance discussed in the paragraph above.
First Peak Year. The First Peak Year occurs in 2013, after the completion of \$64,710 of replacements in 2010 to 2013. The Cash Flow Method - Minimum Annual Funding of Replacement Reserves declines from \$14,535 in 2013 to \$5,418 in 2014.
Subsequent Peak Years. There are no subsequent Peak Years and after the first Peak Year in 2013, the Cash Flow Method - Minimum Annual Funding remains constant for the remainder of the Study Period.
- Study Period. The Cash Flow Method calculates the recommended contributions to Replacement Reserves over the 30-year Study Period. These calculations are based upon a 40-year projection of expenditures for Projected Replacements to avoid the Replacement Reserve balance dropping to the Minimum Recommended Balance in the final year of the Study Period.
- Failure to Fund. The Cash Flow Method calculates a MINIMUM annual funding of Replacement Reserves. Failure to fund Replacement Reserves at the minimum level calculated by the Cash Flow Method will result in Replacement Reserves not being available for the Projected Replacements listed in the Replacement Reserve Inventory and/or Replacement Reserves dropping below the Minimum Recommended Balance.
- Adjustment to the Cash Flow Method for interest and inflation. The calculations in this Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.
- Comparison of Cash Flow Funding and Average Annual Expenditure. The Average Annual Expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is \$5,098 (see Graph #1). The Cash Flow Method - Minimum Annual Funding of Replacement Reserves in the Study Year is \$14,535. This is 285.1 percent of the Average Annual Expenditure, indicating that the Association is building Replacement Reserves in advance of the first Peak Year in 2013.

Table #1. Cash Flow Method Data - Years 1 through 30

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Starting balance	\$11,841									
Annual deposit	\$14,535	\$14,535	\$14,535	\$14,535	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418
Expenditures	\$885	\$1,350		\$62,475	\$2,818	\$3,050	\$4,690	\$350	\$550	\$350
Year end balance	\$25,491	\$38,675	\$53,210	\$5,269	\$7,870	\$10,238	\$10,965	\$16,033	\$20,901	\$25,969
Minimum rec. funding lvl.	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269
Cumulative expenditures	\$885	\$2,235	\$2,235	\$64,710	\$67,528	\$70,578	\$75,268	\$75,618	\$76,168	\$76,518
Cumulative receipts	\$26,376	\$40,910	\$55,445	\$69,979	\$75,397	\$80,815	\$86,233	\$91,651	\$97,069	\$102,486
First Peak Year										
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual deposit	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418
Expenditures	\$1,270	\$1,350	\$2,818	\$900		\$3,585		\$4,450	\$29,800	\$350
Year end balance	\$30,117	\$34,185	\$36,785	\$41,303	\$46,721	\$48,553	\$53,971	\$54,939	\$30,557	\$35,625
Minimum rec. funding lvl.	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269
Cumulative expenditures	\$77,788	\$79,138	\$81,955	\$82,855	\$82,855	\$86,440	\$86,440	\$90,890	\$120,690	\$121,040
Cumulative receipts	\$107,904	\$113,322	\$118,740	\$124,158	\$129,576	\$134,993	\$140,411	\$145,829	\$151,247	\$156,665
Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Annual deposit	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418	\$5,418
Expenditures	\$8,418	\$6,040		\$900		\$12,200		\$350	\$3,638	\$350
Year end balance	\$32,625	\$32,003	\$37,421	\$41,939	\$47,356	\$40,574	\$45,992	\$51,060	\$52,840	\$57,908
Minimum rec. funding lvl.	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269	\$5,269
Cumulative expenditures	\$129,458	\$135,498	\$135,498	\$136,398	\$136,398	\$148,598	\$148,598	\$148,948	\$152,585	\$152,935
Cumulative receipts	\$162,083	\$167,500	\$172,918	\$178,336	\$183,754	\$189,172	\$194,590	\$200,007	\$205,425	\$210,843

COMPONENT METHOD

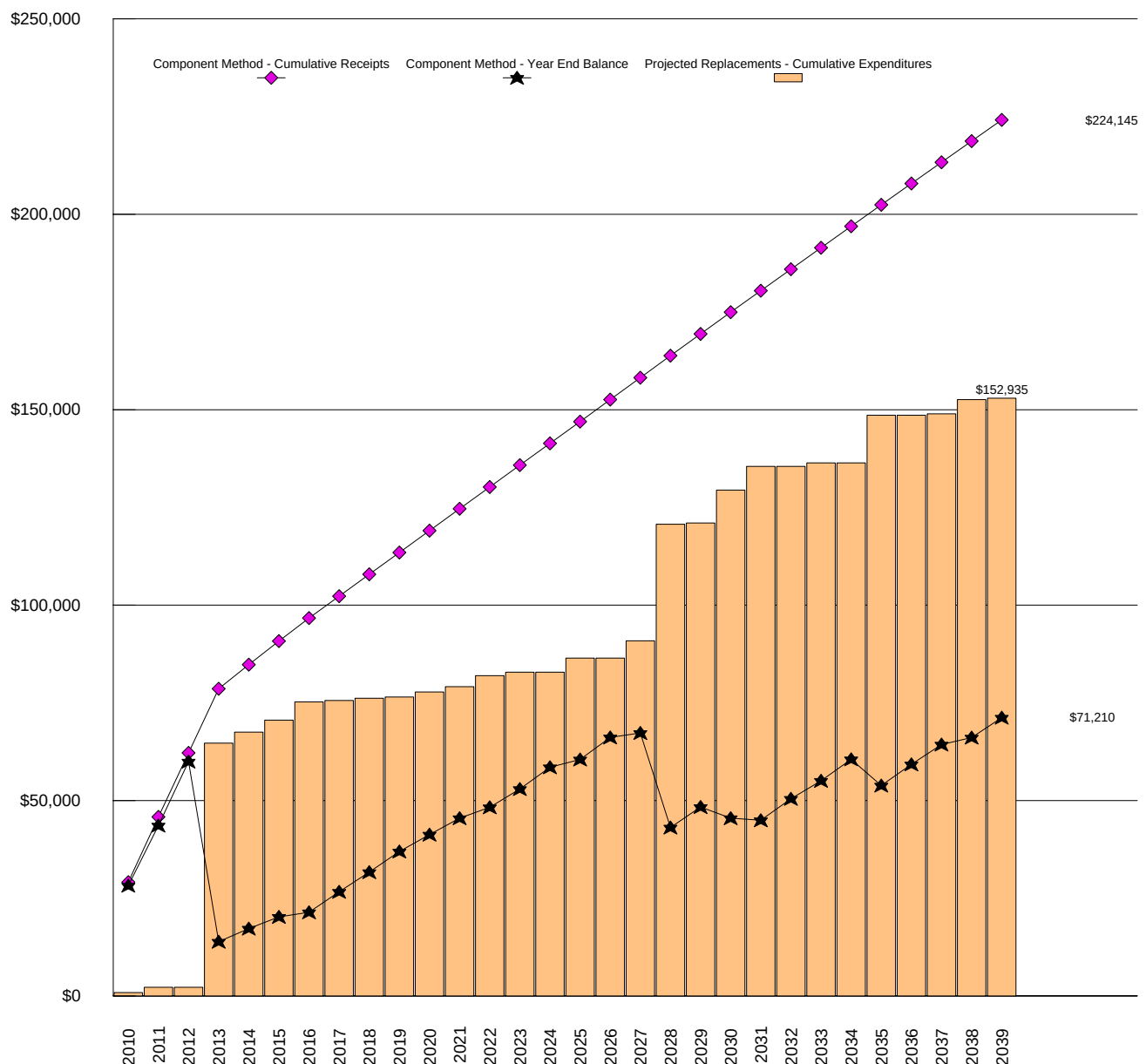
\$17,287

COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2010.

