

A photograph of a stone wall with the text "CRYSTAL RIDGE" in large gold letters and "A NOVASTAR COMMUNITY" in smaller gold letters below it. The wall is surrounded by greenery and a lawn. A white utility pole is visible on the right.

CRYSTAL RIDGE

A NOVASTAR COMMUNITY



FY18 Level 1 Reserve Study

Crystal Ridge HOA

Puyallup, WA 98372

Date Prepared: September 7, 2017



Crystal Ridge HOA
Puyallup, WA

Northwest Reserve Studies
17404 Meridian E, Suite F - PMB 208
Puyallup, WA 98375

September, 7 2017

Board of Directors,

Thank you for choosing Northwest Reserve Studies as your trusted source for homeowners associations reserve studies. We take pride in providing associations with the most informative and easily digestible reserve studies possible.

If you have any questions about the content presented in this report, please feel free to contact me by phone at 253-693-4088, or by email at Thomas@NorthwestReserveStudies.com.

Sincerely,

Thomas James Weems

Thomas James Weems
Northwest Reserve Studies

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EXECUTIVE SUMMARY

Association: Crystal Ridge HOA

Location: Puyallup, WA

Of Units: 301

Site Visit Date: July, 14 2017

Level of Service: Level 1

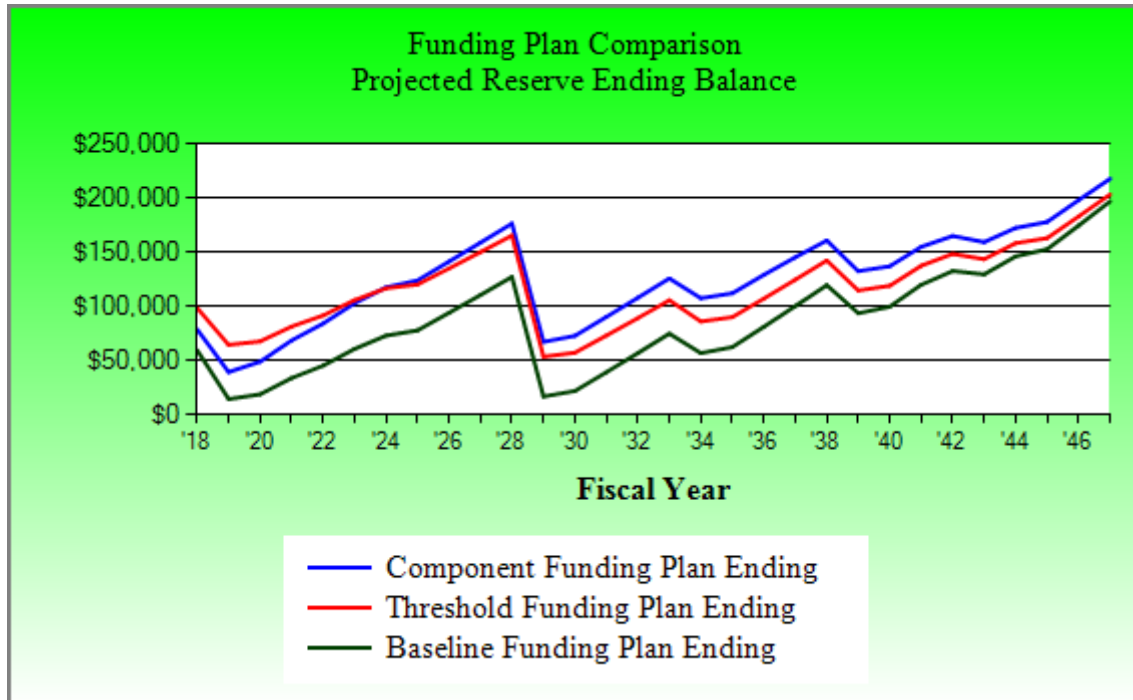
Budget Year: January 1st – December 31st 2018

Current Standing	
Projected Reserve Balance (January 1, 2018):	\$21,000
Current Reserve Requirement (Fully Funded With Contingency):	\$127,560
Percent Funded (Starting Reserve Balance / Reserve Requirement):	16%
Replacement Cost of Components:	\$198,835
Reserve Deficit Per Unit:	(-\$354)
Projected 2018 Reserve Expenses:	\$0
Projected Interest Earned (December 31, 2018):	\$110
Funding Plan Options	
Component Funding Plan (100% Fully Funded):	\$57,500
Per Unit Cost:	\$191
70% Threshold Funding Plan:	\$77,253
Per Unit Cost:	\$257
Baseline Funding Plan:	\$38,418
Per Unit Cost:	\$128
Current Annual Reserve Fund Contribution:	\$33,463
Per Unit Cost:	\$111
Considerations	
Interest Earnings:	30%
Inflation Rate:	1.50%

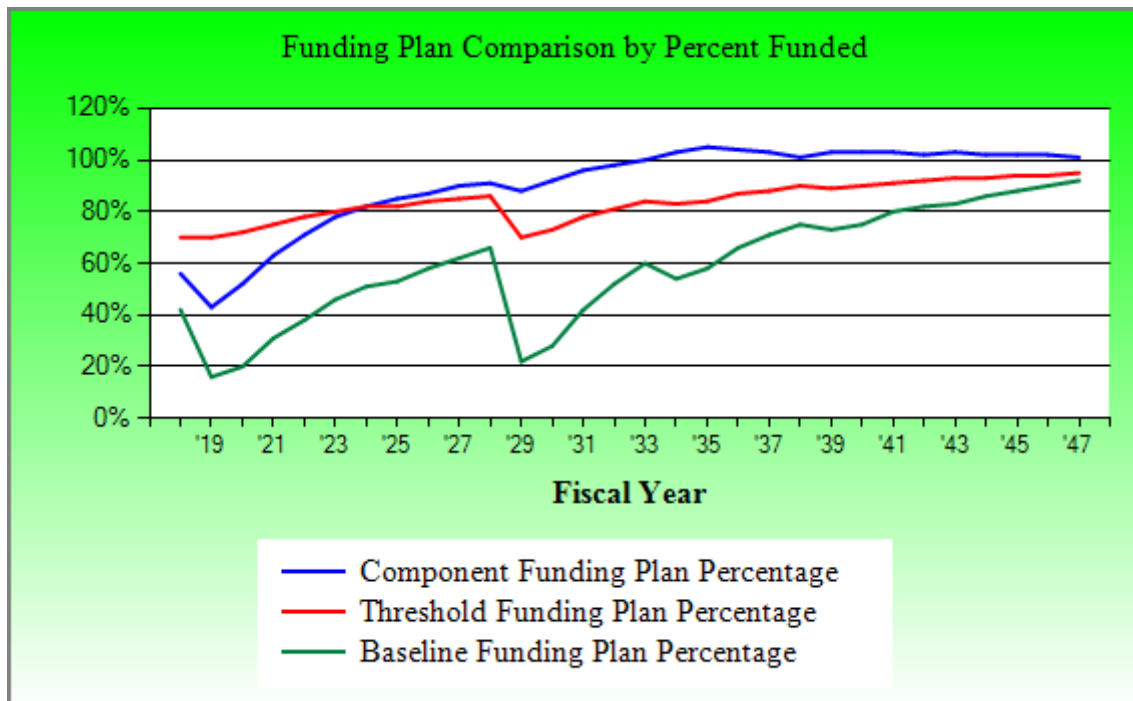
Our Recommendation

Your association is projected to be 16% at 1/1/2018, a low level of funding. Typically associations want to be above 70%, and then as close to 100% as possible. Being way behind has created a situation where the funding plans have the association catching up at exorbitant rates these next couple years. The good news is that the current annual rate is high and will catch the association up to where it should be in the next couple years. Our recommendation to the board is to continue to fund the reserves at the current annual reserve fund contribution rate of \$33,463.

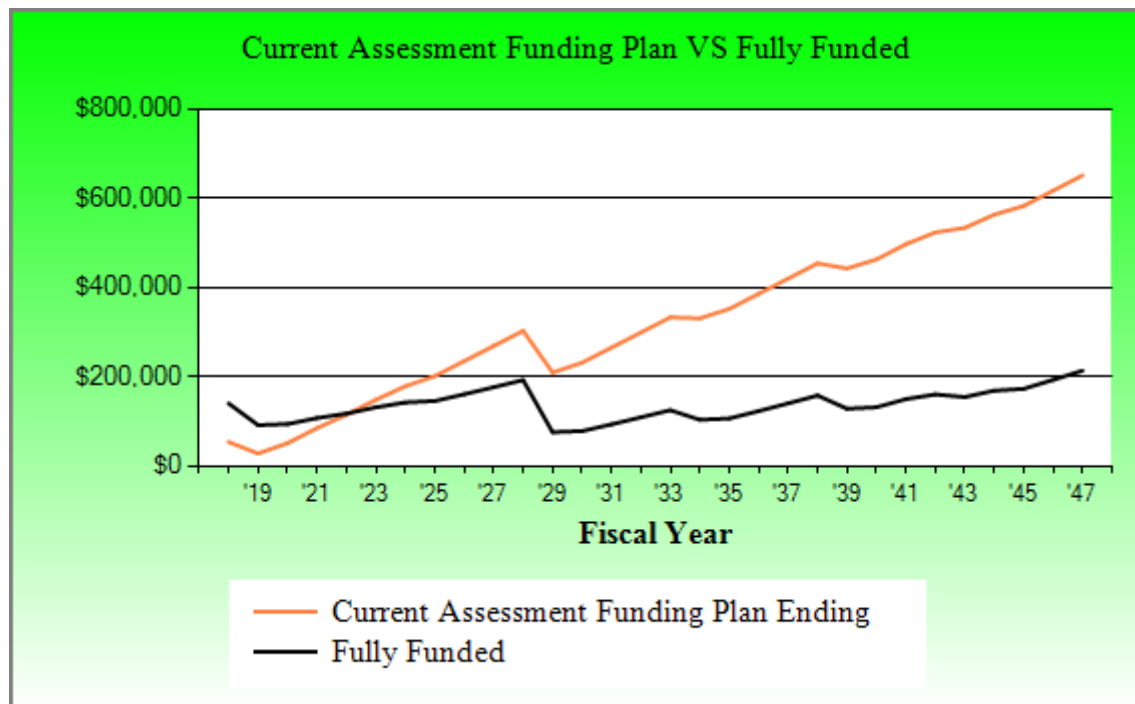
The chart below compares the projected reserve ending balances of the three funding plans (Component Funding Plan, Threshold Funding Plan and Baseline Funding Plan) over 30 years.



