LEVEL 1 REPLACEMENT RESERVE REPORT FY 2023
ANNAPOLIS COVE MARINA

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REPLACEMENT RESERVE REPORT

ANNAPOLIS COVE MARINA

ANNAPOLIS, MARYLAND
January 18, 2023
Revised March 31, 2023
Revised June 06, 2023

Description. Annapolis Cove Marina is a Marina located in Annapolis, Maryland. The community consists of a single marina containing 54 boat slips constructed in the early to mid 1980s. The survey examined the common elements of the property, including:

- Entrance Monument and All Roadways
- Marina, Piers, and Boat Docks
- Dock Lighting and Fire Suppression
- Marine Power, Water, Shed, and Pump Station

EXECUTIVE SUMMARY
This Reserve Study has been prepared for the Annapolis Cove Marina for the Fiscal Year 2023 covering the period from January 1, 2023 to December 31, 2023. The Replacement Reserves Starting Balance as of January 1, 2023 is reported to be $220,000. The reported Current Annual Funding for Reserves is $15,000. The Recommended Annual Reserve Funding level for 2023 is $36,448.

The increase in the Recommended Annual Funding level shown above is primarily due to the inflation rate in the construction industry pushing replacement costs higher. The current level of funding is inadequate to fund projected replacements starting in 2025. After a peak year in 2043, the recommended annual funding drops to $17,729.

The Next Step. The next step in the Reserve Study process is for the Board to carefully review the Component Inventory to make sure that all included components are the responsibility of the Association and that the priorities and the timing of the replacement are in keeping with the goals and objectives of the Board.

If, after that review, the Reserve Study still recommends a substantial increase in the Annual Reserve Funding, MillerDodson can work with the Board to develop a Strategic Funding Plan to ramp up the Funding levels incrementally.

Please Note: MillerDodson did not conduct a structural evaluation of the piers. Such an evaluation is beyond the Scope of this Reserve Study. MillerDodson strongly recommends that the Association retain the services of a Qualified Professional to conduct thorough and periodic evaluations of the piers and any other structural components of the facility and amenities of the Association.

MillerDodson welcomes the opportunity to answer questions or to discuss this Reserve Study in more detail should the Board so desire.

Current Funding. The Starting Balance and Current Annual Reserve Funding figures have been supplied by the managing agent and/or Board of Directors. 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.

Level of Service. This study has been performed as a Level 1 Full-Service Reserve Study with Site Visit/On-Site Review as defined by the Community Associations Institute's, National Reserve Study Standards. As such, a complete inventory of components, including their condition and cost for major repair or replacement, was established by the Analyst for the common and limited common elements of this facility based on information provided by the Community Manager and/or Board of Directors, or by those developed from visual assessments, field measurements, takeoffs from to-scale drawings, or review of provided historical data. The analysis, including fund status and funding plan, is developed from the inventory.

To aid in the understanding of this report and its concepts and practices, on our web site, we have developed videos addressing frequently asked topics. In addition, there are posted links covering a variety of subjects under the resources page of our web site at mdareserves.com.

Purpose. The purpose of this Replacement Reserve Study is to provide Annapolis Cove Marina (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 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 includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D 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 the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the reported current funding and the recommended funding based on the Cash Flow Method. 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.
- Miller+Dodson performed a visual evaluation on January 18, 2023 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.
- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller+Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

To-Scale Drawings. Site and building plans were not used in the development of this study. We recommend the Association assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller+Dodson can provide scanning services.

Acknowledgment. Miller+Dodson Associates would like to acknowledge the assistance and input of Ryan Brassel, Board President; Peter Gaffney, Treasurer; Corrie Asworth and Holly O'Hare, current and former Board Members who provided very helpful insight into the current operations of the property.

Analyst's Credentials. Mr. Craig Amaral holds an Associate's Degree in Architectural and Construction Technology from Montgomery College in Rockville, Maryland, with continuing courses in Bachelor of Science programs in Physical Science at the University of Maryland College Park, Maryland, and Electrical Engineering at Capitol College in Laurel, Maryland. In addition, he has completed several certificate programs in Managing Government Contracts from the Masters Institute for Government Contracting. Craig has over 25 years of experience as a construction management consultant, with 40 years of experience as an Executive Project Manager, Project Manager, Estimator, and Construction Inspector. He has served as Corporate Vice President for a mechanical prime contractor and Principle in his own construction consulting firm. Mr. Amaral is currently a reserve analyst for Miller+Dodson, serving the greater Baltimore/Washington Metropolitan area.

Respectfully Submitted,

millerdodson
CAPITAL RESERVE CONSULTANTS

Craig Amaral
Craig Amaral

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SECTION A - FINANCIAL ANALYSIS

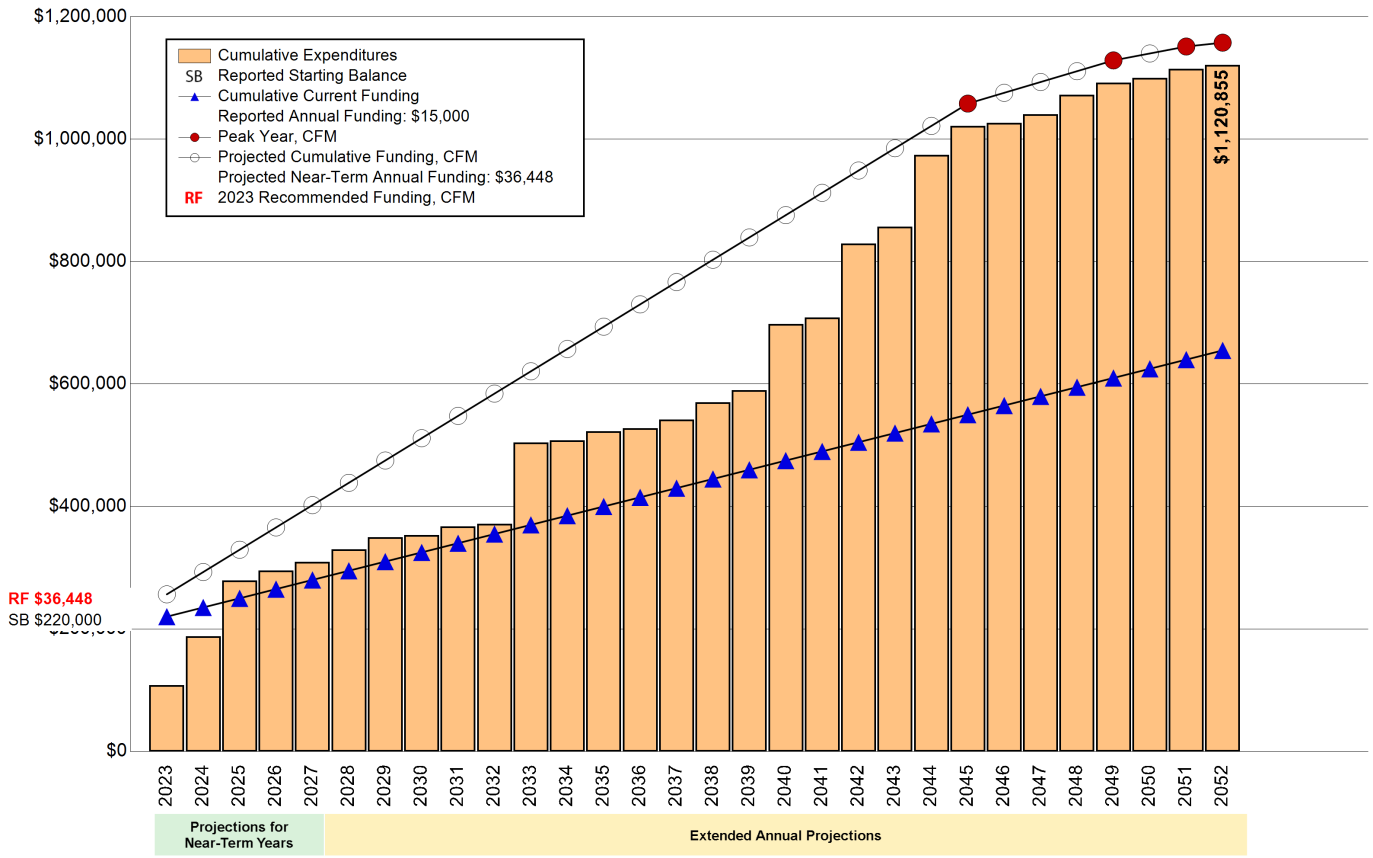
The Annapolis Cove Marina Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 58 Projected Replacements identified in the Replacement Reserve Inventory.

$36,448 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2023**

We recommend the Association adopt a Replacement Reserve Funding Plan based on the annual funding recommendation above. Inflation adjusted funding for subsequent years is shown on Page A.5.