\$12.53 Per unit (average), recommended monthly funding of Replacement Reserves

General. The Component Method is a time tested and very conservative mathematical model developed by HUD in the early 1980s. Each of the 21 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of these individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of the Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page A7.

Graph #4. Component Method - Cumulative Receipts and Expenditures Graph



COMPONENT METHOD (cont'd)

- Current Funding Objective.** A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 21 Projected Replacements. The total, \$63,891, is the Current Funding Objective.

 For an example, consider a very simple Replacement Reserve Inventory with one Projected Replacement, a fence with a \$1,000 Replacement Cost, a Normal Economic Life of 10 years, and a Remaining Economic Life of 2 years. A contribution to Replacement Reserves of \$100 (\$1,000 ÷ 10 years) should have been made in each of the previous 8 years (10 years - 2 years). The result is a Current Funding Objective of \$800 (8 years x \$100 per year).
- Funding Percentage.** The Funding Percentage is calculated by dividing the Beginning Balance (\$11,841) by the Current Funding Objective (\$63,891). At Anna Coves POA the Funding Percentage is 18.5%
- Allocation of the Beginning Balance.** The Beginning Balance is divided among the 21 Projected Replacements in the Replacement Reserve Inventory. The Current Funding Objective for each Projected Replacement is multiplied by the Funding Percentage and these funds are then "locked" into the account of each item.

 If we relate this calculation back to our fence example, it means that the Association has not accumulated \$800 in Reserves (the Funding Objective), but rather at 18.5 percent funded, there is \$148 in the account for the fence.
- Annual Funding.** The Recommended Annual Funding of Replacement Reserves is then calculated for each Projected Replacement. The funds allocated to the account of the Projected Replacement are subtracted from the Replacement Cost. The result is then divided by the number of years until replacement, and the result is the annual funding for each of the Projected Replacements. The sum of these is \$17,287, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2010).

 In our fence example, the \$148 in the account is subtracted from the \$1,000 Total Replacement Cost and divided by the 2 years that remain before replacement, resulting in an annual deposit of \$426. Next year, the deposit remains \$426, but in the third year, the fence is replaced and the annual funding adjusts to \$100.
- Adjustment to the Component Method for interest and inflation.** The calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.

Table #2. Component Method Data - Years 1 through 30

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Starting balance	\$11,841									
Annual deposit	\$17,287	\$16,705	\$16,379	\$16,379	\$6,193	\$6,021	\$5,886	\$5,595	\$5,595	\$5,595
Expenditures	\$885	\$1,350		\$62,475	\$2,818	\$3,050	\$4,690	\$350	\$550	\$350
Year end balance	\$28,243	\$43,598	\$59,977	\$13,881	\$17,257	\$20,227	\$21,424	\$26,669	\$31,714	\$36,959
Cumulative Expenditures	\$885	\$2,235	\$2,235	\$64,710	\$67,528	\$70,578	\$75,268	\$75,618	\$76,168	\$76,518
Cumulative Receipts	\$29,128	\$45,833	\$62,212	\$78,591	\$84,784	\$90,805	\$96,691	\$102,286	\$107,881	\$113,476
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual deposit	\$5,595	\$5,579	\$5,579	\$5,579	\$5,579	\$5,579	\$5,617	\$5,617	\$5,617	\$5,565
Expenditures	\$1,270	\$1,350	\$2,818	\$900		\$3,585		\$4,450	\$29,800	\$350
Year end balance	\$41,284	\$45,513	\$48,275	\$52,955	\$58,534	\$60,528	\$66,145	\$67,312	\$43,129	\$48,344
Cumulative Expenditures	\$77,788	\$79,138	\$81,955	\$82,855	\$82,855	\$86,440	\$86,440	\$90,890	\$120,690	\$121,040
Cumulative Receipts	\$119,071	\$124,651	\$130,230	\$135,810	\$141,389	\$146,968	\$152,585	\$158,202	\$163,819	\$169,384
Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Annual deposit	\$5,565	\$5,499	\$5,499	\$5,499	\$5,499	\$5,499	\$5,425	\$5,425	\$5,425	\$5,425
Expenditures	\$8,418	\$6,040		\$900		\$12,200		\$350	\$3,638	\$350
Year end balance	\$45,492	\$44,951	\$50,450	\$55,049	\$60,548	\$53,847	\$59,272	\$64,347	\$66,135	\$71,210
Cumulative Expenditures	\$129,458	\$135,498	\$135,498	\$136,398	\$136,398	\$148,598	\$148,598	\$148,948	\$152,585	\$152,935
Cumulative Receipts	\$174,949	\$180,448	\$185,947	\$191,446	\$196,946	\$202,445	\$207,870	\$213,295	\$218,720	\$224,145

CURRENT FUNDING

\$8,325

CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES (as reported by the Association).

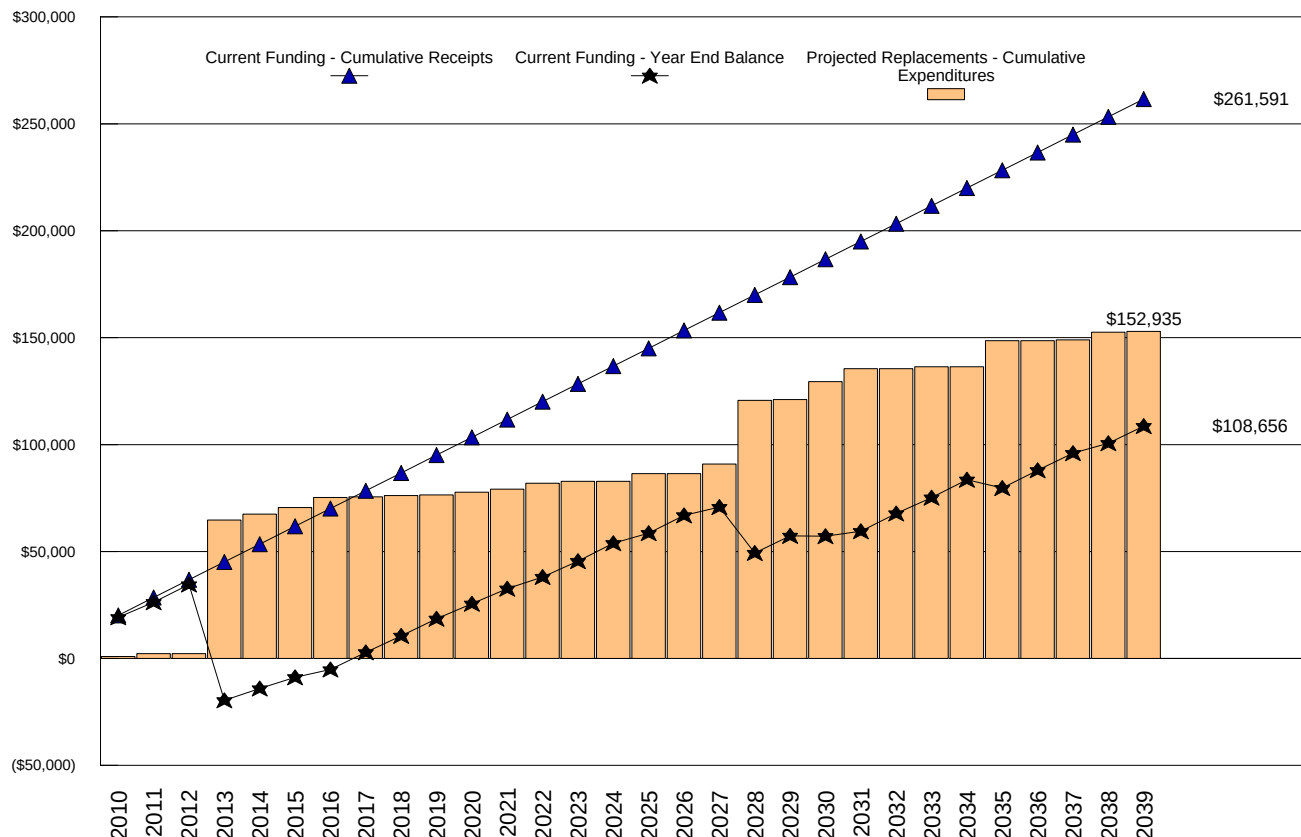
\$6.03 Per unit (average), reported current monthly funding of Replacement Reserves