The chart below compares the three funding models (Component Funding Plan, Threshold Funding Plan and Baseline Funding Plan) by the percentage fully funded over 30 years.



The chart below compares the current annual assessment to Fully Funded.



- The methods and objectives utilized in computing or evaluating Crystal Ridge HOA's reserve fund status included an in-brief where we received a component listing and beginning balance. We then performed an on-site visit to assess the condition of the components. We then used Vista Community Management, cost estimation software, personal experience, and vendors to find the replacement cost and useful life projection. With this information we were able to find Crystal Ridge HOA's current percent funded status and propose alternatives in order to better fund the life cycle cost replacement of the associations components.
- Crystal Ridge HOA's starting reserve fund balance was provided by Vista Community Management, the associations management company.
- Interest is calculated at the current money market account rate of .2%. Tax on income gained by that investment is calculated at 20%, the current capital gains tax rate.
- We recommend that this reserve study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration.
- This reserve study complies with RCW 64.34.382 and 64.38.070, it also meets with the National Reserve Study Standards criteria established by the Community Associations Institute (CAI).
- Inflation rate is based upon the average increase of the Producer Price Index (PPI) over the last three years, as published by the US Bureau of Labor Statistics. The inflation rate in this report was increased to 1.5% in order to account for variables and contingencies present in the durable goods market today.

TEN YEAR INVESTMENT STRATEGY

- This ten year investment strategy below shows what the next ten years will look like with each alternative Crystal Ridge HOA has to choose from.

COMPONENT FUNDING PLAN				
Year	Contribution	Reserve Fund Balance	Reserve Amount Required	Percent Funded
2018	\$57,500	\$78,610	\$140,558	56%
2019	\$20,180	\$39,344	\$92,070	43%
2020	\$19,806	\$48,916	\$94,512	52%
2021	\$19,498	\$68,510	\$107,947	63%
2022	\$19,153	\$84,042	\$117,853	71%
2023	\$18,608	\$102,793	\$132,002	78%
2024	\$17,865	\$117,395	\$142,963	82%
2025	\$17,342	\$123,812	\$146,249	85%
2026	\$17,164	\$141,173	\$161,390	87%
2027	\$17,237	\$158,631	\$176,951	90%
70% THRESHOLD FUNDING PLAN				
Year	Contribution	Reserve Fund Balance	Reserve Amount Required	Percent Funded
2018	\$77,253	\$98,390	\$140,558	70%
2019	\$25,470	\$64,449	\$92,070	70%
2020	\$13,375	\$67,616	\$94,512	72%
2021	\$13,576	\$81,306	\$107,947	75%
2022	\$13,779	\$91,475	\$117,853	78%
2023	\$13,986	\$105,608	\$132,002	80%
2024	\$14,196	\$116,539	\$142,963	82%
2025	\$14,409	\$120,017	\$146,249	82%
2026	\$14,625	\$134,830	\$161,390	84%
2027	\$14,844	\$149,884	\$176,951	85%
BASELINE FUNDING PLAN (MINIMUM FUNDING)				
Year	Contribution	Reserve Fund Balance	Reserve Amount Required	Percent Funded
2018	\$38,418	\$59,501	\$140,558	42%
2019	\$14,453	\$14,473	\$92,070	16%
2020	\$14,670	\$18,868	\$94,512	20%
2021	\$14,890	\$33,805	\$107,947	31%
2022	\$15,113	\$45,243	\$117,853	38%
2023	\$15,340	\$60,668	\$132,002	46%
2024	\$15,570	\$72,913	\$142,963	51%
2025	\$15,804	\$77,727	\$146,249	53%
2026	\$16,041	\$93,899	\$161,390	58%
2027	\$16,281	\$110,335	\$176,951	62%
CURRENT ASSESSMENT FUNDING PLAN				
Year	Contribution	Reserve Fund Balance	Reserve Amount Required	Percent Funded
2018	\$33,463	\$54,539	\$140,558	39%
2019	\$33,463	\$28,541	\$92,070	31%
2020	\$33,463	\$51,774	\$94,512	55%
2021	\$33,463	\$85,357	\$107,947	79%
2022	\$33,463	\$115,243	\$117,853	98%
2023	\$33,463	\$148,914	\$132,002	113%
2024	\$33,463	\$179,200	\$142,963	125%
2025	\$33,463	\$201,847	\$146,249	138%
2026	\$33,463	\$235,639	\$161,390	146%
2027	\$33,463	\$269,479	\$176,951	152%

NORTHWEST RESERVE STUDIES DISCLOSURE

1. Description of Other Involvement

Northwest Reserve Studies has no affiliations with the voting members of Crystal Ridge HOA. Northwest Reserve Studies has not received any extra benefits for its services outlined in the service agreement, nor have the voting members of Crystal Ridge HOA received any extra benefit for selecting Northwest Reserve Studies as its source for reserve studies.

2. Physical Analysis

The physical analysis of Crystal Ridge HOA was done by obtaining an initial components inventory from the board members or its designated representatives and then performing an on-site visit to thoroughly examine the assets and their condition. A visual assessment, as well as the use of vendors were used to determine the age and useful life remaining of assets. The analysis may also include the use of field measurements at the time of the on-site inspection. Also, the use of Plat Maps, construction, and/or architectural drawings may be used to determine information about the assets.

3. Professional Credentials

The Owner of Northwest Reserve Studies has spent nearly a decade in facility management for the Department of Defense. He specialized in real property management, project planning, and performing life-cycle cost analysis on numerous government owned facilities valued at over 1 billion dollars.

4. Completeness

At the time of this reserve study, Northwest Reserve Studies has not received any information that, if not disclosed, would cause a distortion of the Crystal Ridge HOA's standing.

5. Reliance on Client Data

Information provided by the official representative of Crystal Ridge HOA regarding financial, physical, quantity, or historical issues will be deemed reliable by Northwest Reserve Studies.

6. Scope

This reserve study is a reflection of information provided to Northwest Reserve Studies and assembled for Crystal Ridge HOA's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.

7. Reserve Balance

The actual or projected total presented in this reserve study is based upon information provided and was not audited.

8. Reserve Projects

Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

9. RCW Required Statement

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

PART I

RESTRICTIONS, DISCLAIMERS, AND UPDATES

This document has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of NWRS. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, to lot owners of the association and their lenders. The client shall also have the right to distribute the report to prospective buyers and their lenders.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

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

We recommend that your reserve analysis study be updated on an annual basis due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the components under consideration. All of the information collected during our inspection of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

NWRS would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described.

INTRODUCTION

Preparing the annual budget and overseeing the association's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the association and set the level and quality of service for all of the association's activities.

FUNDING OPTIONS

When a major repair or replacement is required in a community, an association has essentially four options available to address the expenditure:

The first, and only logical means that the Board of Directors has to ensure its ability to maintain the components for which it is obligated, is by **assessing an adequate level of reserves** as part of the regular membership assessment, thereby distributing the cost of the replacements uniformly over the entire membership. The community is not only comprised of present members, but also future members. Any decision by the Board of Directors to adopt a calculation plan or funding plan which would disproportionately burden future members in order to make up for past reserve deficits, would be a breach of its fiduciary responsibility to those future members. Unlike individuals determining their own course of action, the board is responsible to the "community" as a whole.

Whereas, if the association was setting aside reserves for this purpose, using the vehicle of the regularly assessed membership dues, it would have had the full term of the life of the roof, for example, to accumulate the necessary moneys. Additionally, those contributions would have been evenly assigned over the entire membership and would have earned interest as part of that contribution.

The second option is for the association to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an association using "future homeowner assessments" as collateral for the loan. With this plan, the current board is pledging the future components of an association. They are also incurring the additional expense of interest fees along with the original principal amount. In the case of a \$150,000 roofing replacement, the association may be required to pay back the loan over a three to five year period, with interest.

The third option, too often used, is simply to **defer the required repair or replacement**. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the association's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on sellers in the association by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

The fourth option is to pass a "**special assessment**" to the membership in an amount required to cover the expenditure. When a special assessment is passed, the association has the authority and responsibility to collect the assessments, even by means of foreclosure, if necessary. However, an association considering a special assessment cannot guarantee that an assessment, when needed, will be passed. Consequently, the association cannot guarantee its ability to perform the required repairs or replacements to those major components for which it is obligated when the need arises. Additionally, while relatively new communities require very little in the way of major "reserve" expenditures, associations reaching 12 to 15 years of age and older, find many components reaching the end of their effective useful lives. These required expenditures, all accruing at the same time, could be devastating to an association's overall budget.

TYPES OF RESERVE STUDIES

Most reserve studies fit into one of three categories:

Level One: Full Reserve Study;

Level Two: Update with site inspection; and

Level Three: Update without site inspection.

In a **Full Reserve Study**, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a “fund status” and “funding plan”.

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the “fund status and “funding plan.”

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the “fund status” and “funding plan.”

THE RESERVE STUDY: A PHYSICAL AND A FINANCIAL ANALYSIS

There are two components of a reserve study: a physical analysis and a financial analysis.

PHYSICAL ANALYSIS

During the physical analysis, a reserve study provider evaluates information regarding the physical status and repair/replacement cost of the association’s major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates.

DEVELOPING A COMPONENT LIST

The budget process begins with full inventory of all the major components for which the association is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the association, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

OPERATIONAL EXPENSES

Occur at least annually, no matter how large the expense, and can be budgeted for effectively each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of *operational expenses* include:

Utilities:	Bank Service Charges	Accounting
Electricity	Dues & Publications	Reserve Study
Gas	Licenses, Permits & Fees	Repair Expenses:
Water	Insurance(s)	Tile Roof Repairs
Telephone	Services:	Equipment Repairs
Cable TV	Landscaping	Minor Concrete Repairs
Administrative:	Pool Maintenance	Operating Contingency
Supplies	Street Sweeping	

RESERVE EXPENSES

These are major expenses that occur other than annually, and which must be budgeted for in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant components that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved for in advance. Examples of reserve expenses include:

Roof Replacements	Park/Play Equipment
Painting	Pool/Spa Re-plastering
Deck Resurfacing	Pool Equipment Replacement
Fencing Replacement	Pool Furniture Replacement
Asphalt Seal Coating	Tennis Court Resurfacing
Asphalt Repairs	Lighting Replacement
Asphalt Overlays	Insurance(s)
Equipment Replacement	Reserve Study
Interior Furnishings	

BUDGETING IS NORMALLY EXCLUDED FOR:

Repairs or replacements of components which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an association's governing documents. Examples include the complete replacement of elevators, tile roofs, wiring and plumbing. Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents or other occurrences that are more properly insured for, rather than reserved for, are also excluded.