Annapolis Cove Marina reports a Starting Balance of $220,000 and Annual Funding totaling $15,000, which is inadequate to fund projected replacements starting in 2025. See Page A.3 for a more detailed evaluation.

#1 - Cumulative Replacement Reserve Funding and Expenditures Graph



The increase in the Recommended Annual Funding level shown above is primarily due to the inflation rate in the construction industry pushing replacement costs higher. The current level of funding is inadequate to fund projected replacements starting in 2025. After a peak year in 2043, the recommended annual funding drops to $17,729.

The Next Step. The next step in the Reserve Study process is for the Board to carefully review the Component Inventory to make sure that all included components are the responsibility of the Association and that the priorities and the timing of the replacement are in keeping with the goals and objectives of the Board.

If, after that review, the Reserve Study still recommends a substantial increase in the Annual Reserve Funding, MillerDodson can work with the Board to develop a Strategic Funding Plan to ramp up the Funding levels incrementally.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Annapolis Cove Marina Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method (CFM) and the evaluation of the Current Funding are based upon the same Study Year, Study Period, Beginning Balance, Replacement Reserve Inventory and Level of Service.

2023 **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, 2023.

30 Years **STUDY PERIOD**

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 30-year Study Period

$220,000 **STARTING BALANCE**

The Association reports Replacement Reserves on Deposit totaling $220,000 at the start of the Study Year.

Level One **LEVEL OF SERVICE**

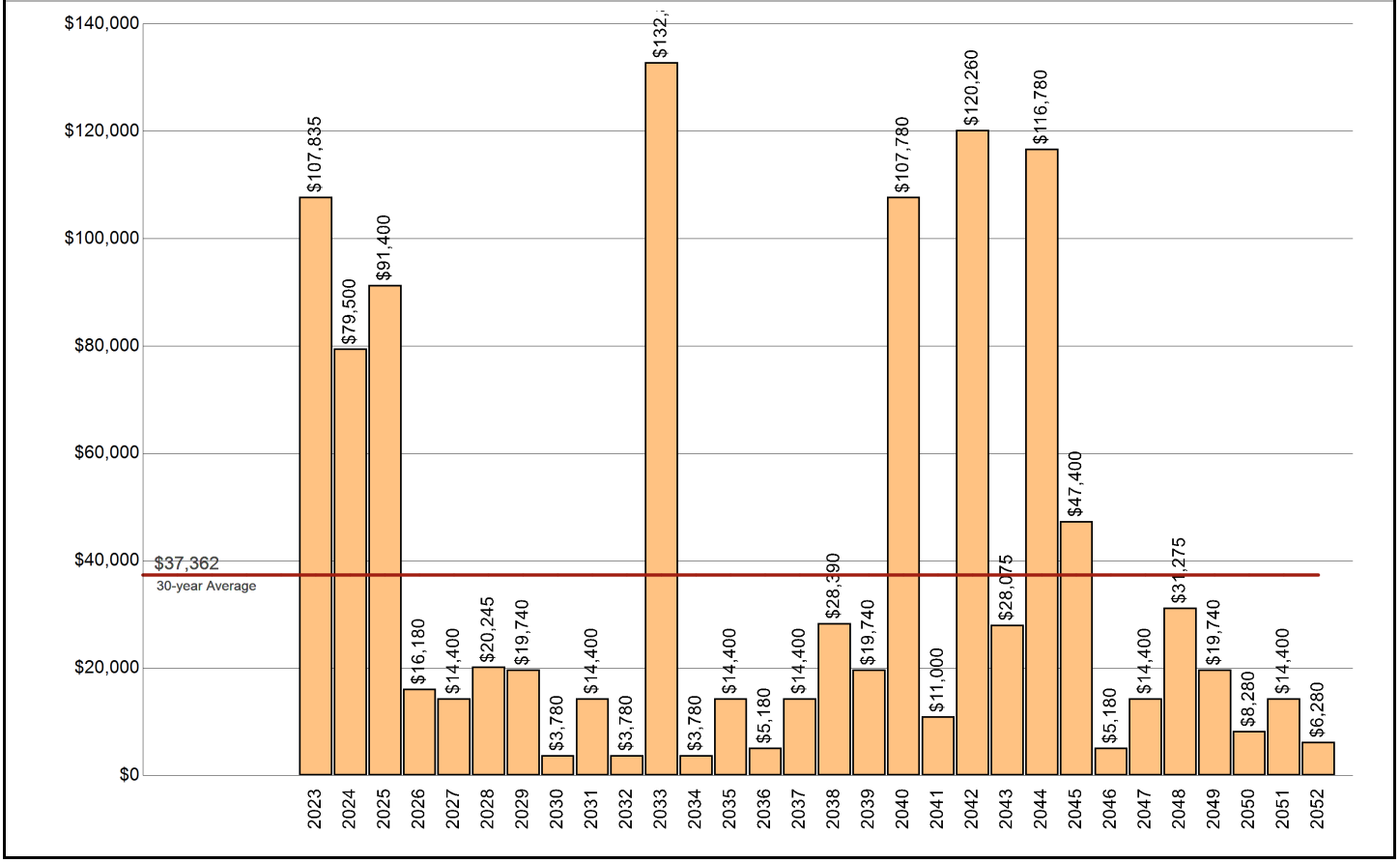
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

$1,120,855 **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Annapolis Cove Marina Replacement Reserve Inventory identifies 58 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $1,120,855 over the 30-year Study Period. The Projected Replacements are divided into 2 major categories starting on Page B.3. Pages B.1-B.2 provide detailed information on the Replacement Reserve Inventory.

#2 - Annual Expenditures for Projected Replacements Graph

This graph shows annual expenditures for Projected Replacements over the 30-year Study Period. The red line shows the average annual expenditure of $37,362. Section C provides a year by year Calendar of these expenditures.



UPDATING OF THE FUNDING PLAN

The Association has a responsibility to review the Funding Plan annually. The review should include a comparison and evaluation of actual reserve funding with recommended levels shown on Page A.4 and A.5. The Projected Replacements listed on Page C.2 should be compared with any replacements accomplished and funded from Replacement Reserves. Discrepancies should be evaluated and if necessary, the Reserve Study should be updated or a new study commissioned. We recommend annual increases in replacement reserve funding to account for the impact of inflation. Inflation Adjusted Funding is discussed on Page A.5.

UPDATING OF THE REPLACEMENT RESERVE STUDY

At a minimum, the Replacement Reserve Study should be professionally updated every three to five years or after completion of a major replacement project. Updating should also be considered if during the annual review of the Funding Plan, discrepancies are noted between projected and actual reserve funding or replacement costs. Updating may also be necessary if there is a meaningful discrepancy between the actual inflation rate and the inflation rate used for the Inflation Adjusted Funding of Replacement Reserves on Page A.5.

ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the $1,120,855 of Projected Expenditures over the 30-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 30

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Starting Balance	$220,000									
Projected Replacements	($107,835)	($79,500)	($91,400)	($16,180)	($14,400)	($20,245)	($19,740)	($3,780)	($14,400)	($3,780)
Annual Deposit	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000
End of Year Balance	$127,165	$62,665	($13,735)	($14,915)	($14,315)	($19,560)	($24,300)	($13,080)	($12,480)	($1,260)
Cumulative Expenditures	($107,835)	($187,335)	($278,735)	($294,915)	($309,315)	($329,560)	($349,300)	($353,080)	($367,480)	($371,260)
Cumulative Receipts	$235,000	$250,000	$265,000	$280,000	$295,000	$310,000	$325,000	$340,000	$355,000	$370,000
Year	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**
Projected Replacements	($132,855)	($3,780)	($14,400)	($5,180)	($14,400)	($28,390)	($19,740)	($107,780)	($11,000)	($120,260)
Annual Deposit	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000
End of Year Balance	($119,115)	($107,895)	($107,295)	($97,475)	($96,875)	($110,265)	($115,005)	($207,785)	($203,785)	($309,045)
Cumulative Expenditures	($504,115)	($507,895)	($522,295)	($527,475)	($541,875)	($570,265)	($590,005)	($697,785)	($708,785)	($829,045)
Cumulative Receipts	$385,000	$400,000	$415,000	$430,000	$445,000	$460,000	$475,000	$490,000	$505,000	$520,000
Year	**2043**	**2044**	**2045**	**2046**	**2047**	**2048**	**2049**	**2050**	**2051**	**2052**
Projected Replacements	($28,075)	($116,780)	($47,400)	($5,180)	($14,400)	($31,275)	($19,740)	($8,280)	($14,400)	($6,280)
Annual Deposit	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000
End of Year Balance	($322,120)	($423,900)	($456,300)	($446,480)	($445,880)	($462,155)	($466,895)	($460,175)	($459,575)	($450,855)
Cumulative Expenditures	($857,120)	($973,900)	($1,021,300)	($1,026,480)	($1,040,880)	($1,072,155)	($1,091,895)	($1,100,175)	($1,114,575)	($1,120,855)
Cumulative Receipts	$535,000	$550,000	$565,000	$580,000	$595,000	$610,000	$625,000	$640,000	$655,000	$670,000

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of $220,000 & annual funding of $15,000), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 58 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of $15,000 throughout the 30-year Study Period.