General. Our evaluation of the Current Association Funding assumes that the Association will continue to fund Replacement Reserves at the current level of \$8,325 per year in each of the 30 years of the Study Period.

Our evaluation is based upon this Replacement Reserve Funding Level, a \$11,841 Beginning Balance, the Projected Annual Replacement Expenditures shown in Graph #1 and listed in the Replacement Reserve Inventory, and any interest, inflation rate, or constant annual increase in annual contribution adjustments discussed below.

- **Evaluation.** Our calculations have determined that Current Annual Funding of Replacement Reserves, as reported by the Association, is inadequate to fund Projected Replacement beginning in 2013.
The Current Annual Funding of Replacement Reserves results in insufficient funds to make Projected Replacements in 4 years of the 30-year Study Period, and a maximum shortfall of \$-19,569 occurs in 2013.
- **Adjustment to the Current Association Funding for interest and inflation.** The Calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.
- **Comparison of Current Association Funding and Average Annual Expenditure.** The average annual expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is \$5,098 (see Graph #1). Current Association annual funding of Replacement Reserves is \$8,325, or approximately 163 percent of the Average Annual Expenditure.

Graph #5. Current Association Funding - Cumulative Receipts and Expenditures Graph



CURRENT FUNDING (cont'd)

Table #3. Current Funding Data - Years 1 through 30

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Starting balance	\$11,841									
Annual deposit	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325
Expenditures	\$885	\$1,350		\$62,475	\$2,818	\$3,050	\$4,690	\$350	\$550	\$350
Year end balance	\$19,281	\$26,256	\$34,581	(\$19,569)	(\$14,061)	(\$8,786)	(\$5,151)	\$2,824	\$10,599	\$18,574
Cumulative Expenditures	\$885	\$2,235	\$2,235	\$64,710	\$67,528	\$70,578	\$75,268	\$75,618	\$76,168	\$76,518
Cumulative Receipts	\$20,166	\$28,491	\$36,816	\$45,141	\$53,466	\$61,791	\$70,116	\$78,441	\$86,766	\$95,091
Year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Annual deposit	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325
Expenditures	\$1,270	\$1,350	\$2,818	\$900		\$3,585		\$4,450	\$29,800	\$350
Year end balance	\$25,629	\$32,604	\$38,111	\$45,536	\$53,861	\$58,601	\$66,926	\$70,801	\$49,326	\$57,301
Cumulative expenditures	\$77,788	\$79,138	\$81,955	\$82,855	\$82,855	\$86,440	\$86,440	\$90,890	\$120,690	\$121,040
Cumulative receipts	\$103,416	\$111,741	\$120,066	\$128,391	\$136,716	\$145,041	\$153,366	\$161,691	\$170,016	\$178,341
Year	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Annual deposit	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325	\$8,325
Expenditures	\$8,418	\$6,040		\$900		\$12,200		\$350	\$3,638	\$350
Year end balance	\$57,209	\$59,494	\$67,819	\$75,244	\$83,569	\$79,694	\$88,019	\$95,994	\$100,681	\$108,656
Cumulative Expenditures	\$129,458	\$135,498	\$135,498	\$136,398	\$136,398	\$148,598	\$148,598	\$148,948	\$152,585	\$152,935
Cumulative Receipts	\$186,666	\$194,991	\$203,316	\$211,641	\$219,966	\$228,291	\$236,616	\$244,941	\$253,266	\$261,591

COMMENTS ON THE REPLACEMENT RESERVE ANALYSIS

- This Replacement Reserve Study has been developed in compliance with the Community Associations Institute, National Reserve Study Standards, for a Level One Study - Full Service.
- Anna Coves POA has 115 units. The type of property is a property owners association.
- Our calculations assume that Replacement Reserves are not subject to tax.
- 06/02/10. Changed starting balance, current contribution, and number of units.

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REPLACEMENT RESERVE INVENTORY GENERAL INFORMATION

Anna Coves POA - Replacement Reserve Inventory identifies 35 items. Two types of items are identified, Projected Replacements and Excluded Items:

- **PROJECTED REPLACEMENTS.** 21 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of \$105,388. Replacements totaling \$152,935 are scheduled in the Replacement Reserve Inventory over the 30-year Study Period.

Projected Replacements are the replacement of commonly owned physical assets that require periodic replacement and whose replacement is to be funded from Replacement Reserves.

- **EXCLUDED ITEMS.** 14 of the items are Excluded Items, and expenditures for these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The Excluded Items are listed in the Replacement Reserve Inventory to identify specific items and categories of items that are not to be funded from Replacement Reserves. There are multiple categories of items that are typically excluded from funding by Replacement Reserves, including but not limited to:

Tax Code. The United States Tax Code grants very favorable tax status to Replacement Reserves, conditioned on expenditures being made within certain guidelines. These guidelines typically exclude maintenance activities, partial replacements, repairs, capital improvements, and one-time only replacements.

Value. Items with a replacement cost of less than \$1,000 are typically excluded from funding from Replacement Reserves. This exclusion is made to accurately reflect how Replacement Reserves are administered. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

Long-lived Items. Items that when properly maintained, can be assumed to have a life equal to the property as a whole, are typically excluded from the Replacement Reserve Inventory.

Unit improvements. Items located on property owned by a single unit and where the items serve a single unit are generally assumed to be the responsibility of that unit, not the Association.

Other non-common improvements. Items owned by the local government, public and private utility companies, the United States Postal Service, Master Associations, state and local highway authorities, etc., may be installed on property that is owned by the Association. These types of items are generally not the responsibility of the Association and are excluded from the Replacement Reserve Inventory.