FINANCIAL ANALYSIS

The financial analysis assesses the association's "fund status" (measured in as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the future, known as the "funding plan".

PREPARING THE RESERVE STUDY

Once the reserve components have been identified and quantified, their respective replacement costs, useful lives and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of components and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements and maintenance history.

By following the recommendations of an effective reserve study, the association should avoid any major shortfalls. However, to remain accurate, the report should be updated on an annual basis to reflect such changes as shifts in economic parameters, additions of phases or components, or expenditures of reserve funds. The association can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

FUNDING PLANS

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow plan and the component plan.

The cash flow plan develops a reserve-funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This plan sets up a "window" in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The NWRS 70% Threshold and the NWRS Baseline Funding Plans are based upon the cash flow plan.

The component plan develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component plan is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This plan also allows for computations on individual components in the analysis. The NWRS Component Funding Plan is based upon the component methodology.

FUNDING STRATEGIES (PLANS)

Once an association has established its funding goals, the association can select an appropriate funding plan. There are four basic strategies from which most associations select. It is recommended that associations consult professionals to determine the best strategy or combination of plans that best suit the association's need. Additionally, associations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Associations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

The Fully Funded Balance is the computed deterioration of common area components based on replacement cost. This figure is determined by multiplying the fractional age (expired life) of each component by its current estimated Replacement Cost, then summing the products for all components. Full Funding---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an association has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be "fully-funded." This plan is important in that it is a measure of the adequacy of an association's reserves at any one point of time, and is independent of any particular plan which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age** divided by **Useful Life** the results multiplied by **Current Replacement Cost**

When an association's assigned reserves for all components meet this criterion, its reserves are considered "fully-funded."

The NWRS Baseline Funding Plan (Minimum Funding). The goal of this funding plan is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An association using this funding plan must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance.

The NWRS 70% Threshold Funding Plan. This plan is based upon maintaining at or above 70% of fully funded. This means that while each individual component may not be fully funded, the percent funded stays at or above 70% funded.

The NWRS Current Assessment Funding Plan. This plan is also based upon the cash flow funding concept. The initial reserve assessment is set at the association's current fiscal year funding level and a 30-year projection is calculated to illustrate the adequacy of the current funding over time.

The NWRS Component Funding Plan. This is a straight-line funding plan. It assigns the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name "Component Funding Plan". This is the most conservative funding plan. It leads to or maintains the fully funded reserve position. The following details this calculation process.

COMPONENT FUNDING PLAN DISTRIBUTION OF ACCUMULATED RESERVES

The “Distribution of Accumulated Reserves Report” is a “Component Funding Plan” calculation. This distribution **does not** apply to the cash flow funding plans.

When calculating reserves based upon the component plan, a beginning reserve balance must be assigned to each of the individual components considered in the analysis, before the individual calculations can be completed. If the reserve fund balance has not been previously assigned, the following plan is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for components that have predetermined (fixed) reserve balances. The user can “fix” the accumulated reserve balance within the program on the individual component’s detail page. If, by error, these amounts total more than the amount of funds available, then the remaining components are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each component. As indicated in the prior section, this is accomplished by evaluating the component’s age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

Fully Funded Reserves = (Age/Useful Life) x Current Replacement Cost

The NWRS software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the components used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These components are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all components are appropriately funded. If any components have no remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that component assumes its new grouping position alphabetically in the final printed report.

If, at the completion of this task, there are additional moneys that have not been assigned, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all components at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the annual contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all components under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of \$50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to “replenish” the account. If the \$50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

If the reserves are under-funded, the annual contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual components are replaced, the funding

requirements will return to their normal levels. In the case of a large deficiency, a special assessment may be considered. The program can easily generate revised reports outlining how the annual contributions would be affected by such an adjustment, or by any other changes that may be under consideration.

FUNDING RESERVES

Three assessment and contribution figures are provided in the report; the “Annual Reserve Assessment Required”, the “Average Net Annual Interest Earned” contribution, and the “Total Annual Allocation to Reserves.” The association should assign the “Annual Reserve Assessment Required” amount to reserves each year if the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in reserves and only amounts set aside for taxes should be removed.

The second alternative is to assign the “Total Annual Allocation” to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year). This plan assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. Reserve account allocations are net of taxes; all tax payments must be made from the association’s operating accounts.

USERS’ GUIDE TO YOUR RESERVE ANALYSIS STUDY

Part II of this report is the reserve analysis for your association.

The Report Summary for all funding plans lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

The **Distribution of Accumulated Reserves** report lists all components in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the association as well as the actual reserves available. This information is valid only for the “Component Funding Plan” calculation.

The **Component Listing/Summary** lists all components by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, annual reserve contribution, and net annual allocation.

DETAIL REPORTS

The Detail Report itemizes each component and lists all measurements, current and future costs, and calculations for that component. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The components are enhanced by an extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The Category Detail Index is an alphabetical listing of all components, together with the page number of the component’s detail report, the projected replacement year, and the component number.

PROJECTIONS

Thirty-year projections add to the usefulness of your reserve analysis study.

DEFINITIONS

Budget Year Beginning/Ending

The budgetary year for which the report is prepared. For associations with fiscal years ending December 31st, the annual contribution figures indicated are for the 12-month period beginning 1/1/2017 and ending 12/31/2017.

Number of Units and/or Phases

If applicable, the number of units and/or phases included in this version of the report.

Inflation

This figure is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the annual reserve contribution that will be necessary to accumulate the required funds in time for replacement.

Annual Assessment Increase

This represents the percentage rate at which the association will increase its assessment to reserves at the end of each year. For example, in order to accumulate \$10,000 in 10 years, you could set aside \$1,000 per year. As an alternative, you could set aside \$795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those associations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

Projected Reserve Balance

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

Percent Fully Funded

The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

Annual Assessment

The assessment to reserves required by the association each year.

Interest Contribution (After Taxes)

The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and annual contributions for the budget year. This figure is averaged for budgeting purposes.

Total Annual Assessment

The sum of the annual assessment and interest contribution figures.

Group and Category

The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

Percentage of Replacement or Repairs

In some cases, a component may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

Placed-In-Service Date

The month and year that the component was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

Useful Life

The estimated useful life of a component based upon industry standards, manufacturer specifications, visual inspection, location, usage, association standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular component. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical

carpeting in a seldom-used meeting room or office.

Adjustment to Useful Life

Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

Remaining Life

This calculation is completed internally based upon the report's fiscal year date and the date the component was placed-in-service.

Replacement Year

The year that the component is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

Salvage Value

The salvage value of the component at the time of replacement, if applicable.

One-Time Replacement

Notation if the component is to be replaced on a one-time basis.

Current Replacement Cost

The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared

Future Replacement Cost

The estimated cost to repair or replace the component at the end of its estimated useful life based upon the current replacement cost and inflation.

Component Inventory

The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of association design and organizational documents, a review of established association precedents, and discussion with appropriate association representative(s).

A MULTI-PURPOSE TOOL

Your NWRS Report is an important part of your association's budgetary process. Following its recommendations should ensure the association's smooth budgetary transitions from one fiscal year to the next, and either decrease or eliminate the need for "special assessments".

In addition, your NWRS reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- In the event of audit, a reserve study may be required for a favorable opinion.
- The NWRS reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your NWRS Report is also a detailed inventory of the association's major components and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your NWRS Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair. If a community is operating on a special assessment basis, it cannot guarantee that an assessment, when needed, will be passed. Therefore, it cannot guarantee its ability to perform the required repairs or replacements to those major components for which the association is obligated.
- Since the NWRS reserve analysis study includes measurements and cost estimates of the client's components, the detail reports may be used to evaluate the accuracy and price of contractor bids when components are due to be repaired or replaced.
- The NWRS reserve study is an annual disclosure to the membership concerning the financial condition of the association, and may be used as a "consumers' guide" by prospective purchasers.
- The NWRS Owners' Summary meets the disclosure requirements of the Washington Civil Code.
- Your NWRS Report provides a record of the time, cost, and quantities of past reserve replacements. At times the association's management company and board of directors are transitory which may result in the loss of these important records.

Crystal Ridge HOA Component List

Asset ID	Description	Replacement	Page
Fencing/Security			
1005	Cedar Fence	2019	19
1006	Cedar Fence Seal	2019	20
1011	Chain Link Fence	2022	21
Grounds Components			
1003	Landscape Refurbish	2020	23
1009	Metal Bench	2022	24
1002	Monument - Crystal Ridge	2043	25
1007	Monument - Janelle Estates	2042	26
1004	Monument - The Estates	2029	27
1008	Play Structure	2019	28
1010	Swing Set	2019	29
Mailboxes			
1001	Mailboxes	2029	31
Total Funded Assets		11	
Total Unfunded Assets		<u>0</u>	
Total Assets		11	

Crystal Ridge HOA
Category Summary of Reserve Fund Assignments

Description	Replacement Year	Useful Life	Adjustment	Remaining Life	Replacement Cost	Assigned Reserves	Fully Funded
Fencing/Security							
Cedar Fence	2019	15	0	1	25,347	20,370	23,657
Cedar Fence Seal	2019	5	0	1	3,134	0	2,508
Chain Link Fence	2022	30	0	4	2,110	0	1,829
Fencing/Security - Total					\$30,591	\$20,370	\$27,993
Grounds Components							
Landscape Refurbish	2020	5	0	2	10,000	0	6,000
Metal Bench	2022	30	0	4	1,412	0	1,224
Monument - Crystal Ridge	2043	25	1	25	16,485	0	634
Monument - Janelle Estates	2042	25	0	24	5,495	0	220
Monument - The Estates	2029	25	0	11	43,960	0	24,618
Play Structure	2019	20	7	1	27,780	0	26,751
Swing Set	2019	20	7	1	2,360	0	2,273
Grounds Components - Total					\$107,492		\$61,719
Mailboxes							
Mailboxes	2029	25	0	11	60,752	0	34,021
Mailboxes - Total					\$60,752		\$34,021
Total Asset Summary					\$198,835	\$20,370	\$123,733
Contingency at 3.00%						\$630	\$3,827
Summary Total						\$21,000	\$127,560

Percent Fully Funded	16%
Current Average Liability per Unit (Total Units: 301)	-\$354

Crystal Ridge HOA Detail Report by Category

Cedar Fence - 2019

Asset ID	1005	Asset Cost	\$25,347.00
		Percent Replacement	100%
	Fencing/Security	Future Cost	\$25,727.20
Placed in Service	June 2004	Assigned Reserves	\$20,370.00
Useful Life	15		
Replacement Year	2019	Annual Assessment	\$3,003.89
Remaining Life	1	Interest Contribution	<u>\$32.72</u>
		Reserve Allocation	\$3,036.61



Description: Replace the cedar fence with brick posts maintained by the association. A measurement of 617 Linear Feet (LF) of 6 foot fence and 198 LF of 3 foot fence was found via the plat map.