Annual Funding of $15,000 is approximately 41 percent of the $36,448 recommended Annual Funding calculated by the Cash Flow Method for 2023, the Study Year.

See the Executive Summary for the Current Funding Statement.

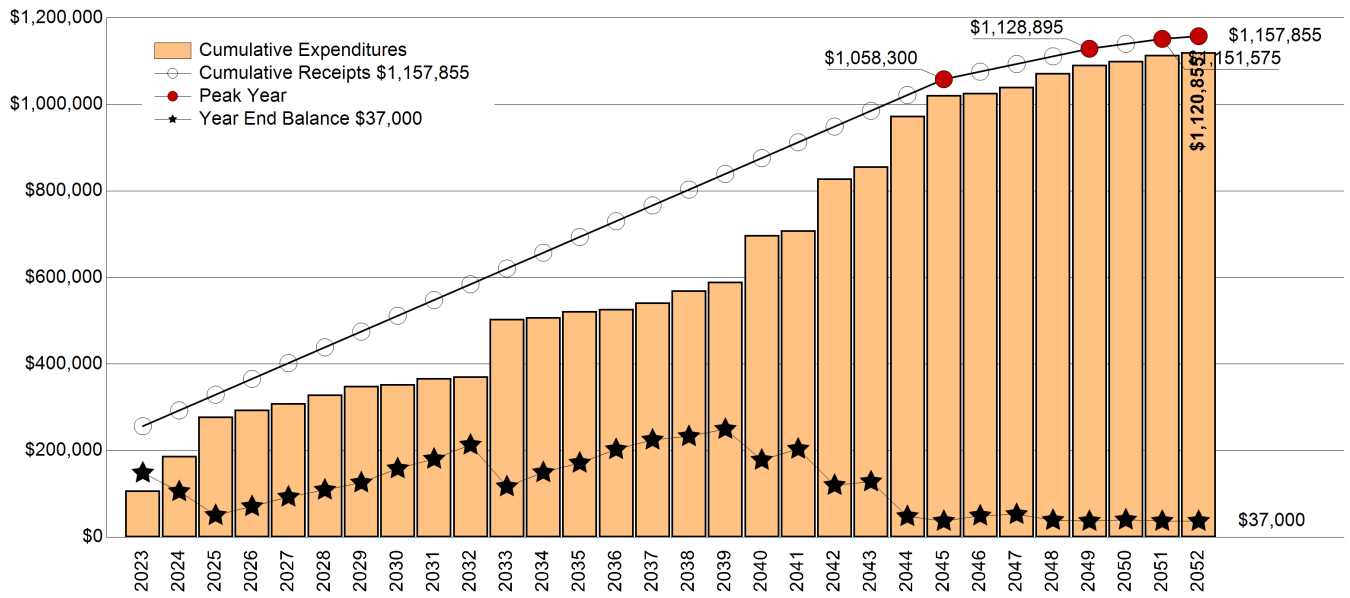
CASH FLOW METHOD FUNDING

$36,448 **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2023**

Recommended Replacement Reserve Funding has been calculated using the Cash Flow Method (also called the Straight Line or Threshold Method). This method calculates a constant annual funding between peaks in cumulative expenditures, while maintaining a Minimum Balance (threshold) in the Peak Years.

- **Peak Years.** The First Peak Year occurs in 2045 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of $1,021,300 of replacements from 2023 to 2045. Recommended funding is anticipated to decline in 2046. Peak Years are identified in Chart 4 and Table 5.
- **Threshold (Minimum Balance).** The calculations assume a Minimum Balance of $37,000 will always be held in reserve, which is calculated by rounding the 12-month 30-year average annual expenditure of $37,362 as shown on Graph #2.
- **Cash Flow Method Study Period.** Cash Flow Method calculates funding for $1,120,855 of expenditures over the 30-year Study Period. It does not include funding for any projects beyond 2052 and in 2052, the end of year balance will always be the Minimum Balance.

#4 - Cash Flow Method - Graph of Cumulative Receipts and Expenditures - Years 1 through 30



#5 - Cash Flow Method - Table of Receipts & Expenditures - Years 1 through 30

Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Starting Balance	$220,000									
Projected Replacements	($107,835)	($79,500)	($91,400)	($16,180)	($14,400)	($20,245)	($19,740)	($3,780)	($14,400)	($3,780)
Annual Deposit	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448
End of Year Balance	$148,613	$105,561	$50,608	$70,876	$92,924	$109,127	$125,835	$158,503	$180,550	$213,218
Cumulative Expenditures	($107,835)	($187,335)	($278,735)	($294,915)	($309,315)	($329,560)	($349,300)	($353,080)	($367,480)	($371,260)
Cumulative Receipts	$256,448	$292,896	$329,343	$365,791	$402,239	$438,687	$475,135	$511,583	$548,030	$584,478
Year	**2033**	**2034**	**2035**	**2036**	**2037**	**2038**	**2039**	**2040**	**2041**	**2042**
Projected Replacements	($132,855)	($3,780)	($14,400)	($5,180)	($14,400)	($28,390)	($19,740)	($107,780)	($11,000)	($120,260)
Annual Deposit	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448	$36,448
End of Year Balance	$116,811	$149,479	$171,527	$202,795	$224,842	$232,900	$249,608	$178,276	$203,724	$119,912
Cumulative Expenditures	($504,115)	($507,895)	($522,295)	($527,475)	($541,875)	($570,265)	($590,005)	($697,785)	($708,785)	($829,045)
Cumulative Receipts	$620,926	$657,374	$693,822	$730,270	$766,717	$803,165	$839,613	$876,061	$912,509	$948,957
Year	**2043**	**2044**	**1st Peak - 2045**	**2046**	**2047**	**2048**	**2nd Peak - 2049**	**2050**	**3rd Peak - 2051**	**4th Peak - 2052**
Projected Replacements	($28,075)	($116,780)	($47,400)	($5,180)	($14,400)	($31,275)	($19,740)	($8,280)	($14,400)	($6,280)
Annual Deposit	$36,448	$36,448	$36,448	$17,649	$17,649	$17,649	$17,649	$11,340	$11,340	$6,280
End of Year Balance	$128,284	$47,952	$37,000	$49,469	$52,717	$39,091	$37,000	$40,060	$37,000	$37,000
Cumulative Expenditures	($857,120)	($973,900)	($1,021,300)	($1,026,480)	($1,040,880)	($1,072,155)	($1,091,895)	($1,100,175)	($1,114,575)	($1,120,855)
Cumulative Receipts	$985,404	$1,021,852	$1,058,300	$1,075,949	$1,093,597	$1,111,246	$1,128,895	$1,140,235	$1,151,575	$1,157,855

INFLATION ADJUSTED FUNDING

The Cash Flow Method calculations on Page A4 have been done in today's dollars with no adjustment for inflation. At Miller+Dodson, we believe that long-term inflation forecasting is effective at demonstrating the power of compounding, not at calculating appropriate funding levels for Replacement Reserves. We have developed this proprietary model to estimate the short-term impact of inflation on Replacement Reserve funding.

$36,448 **2023 - CASH FLOW METHOD RECOMMENDED FUNDING**

The 2023 Study Year calculations have been made using current replacement costs (see Page B.2), modified by the Analyst for any project specific conditions.

$38,817 **2024 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2024 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $148,613 on January 1, 2024.
- All 2023 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than $107,835.
- Construction Cost Inflation of 6.50 percent in 2023.

The $38,817 inflation adjusted funding in 2024 is a 6.50 percent increase over the non-inflation adjusted funding of $36,448.

$41,340 **2025 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2025 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $134,408 on January 1, 2025.
- All 2024 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than $79,728.
- Construction Cost Inflation of 6.50 percent in 2024.

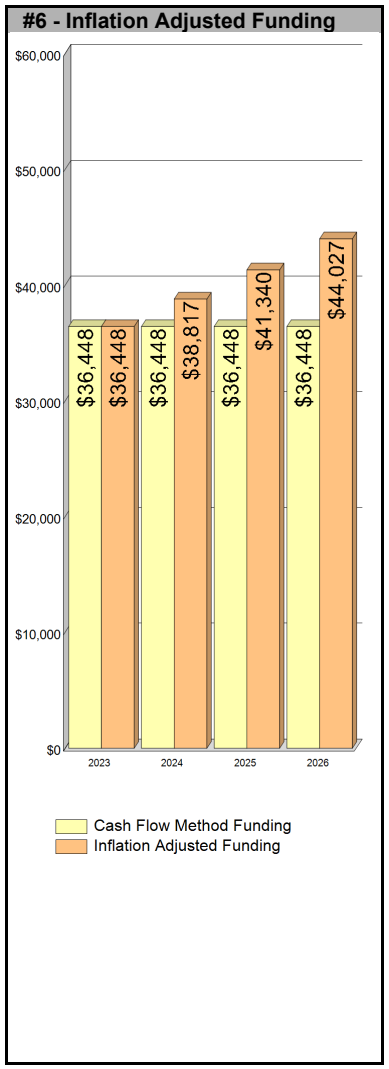
The $41,340 inflation adjusted funding in 2025 is a 13.42 percent increase over the non-inflation adjusted funding of $36,448.