The rationale for the exclusion of an item from funding by Replacement Reserves is discussed in more detail in the 'Comments' section of its page of the Replacement Reserve Inventory.

- **CATEGORIES.** The 35 items included in the Anna Coves POA Replacement Reserve Inventory are divided into 8 major categories. Each category is printed on a separate page, Pages B3 to B9.
- **LEVEL OF SERVICE.** This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level One Study - Full Service, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

A Level I - Full Service Reserve Study includes the computation of complete component inventory information regarding commonly owned components provided by the property manager, quantities derived from field measurements and/or quantity takeoffs from to-scale engineering drawings that may be made available. The condition of all components is ascertained from a visual inspection of each component by the analyst. The life expectancy and the value of the components are provided based on these observations and the funding status and funding plan are then derived from analysis of this data.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- **INVENTORY DATA.** Each of the 21 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

Item Number. The Item Number is assigned sequentially and is intended for identification purposes only.

Item Description. We have named each item included in the Inventory. Where the name of the item and the category are not sufficient to specifically identify the item, we have included additional information in the Comments section at the bottom of the page.

Units. We have used standard abbreviations to identify the number of units including SF-square feet, FT-feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Nonstandard abbreviations are noted in the Comments section on the page on which the abbreviation is used.

Number of Units. The methods used to develop the quantities are discussed in "Level of Service" above.

Unit Replacement Cost. We use three sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, industry standard estimating manuals, and a cost database that we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work. In addition, trends in the Producers Price Index (PPI), labor rates, and transportation costs are monitored and considered. This cost database is reviewed and updated regularly by Miller Dodson and biannually by an independent professional cost estimating firm.

Normal Economic Life (Yrs). The number of years that a new and properly installed item should be expected to remain in service.

Economic Life Remaining (Yrs). The estimated number of years before an item will need to be replaced. In "normal" conditions, this could be calculated by subtracting the age of the item from the Normal Economic Life of the item, but only rarely do physical assets age "normally". Some items may have longer or shorter lives depending on many factors such as environment, initial quality of the item, maintenance, etc.

Total Replacement Cost. This is calculated by multiplying the Unit Replacement Cost by the Number of Units.

Each of the 14 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- **REVIEW OF EXPENDITURES.** All expenditures from Replacement Reserves should be made only after consultation with an accounting professional.
- **PARTIAL FUNDING.** Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted on in the Comments section.

REPLACEMENT RESERVE INVENTORY - GENERAL COMMENTS

- **PLEASE NOTE:** For inventory items with a Remaining Economic Life greater than 40 years, the replacement projections fall outside this study's limits and are not included in the annual calculations. However, tracking these items over time will bring them within the 40 year window and they will be included in the future.

SITE COMPONENTS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
1	Repoint stone entrance feature, 10%	sf	30	\$9.50	15	none	\$285
2	Entry monument wood frame, stained	sf	32	\$20.00	15	6	\$640
3	Entry monument sign letters, plastic	ea	18	\$15.00	18	10	\$270
4	Gravel drive, replenish 1.5"	sf	8,050	\$0.35	8	4	\$2,818
5	Rip-Rap bank protection, replenish, 20%	sf	100	\$10.00	10	1	\$1,000
6	Entry gate, metal	ls	1	\$4,250.00	35	20	\$4,250
7	Split rail fence (wood)	ls	1	\$400.00	15	10	\$400
8	Wood retaining wall @ sand beach, 20%	ls	1	\$550.00	5	3	\$550
9	Site signage	ls	1	\$600.00	5	none	\$600
10	Landscaping @ front entrance, allow.	ls	1	\$1,000.00	10	15	\$1,000

SITE COMPONENTS - Replacement Costs - Subtotal \$11,813

SITE COMPONENTS
COMMENTS

- The landscaping allowance is for the replacement of large trees and shrubs that add significant value to the property.

RECREATION COMPONENTS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
11	Picnic shelter roofing, asphalt	sf	1,025	\$4.00	18	17	\$4,100
12	Picninc shelter structure	ls	1	\$8,500.00	36	25	\$8,500
13	Picnic tables	ea	9	\$450.00	15	6	\$4,050
14	Benches	ea	3	\$250.00	15	5	\$750
15	Boat dock decking	sf	2,375	\$10.00	15	3	\$23,750
16	Boat dock structure	sf	2,375	\$15.00	30	3	\$35,625
17	Boat launch decking	sf	220	\$10.00	15	3	\$2,200
18	Boat launch structure	sf	220	\$15.00	30	18	\$3,300
19	Concrete boat ramp	sf	960	\$10.00	40	30	\$9,600
20	Sand beach, replenish	sf	1,800	\$0.75	10	5	\$1,350
21	Floating buoys	ls	1	\$350.00	2	1	\$350
RECREATION COMPONENTS - Replacement Costs - Subtotal							\$93,575

RECREATION COMPONENTS
COMMENTS

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Site lighting fixtures	ls	1				EXCLUDED
	Property identification signage	ls	1				EXCLUDED
	Miscellaneous signage	ls	1				EXCLUDED

VALUATION EXCLUSIONS

COMMENTS

- Valuation Exclusions. For ease of administration of the Replacement Reserves and to reflect accurately how Replacement Reserves are administered, items with a dollar value less than \$1,000.00 have not been scheduled for funding from Replacement Reserves. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

LONG-LIFE EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Brick masonry grille	ls	1				EXCLUDED

LONG-LIFE EXCLUSIONS

COMMENTS

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Exterior masonry is generally assumed to have an unlimited economic life but periodic repointing is required and we have included this for funding in the Replacement Reserve Inventory.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UNIT IMPROVEMENTS EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	All single family homes	Is	1				EXCLUDED
	Utilities for single family homes	Is	1				EXCLUDED
	Driveway on an individual lot	Is	1				EXCLUDED
	Fence on an individual lot	Is	1				EXCLUDED
	Dock on an individually lot	Is	1				EXCLUDED

UNIT IMPROVEMENTS EXCLUSIONS

COMMENTS

- Unit improvement Exclusions. We understand that the elements of the project that relate to a single unit are the responsibility of that unit owner. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

MAINTENANCE AND REPAIR EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Repair services	ls	1				EXCLUDED
	Partial replacements	ls	1				EXCLUDED
	Capital improvements	ls	1				EXCLUDED

MAINTENANCE AND REPAIR EXCLUSIONS

COMMENTS

- Maintenance activities, one-time-only repairs, and capital improvements. These activities are NOT appropriately funded from Replacement Reserves. The inclusion of such component in the Replacement Reserve Inventory could jeopardize the special tax status of ALL Replacement Reserves, exposing the Association to significant tax liabilities. We recommend that the Board of Directors discuss these exclusions and Revenue Ruling 75-370 with a Certified Public Accountant.
- Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

GOVERNMENT EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Government, roadways & parking	ls	1				EXCLUDED
	Government, stormwater mgmt.	ls	1				EXCLUDED

GOVERNMENT EXCLUSIONS

COMMENTS

- Government Exclusions. We have assumed that some of the improvements installed on property owned by the Association will be maintained by the state, county, or local government, or other association or other responsible entity. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Excluded right-of-ways, including LIST ROADS, and adjacent properties.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

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PROJECTED ANNUAL REPLACEMENTS

GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 21 Projected Replacements in the Anna Coves POA Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY

POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVISIONS.** Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision, if requested in writing within three months of the date of the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- **TAX CODE.** The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1020 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot commingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1020H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- **CONFLICT OF INTEREST.** Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Association which would represent a real or perceived conflict of interest.
- **RELIANCE ON DATA PROVIDED BY THE CLIENT.** Information provided by an official representative of the Association regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- **INTENT.** This Replacement Reserve Study is a reflection of the information provided by the Association and the visual evaluations of the Analyst. It has been prepared for the sole use of the Association and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- **PREVIOUS REPLACEMENTS.** Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- **UPDATING.** In the first two or possibly three years after the completion of a Level One Replacement Reserve Study, we recommend the Association review and revise the Replacement Reserve Analysis and Inventory annually to take into account replacements which have occurred and known changes in replacement costs. This can frequently be handled as a Level Two or Level Three Study (as defined by the Community Associations Institute), unless the Association has completed major replacement projects. A full analysis (Level One) based on a comprehensive visual evaluation of the site should be accomplished every three to five years or after each major replacement project.
- **EXPERIENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the Anna Coves POA Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2010	\$
1	Repoint stone entrance feati	\$285
9	Site signage	\$600
Total Scheduled Replacements		\$885

Item	2011	\$
5	Rip-Rap bank protection, re	\$1,000
21	Floating buoys	\$350
Total Scheduled Replacements		\$1,350

Item	2012	\$
No Scheduled Replacements		

Item	2013	\$
8	Wood retaining wall @ sand	\$550
15	Boat dock decking	\$23,750
16	Boat dock structure	\$35,625
17	Boat launch decking	\$2,200
21	Floating buoys	\$350
Total Scheduled Replacements		\$62,475

Item	2014	\$
4	Gravel drive, replenish 1.5"	\$2,818
Total Scheduled Replacements		\$2,818

Item	2015	\$
9	Site signage	\$600
14	Benches	\$750
20	Sand beach, replenish	\$1,350
21	Floating buoys	\$350
Total Scheduled Replacements		\$3,050

Item	2016	\$
2	Entry monument wood frame	\$640
13	Picnic tables	\$4,050
Total Scheduled Replacements		\$4,690

Item	2017	\$
21	Floating buoys	\$350
Total Scheduled Replacements		\$350

Item	2018	\$
8	Wood retaining wall @ sand	\$550
Total Scheduled Replacements		\$550

Item	2019	\$
21	Floating buoys	\$350
Total Scheduled Replacements		\$350

Item	2020	\$
3	Entry monument sign letters	\$270
7	Split rail fence (wood)	\$400
9	Site signage	\$600
Total Scheduled Replacements		\$1,270

Item	2021	\$
5	Rip-Rap bank protection, re	\$1,000
21	Floating buoys	\$350
Total Scheduled Replacements		\$1,350

Item	2022	\$
4	Gravel drive, replenish 1.5"	\$2,818
Total Scheduled Replacements		\$2,818

Item	2023	\$
8	Wood retaining wall @ sand	\$550
21	Floating buoys	\$350
Total Scheduled Replacements		\$900

Item	2024	\$
No Scheduled Replacements		

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2025	\$
1	Repoint stone entrance feati	\$285
9	Site signage	\$600
10	Landscaping @ front entran	\$1,000
20	Sand beach, replenish	\$1,350
21	Floating buoys	\$350
Total Scheduled Replacements		\$3,585

Item	2026	\$
No Scheduled Replacements		

Item	2027	\$
11	Picnic shelter roofing, aspha	\$4,100
21	Floating buoys	\$350
Total Scheduled Replacements		\$4,450

Item	2028	\$
8	Wood retaining wall @ sand	\$550
15	Boat dock decking	\$23,750
17	Boat launch decking	\$2,200
18	Boat launch structure	\$3,300
Total Scheduled Replacements		\$29,800

Item	2029	\$
21	Floating buoys	\$350
Total Scheduled Replacements		\$350

Item	2030	\$
4	Gravel drive, replenish 1.5"	\$2,818
6	Entry gate, metal	\$4,250
9	Site signage	\$600
14	Benches	\$750
Total Scheduled Replacements		\$8,418

Item	2031	\$
2	Entry monument wood frame	\$640
5	Rip-Rap bank protection, re	\$1,000
13	Picnic tables	\$4,050
21	Floating buoys	\$350
Total Scheduled Replacements		\$6,040

Item	2032	\$
No Scheduled Replacements		

Item	2033	\$
8	Wood retaining wall @ sand	\$550
21	Floating buoys	\$350
Total Scheduled Replacements		\$900

Item	2034	\$
No Scheduled Replacements		

Item	2035	\$
7	Split rail fence (wood)	\$400
9	Site signage	\$600
10	Landscaping @ front entran	\$1,000
12	Picninc shelter structure	\$8,500
20	Sand beach, replenish	\$1,350
21	Floating buoys	\$350
Total Scheduled Replacements		\$12,200

Item	2036	\$
No Scheduled Replacements		

Item	2037	\$
21	Floating buoys	\$350
Total Scheduled Replacements		\$350

Item	2038	\$
3	Entry monument sign letters	\$270
4	Gravel drive, replenish 1.5"	\$2,818
8	Wood retaining wall @ sand	\$550
Total Scheduled Replacements		\$3,638

Item	2039	\$
21	Floating buoys	\$350
Total Scheduled Replacements		\$350

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CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Anna Coves in May 2010. Anna Coves is in average condition for a community constructed beginning in the early 1980's. A review of the Replacement Reserve Inventory will show that we are anticipating most of the components achieving their normal economic lives.

The following comments pertain to the larger, more significant components in the Replacement Reserve Inventory and to those items that are unique or deserving of attention because of their condition or the manner in which they have been treated in the Replacement Reserve Analysis or Inventory.

SITE IMPROVEMENTS

Entrance Monuments. Stone masonry walls have been erected as entrance monuments to the community. Because the stonework has a very long life expectancy, we have excluded replacement of these walls. We have, however, included funding for the periodic tuckpointing of mortar joints as exposure to weather over an extended period of time will wash lime out of the mortar and weaken the joint. Periodic tuckpointing of these joints and replacement of damaged stone is required to extend the life of the wall. Unless the wall is damaged by settlement, this work is typically not required until the wall is approximately 35-40 years old. At that point we expect that approximately 10 percent of the surface area will require repair and that an additional 10 percent will require repair every 10 years thereafter.

The stone masonry monuments are currently in fair condition with the major defect being failure of the mortar in each of the monuments sloping capstones. The stained wood frame for the plastic letters, and the letters themselves, are in good condition (the top board on each of the wood frames had deteriorated and was recently replaced).



View of west side entrance monument



View of west side entrance monument wood frame and plastic letters



View of west side entrance monument
sloping cap failing mortar



View of west side entrance monument
failing mortar below cap



View of east side entrance monument



View of east side entrance monument
sloping cap failing mortar

Gravel Road. The Association maintains the gravel road leading from Rogers Court to the lake recreation area and boat ramp. We have included funds for replenishing the gravel road with a new 1-1/2" layer of gravel every eight years.