Replacement Cost: The cost was provided by Fence Specialists, Puyallup WA.

617 - New 6 Ft Fence	@	\$27.00 =	\$16,659.00
198 - New 3 Ft Fence	@	20.00 =	3,960.00
815 - Removal of Old Fence	@	3.00 =	2,445.00
1 - Sales Tax	@	2,283.00 =	<u>2,283.00</u>
		Total =	\$25,347.00

Condition: A short piece of the 6 foot fence and 3 foot fence was recently replaced, but the rest of the fencing is well weathered. The fence is leaning in some locations, others have boards warping and splitting. I recommend repair or replacement in the next couple years or once economically feasible. Generally these fences last about 15 years before needing to be majorly repaired or replaced.

Crystal Ridge HOA Detail Report by Category

Cedar Fence Seal - 2019

Asset ID	1006	Asset Cost	\$3,134.50
		Percent Replacement	100%
Fencing/Security		Future Cost	\$3,181.52
Placed in Service	January 2014	Assigned Reserves	<i>none</i>
Useful Life	5		
Replacement Year	2019	Annual Assessment	\$1,793.49
Remaining Life	1	Interest Contribution	<u>\$2.51</u>
		Reserve Allocation	\$1,796.00



Description: Seal approximately 815 LF of cedar fence maintained by the association.

Replacement Cost: The cost has been provided by ClearCO, Tacoma WA. The estimate includes sealing both sides of the fence.

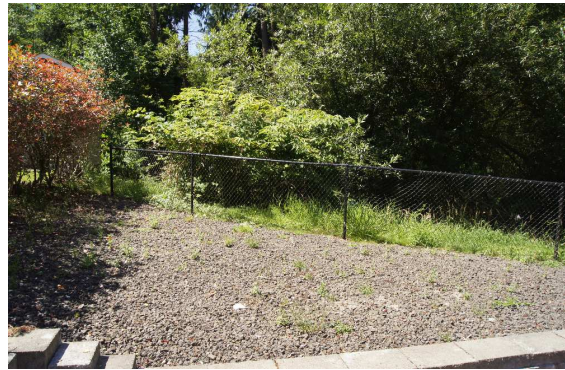
815 - LF of Fence	@	\$3.50 =	\$2,852.50
1 - Sales Tax	@	282.00 =	<u>282.00</u>
		Total =	\$3,134.50

Condition: The fence is weathered and needs to be replaced. I recommend a 5 year sealant or paint once constructed and every 5 years after that.

Crystal Ridge HOA Detail Report by Category

Chain Link Fence - 2022

Asset ID	1011	Asset Cost	\$2,110.00
		Percent Replacement	100%
	Fencing/Security	Future Cost	\$2,239.48
Placed in Service	November 1992	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2022	Annual Assessment	\$314.95
Remaining Life	4	Interest Contribution	<u>\$0.44</u>
		Reserve Allocation	\$315.39



Description: Major repair or replacement of the four foot chain link fence located at the park. A measurement via the plat map found 60 Linear Feet (LF).

Replacement Cost: The cost was provided by Fence Specialists, Puyallup WA.

60 - Remove & Replace	@	\$32.00 =	\$1,920.00
1 - Sales Tax	@	190.00 =	<u>190.00</u>
		Total =	\$2,110.00

Condition: The fence was in okay condition. The chain link was bent in several locations from years of use.

**Crystal Ridge HOA
Detail Report by Category**

Fencing/Security - Total Current Cost	\$30,591
Assigned Reserves	\$20,370
Fully Funded Reserves	\$27,993

**Crystal Ridge HOA
Detail Report by Category**

Landscape Refurbish - 2020

Asset ID	1003	Asset Cost	\$10,000.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$10,302.25
Placed in Service	June 2015	Assigned Reserves	<i>none</i>
Useful Life	5		
Replacement Year	2020	Annual Assessment	\$2,901.76
Remaining Life	2	Interest Contribution	<u>\$4.06</u>
		Reserve Allocation	\$2,905.82



Description: Periodic maintenance of the landscaping of the community.

Replacement Cost: The cost estimate is based off Craftsman repair and remodel estimator.

1 - Landscape Refurbish	@\$10,000.00 =	<u>\$10,000.00</u>
	Total =	\$10,000.00

Condition: The landscaping was refurbished a couple years ago and is in good condition. I recommend evaluating in 2020 if a refurbishment is needed again.

Crystal Ridge HOA Detail Report by Category

Metal Bench - 2022

Asset ID	1009	Asset Cost	\$1,412.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$1,498.65
Placed in Service	November 1992	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2022	Annual Assessment	\$210.76
Remaining Life	4	Interest Contribution	<u>\$0.29</u>
		Reserve Allocation	\$211.06



Description: Replace one steel bench located at the park.

Replacement Cost: The cost has been provided by the distributor Pacific Outdoor Products.

1 - Steel Bench	@	\$989.00 =	\$989.00
1 - Installation	@	296.00 =	296.00
1 - Sales Tax	@	127.00 =	<u>127.00</u>
		Total =	\$1,412.00

Condition: The bench is in good condition. Some minor weathering has taken place, but is due to last the remainder of its projected useful life.

Crystal Ridge HOA Detail Report by Category

Monument - Crystal Ridge - 2043

Asset ID	1002	Asset Cost	\$16,485.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$23,918.83
Placed in Service	January 2017	Assigned Reserves	<i>none</i>
Useful Life	25		
Adjustment	1	Annual Assessment	\$530.34
Replacement Year	2043	Interest Contribution	<u>\$0.74</u>
Remaining Life	25	Reserve Allocation	\$531.08



Description: Repair/replace the crystal ridge monument at the corner of Crystal Ridge DR SE and Shaw Road E. Due to math constraints, I have put the date in service as this year with an additional year tacked on before service is due. I can update this study with the true date in service once construction is complete.

Replacement Cost: The estimate is based on a like-kind replacement of the current structure using Craftsman Repair and Remodel Estimator.

1 - Repair/Replace Monument	@ 15,000.00 =	15,000.00
1 - Sales Tax	@ 1,485.00 =	<u>1,485.00</u>
	Total =	\$16,485.00

Condition: This monument is due to be replaced and paid for by the construction project that is widening Shaw Road E. This planned repair/replacement will occur 25 years after that replacement, which I project will happen in the next year.

**Crystal Ridge HOA
Detail Report by Category**

Monument - Janelle Estates - 2042

Asset ID	1007	Asset Cost	\$5,495.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$7,855.12
Placed in Service	January 2017	Assigned Reserves	<i>none</i>
Useful Life	25		
Replacement Year	2042	Annual Assessment	\$181.55
Remaining Life	24	Interest Contribution	<u>\$0.25</u>
		Reserve Allocation	\$181.80



Description: Repair/replace the Janelle Estates monument located at Shaw Road E and 15th AVE SE.

Replacement Cost: The estimate is based on a like-kind replacement of the current structure using Craftsman Repair and Remodel Estimator.

1 - Repair/Replace Monument	@	5,000.00 =	5,000.00
1 - Sales Tax	@	495.00 =	<u>495.00</u>
		Total =	\$5,495.00

Condition: This monument was recently replaced and should last 25 years before major repair or replacement is needed.

Crystal Ridge HOA Detail Report by Category

Monument - The Estates - 2029

Asset ID	1004	Asset Cost	\$43,960.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$51,782.63
Placed in Service	January 2004	Assigned Reserves	<i>none</i>
Useful Life	25		
Replacement Year	2029	Annual Assessment	\$2,635.20
Remaining Life	11	Interest Contribution	<u>\$3.69</u>
		Reserve Allocation	\$2,638.88



Description: Repair/replace the 4 Estates monuments located in the community.

Replacement Cost: The estimate is based on a like-kind replacement of the current structure using Craftsman Repair and Remodel Estimator.

4 - Repair/Replace Monuments	@ 10,000.00 =	40,000.00
1 - Sales Tax	@ 3,960.00 =	<u>3,960.00</u>
	Total =	\$43,960.00

Condition: These monuments are in okay condition. The bricks and stones are weathered from being in the elements and need to be pressure washed and sealed. I estimate they are at half useful life.

Crystal Ridge HOA Detail Report by Category

Play Structure - 2019

Asset ID	1008	Asset Cost	\$27,780.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$28,196.70
Placed in Service	November 1992	Assigned Reserves	<i>none</i>
Useful Life	20		
Adjustment	7	Annual Assessment	\$15,895.05
Replacement Year	2019	Interest Contribution	<u>\$22.25</u>
Remaining Life	1	Reserve Allocation	\$15,917.30



Description: Major repair or replacement of the play structure located at the park.

Replacement Cost: The cost has been provided by the distributor of the component, Pacific Outdoor Products.

1 - Play Structure	@ \$19,445.00 =	\$19,445.00
1 - Installation	@ 5,833.00 =	5,833.00
1 - Sales Tax	@ 2,502.00 =	<u>2,502.00</u>
	Total =	\$27,780.00

Condition: The play structure is towards the end of its useful life. The board representative mentioned they were looking at replacement in the next couple years. The association will be able to save on cost by offering the current play structure for free with new owners paying for removal/relocation.

Crystal Ridge HOA Detail Report by Category

Swing Set - 2019

Asset ID	1010	Asset Cost	\$2,360.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$2,395.40
Placed in Service	November 1992	Assigned Reserves	<i>none</i>
Useful Life	20		
Adjustment	7	Annual Assessment	\$1,350.34
Replacement Year	2019	Interest Contribution	<u>\$1.89</u>
Remaining Life	1	Reserve Allocation	\$1,352.23



Description: Replace the timber swing set located at the park.

Replacement Cost: The cost has been provided by the distributor of the component Pacific Outdoor Products, Maple Valley WA.

1 - Swing Set	@ \$1,653.00 =	\$1,653.00
1 - Installation	@ 495.00 =	495.00
1 - Sales Tax	@ 212.00 =	<u>212.00</u>
	Total =	\$2,360.00

Condition: The swing set is towards the end of its useful life. The board representative mentioned they were looking at replacement in the next couple years. The association will be able to save on cost by offering the current play structure for free with new owners paying for removal/relocation.