$44,027 **2026 - INFLATION ADJUSTED FUNDING**

A new analysis calculates the 2026 funding based on three assumptions:

- Replacement Reserves on Deposit totaling $156,328 on January 1, 2026.
- All 2025 Projected Replacements listed on Page C.2 accomplished at a cost to Replacement Reserves less than $97,493.
- Construction Cost Inflation of 6.50 percent in 2025.

The $44,027 inflation adjusted funding in 2026 is a 20.79 percent increase over the non-inflation adjusted funding of $36,448.



Year Four and Beyond

The inflation-adjusted funding calculations outlined above are not intended to be a substitute for periodic evaluation of common elements by an experienced Reserve Analyst. Industry Standards, lender requirements, and many state and local statutes require a Replacement Reserve Study to be professionally updated every 3 to 5 years.

Inflation Adjustment

Prior to approving a budget based upon the 2024, 2025 and 2026 inflation-adjusted funding calculations above, the 6.50 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percentage point), contact Miller+Dodson Associates prior to using the Inflation Adjusted Funding.

Interest on Reserves

The recommended funding calculations do not account for interest earned on Replacement Reserves. In 2023, based on a 1.50 percent interest rate, we estimate the Association may earn $2,765 on an average balance of $184,306, $2,123 on an average balance of $141,510 in 2024, and $2,181 on $145,368 in 2025. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2023 funding from $36,448 to $33,683 (a 7.58 percent reduction), $38,817 to $36,694 in 2024 (a 5.46 percent reduction), and $41,340 to $39,160 in 2025 (a 5.27 percent reduction).

REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

[03/24/2023] Revised the starting balance.
[06/02/2023] Revised the starting balance and inventory per board.

SECTION B - REPLACEMENT RESERVE INVENTORY

- **PROJECTED REPLACEMENTS.** Annapolis Cove Marina - Replacement Reserve Inventory identifies 58 items which 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 $1,006,940. Cumulative Replacements totaling $1,120,855 are scheduled in the Replacement Reserve Inventory over the 30-year Study Period. Cumulative Replacements include those components that are replaced more than once during the period of the study.

  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.** Some of the items contained in the Replacement Reserve Inventory are 'Excluded Items'. Multiple categories of items 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, minor repairs, and capital improvements.

  Value. Items with a replacement cost of less than $1000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect the Association policy on the administration of Replacement Reserves. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B.2.

  Long-lived Items. Items are excluded from the Replacement Reserve Inventory when items are properly maintained and are assumed to have a life equal to the property.

  Unit improvements. Items 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.

- **CATEGORIES.** The 58 items included in the Annapolis Cove Marina Replacement Reserve Inventory are divided into 2 major categories. Each category is printed on a separate page, beginning on page B.3.

- **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 Association, 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 remaining economic life and the value of the components are provided based on these observations and the funding status and funding plan are then derived from the analysis of this data.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (CONT'D)

- **INVENTORY DATA.** Each of the 58 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 identified each item included in the Inventory. Additional information may be included in the Comments section at the bottom of each page of the Inventory.

  Units. We have used standard abbreviations to identify the number of units including SF-square feet, LF-lineal feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Non-standard abbreviations are noted in the Comments section at the bottom of the page.

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

  Unit Replacement Cost. We use four sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, information provided by local contractors and suppliers, industry standard estimating manuals, and a cost database we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work.

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

  Remaining Economic Life (Years). 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.

- **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 in the Comments section.
- **REMAINING ECONOMIC LIFE GREATER THAN 30 YEARS.** The calculations do not include funding for initial replacements beyond 30 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 30-year window.
- **ACCURACY OF THE ANALYSIS.** The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 58 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B.1.

MARINE COMPONENTS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
1	Piling (6% allowance)	ea	12	$1,200.00	100	2	$14,400
2	Piling (6% allowance)	ea	12	$1,200.00	100	4	$14,400
3	Piling (6% allowance)	ea	12	$1,200.00	100	6	$14,400
4	Piling (6% allowance)	ea	12	$1,200.00	100	8	$14,400
5	Piling (6% allowance)	ea	12	$1,200.00	100	10	$14,400
6	Piling (6% allowance)	ea	12	$1,200.00	100	12	$14,400
7	Piling (6% allowance)	ea	12	$1,200.00	100	14	$14,400
8	Piling (6% allowance)	ea	12	$1,200.00	100	16	$14,400
9	Piling (6% allowance)	ea	12	$1,200.00	100	20	$14,400
10	Piling (6% allowance)	ea	12	$1,200.00	100	22	$14,400
11	Piling (6% allowance)	ea	12	$1,200.00	100	24	$14,400
12	Piling (6% allowance)	ea	12	$1,200.00	100	26	$14,400
13	Piling (6% allowance)	ea	12	$1,200.00	100	28	$14,400
14	Pier water service (allowance)	ft	750	$38.00	100	none	$28,500
15	Pier water service (allowance)	ft	750	$38.00	100	10	$28,500
16	Pier water service (allowance)	ft	750	$38.00	100	22	$28,500
17	Pump-out unit	ls	1	$4,500.00	100	5	$4,500
18	Pump-out unit	ls	1	$4,500.00	100	10	$4,500
19	Pump-out unit	ls	1	$4,500.00	100	15	$4,500
20	Pump-out unit	ls	1	$4,500.00	100	22	$4,500
21	Pump-out unit	ls	1	$4,500.00	100	27	$4,500

Replacement Costs - Page Subtotal $295,200

COMMENTS

- Item #9: Piling (6% allowance) - [06/02/2023] Revised per board
- Item #16: Pier water service (allowance) - [06/02/2023] Revised per board
- Item #20: Pump-out unit - [06/02/2023] Revised per board
- Item #21: Pump-out unit - [06/02/2023] Revised per board

MARINE COMPONENTS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
22	Pier structure (30%allowance)	sf	2,000	$31.00	30	21	$62,000
23	Pier structure (30% allowance)	sf	2,000	$31.00	30	19	$62,000
24	Pier structure (30% allowance)	sf	2,000	$31.00	30	17	$62,000
25	Pier decking (30% allowance)	sf	2,000	$21.00	21	21	$42,000
26	Pier decking (30% allowance)	sf	2,000	$21.00	21	19	$42,000
27	Pier decking (30% allowance)	sf	2,000	$21.00	21	17	$42,000
28	Pier decking (3% allowance)	sf	180	$21.00	2	3	$3,780
29	Pier decking, immediate need	sf	60	$21.00	45	none	$1,260
30	Wave attenuation phase 1 (30% allowance)	lf	77	$1,000.00	100	none	$77,000
31	Wave attenuation, phase 2 (30% allowance)	lf	77	$1,000.00	100	1	$77,000
32	Wave attenuation, phase 3 (30% allowance)	lf	77	$1,000.00	100	2	$77,000
33	Electrical shed	sf	120	$44.00	20	19	$5,280
34	Electrical meter bank	ea	6	$6,000.00	50	10	$36,000
35	Terminal box, 800 amp and main breaker	ea	1	$9,000.00	50	10	$9,000
36	Fire extinguisher	ea	10	$85.00	30	5	$850
37	Pier electrical service (allowance)	lf	750	$30.00	20	10	$22,500
38	Fire extinguisher, cabinet	ea	10	$50.00	30	5	$500
39	Pier electric panel and breakers, 100 amp	ea	1	$2,500.00	50	1	$2,500
40	Pier lights	ea	10	$1,600.00	15	10	$16,000
41	Fire suppression system (standpipe)	ls	4	$2,500.00	15	3	$10,000