View of gravel road leading to recreation
area and boat ramp



View of gravel road at boat ramp

Metal Entrance Gate. The Association maintains the painted pipe-rail entrance gate and fence at the entrance to the lake recreation area. The components are in good condition with no defects noted.



Painted pipe-rail entrance gate

Split Rail Fencing. The Association maintains an inventory of approximately 62 linear feet of two rail wood fencing along the gravel road. The overall condition of the fencing is good with the North side fence missing one bottom rail.



View of typical split rail fence

Wood Timber Retaining Walls. The Association maintains an inventory of low, treated wood retaining walls located at the lake recreation area sand beach. The overall condition of the retaining walls is good with no significant defects. We have also included funding for the periodic replenishment of the beach sand.



View of wood timbers at sand beach

Riprap. The community has installed stone riprap along the lake shoreline to protect against erosion. In general, the riprap is in good condition.

While riprap is considered to be a long-life item, with time and exposure the riprap can be undermined, silted, or washed away. Therefore we have included repairs to the riprap in the Reserve Analysis. Due to the incremental nature of the work, we have assumed that twenty percent of the rip rap will require replenishment every ten years.

Storm Water Culvert Piping. The culvert is located under the gravel drive at the lake recreation area. Due to the subsurface locations of the pipe, the condition of individual section cannot be easily determined. We were able to view the openings and found the pipes to be in good condition with minimal rust or deterioration. Regular inspection and maintenance should be done to keep the culvert operating as intended. Generally, galvanized steel corrugated pipe has a service life of 35-40 years.



View of culvert pipe inlet - leaves should be removed

Signage. The Association maintains the three metal signs located at the lake recreation area. The signs are in poor condition and the Association has plans to replace these signs with similar signs in the near future.



No trespassing metal sign



Miscellaneous metal signs

Floating Buoys. The Association maintains three plastic floating buoys located near the pier to warn boaters to slow down. The manager relayed that these buoy's are frequently damaged and lost as a result of boaters hitting them. We have included funding for the periodic replacement of these buoys.



Typical "slow-no-wake" buoy - one of three

RECREATIONAL FACILITIES

Open Sided Shelter. The Association maintains an open sided wood shelter with a gravel floor located at the lake recreation area. The shelter was constructed in the year 2000+/- and is framed with 6" x 6" treated wood columns supporting a beam made up of (2) 2 x 8's. The beam supports the wood trusses and plywood sheathing. The asphalt shingle roof was replaced in 2009 and is in overall good condition with several areas of moss growth. The moss can and should be removed with a moss and fungus remover to prevent premature aging of the roofing. We have included funding for replacement of the roofing and structure.



End view of shelter



Side view of shelter



View of wood trusses



View of asphalt shingle roof with moss growth

Wood Picnic Tables and Benches. The Association maintains the wood picnic tables and benches at the shelter and sand beach. The items are in good condition with no signs of rot observed.



Typical wood picnic table



Typical wood bench

Concrete Boat Ramp. The Association maintains the concrete boat ramp at the lake recreation area. The ramp was installed in the year 2000+/- by placing new concrete slabs over top of the existing concrete boat ramp. The ramp is in very good condition with no cracks or damage observed.



View of concrete boat ramp



View of concrete boat ramp

Wood Boat Docks. The Association maintains the wood boat dock and wood boat launch dock at the lake recreation area. The docks are constructed from stained pressure treated lumber and rest on wood pilings. The structures are approximately 25 years old.

- **Wood Dock Decking.** The wood decking on the docks, the fingers, and the wood walk is exposed to harsh extremes of sun and weather. It will typically require replacement before the heavier members of the underlying structure. This decking will also be removed and replaced in its entirety when the underlying structure is replaced. To model this replacement pattern, we have provided for complete replacement incident to the replacement of the structure, and we have included an additional replacement interval for the wood dock decking at the midpoint of the service life of the underlying structure.



Overall view of wood boat dock

The wood dock decking is in good to fair condition with deteriorated boards being replaced on an as needed basis.

- **Dock Structure.** The structure consists of pressure treated wood piles on 10-foot centers with stringers spanning the distance between piles. We have assumed that when the dock structure will require replacement, all piling also will be replaced.

The boat dock structure is in poor condition with piles driven to an inadequate depth allowing for side to side movement of the deck. The Association plans to replace the entire boat dock structure in 3-5 years. In the meantime, any loose and swaying piles should be driven deeper or reinforced to prevent the swaying of the deck and possible collapse.

It is recommended that all piers be inspected at least once each year to identify damage to pilings, structural members and surface boards.



View from boat dock looking back toward land



View from boat dock looking back toward land



View from boat dock sun deck



View of boat dock sun deck



View of boat launch dock



View from boat launch dock looking back towards boat ramp

This Condition Assessment is based upon our visual survey of the property. The sole purpose of the visual survey was an evaluation of the common elements of the property to ascertain the remaining useful life and the replacement costs of these common elements. Our evaluation assumed that all components met building code requirements in force at the time of construction. Our visual survey was conducted with care by experienced persons, but no warranty or guarantee is expressed or implied.

End of Condition Assessment

CASH FLOW METHOD ACCOUNTING SUMMARY

This Anna Coves POA - Cash Flow Method Accounting Summary is an attachment to the Anna Coves POA - Replacement Reserve Study dated Revised June 2, 2010 and is for use by accounting and reserve professionals experienced in Association funding and accounting principals. This Summary consists of four reports, the 2010, 2011, and 2012 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2010, 2011, and 2012. Each of the 21 Projected Replacements listed in the Anna Coves POA Replacement Reserve Inventory has been assigned to one of 2 categories. The following information is summarized by category in each report:
 - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
 - Cost of all Scheduled Replacements in each category.
 - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
 - Cost of Projected Replacements in the report period.
 - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Cash Flow Method.
- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the \$11,841 Beginning Balance (at the start of the Study Year) and the \$55,445 of Replacement Reserve Funding in 2010 through 2012 (as calculated in the Replacement Reserve Analysis) to each of the 21 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and discussed below. The calculated data includes:
 - Identification and estimated cost of each Projected Replacement schedule in years 2010 through 2012.
 - Allocation of the \$11,841 Beginning Balance to the Projected Replacements by Chronological Allocation.
 - Allocation of the \$55,445 of Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2010 through 2012, to the Projected Replacements by Chronological Allocation.
- CHRONOLOGICAL ALLOCATION. Chronological Allocation assigns Replacement Reserves to Projected Replacements on a "first come, first serve" basis in keeping with the basic philosophy of the Cash Flow Method. The Chronological Allocation methodology is outlined below.
 - The first step is the allocation of the \$11,841 Beginning Balance to the Projected Replacements in the Study Year. Remaining unallocated funds are next allocated to the Projected Replacements in subsequent years in chronological order until the total of Projected Replacements in the next year is greater than the unallocated funds. Projected Replacements in this year are partially funded with each replacement receiving percentage funding. The percentage of funding is calculated by dividing the unallocated funds by the total of Projected Replacements in the partially funded year.

At Anna Coves POA the Beginning Balance funds 15.4% of Scheduled Replacements in the Study Year through 2012 and provides partial funding(0%) of replacements scheduled in 2013.
 - The next step is the allocation of the \$26,376 of 2010 Cash Flow Method Reserve Funding calculated in the Replacement Reserve Analysis. These funds are first allocated to fund the partially funded" Projected Replacements and then to subsequent years in chronological order as outlined above.