**Crystal Ridge HOA
Detail Report by Category**

Grounds Components - Total Current Cost	\$107,492
Assigned Reserves	\$0
Fully Funded Reserves	\$61,719

Crystal Ridge HOA Detail Report by Category

Mailboxes - 2029

Asset ID	1001	Asset Cost	\$60,752.00
		Percent Replacement	100%
Mailboxes		Future Cost	\$71,562.75
Placed in Service	July 2004	Assigned Reserves	<i>none</i>
Useful Life	25		
Replacement Year	2029	Annual Assessment	\$3,641.80
Remaining Life	11	Interest Contribution	<u>\$5.10</u>
		Reserve Allocation	\$3,646.90



Description: Repair/replace all the mailboxes and arch covers in the community. The mailboxes are planned to be replaced with cluster mailboxes of varying sizes.

Replacement Cost: The cost estimate is based off Craftsman repair and remodel estimator. The cluster mailboxes will vary on cost based off size, the estimate reflects an average.

39 - Mailboxes	@	\$900.00 =	\$35,100.00
39 - Mailbox Installations	@	120.00 =	4,680.00
31 - Arch Covers	@	500.00 =	15,500.00
1 - Sales Tax	@	5,472.00 =	<u>5,472.00</u>
		Total =	\$60,752.00

Condition: The mailboxes have been replaced at different times, therefore have a wide variety of conditions. Some older boxes (such as the individual ones) are due to be replaced soon. For the purposes of this study, I have set the life-cycle to half (of 25 years) and recommend the board replace as they see fit. The arch covers have a similar condition, some look like they are about to fall down and others are in far better condition. I recommend repairing/replacing the arches the same time as the mailbox they support is being replaced.

**Crystal Ridge HOA
Detail Report by Category**

Mailboxes - Total Current Cost	\$60,752
Assigned Reserves	\$0
Fully Funded Reserves	\$34,021

**Crystal Ridge HOA
Detail Report by Category**

Detail Report Summary

Total of All Assets

Assigned Reserves	\$20,370.00
Annual Contribution	\$32,459.11
Annual Interest	\$73.96
Annual Allocation	\$32,533.07

Contingency at 3.00%

Assigned Reserves	\$630.00
Annual Contribution	\$1,003.89
Annual Interest	\$2.29
Annual Allocation	\$1,006.18

Grand Total

Assigned Reserves	\$21,000.00
Annual Contribution	\$33,463.00
Annual Interest	\$76.25
Annual Allocation	\$33,539.25

**Crystal Ridge HOA
Reserve Fund Assignments**

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Cedar Fence	1	2019	* 20,370	23,657
Cedar Fence Seal	1	2019		2,508
Play Structure	1	2019		26,751
Swing Set	1	2019		2,273
Landscape Refurbish	2	2020		6,000
Chain Link Fence	4	2022		1,829
Metal Bench	4	2022		1,224
Mailboxes	11	2029		34,021
Monument - The Estates	11	2029		24,618
Monument - Janelle Estates	24	2042		220
Monument - Crystal Ridge	25	2043		634
Total Asset Summary			<u>\$20,370</u>	<u>\$123,733</u>
Contingency at 3.00%			<u>\$630</u>	<u>\$3,827</u>
Summary Total			<u>\$21,000</u>	<u>\$127,560</u>

Percent Fully Funded	16%
Current Average Liability per Unit (Total Units: 301)	-\$354

'' Indicates Partially Funded*

**Crystal Ridge HOA
Annual Expenditure Detail**

Description	Expenditures
<i>No Replacement in 2018</i>	
Replacement Year 2019	
Cedar Fence	25,727
Cedar Fence Seal	3,182
Play Structure	28,197
Swing Set	2,395
Total for 2019	\$59,501
Replacement Year 2020	
Landscape Refurbish	10,302
Total for 2020	\$10,302
<i>No Replacement in 2021</i>	
Replacement Year 2022	
Chain Link Fence	2,239
Metal Bench	1,499
Total for 2022	\$3,738
<i>No Replacement in 2023</i>	
Replacement Year 2024	
Cedar Fence Seal	3,427
Total for 2024	\$3,427
Replacement Year 2025	
Landscape Refurbish	11,098
Total for 2025	\$11,098
<i>No Replacement in 2026</i>	
<i>No Replacement in 2027</i>	
<i>No Replacement in 2028</i>	
Replacement Year 2029	
Cedar Fence Seal	3,692
Mailboxes	71,563
Monument - The Estates	51,783
Total for 2029	\$127,038

**Crystal Ridge HOA
Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2030	
Landscape Refurbish	11,956
Total for 2030	\$11,956
<i>No Replacement in 2031</i>	
<i>No Replacement in 2032</i>	
<i>No Replacement in 2033</i>	
Replacement Year 2034	
Cedar Fence	32,165
Cedar Fence Seal	3,978
Total for 2034	\$36,143
Replacement Year 2035	
Landscape Refurbish	12,880
Total for 2035	\$12,880
<i>No Replacement in 2036</i>	
<i>No Replacement in 2037</i>	
<i>No Replacement in 2038</i>	
Replacement Year 2039	
Cedar Fence Seal	4,285
Play Structure	37,977
Swing Set	3,226
Total for 2039	\$45,488
Replacement Year 2040	
Landscape Refurbish	13,876
Total for 2040	\$13,876
<i>No Replacement in 2041</i>	
Replacement Year 2042	
Monument - Janelle Estates	7,855
Total for 2042	\$7,855
Replacement Year 2043	
Monument - Crystal Ridge	23,919
Total for 2043	\$23,919

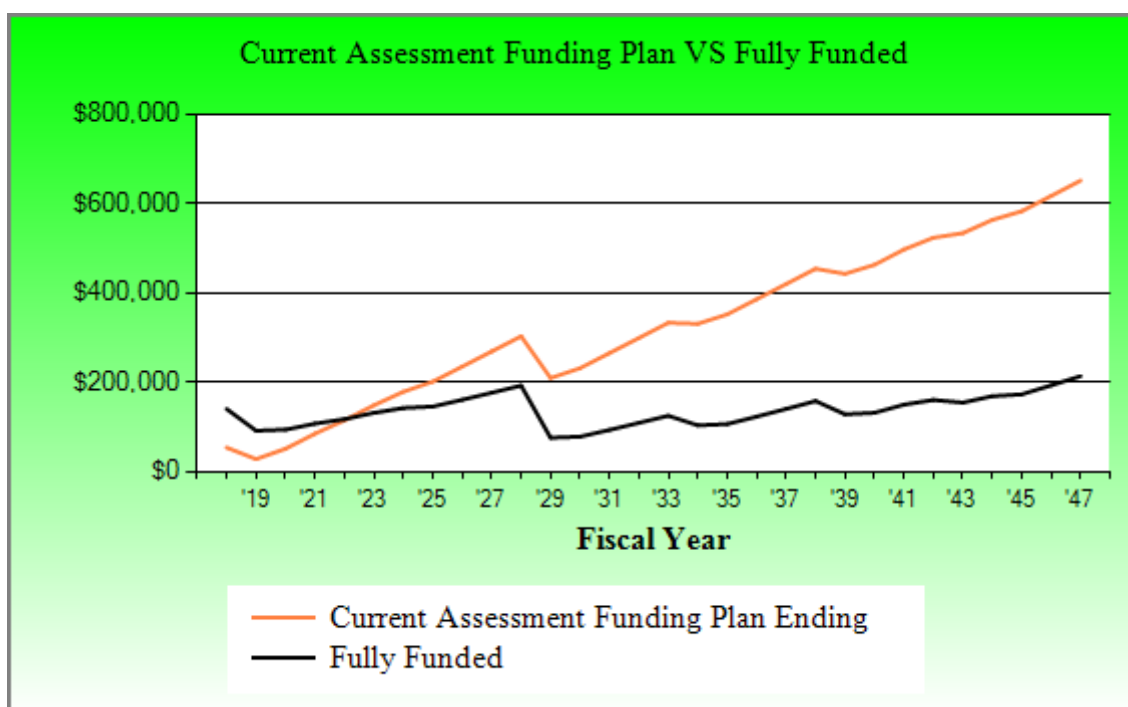
**Crystal Ridge HOA
Annual Expenditure Detail**

Description	Expenditures
Replacement Year 2044	
Cedar Fence Seal	4,616
Total for 2044	\$4,616
Replacement Year 2045	
Landscape Refurbish	14,948
Total for 2045	\$14,948

Crystal Ridge HOA
Puyallup, WA
Current Assessment Funding Plan Summary

Report Date	August 14, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	301

<i>Report Parameters</i>	
Inflation	1.50%
Annual Assessment Increase	0.00%
Interest Rate on Reserve Deposit	0.20%
Tax Rate on Interest	30.00%
Contingency	3.00%
2018 Beginning Balance	\$21,000



- **The Current Assessment Funding Model** is based on the current annual assessment, parameters, and reserve fund balance. It is calculated using the current annual assessment, it will give the accurate projection of how well the association is funded for the next 30 years of planned reserve expenditures.

Current Assessment Funding Model Summary of Calculations

Required Annual Contribution	\$33,463.00
<i>\$111.17 per unit annually</i>	
Average Net Annual Interest Earned	\$76.25
Total Annual Allocation to Reserves	\$33,539.25
<i>\$111.43 per unit annually</i>	