Replacement Costs - Page Subtotal $650,670

COMMENTS

- Pilings have a normal economic life expectancy of 30 years. We are modeling 6% of the total requiring replacement every two years to reflect the incremental nature of the replacement of pilings by the Association on an 'as needed' basis. 30 years divided by 2 years is 15 recurrences in 30 years (30/2 = 15). 6% times 15 occurrences are equal to a 90% total replacement in 30 years (6% * 15 = 90%).
- Pier structure replacement has been broken into three 30% parts to distribute the replacement cost over time.
- Pier decking has a normal economic life expectancy of 21 years. We are modeling one complete decking replacement when the pier structure is replaced. We also model 3% of the total requiring replacement every two years. Items showing zero remaining life expectancy are to take care of immediate needs due to tripping hazards. 30 years divided by two years is 15 recurrences (30/2 = 15). 3% times 15 equals 45% replacement or about one-half times the total replacement in 30 years (3% x 15 = 45%). Pier decking replacement has been broken into three 30% parts to distribute the replacement cost over time.
- Wave attenuation replacement has been broken into three 30% parts to distribute the replacement cost over time.
- Item #22: Pier structure (30%allowance) - [06/02/2023] Revised per board
- Item #25: Pier decking (30% allowance) - [06/02/2023] Revised per board
- Item #30: Wave attenuation phase 1 (30% allowance) - [06/02/2023] Revised per board
- Item #31: Wave attenuation, phase 2 (30% allowance) - [06/02/2023] Revised per board
- Item #32: Wave attenuation, phase 3 (30% allowance) - [06/02/2023] Revised per board

MARINE COMPONENTS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
42	Well and casing	ls	1	$9,000.00	50	21	$9,000
43	Well pump and pressure tank	ea	1	$1,000.00	15	3	$1,000
44	Dock ladder (4 step)	ea	10	$104.00	20	5	$1,040
45	Boat whips, 16'	ea	7	$620.00	10	6	$4,340
46	Work platform (floating dock section)	ea	1	$1,000.00	10	6	$1,000
47	Bubblers	ea	10	$850.00	10	5	$8,500
48	Copper piling caps, 10"	ea	200	$36.00	50	19	$7,200

Replacement Costs - Page Subtotal $32,080

COMMENTS

SHARED COMPONENTS
PROJECTED REPLACEMENTS

NEL- Normal Economic Life (yrs)
REL- Remaining Economic Life (yrs)

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
49	Asphalt pvmt. mill & overlay (25% allowance)	sf	4,300	$2.45	20	15	$10,535
50	Asphalt pavement, seal coat (25% allowance)	sf	4,300	$0.25	5	none	$1,075
51	Concrete driveway apron (25% allowance)	sf	50	$14.00	60	20	$700
52	Miscellaneous (25% allowance)	ls	1	$1,400.00	10	3	$1,400
53	Entrance monument, carved wood sign	sf	4	$220.00	15	10	$880
54	Sign and post, other	ea	3	$300.00	35	20	$900
55	Cut post, PTL wood (8"x8"x5'-4")	ea	1	$300.00	30	20	$300
56	Cut post, PTL wood (piling)	ea	10	$300.00	30	20	$3,000
57	Cable guardrail with wood post	ft	350	$22.00	30	20	$7,700
58	Pedestal mailbox	ea	1	$2,500.00	35	29	$2,500
	Bulkhead, replace						EXCLUDED
	Bulkhead, refurbish, 10% of repl.						EXCLUDED
	Bulkhead, cap						EXCLUDED
	Stairs wood, replace						EXCLUDED

Replacement Costs - Page Subtotal $28,990

COMMENTS

- Shared components are used jointly by the Home Owners Association and the Marina Association. As directed by the Board, all of these components have been apportioned based on the number of units or slips per association. Since the Home Owners Association has 210 units, and the Marina Association has 54 slips, the amount attributed to the Home Owners Association is 75%, with 25% attributed to the Marina Association.
- For the Marina Association, the following items from the Home Owner Association's Study have been combined into a miscellaneous allowance for small components every ten years, including Bollards, Light Pole, Stairs-Refurbishment, and Terrace Stairs.
- Seal coating or rejuvenation has been shown to extend service life of asphalt if performed at an early stage, once asphalt has fully cured and then cyclically thereafter. This is the best practice to extend life of the asphalt pavement. The Unit Cost includes crack sealing, and line/curb painting. The Asphalt paving industries recommendation/best practice is to sealcoat approximately one (1) year after the mill and overlay is performed. One (1) year allows the excess oils in the paving mixture to “weather off”. Sealing the following year locks in the remaining essential oils that keep the pavement pliable. Cyclical reapplication of the sealcoat, approximately every five (5) years, will keep those oils in expanding its useful life.
- Bulkhead, replace - [01/31/2023] excluded per board
- Bulkhead, refurbish, 10% of repl. - [01/31/2023] excluded per board
- Bulkhead, cap - [01/31/2023] excluded per board

VALUATION EXCLUSIONS
Excluded Items

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
	Water filters						EXCLUDED
	Hose bibs						EXCLUDED
	Navigational signage						EXCLUDED
	Bollard/access control devices/gates						EXCLUDED
	PTL lumber/landscape borders						EXCLUDED
	PTL lumber steps						EXCLUDED
	Handrail						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 $1000 have not been scheduled for funding from Replacement Reserve. Examples of items excluded 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 ($)	NEL	REL	REPLACEMENT COST ($)
	Tree replacement						EXCLUDED
	Bulkheads						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 ($)	NEL	REL	REPLACEMENT COST ($)
	Lines, cleats, bumpers, rub rails, etc.						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.

UTILITY EXCLUSIONS
Excluded Items

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST ($)	NEL	REL	REPLACEMENT COST ($)
	Primary electric feeds						EXCLUDED
	Electric transformers						EXCLUDED
	Water mains and meters						EXCLUDED

UTILITY EXCLUSIONS
Comments

- Utility Exclusions. Many improvements owned by utility companies are on property owned by the Association. We have assumed that repair, maintenance, and replacements of these components will be done at the expense of the appropriate utility company. Examples of items excluded from funding 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 ($)	NEL	REL	REPLACEMENT COST ($)
	Cleaning of asphalt pavement						EXCLUDED
	Crack sealing of asphalt pavement						EXCLUDED
	Floats & safety equipment						EXCLUDED
	Striping of parking spaces						EXCLUDED
	Numbering of parking spaces						EXCLUDED
	Landscaping and site grading						EXCLUDED
	Exterior painting and other coatings						EXCLUDED
	Repair services						EXCLUDED
	Partial replacements						EXCLUDED
	Capital improvements						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 are listed above. The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

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SECTION C - CALENDAR OF PROJECTED ANNUAL REPLACEMENTS

GENERAL STATEMENT. The 58 Projected Replacements in the Annapolis Cove Marina 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 C.2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the 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.
- **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. We acknowledge that there are instances in which multiple revisions are necessary. However, unnecessary multiple revisions drain on our time and manpower resources. Therefore, Miller Dodson will exercise its sole discretion as to whether additional charges are incurred.
- **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 1120 (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 co-mingle 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 1120H (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.
- **EXPERIENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the Study Period, 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.

PROJECTED REPLACEMENTS

Item	2023 - Study Year	$
14	Pier water service (allowance)	$28,500
29	Pier decking, immediate need	$1,260
30	Wave attenuation phase 1 (30% allowance)	$77,000
50	Asphalt pavement, seal coat (25% allowance)	$1,075
Total Scheduled Replacements		$107,835

Item	2024 - YEAR 1	$
31	Wave attenuation, phase 2 (30% allowance)	$77,000
39	Pier electric panel and breakers, 100 amp	$2,500
Total Scheduled Replacements		$79,500

Item	2025 - YEAR 2	$
1	Piling (6% allowance)	$14,400
32	Wave attenuation, phase 3 (30% allowance)	$77,000
Total Scheduled Replacements		$91,400

Item	2026 - YEAR 3	$
28	Pier decking (3% allowance)	$3,780
41	Fire suppression system (standpipe)	$10,000
43	Well pump and pressure tank	$1,000
52	Miscellaneous (25% allowance)	$1,400
Total Scheduled Replacements		$16,180

Item	2027 - YEAR 4	$
2	Piling (6% allowance)	$14,400
Total Scheduled Replacements		$14,400

Item	2028 - YEAR 5	$
17	Pump-out unit	$4,500
28	Pier decking (3% allowance)	$3,780
36	Fire extinguisher	$850
38	Fire extinguisher, cabinet	$500
44	Dock ladder (4 step)	$1,040
47	Bubblers	$8,500
50	Asphalt pavement, seal coat (25% allowance)	$1,075
Total Scheduled Replacements		$20,245

Item	2029 - YEAR 6	$
3	Piling (6% allowance)	$14,400
45	Boat whips, 16'	$4,340
46	Work platform (floating dock section)	$1,000
Total Scheduled Replacements		$19,740

Item	2030 - YEAR 7	$
28	Pier decking (3% allowance)	$3,780
Total Scheduled Replacements		$3,780

Item	2031 - YEAR 8	$
4	Piling (6% allowance)	$14,400
Total Scheduled Replacements		$14,400

Item	2032 - YEAR 9	$
28	Pier decking (3% allowance)	$3,780
Total Scheduled Replacements		$3,780

PROJECTED REPLACEMENTS

Item	2033 - YEAR 10	$
5	Piling (6% allowance)	$14,400
15	Pier water service (allowance)	$28,500
18	Pump-out unit	$4,500
34	Electrical meter bank	$36,000
35	Terminal box, 800 amp and main breaker	$9,000
37	Pier electrical service (allowance)	$22,500
40	Pier lights	$16,000
50	Asphalt pavement, seal coat (25% allowance)	$1,075
53	Entrance monument, carved wood sign	$880
Total Scheduled Replacements		$132,855