At Anna Coves POA the Beginning Balance and the 2010 Replacement Reserve Funding, funds replacements through 2012 and partial funds (38.6%) replacements in 2013.
 - Allocations of the 2010 and 2011 Reserve Funding are done using the same methodology.
 - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2010 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Anna Coves POA Replacement Reserve Inventory has been assigned to one of the 2 categories listed in TABLE CF-1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of \$11,841 as of the first day of the Study Year, January 1, 2010.
- Total reserve funding (including the Beginning Balance) of \$26,376 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2010 being accomplished in 2010 at a cost of \$885.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2010 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-1							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2010 BEGINNING BALANCE	2010 RESERVE FUNDING	2010 PROJECTED REPLACEMENTS	2010 END OF YEAR BALANCE
SITE COMPONENTS	5 to 35 years	0 to 20 years	\$11,813	\$946	\$2,193	\$885	\$2,254
RECREATION COMPONENTS	2 to 40 years	1 to 30 years	\$93,575	\$10,895	\$15,094		\$25,989

2011 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Anna Coves POA Replacement Reserve Inventory has been assigned to one of the 2 categories listed in TABLE CF-2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$25,491 on January 1, 2011.
- Total reserve funding (including the Beginning Balance) of \$40,910 in 2010 through 2011.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
 - All Projected Replacements scheduled in the Replacement Reserve Inventory in 2011 being accomplished in 2011 at a cost of \$1,350.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2011 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2010 BEGINNING BALANCE	2010 RESERVE FUNDING	2010 PROJECTED REPLACEMENTS	2010 END OF YEAR BALANCE
SITE COMPONENTS	5 to 35 years	0 to 19 years	\$11,813	\$2,254	\$1,611	\$1,000	\$2,865
RECREATION COMPONENTS	2 to 40 years	0 to 29 years	\$93,575	\$25,989	\$15,094	\$350	\$40,733

2012 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 21 Projected Replacements included in the Anna Coves POA Replacement Reserve Inventory has been assigned to one of the 2 categories listed in TABLE CF-3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$38,675 on January 1, 2012.
- Total Replacement Reserve funding (including the Beginning Balance) of \$55,445 in 2010 to 2012.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

2012 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-3							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2010 BEGINNING BALANCE	2010 RESERVE FUNDING	2010 PROJECTED REPLACEMENTS	2010 END OF YEAR BALANCE
SITE COMPONENTS	5 to 35 years	1 to 18 years	\$11,813	\$2,865	\$1,285		\$4,151
RECREATION COMPONENTS	2 to 40 years	1 to 28 years	\$93,575	\$40,733	\$15,094		\$55,826

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE 4 below details the allocation of the \$11,841 Beginning Balance, as reported by the Association and the \$55,445 of Replacement Reserve Funding calculated by the Cash Flow Method in 2010 to 2012, to the 21 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF-1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$11,841 on January 1, 2010.
- Replacement Reserves on Deposit totaling \$25,491 on January 1, 2011.
- Replacement Reserves on Deposit totaling \$38,675 on January 1, 2012.
- Total Replacement Reserve funding (including the Beginning Balance) of \$55,445 in 2010 to 2012.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2010 to 2012 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of \$2,235.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE 4												
Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2010 Reserve Funding	2010 Projected Replacements	2010 End of Year Balance	2011 Reserve Funding	2011 Projected Replacements	2011 End of Year Balance	2012 Reserve Funding	2012 Projected Replacements	2012 End of Year Balance
SITE COMPONENTS												
1	Repoint stone entrance feature, 10%	285	285		(285)							
2	Entry monument wood frame, stained	640										
3	Entry monument sign letters, plastic	270										
4	Gravel drive, replenish 1.5"	2,818										
5	Rip-Rap bank protection, replenish, 20	1,000	1,000			1,000		(1,000)				
6	Entry gate, metal	4,250										
7	Split rail fence (wood)	400										
8	Wood retaining wall @ sand beach, 20	550	85	128		213	128		340	128		468
9	Site signage	600	600		(600)							
10	Landscaping @ front entrance, allow.	1,000										
RECREATION COMPONENTS												
11	Picnic shelter roofing, asphalt	4,100										
12	Picnic shelter structure	8,500										
13	Picnic tables	4,050										
14	Benches	750										
15	Boat dock decking	23,750	3,652	5,525		9,177	5,525		14,703	5,525		20,228
16	Boat dock structure	35,625	5,478	8,288		13,766	8,288		22,054	8,288		30,342
17	Boat launch decking	2,200	338	512		850	512		1,362	512		1,874
18	Boat launch structure	3,300										
19	Concrete boat ramp	9,600										
20	Sand beach, replenish	1,350										
21	Floating buoys	350	404	81		485	81	(350)	217	81		298

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1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for community facilities and infrastructure around many of our homes has shifted from the local government to Community Associations. Thirty years ago, a typical new town house abutted a public street on the front and a public alley on the rear. Open space was provided by a nearby public park and recreational facilities were purchased ala carte from privately owned country clubs, swim clubs, tennis clubs, and gymnasiums. Today, 60% of all new residential construction, i.e. townhouses, single family homes, condominiums, and cooperatives, is in Common Interest Developments (CID). In a CID, a home owner is bound to a Community Association that owns, maintains, and is responsible for periodic replacements of various components that may include the roads, curbs, sidewalks, playgrounds, street lights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965 there were only 500 Community Associations in the United States. According to the U.S. Census, there were 130,000 Community Associations in 1990. Community Associations Institute (CAI), a national trade association, estimates there were more than 200,000 Community Associations in the year 2000, and that the number of Community Associations will continue to multiply.

The shift of responsibility for billions of dollars of community facilities and infrastructure from the local government and private sector to Community Associations has generated new and unanticipated problems. Although Community Associations have succeeded in solving many short term problems, many Associations have failed to properly plan for the tremendous expenses of replacing community facilities and infrastructure components. When inadequate replacement reserve funding results in less than timely replacements of failing components, home owners are exposed to the burden of special assessments, major increases in Association fees, and a decline in property values.

2. REPLACEMENT RESERVE STUDY

The purpose of a Replacement Reserve Study is to provide the Association with an inventory of the common community facilities and infrastructure components that require periodic replacement, a general view of the condition of these components, and an effective financial plan to fund projected periodic replacements. The Replacement Reserve Study consists of the following:

- **Replacement Reserve Study Introduction.** The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.
- **Section A Replacement Reserve Analysis.** Many components owned by the Association have a limited life and require periodic replacement. Therefore it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, Section A Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Section A Replacement Reserve Analysis includes graphic and tabular presentations of these methods and current Association funding.
- **Section B Replacement Reserve Inventory.** The Replacement Reserve Inventory lists the commonly-owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

Replacement Reserve Inventory includes estimates of the normal economic life and the remaining economic life for those components whose replacement is scheduled for funding from Replacement Reserves.

- **Section C Projected Annual Replacements.** The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.
- **Section D Condition Assessment.** Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.
- **Section E Attachments.** The Appendix is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc).