Crystal Ridge HOA
Current Assessment Funding Plan Projection

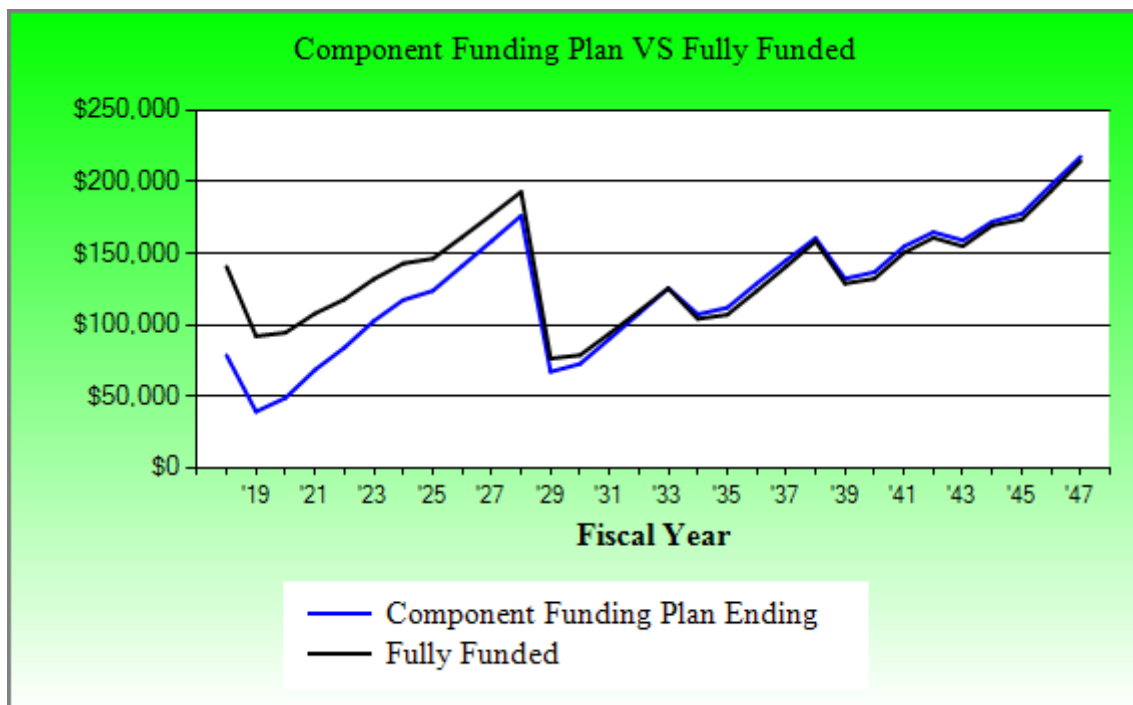
Beginning Balance: \$21,000

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	198,835	33,463	76		54,539	140,558	39%
2019	201,818	33,463	40	59,501	28,541	92,070	31%
2020	204,845	33,463	72	10,302	51,774	94,512	55%
2021	207,918	33,463	119		85,357	107,947	79%
2022	211,037	33,463	161	3,738	115,243	117,853	98%
2023	214,202	33,463	208		148,914	132,002	113%
2024	217,415	33,463	251	3,427	179,200	142,963	125%
2025	220,677	33,463	282	11,098	201,847	146,249	138%
2026	223,987	33,463	329		235,639	161,390	146%
2027	227,347	33,463	377		269,479	176,951	152%
2028	230,757	33,463	424		303,366	192,944	157%
2029	234,218	33,463	294	127,038	210,085	76,445	275%
2030	237,731	33,463	324	11,956	231,916	78,822	294%
2031	241,297	33,463	372		265,751	93,951	283%
2032	244,917	33,463	419		299,633	109,517	274%
2033	248,591	33,463	466		333,562	125,529	266%
2034	252,319	33,463	463	36,143	331,346	104,177	318%
2035	256,104	33,463	493	12,880	352,421	107,065	329%
2036	259,946	33,463	540		386,424	123,696	312%
2037	263,845	33,463	588		420,475	140,802	299%
2038	267,803	33,463	636		454,574	158,393	287%
2039	271,820	33,463	620	45,488	443,168	128,882	344%
2040	275,897	33,463	648	13,876	463,403	132,244	350%
2041	280,035	33,463	696		497,562	150,414	331%
2042	284,236	33,463	732	7,855	523,902	160,879	326%
2043	288,499	33,463	747	23,919	534,193	154,978	345%
2044	292,827	33,463	788	4,616	563,828	169,438	333%
2045	297,219	33,463	815	14,948	583,159	173,557	336%
2046	301,678	33,463	863		617,485	193,638	319%
2047	306,203	33,463	911		651,859	214,282	304%

Crystal Ridge HOA
Puyallup, WA
Component Funding Plan Summary

Report Date	August 14, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	301

<i>Report Parameters</i>	
Inflation	1.50%
Interest Rate on Reserve Deposit	0.20%
Tax Rate on Interest	30.00%
Contingency	3.00%
2018 Beginning Balance	\$21,000



- The **Component Funding Model's** long-term objective is to provide a plan to a fully funded reserve position over the longest period of time practical. This is the most conservative funding model.

Component Funding Model Summary of Calculations

Required Annual Contribution	\$57,499.68
<i>\$191.03 per unit annually</i>	
Average Net Annual Interest Earned	\$109.90
Total Annual Allocation to Reserves	\$57,609.58
<i>\$191.39 per unit annually</i>	

**Crystal Ridge HOA
Component Funding Plan Projection**

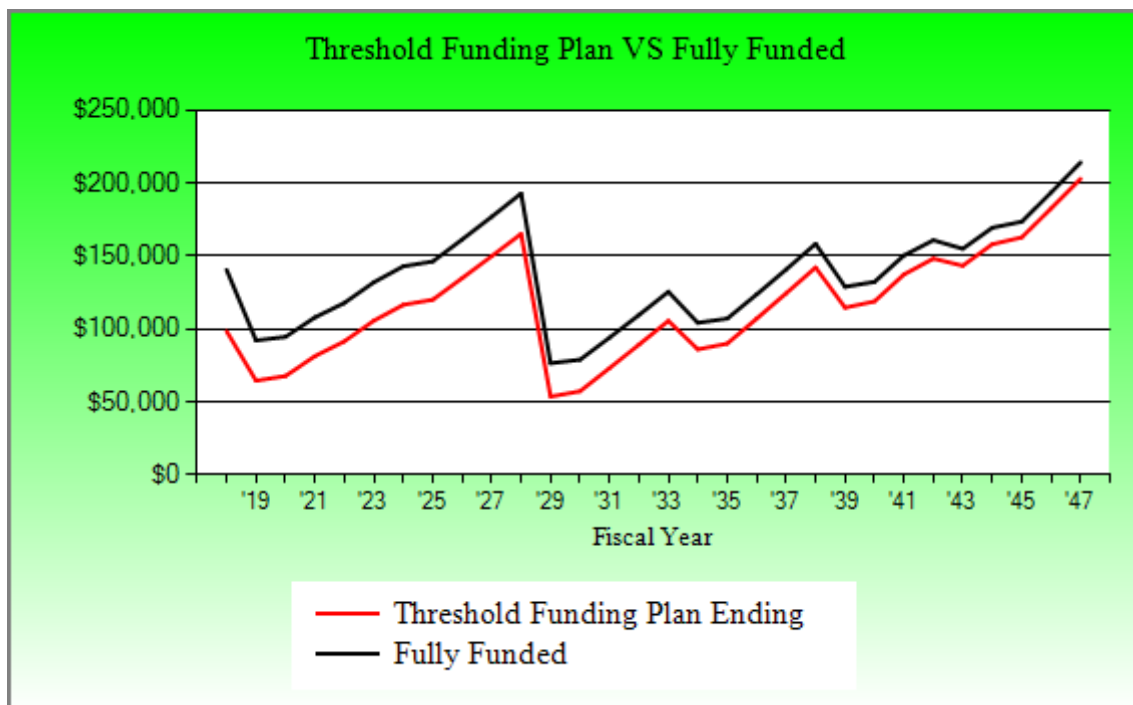
Beginning Balance: \$21,000

Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	198,835	57,500	110		78,610	140,558	56%
2019	201,818	20,180	55	59,501	39,344	92,070	43%
2020	204,845	19,806	68	10,302	48,916	94,512	52%
2021	207,918	19,498	96		68,510	107,947	63%
2022	211,037	19,153	117	3,738	84,042	117,853	71%
2023	214,202	18,608	144		102,793	132,002	78%
2024	217,415	17,865	164	3,427	117,395	142,963	82%
2025	220,677	17,342	173	11,098	123,812	146,249	85%
2026	223,987	17,164	197		141,173	161,390	87%
2027	227,347	17,237	222		158,631	176,951	90%
2028	230,757	17,351	246		176,229	192,944	91%
2029	234,218	17,912	94	127,038	67,197	76,445	88%
2030	237,731	17,374	102	11,956	72,716	78,822	92%
2031	241,297	17,367	126		90,209	93,951	96%
2032	244,917	17,491	151		107,851	109,517	98%
2033	248,591	17,624	176		125,650	125,529	100%
2034	252,319	17,732	150	36,143	107,389	104,177	103%
2035	256,104	17,313	157	12,880	111,979	107,065	105%
2036	259,946	16,734	180		128,893	123,696	104%
2037	263,845	16,038	203		145,133	140,802	103%
2038	267,803	15,260	225		160,618	158,393	101%
2039	271,820	17,007	185	45,488	132,321	128,882	103%
2040	275,897	18,219	191	13,876	136,856	132,244	103%
2041	280,035	17,679	216		154,751	150,414	103%
2042	284,236	17,649	230	7,855	164,776	160,879	102%
2043	288,499	17,988	222	23,919	159,067	154,978	103%
2044	292,827	17,450	241	4,616	172,142	169,438	102%
2045	297,219	20,225	248	14,948	177,668	173,557	102%
2046	301,678	19,820	276		197,764	193,638	102%
2047	306,203	19,420	304		217,488	214,282	101%

Crystal Ridge HOA
Puyallup, WA
Threshold Funding Plan Summary

Report Date	August 14, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	301

<i>Report Parameters</i>	
Inflation	1.50%
Annual Assessment Increase	1.50%
Interest Rate on Reserve Deposit	0.20%
Tax Rate on Interest	30.00%
Contingency	3.00%
2018 Beginning Balance	\$21,000



- The **Threshold Funding Model** calculates the minimum reserve assessments, with the restriction that the funding percentage is not allowed to go below 70% during the period of time examined.