Item	2034 - YEAR 11	$
28	Pier decking (3% allowance)	$3,780
Total Scheduled Replacements		$3,780

Item	2035 - YEAR 12	$
6	Piling (6% allowance)	$14,400
Total Scheduled Replacements		$14,400

Item	2036 - YEAR 13	$
28	Pier decking (3% allowance)	$3,780
52	Miscellaneous (25% allowance)	$1,400
Total Scheduled Replacements		$5,180

Item	2037 - YEAR 14	$
7	Piling (6% allowance)	$14,400
Total Scheduled Replacements		$14,400

Item	2038 - YEAR 15	$
19	Pump-out unit	$4,500
28	Pier decking (3% allowance)	$3,780
47	Bubblers	$8,500
49	Asphalt pvmt. mill & overlay (25% allowance)	$10,535
50	Asphalt pavement, seal coat (25% allowance)	$1,075
Total Scheduled Replacements		$28,390

Item	2039 - YEAR 16	$
8	Piling (6% allowance)	$14,400
45	Boat whips, 16'	$4,340
46	Work platform (floating dock section)	$1,000
Total Scheduled Replacements		$19,740

Item	2040 - YEAR 17	$
24	Pier structure (30% allowance)	$62,000
27	Pier decking (30% allowance)	$42,000
28	Pier decking (3% allowance)	$3,780
Total Scheduled Replacements		$107,780

Item	2041 - YEAR 18	$
41	Fire suppression system (standpipe)	$10,000
43	Well pump and pressure tank	$1,000
Total Scheduled Replacements		$11,000

Item	2042 - YEAR 19	$
23	Pier structure (30% allowance)	$62,000
26	Pier decking (30% allowance)	$42,000
28	Pier decking (3% allowance)	$3,780
33	Electrical shed	$5,280
48	Copper piling caps, 10"	$7,200
Total Scheduled Replacements		$120,260

PROJECTED REPLACEMENTS

Item	2043 - YEAR 20	$
9	Piling (6% allowance)	$14,400
50	Asphalt pavement, seal coat (25% allowance)	$1,075
51	Concrete driveway apron (25% allowance)	$700
54	Sign and post, other	$900
55	Cut post, PTL wood (8"x8"x5'-4")	$300
56	Cut post, PTL wood (piling)	$3,000
57	Cable guardrail with wood post	$7,700
	Total Scheduled Replacements	$28,075

Item	2044 - YEAR 21	$
22	Pier structure (30%allowance)	$62,000
25	Pier decking (30% allowance)	$42,000
28	Pier decking (3% allowance)	$3,780
42	Well and casing	$9,000
	Total Scheduled Replacements	$116,780

Item	2045 - YEAR 22	$
10	Piling (6% allowance)	$14,400
16	Pier water service (allowance)	$28,500
20	Pump-out unit	$4,500
	Total Scheduled Replacements	$47,400

Item	2046 - YEAR 23	$
28	Pier decking (3% allowance)	$3,780
52	Miscellaneous (25% allowance)	$1,400
	Total Scheduled Replacements	$5,180

Item	2047 - YEAR 24	$
11	Piling (6% allowance)	$14,400
	Total Scheduled Replacements	$14,400

Item	2048 - YEAR 25	$
28	Pier decking (3% allowance)	$3,780
40	Pier lights	$16,000
44	Dock ladder (4 step)	$1,040
47	Bubblers	$8,500
50	Asphalt pavement, seal coat (25% allowance)	$1,075
53	Entrance monument, carved wood sign	$880
	Total Scheduled Replacements	$31,275

Item	2049 - YEAR 26	$
12	Piling (6% allowance)	$14,400
45	Boat whips, 16'	$4,340
46	Work platform (floating dock section)	$1,000
	Total Scheduled Replacements	$19,740

Item	2050 - YEAR 27	$
21	Pump-out unit	$4,500
28	Pier decking (3% allowance)	$3,780
	Total Scheduled Replacements	$8,280

Item	2051 - YEAR 28	$
13	Piling (6% allowance)	$14,400
	Total Scheduled Replacements	$14,400

Item	2052 - YEAR 29	$
28	Pier decking (3% allowance)	$3,780
58	Pedestal mailbox	$2,500
	Total Scheduled Replacements	$6,280

SECTION D - CONDITION ASSESSMENT

General Comments. Miller+Dodson Associates conducted a Reserve Study at Annapolis Cove Marina in January 2023. Annapolis Cove Marina is in generally good condition for a marina constructed in the early to mid 1980s. A review of the Replacement Reserve Inventory will show that we anticipate 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 those items that are unique or deserving of attention because of their condition or how they have been treated in the Replacement Reserve Analysis or Inventory.

IMPORTANT NOTE: This Condition Assessment is based upon visual and apparent conditions of the common elements of the community which were observed by the Reserve Analyst at the time of the site visit. This Condition Assessment does not constitute, nor is it a substitute for, a professional Structural Evaluation of the buildings, amenities, or systems. Miller Dodson strongly recommends that the Association retain the services of a Structural Engineer to conduct thorough and periodic evaluations of the buildings, balconies, and any other structural components of the buildings and amenities of the Association.

General Condition Statements.

Excellent. 100% to 90% of Normal Economic Life expected, with no appreciable wear or defects.

Good. 90% to 60% of Normal Economic Life expected, minor wear or cosmetic defects found. Normal maintenance should be expected. If performed properly, normal maintenance may increase the useful life of a component. Otherwise, the component is wearing normally.

Fair. 60% to 30% of Normal Economic Life expected, moderate wear with defects found. Repair actions should be taken to extend the life of the component or to correct repairable defects and distress. Otherwise, the component is wearing normally.

Marginal. 30% to 10% of Normal Economic Life expected, with moderate to significant wear or distress found. Repair actions are expected to be cost-effective for localized issues, but normal wear and use are evident. The component is reaching the end of the Normal Economic Life.

Poor. 10% to 0% of Normal Economic Life expected, with significant distress and wear. Left unattended, additional damage to underlying structures is likely to occur. Further maintenance is unlikely to be cost-effective.

(Continued on next page)

MARINE COMPONENTS

Wood Piers. The Association operates one wood pier with a main trunk, multiple stems, finger piers, and wave attenuation bulkheads. The piers are constructed from pressure-treated lumber supported by wood pilings. The piers are approximately 40 years old. New wood pier stringers and surfaces were installed approximately ten years ago. The pilings are being replaced as needed, and the wave attenuation baffles need to be replaced.

Due to the high cost of replacement of pier components at one time, we have elected to model the replacement of the pier components in a phased manner. Other replacements such as wave attenuators, lighting, power and water supply, and fire systems are staggered within the different phases of construction.

Wood Pier Decking. The wood decking on the pier's trunk, stems, fingers, and wave attenuators are exposed to harsh sun and weather extremes. It will typically require replacement before the heavier members of the underlying structure. This decking will also be entirely removed and replaced when the underlying structure is replaced. To model this replacement pattern, we have provided for a complete replacement incident to the replacement of the structure, and we have included an additional replacement interval for the wood pier decking at the midpoint of the service life of the underlying structure.

The wood pier decking appears to be in fair condition with some signs of discoloration and rot.

Pier Structure. The structure consists of pressure-treated woodpiles on 10-foot centers with stringers spanning the distance between piles. We have assumed that all pilings will be replaced as needed.

The pier structure appears in good condition and was replaced approximately 10 years ago. We noted some rot on the pilings.

Freestanding Pilings. Freestanding pilings are those pilings that are installed at the outside limit of each slip. These pilings provide mooring points to secure the stern of the boat within the slip. They are not a part of the pier structure. Because these pilings can be replaced individually when required without affecting other elements of the pier structure, we have treated them as being replaced as needed and spread the cost of their replacement over time.

The freestanding pilings appear to be in fair condition with moderate vegetative growth and minor rot at the water level.

Wave Attenuation. The pier includes wave attenuators across the ends of the stems. Wave attenuators are installed on the water with part of the attenuator remaining at and above sea level and the bottom half reaching underwater to reduce the energy and impact from incoming waves.

The wave attenuators are reported to be in poor condition, and the Association plans to replace them in phases to spread out the cost.

Pier Utility Systems. The pier includes lighting, electrical outlets, water supply, and fire suppression standpipe utility systems. We have assumed that the utility systems will be removed and replaced when the pier structure is replaced. We have also assumed that the systems will be replaced at the midpoint of the service life of the pier structure.