3. METHODS OF ANALYSIS

The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Minimum Annual Contribution to the Reserves. The results of both methods are presented in this report. The Association should obtain the advice of its accounting professional as to which method is more appropriate for the Association. The two methods are:

- **Component Method.** This method is a time tested mathematical model developed by HUD in the early 1980s. It treats each item in the replacement schedule as an individual line item budget. Generally, the Minimum Annual Contribution to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

First, the total Current Objective is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the Reserves Currently on Deposit (as reported by the Association) are distributed to the components in the schedule in proportion to the Current Objective. The Minimum Annual Deposit for each component is equal to the Estimated Replacement Cost, minus the Reserves on Hand, divided by the years of life remaining.

- **Cash Flow Method.** The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the specified minimum level in any year. This method usually results in a calculated requirement for annual contribution somewhat less than that arrived at by the Component Method of analysis.

First, the Minimum Recommended Reserve Level to be Held on Account is determined based on the age, condition, and replacement cost of the individual components. The mathematical model then allocates the estimated replacement costs to the future years in which they are projected to occur. Based on these expenditures, it then calculates the minimum constant yearly contribution (Minimum Annual Deposit) to the reserves necessary to keep the reserve balance at the end of each year above the Minimum Recommended Reserve Level to be Held on Account. The Cash Flow Analysis assumes that the Association will have authority to use all of the reserves on hand for replacements as the need occurs. This method usually results in a Minimum Annual Deposit which is less than that arrived at by the Component Method.

- **Adjusted Cash Flow Analysis.** This program has the ability to modify the Cash Flow Method to take into account forecasted inflation and interest rates, thereby producing an Adjusted Cash Flow Analysis. Attempting to forecast future inflation and interest rates and the impact of changing technology is highly tenuous. Therefore, in most cases it is preferable to make a new schedule periodically rather than attempt to project far into the future. We will provide more information on this type of analysis upon request.

4. REPLACEMENT RESERVE STUDY DATA

- **Identification of Reserve Components.** The Reserve Analyst has only two methods of identifying Reserve Components; 1) information provided by the Association and 2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.

- **Unit Costs.** Unit costs are developed using nationally published standards and estimating guides and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

Contractor proposals or actual cost experience may be available as part of the Association records. This is useful information which should be incorporated into your report. Please bring any such available data to our attention, preferably before the report is commenced.

- **Replacement vs. Repair and Maintenance.** A Replacement Reserve Study addresses the required funding for Capital Replacement Expenditures. This should not be confused with operational costs or cost of repairs or maintenance.

5. DEFINITIONS

Adjusted Cash Flow Analysis. Cash flow analysis adjusted to take into account annual cost increases due to inflation and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.

Annual Deposit if Reserves Were Fully Funded. Shown on the Summary Sheet A1 in the Component Method summary, this would be the amount of the Annual Deposit needed if the Reserves Currently on Deposit were equal to the Total Current Objective.

Cash Flow Analysis. See Cash Flow Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. Roughly the same as the Minimum Recommended Reserve Level to be Held on Account used in the Cash Flow Method of analysis.

Critical Year. In the Cash Flow Method, a year in which the reserves on hand are projected to fall to the established minimum level. See Minimum Recommended Reserve Level to be Held on Account.

Current Objective. This is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement cost. It is equal to the estimated replacement cost divided by the estimated economic life, times the number of years expended (the difference between the Estimated Economic Life and the Estimated Life Left). The Total Current Objective can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

Cyclic Replacement Item. A component item that typically begins to fail after an initial period (Estimated Initial Replacement), but which will be replaced in increments over a number of years (the Estimated Replacement Cycle). The Reserve Analysis program divides the number of years in the Estimated Replacement Cycle into five equal increments. It then allocates the Estimated Replacement Cost equally over those five increments. (As distinguished from Normal Replacement Items, see below)

Estimated Economic Life. Used in the Normal Replacement Schedules. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.

Estimated Economic Life Left. Used in the Normal Replacement Schedules. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the Estimated Economic Life and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.

Estimated Initial Replacement. For a Cyclic Replacement Item (see above), the number of years until the replacement cycle is expected to begin.

Estimated Replacement Cycle. For a Cyclic Replacement Item, the number of years over which the remainder of the component's replacement occurs.

Minimum Annual Deposit. Shown on the Summary Sheet A1. The calculated requirement for annual contribution to reserves as calculated by the Cash Flow Method (see above).

Minimum Deposit in the Study Year. Shown on the Summary Sheet A1. The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).

Minimum Recommended Reserve Level to be Held on Account. Shown on the Summary Sheet A1, this number is used in the Cash Flow Method only. This is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total Estimated Replacement Cost of all reserve components.

Normal Replacement Item. A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from Cyclic Replacement Items, see above.)

Normal Replacement Schedules. The list of Normal Replacement Items by category or location. These items appear on pages designated.

Number of Years of the Study. The number of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.

One Time Deposit Required to Fully Fund Reserves. Shown on the Summary Sheet A1 in the Component Method summary, this is the difference between the Total Current Objective and the Reserves Currently on Deposit.

Reserves Currently on Deposit. Shown on the Summary Sheet A1, this is the amount of accumulated reserves as reported by the Association in the current year.

Reserves on Hand. Shown in the Cyclic Replacement and Normal Replacement Schedules, this is the amount of reserves allocated to each component item in the Cyclic or Normal Replacement schedules. This figure is based on the ratio of Reserves Currently on Deposit divided by the total Current Objective.

Replacement Reserve Study. An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.

Total Replacement Cost. Shown on the Summary Sheet A1, this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.

Unit Replacement Cost. Estimated replacement cost for a single unit of a given item on the schedule.

Unit (of Measure). Non-standard abbreviations are defined on the page of the Replacement Reserve Inventory where the item appears. The following standard abbreviations are used in this report:

EA: each FT: feet LS: lump sum PR: pair SF: square feet SY: square yard

6. LIST OF RECOMMENDED REPAIRS - PROCEDURES

A List of Recommended Repairs is offered as a supplemental report to the Replacement Reserve Study (at an additional fee) to assist the Association in understanding the financial implications of all items owned by the Association, not just the items included for funding by Replacement Reserves listed in the Replacement Reserve Inventory. The following information relates to the List of Recommended Repairs:

- Repair costs. Cost range estimates given in the repair list assume that all work by a given trade will be done together as a single project. If repairs are done piece-meal, the costs would be significantly higher. The costs of any repairs to be funded out of the Reserve Fund should be subtracted from the Reserves Currently on Deposit figure. The Board or Property Manager should coordinate this decision with the Reserve Analyst as part of the revision process.
- Completion of repairs. The Replacement Reserve Analysis assumes that all repairs cited in the Repair List will be completed within a twelve-month period of time. Estimated Life Left in the Replacement Reserve Study has been factored under this assumption. Any deletions or delays of the projects included in the List of Recommended Repairs may result in major inaccuracies in the Replacement Reserve Analysis.
- Safety issues. If safety issues have been cited, they should be given the highest priority and should be done immediately upon receipt of this report. The Board must recognize that from a liability standpoint, they have been made aware of the existence of these unsafe conditions, if any, once the report is delivered for their review.
- Unit costs. Nationally published standards and standard estimating manuals have been used in the development of this report. Contractor proposals or actual cost experience may be available as part of the Association records. We will adjust our figures to conform to your experience if the material or information is disclosed to us and/or made available for our use.