<i>Threshold Funding Model Summary of Calculations</i>	
Required Annual Contribution	\$77,252.91
<i>\$256.65 per unit annually</i>	
Average Net Annual Interest Earned	\$137.55
Total Annual Allocation to Reserves	\$77,390.47
<i>\$257.11 per unit annually</i>	

**Crystal Ridge HOA
Threshold Funding Plan Projection**

Beginning Balance: \$21,000

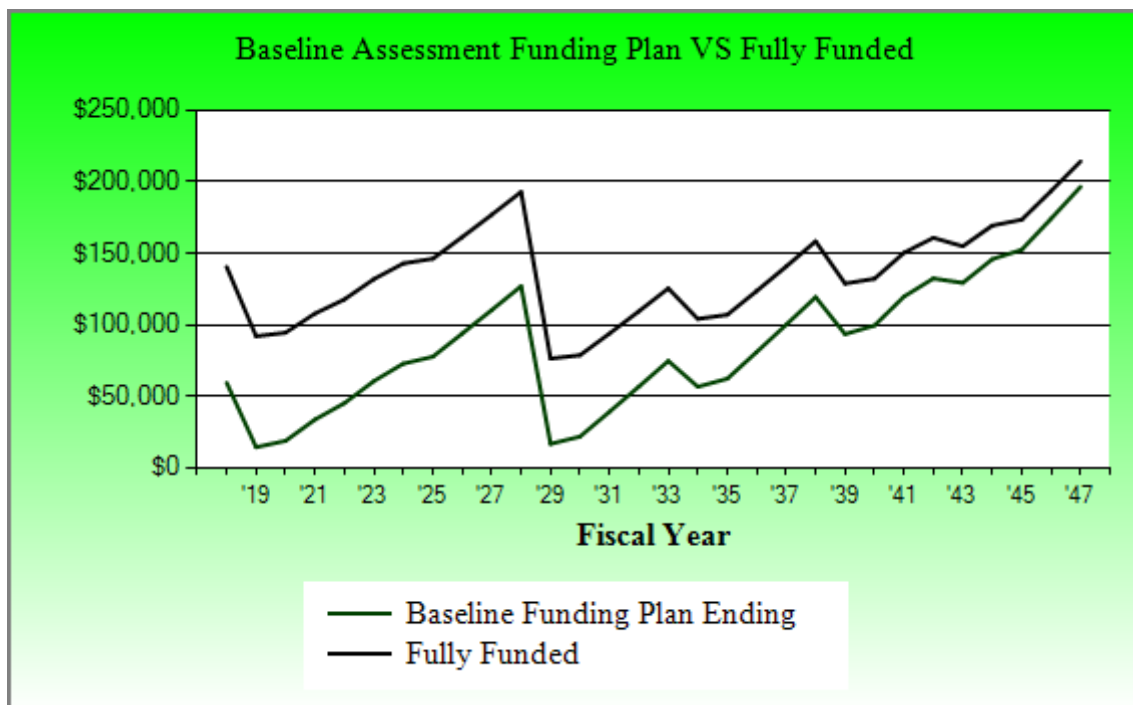
Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	198,835	77,253	138		98,390	140,558	70%
2019	201,818	25,470	90	59,501	64,449	92,070	70%
2020	204,845	13,375	95	10,302	67,616	94,512	72%
2021	207,918	13,576	114		81,306	107,947	75%
2022	211,037	13,779	128	3,738	91,475	117,853	78%
2023	214,202	13,986	148		105,608	132,002	80%
2024	217,415	14,196	163	3,427	116,539	142,963	82%
2025	220,677	14,409	168	11,098	120,017	146,249	82%
2026	223,987	14,625	188		134,830	161,390	84%
2027	227,347	14,844	210		149,884	176,951	85%
2028	230,757	15,067	231		165,181	192,944	86%
2029	234,218	15,293	75	127,038	53,511	76,445	70%
2030	237,731	15,522	80	11,956	57,157	78,822	73%
2031	241,297	15,755	102		73,014	93,951	78%
2032	244,917	15,991	125		89,130	109,517	81%
2033	248,591	16,231	148		105,509	125,529	84%
2034	252,319	16,475	120	36,143	85,961	104,177	83%
2035	256,104	16,722	126	12,880	89,928	107,065	84%
2036	259,946	16,973	150		107,050	123,696	87%
2037	263,845	17,227	174		124,451	140,802	88%
2038	267,803	17,486	199		142,136	158,393	90%
2039	271,820	17,748	160	45,488	114,555	128,882	89%
2040	275,897	18,014	166	13,876	118,860	132,244	90%
2041	280,035	18,284	192		137,336	150,414	91%
2042	284,236	18,559	207	7,855	148,247	160,879	92%
2043	288,499	18,837	200	23,919	143,365	154,978	93%
2044	292,827	19,119	221	4,616	158,090	169,438	93%
2045	297,219	19,406	228	14,948	162,775	173,557	94%
2046	301,678	19,697	255		182,728	193,638	94%
2047	306,203	19,993	284		203,005	214,282	95%

Crystal Ridge HOA
Puyallup, WA
Baseline Funding Plan Summary

Report Date	August 14, 2017
Budget Year Beginning	January 01, 2018
Budget Year Ending	December 31, 2018
Total Units	301

Report Parameters

Inflation	1.50%
Annual Assessment Increase	1.50%
Interest Rate on Reserve Deposit	0.20%
Tax Rate on Interest	30.00%
Contingency	3.00%
2018 Beginning Balance	\$21,000



- The **Baseline Funding Model** calculates the minimum reserve assessments, with the restriction that the reserve balance is not allowed to go below \$0 during the period of time examined.

Baseline Funding Model Summary of Calculations

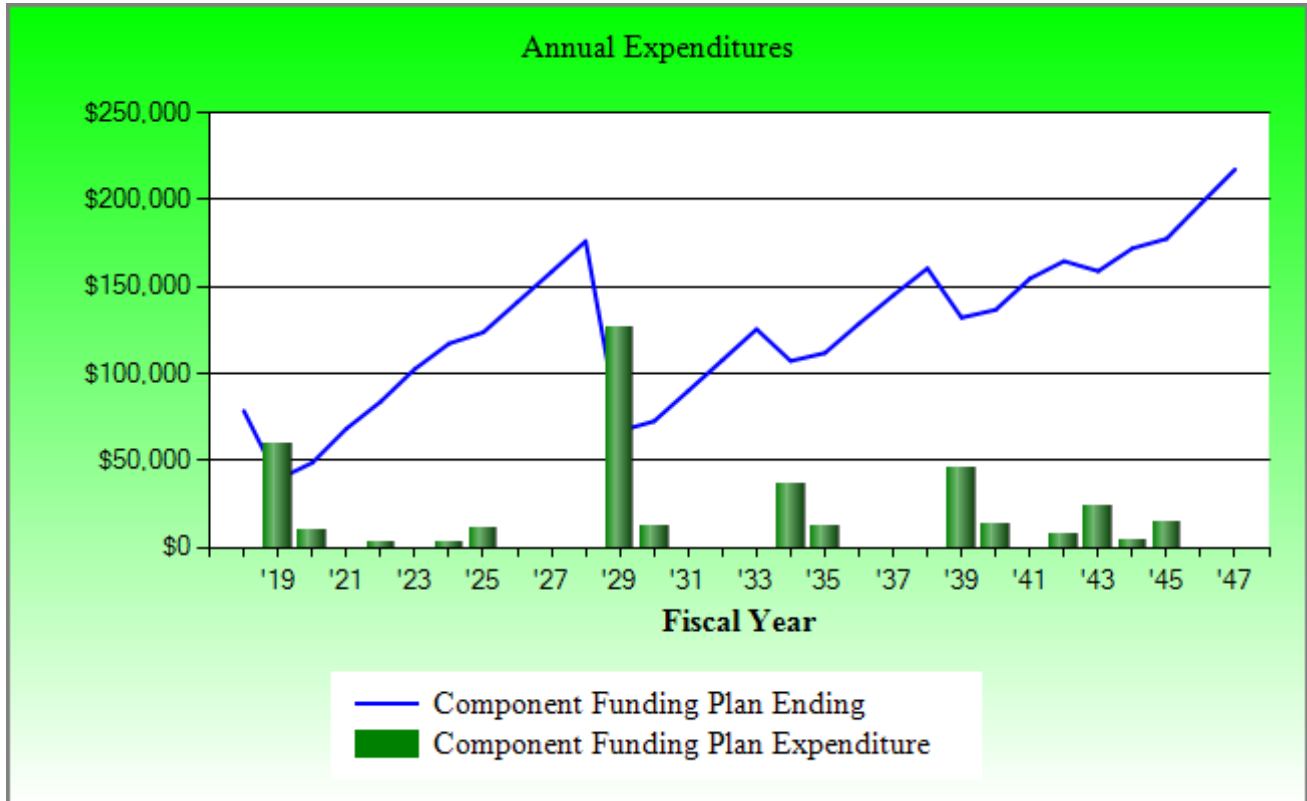
Required Annual Contribution	\$38,417.67
<i>\$127.63 per unit annually</i>	
Average Net Annual Interest Earned	\$83.18
Total Annual Allocation to Reserves	\$38,500.86
<i>\$127.91 per unit annually</i>	

**Crystal Ridge HOA
Baseline Funding Plan Projection**

Beginning Balance: \$21,000

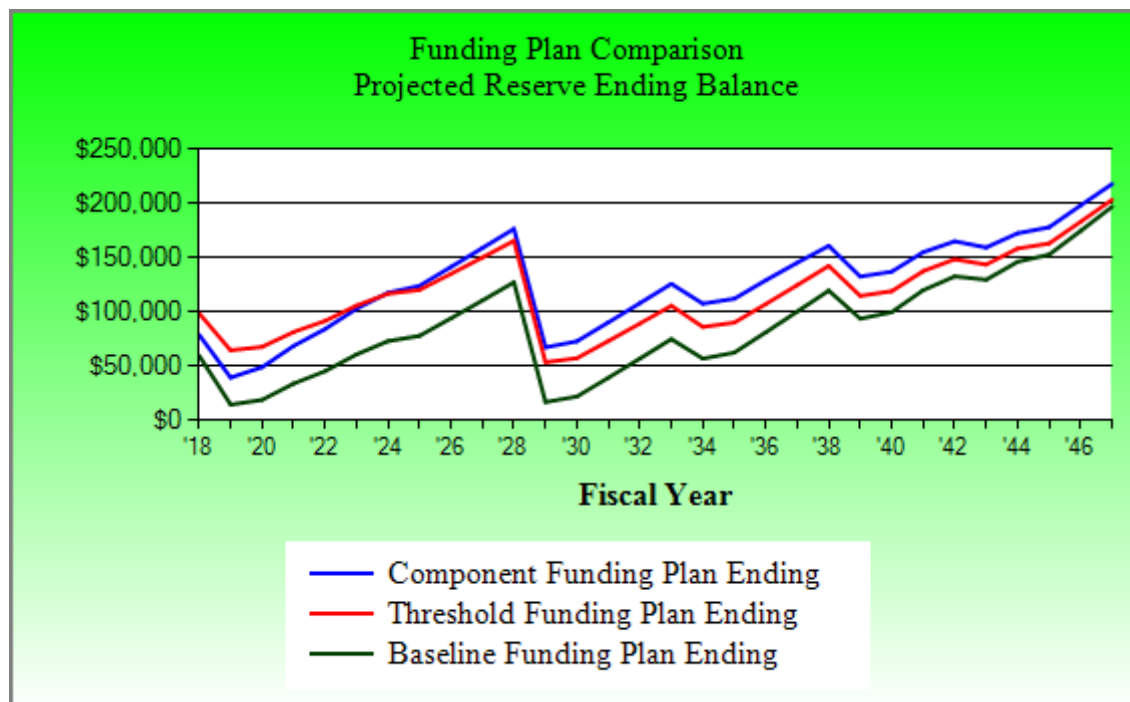
Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2018	198,835	38,418	83		59,501	140,558	42%
2019	201,818	14,453	20	59,501	14,473	92,070	16%
2020	204,845	14,670	26	10,302	18,868	94,512	20%
2021	207,918	14,890	47		33,805	107,947	31%
2022	211,037	15,113	63	3,738	45,243	117,853	38%
2023	214,202	15,340	85		60,668	132,002	46%
2024	217,415	15,570	102	3,427	72,913	142,963	51%
2025	220,677	15,804	109	11,098	77,727	146,249	53%
2026	223,987	16,041	131		93,899	161,390	58%
2027	227,347	16,281	154		110,335	176,951	62%
2028	230,757	16,526	178		127,038	192,944	66%
2029	234,218	16,773	23	127,038	16,797	76,445	22%
2030	237,731	17,025	31	11,956	21,897	78,822	28%
2031	241,297	17,280	55		39,232	93,951	42%
2032	244,917	17,540	79		56,851	109,517	52%
2033	248,591	17,803	105		74,758	125,529	60%
2034	252,319	18,070	79	36,143	56,765	104,177	54%
2035	256,104	18,341	87	12,880	62,313	107,065	58%
2036	259,946	18,616	113		81,042	123,696	66%
2037	263,845	18,895	140		100,077	140,802	71%
2038	267,803	19,179	167		119,423	158,393	75%
2039	271,820	19,466	131	45,488	93,532	128,882	73%
2040	275,897	19,758	139	13,876	99,554	132,244	75%
2041	280,035	20,055	167		119,776	150,414	80%
2042	284,236	20,356	185	7,855	132,461	160,879	82%
2043	288,499	20,661	181	23,919	129,384	154,978	83%
2044	292,827	20,971	204	4,616	145,943	169,438	86%
2045	297,219	21,285	213	14,948	152,493	173,557	88%
2046	301,678	21,605	244		174,342	193,638	90%
2047	306,203	21,929	275		196,545	214,282	92%