The pier utility systems appear to be in mixed fair to poor condition with rusted electrical panels, pitted light poles, broken or missing hose bibs, and broken or poorly supported water piping. The fire standpipe and electrical outlets appear to be in fair condition

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

Miscellaneous Pier Components. We have included pier ladders, piling caps, bubblers, and mooring whips in the reserve funding, but have excluded minor components such as wooden gates, lines, cleats, bumpers, rub rails, and ring buoys. Some of the ring buoys appear to be faded from weather and UV damage. The ladders, whips, and piling caps appear to be in fair condition.

Sheds. The Association owns an open wooden pavilion shed with an asphalt shingle roof that houses the electrical service/meters, compression tank, and for storage of the pump-out system and cart. The shed appears in good condition with minor defects in the polyvinyl chloride plastic (PVC) lattice.

We noted some erosion and mitigation measures at the ground level on the uphill side of the shed and some tree mold on the wooden trim, but no curled, broken, or missing shingles on the asphalt shingle roof.

We have assumed that the components of the shed's exterior will be replaced as needed, and when a complete replacement is required, it will be replaced with a similar type and size.

Electrical Service. The electrical systems of the marina are reported to be operating normally.

Other than transformers and meters and if protected from water damage or overloading, electrical systems within a shed, including feed lines and switchgear, are considered long-life components. Unless otherwise noted, they are excluded from this study.

To maintain this equipment properly, periodic tightening of all connections is recommended every three to five years. Insurance policies in some cases may have specific requirements regarding the tightening of electrical connections. It is also recommended that outlets, sockets, switches, and minor fixtures be replaced at a maximum of every 30 years.

Unless otherwise identified, replacement of these smaller components is considered incidental to refurbishment or a Valuation Exclusion.

Electrical Distribution Panels. The marina has an electrical distribution panel located on the trunk of the pier. This panel separates the marina's electrical power feed into separate circuits while providing protective circuit breakers for each circuit. This panel dates to the original construction of the pier and has a rated service life of 50 years or more.

The overall condition of the distribution panel appears poor with rust on the weatherproof metal cover. As the distribution panel ages, obtaining replacement parts can be expected to become more difficult. When parts are no longer available, the Association will have to replace the existing panels. Therefore, we have included funding in the Reserve Analysis for distribution panel replacement.

Electrical Switchgear. The electrical switchgear includes the marina's primary distribution equipment, disconnects, relays, fuses, circuit breakers, and meters. The primary electrical switchgear dates to the original construction of the marina. Electrical switchgear has a rated service life of 50 years or more. Electrical switchgear requires ongoing maintenance for proper operation and reliability.

The overall condition of the switchgear appears fair with noted rust on the meter bank. We understand that replacement parts are still available for the equipment. As the switchgear continues to age, obtaining replacement parts can be expected to become more difficult. When parts are no longer available or when the condition of the switchgear deteriorates sufficiently, the Association will have to replace or upgrade the existing equipment. Therefore, we have included funding in the Reserve Analysis for distribution panel replacement on an incremental basis.

Wells, Pumps and Tanks. The marina water is supplied by a well and submersible well pump with a pressure tank in the shed. The marina sewerage disposal is provided by a cart-mounted pump-out unit and tank stored in the shed.

The cart-mounted pump-out pump and water tank are reported to be in good operating condition and have an expected life of 5 years.

We have included three items in the Reserve Analysis for the well and water pump: the replacement of the pump, tank, and the well at the end of its rated service life. The water was winterized and not on at the time of the survey, but the system is reported to be in good operating condition. The expected life of the well is 50 years, and the pump and tank are 15 years.

Testing and inspection of well systems are not included in this study.

Fire Safety Systems. The marina is fitted with a fire safety system that includes a concrete fire department water tank, Siamese connection, dock standpipes, and fire extinguishers in cabinets, and these systems are reported to be operating normally. Testing and inspection of fire safety systems are not included in this study.

Standpipe dock systems have a wide variety of configurations and requirements depending on their age, condition, and jurisdictional location. Specific county and municipal codes can make a significant difference in what your facility's specific requirements may be.

For dry pipe systems, we have assumed that these are long-life components and will not require whole-scale replacement. It is imperative however for these pipes to be properly drained or for the water to be properly conditioned. Other components such as heads, gauges, and valves are assumed normal maintenance items and are therefore excluded from the study.

We recommend having your entire fire safety system inspected and evaluated by a professional in this field who is familiar with your area of the country. In addition, a comprehensive preventative maintenance program will ensure the maximum possible useful life from these components, and a qualified professional will be able to help in setting up and implementing such a program.

Your local CAI chapter may have a service provider list on their website that may refer you to a local fire and life safety consultant. As an alternative, please get in touch with our office, and we will provide recommendations.

As a preliminary estimate, we have provided an allowance every 15 years for the major repair and upgrade of the fire safety systems. A detailed evaluation of the facility's fire safety system should include an estimate of reserve funding for these components. This funding estimate should be incorporated in the next reserve study update. Inspections and annual maintenance work are not accounted for or included in this study.

SHARED COMPONENTS

Shared Components. The Marina Association shares responsibility with the Home Owners Association for several components located in the waterfront area of the community. These have been apportioned as described elsewhere in this report. As noted in the inventory section of this study, the asphalt pavement is a major component that is shared. We have apportioned 25% of the asphalt paving to the marina. The bulkhead and stairs were excluded at the time of the site visit.

Asphalt Roads and Parking. The Associations maintain an inventory of approximately 16,000 square feet of common asphalt driveways and parking in the community. The overall condition of the asphalt drives appears fair.

The defects we noted include the following:

- Open Cracks. There are multiple locations where open cracks allow water to penetrate the asphalt base and the bearing soils beneath the pavement. This water will erode the base, accelerating the deterioration of the asphalt pavement. If the cracks have allowed the deterioration of the base materials and the bearing soil, the damaged areas should be removed and replaced. All other cracks should be cleaned and filled.
- Improper Grading. The asphalt pavement is not properly graded in several areas, resulting in ponding water on the pavement. Water ponding on asphalt pavement accelerates the deterioration of the pavement and will result in the formation of potholes. Proper grading of the asphalt pavement will require the replacement of portions of the asphalt. It may also require the replacement of some of the adjacent segments of the curb and gutter that are not properly sloped to move water to the stormwater management system.
- Alligatoring. There are multiple locations where the asphalt has developed a cracking pattern known as alligatoring. Alligatoring is the result of an unstable base under the asphalt. Shifting in the base causes the asphalt to crack and shift, forming cracks that resemble the skin of an alligator. Once these cracks extend through the asphalt, they will allow water to penetrate the base, accelerating the rate of deterioration. The only solution is to remove the defective asphalt and compact the base before the new asphalt is installed.
- Potholes. There are several locations where potholes have formed due to the failure of the underlying base material or the surface material. The repair will require the removal of the asphalt and base material, installation and compaction of new base material, and resurfacing with asphalt.
- Depressions. There are areas where the asphalt surface is depressed due to deformation in the surface or underlying layers. These depressions may continue to grow with exposure to traffic. Water ponding was noted in several of these areas. The repair will require the removal of the asphalt and base material, installation and compaction of new base material, and resurfacing with asphalt.
- Cracking Along Edges. Sections of the asphalt pavement have cracks along their edges due to a lack of curbing to hold it in place. The pavement will continue to deteriorate with time.

As a rule, asphalt should be overlaid when approximately 5% of the surface area is cracked or otherwise deteriorated. The normal service life of asphalt pavement is typically 18 to 20 years.

To maintain the condition of the pavement throughout the community and ensure the longest life of the asphalt, we recommend the Association adopts a systematic and comprehensive maintenance program that includes:

- **Cleaning.** Long-term exposure to oil or gas breaks down asphalt. Because this asphalt pavement is generally not used for long-term parking, it is unlikely that frequent cleaning will be necessary. When necessary, spill areas should be cleaned or patched if deterioration has penetrated the asphalt. This is a maintenance activity, and we have assumed that Reserves will not fund it.
- **Crack Repair.** All cracks should be repaired with an appropriate compound to prevent water infiltration through the asphalt into the base. This repair should be done annually. Crack repair is normally considered a maintenance activity and is not funded by Reserves. Areas of extensive cracking or deterioration that cannot be made watertight should be cut out and patched.

- **Seal Coating.** The asphalt should be seal coated every five to seven years. For this maintenance activity to be effective in extending the life of the asphalt, cleaning and crack repair should be performed first.

The pricing is based on recent contracts for a one-and-one-half-inch overlay, which reflects the current local market for this work.

For seal coating, several different products are available. The older, more traditional seal coating product is paint. They coat the surface of the asphalt, and they are minimally effective. However, the newer coating materials, such as those from Total Asphalt Management, Asphalt Restoration Technologies, Inc., and others, are penetrating. They are engineered, so to speak, to 're-moisturize' the pavement. Asphalt pavement is intended to be flexible. Over time, the volatile chemicals in the pavement dry, the pavement becomes brittle, and degradation follows in the form of cracking and potholes. Re-moisturizing the pavement can return its flexibility and extend pavement life.

Guard Rail. We have included the PTL round post guard rail with rope cable installed along the marina access road. The guard rail appears to be in good condition. the surrounding ground at the guard rail posts should be inspected periodically to ensure that the soil is intact and compacted. Any damaged sections of the cable or posts should be replaced to ensure the system performs adequately.

Entry Monument and Signage. The Association maintains two entry monuments with piers consisting of three PTL lumber piling posts bound with rope cable. The Monument piers appear to be in good condition with no noted defects.

The monument signage and lettering are made of carved wood material and are expected to have a useful life of 20 or more years. The entrance monument signage appears to be in good condition.

In addition to monuments, the Association is responsible for community signage including warnings, private property, and other informational signs.

MISCELLANEOUS SITE COMPONENTS

- **Mailboxes.** There is a mailbox at the entrance to the community, and it is observed to be in good condition with no noted door, lock, or pedestal defects or accumulated tree mold.

Mailboxes should be maintained to the extent that rust does not develop on the structure or pedestal, and all mail slot doors remain intact with operable hinges and locks. Our replacement estimate assumes that these units will be replaced with powder-coated aluminum or composite units in the future.

- **Tree Removal Allowance.** We observed numerous locations where trees are deceased and need to be replanted.

We recommend that these trees be removed before the replacement of the asphalt components. We have excluded funding for the removal of the trees and tree roots. We recommend that the Association commission a study by an Arborist or company specializing in tree management to provide an inventory of the trees and plants within the community. Tree inventories are intended to provide basic information on the plant population of a property to make informed management decisions. Inventories can supply information on plant quantities, location, condition, size, and maintenance requirements. Based on this information, sustainable management plans and rational budgets can be developed for the property's care. We will adjust our figures to conform to professional studies and budget guidelines if the material or information is disclosed and/or made available for use.

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 and limited common elements of the property to ascertain their remaining useful life and replacement cost. 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

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1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for many services, facilities and infrastructure around 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 homeowner 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, streetlights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965, there were only approximately 500 Community Associations in the United States. According to the 1990 U.S. Census, there were roughly 130,000 Community Associations. The Community Associations Institute (CAI), a national trade association, estimates in 2020 that there were more than 350,000 communities with over 75 million residents.

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 issues. Although Community Associations have succeeded in solving many short-term issues, many Associations still fail to properly plan for the significant 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 invariably exposed to the burden of special assessments, major increases in Association fees, and often 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 major repair or replacement, a general view of the physical condition of these components, and an effective financial plan to fund projected periodic replacements or major repairs. The Replacement Reserve Study consists of the following:

Replacement Reserve Study Introduction. The introduction provides a description of the property, an Executive Summary of the Funding Recommendations, Level of Reserve Study service, and a statement of the Purpose of the Replacement Reserve Study. It also lists documents and site evaluations upon which the Replacement Reserve Study is based, and provides the Credentials of the Reserve Analyst.

Section A Replacement Reserve Analysis. Many components that are owned by the Association have a limited life and require periodic replacement. Therefore, it is essential that the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and ultimately, the property value of the home sin the community. In conformance with National Reserve Study Standards, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves using the Threshold Cash Flow Method. See definition below.

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. Replacement Reserve Inventory includes estimates of the Normal Economic Life (NEL) and the Remaining Economic Life (REL) for those components whose replacement is scheduled for funding from Replacement Reserves.

The Replacement Reserve Inventory also provides information about those components which are excluded from the Replacement Reserve Inventory and whose replacement is not 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. The observed condition of the major 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 at the time of our visual evaluation.

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, the Cash Flow Method and the Component Method. Due to the difference in accounting methodologies, these methods lead to different calculated values for the Recommended Annual Funding to the Reserves. A brief description is included below:

Cash Flow Threshold Method. This Reserve Study uses the Threshold Cash Flow Method, sometimes referred to as the "Pooling Method." It calculates the minimum constant annual funding to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the predetermined Minimum Balance, or Threshold, in any year.

Component Method. The Component Method of calculating Reserve Funding needs is based upon an older mathematical model. Instead of calculating total funding based on yearly funding requirements, the Component method treats each component as its own “line item” budget that can only be used for that component. As a result, the Component Method is typically more conservative requiring greater Annual Reserve Funding levels.

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 parties responsible for maintaining the community after acceptance of our proposal. Upon submission of the initial Study, the Study should be reviewed by the Board of Directors and the individuals responsible for maintaining the community. We depend upon the Association for correct information, documentation, and drawings. We also look to the Association representative to help us fashion the Reserve Study so that it reflects what the community hopes to accomplish in the coming years.

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 regular 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 Threshold Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. The “Threshold” used in the Cash Flow Method is a predetermined minimum balance that serves the same purpose as a “contingency”. However, IRS Guidelines do not allow for a “contingency” line item in the inventory. Therefore, it is built into the mathematical model as a “Threshold”.

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 Normal Economic Life (NEL). 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 Remaining Economic Life (REL). 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.

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 Balance. Otherwise referred to as the Threshold, this amount is used in the Cash Flow Threshold Method only. Normally derived using the average annual expenditure over the study period, this is the minimum amount held in reserves in the Peak Year.

National Reserve Study Standards. A set of Standards developed by the Community Associations Institute in 1995 (and updated in 2017) which establishes the accepted methods of Reserve Calculation and stipulates what data must be included in the Reserve Study for each component listed in the inventory. These Standards can be found at CAIonline.org.

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.)

Number of Years of the Study. The numbers 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. The Reserve Study must cover a minimum of 20 years to comply with the National Reserve Study Standards. However, your study covers a 30-year period.

Peak Year. In the Cash Flow Threshold Method, a year in which the reserves on hand are projected to fall to the established threshold level. See Minimum Balance, above.

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.

Replacement Reserve Study. An analysis of all of the components of the common property of a Community Association for which 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, Normal Economic Life, and Remaining Economic Life. The objective of the study is to calculate a Recommended Annual Funding 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	**ls**	lump sum	**sy**	square yard
ft or lf	linear foot	**pr**	pair	**cy**	cubic yard
sf	square foot				

What is a Reserve Study?
Who are we?

https://youtu.be/m4BcOE6q3Aw

What kind of property uses a Reserve Study?
Who are our clients?

https://youtu.be/40SodajTW1g

Who conducts a Reserve Study?
Reserve Specialist (RS) what does this mean?

https://youtu.be/pYSMZO13VjQ

When should a Reserve Study be updated?
What are the different types of Reserve Studies?

https://youtu.be/Qx8WHB9Cgnc

What's in a Reserve Study and what's out?
Improvement/Component, what's the difference?

https://youtu.be/ZfBoAEhtf3E

What is my role as a Community Manager?
Will the report help me explain Reserves?

https://youtu.be/1J2h7FIU3qw

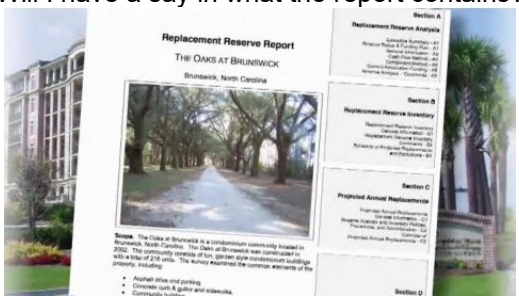
What is my role as a community Board Member?
Will a Reserve Study meet my needs?

https://youtu.be/aARD1B1Oa3o

Community dues, how can a Reserve Study help?
Will a study keep my property competitive?

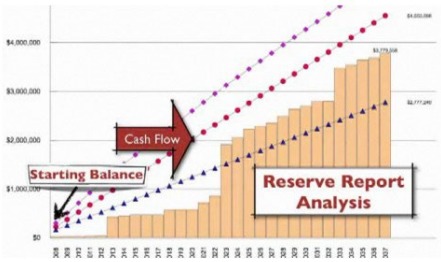
https://youtu.be/diZfM1IyJYU

How do I read the report?
Will I have a say in what the report contains?



https://youtu.be/qCeVJhFf9ag

Where do the numbers come from?
Cumulative expenditures and funding, what?

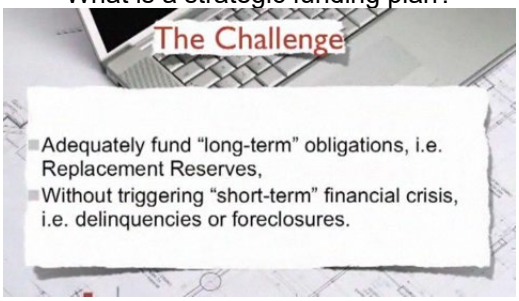


https://youtu.be/SePdwVDvHWI

How are interest and inflation addressed?
Inflation, what should we consider?

https://youtu.be/W8CDLwRIv68

A community needs more help, where do we go?
What is a strategic funding plan?



https://youtu.be/hIxV9X1tIcA