**Crystal Ridge HOA
Annual Expenditure Chart**



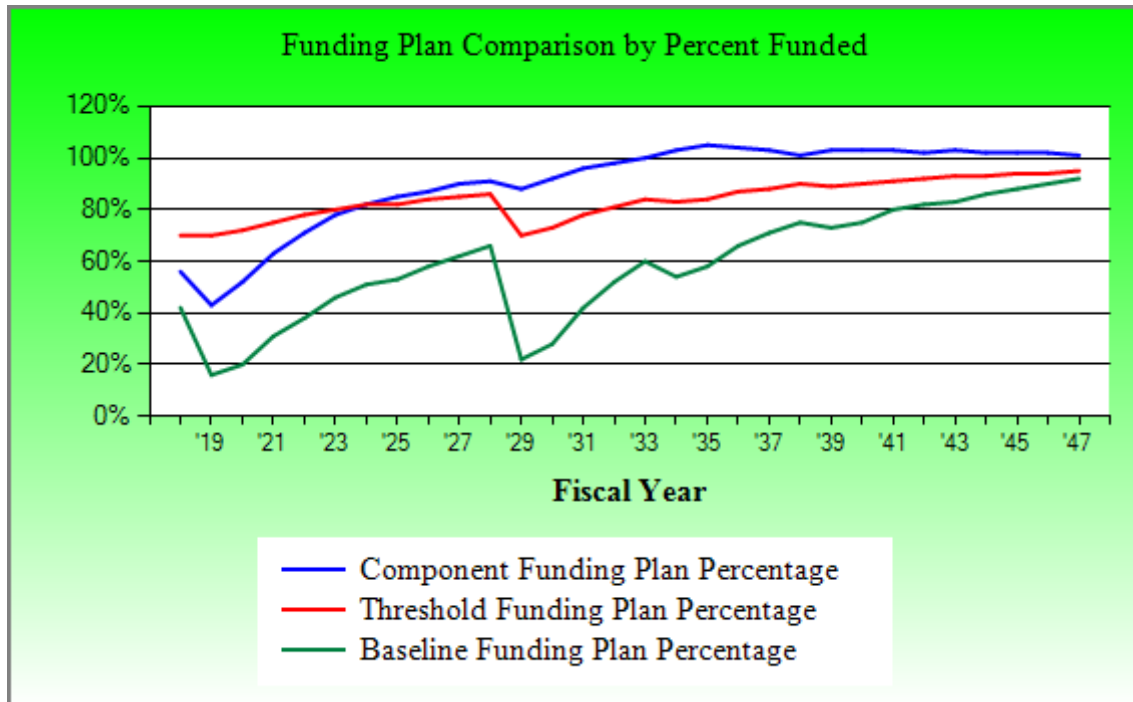
- This chart shows the component funding plan over the next 30 years, as well as the amount of expenditures and the year they are projected to be expensed.

**Crystal Ridge HOA
Funding Plan Reserve Ending Balance Comparison Chart**



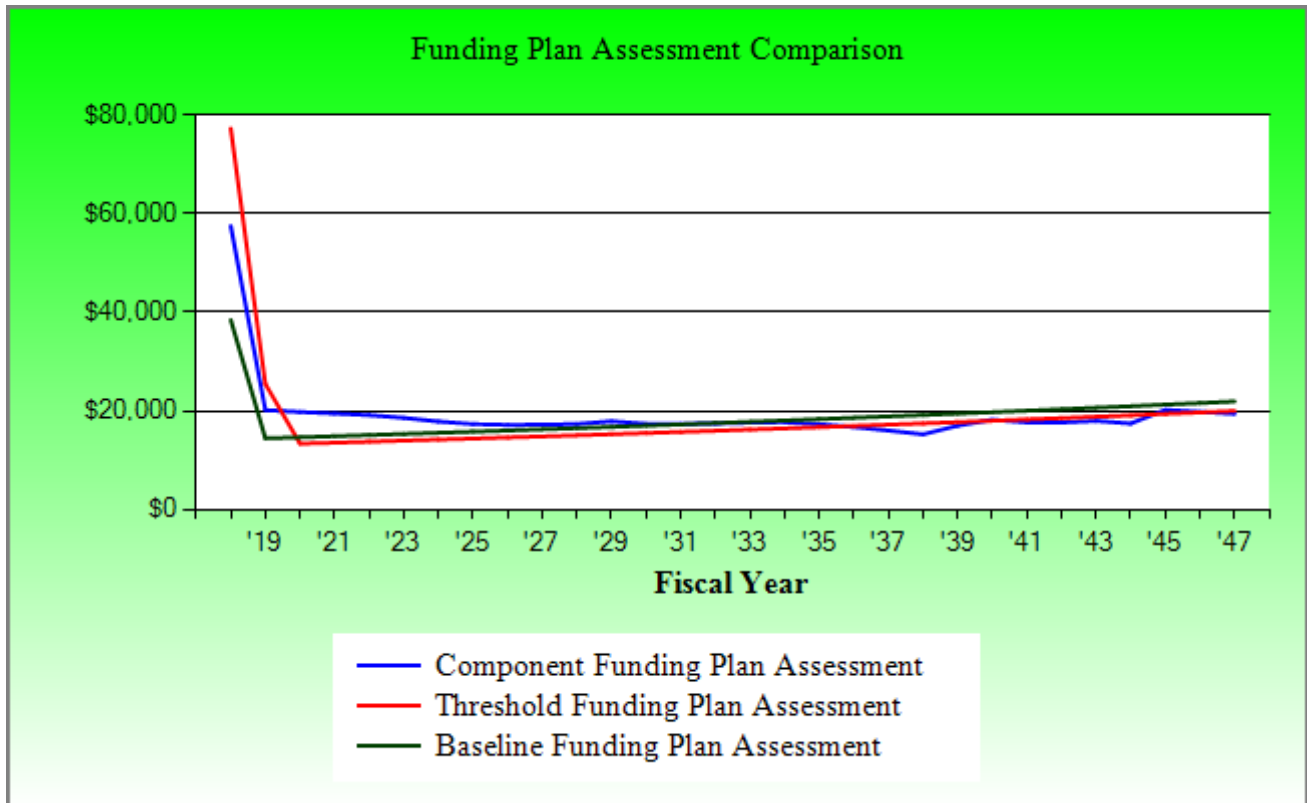
- The chart above compares the projected reserve ending balances of the three funding plans (Current Assessment Funding Plan, Threshold Funding Plan and Component Funding Plan) over 30 years.

**Crystal Ridge HOA
Funding Plan Comparison by Percent Funded**



- The chart above compares the three funding plans (Current Assessment Funding Plan, Threshold Funding Plan, and Component Funding Plan) by the percentage fully funded over 30 years. This allows your association to view and then choose the funding model that might best fit your community's needs.

**Crystal Ridge HOA
Funding Plan Assessment Comparison Chart**



- The chart above compares the annual assessment of the three funding plans (Current Assessment Funding Plan, Threshold Funding Plan and Component Funding Plan) over 30 years.

Crystal Ridge HOA
Thirty-Year Projection of Reserve Account Expenditures

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Description										
Cedar Fence		25,727								
Cedar Fence Seal		3,182					3,427			
Chain Link Fence					2,239					
Landscape Refurbish			10,302					11,098		
Mailboxes										
Metal Bench					1,499					
Monument - Crystal Ridge										
Monument - Janelle Estates										
Monument - The Estates										
Play Structure		28,197								
Swing Set		2,395								
Year Total:		59,501	10,302		3,738		3,427	11,098		

Crystal Ridge HOA
Thirty-Year Projection of Reserve Account Expenditures

	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Description										
Cedar Fence							32,165			
Cedar Fence Seal		3,692					3,978			
Chain Link Fence										
Landscape Refurbish			11,956					12,880		
Mailboxes		71,563								
Metal Bench										
Monument - Crystal Ridge										
Monument - Janelle Estates										
Monument - The Estates		51,783								
Play Structure										
Swing Set										
Year Total:		127,038	11,956				36,143	12,880		

Crystal Ridge HOA
Thirty-Year Projection of Reserve Account Expenditures

	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047
Description										
Cedar Fence										
Cedar Fence Seal		4,285					4,616			
Chain Link Fence										
Landscape Refurbish			13,876					14,948		
Mailboxes										
Metal Bench										
Monument - Crystal Ridge						23,919				
Monument - Janelle Estates					7,855					
Monument - The Estates										
Play Structure		37,977								
Swing Set		3,226								
Year Total:		45,488	13,876		7,855	23,919	4,616	14,948		