

## THE VILLAGE AT LAKE CHELAN

Manson, Washington



# STANDARD LEVEL 2 RESERVE STUDY UPDATE WITH A SITE VISIT

With funding recommendations for the fiscal year ending 2018

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## **CONTENTS**

3
6
13
14
15
16
17
24
27
28
29
30
33



#### **EXECUTIVE SUMMARY**

The Village at Lake Chelan is a 107 lot residential community located at Wapato Way (SR 150) & Oakwood Drive in Manson, Washington. This Reserve Study meets the requirements of the Washington Homeowners' Association Act for a Level 2 Reserve Study update with a site visit, and was prepared by a Reserve Study Professional.

#### **Background**

The community has 107 lots with 70 individual resident buildings currently constructed and one community pool with two covered patios and a restroom/equipment building. Construction of the community is ongoing, with roads and buildings first completed in about 2005.

#### **Financial Information**

Reserve Account Balance on October 27, 2017	\$158,157
Annual Operating Budget	\$67,040
Component Inclusion Threshold	\$ 670
Annual Budgeted Contribution Rate (2017)	\$10,000
Remaining Contribution for the Year	<b>\$</b> 0
Planned or Implemented Special Assessment	None
Fully Funded Balance	\$108,550
Percent Funded at Time of Study	146%
Funding Status at Time of Study	Well Funded

#### Recommendations

Recommended 2018 Contribution	\$25,300
Recommended Contribution per Month	\$2,108
Average Contribution per Unit per Year	\$ 236
Average Contribution per Unit Per Month	\$ 20
Recommended Special Assessment	None
2018 Baseline Funding Plan Contribution Rate	\$24,300
2018 Full Funding Plan Contribution Rate	\$29,800

The recommended reserve contribution represents a Threshold Funding Plan to prevent special assessments over the course of the 30-year study **while maintaining a minimum reserve account balance of one year's contribution to reserves**. The fiscal year for the Reserve Study is a calendar year. Cost projection accuracy decreases into the distant future. Assumptions should be reconsidered and updated with each revision of the study.

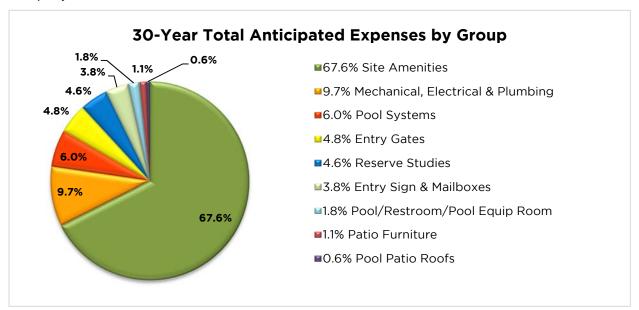
There is no legal requirement to fund reserves. There is a requirement to have a current Reserve Study to know the recommended reserve contribution rate. Reserve Studies must be updated annually to reflect recent financial information, repairs or replacements, and to adjust for future repair costs. Every three years, the update must be based on a visual on-site inspection conducted by a Reserve Study Professional.



## **Estimated Repair Summary**

## **Projected Maintenance Expenses Over the Next 30 Years**

The following illustrates anticipated maintenance expenses over the next 30 years. Changing the timing or costs of these items may result in changes to the recommended contribution. Independent design specifications and oversight are suggested for repairs to the building envelope. We further recommend that the planning stages for these repairs start at least one year before the estimated repair to obtain a scope of repair, select and schedule a contractor, and secure financing for the project.



The following chart illustrates which groups the component numbers are assigned to:

Number	Component Description	<b>Group Name</b>
2.0.0	Paving, Landscaping & Fencing	Site Amenities
3.0.0	Concrete Pool Deck	Site Amenities
5.0.0	Railings	Pool/Restroom/Pool Equip Room
6.0.0	Pool/Restroom/Pool Equip Room	Pool/Restroom/Pool Equip Room
7.0.0	Pool Patio Roofs	Pool Patio Roofs
8.0.0	Entry Gates	Pool/Restroom/Pool Equip Room
9.0.0	Exterior & Interior Finishes	Patio Furniture
10.0.0	Entry Sign & Mailboxes	Entry Sign & Mailboxes
11.0.0	Equipment	Entry Gates
12.0.0	Patio Furniture	Patio Furniture
13.0.0	Pool Systems	Pool Systems
14.0.0	Elevator Equipment	Elevator Maintenance
15.0.0	Plumbing, Pool Equip. & Irrigation	Mechanical, Electrical & Plumbing
16.0.0	Electrical Systems	Mechanical, Electrical & Plumbing
18.0.0	Security Systems	Mechanical, Electrical & Plumbing
20.0.0	Reserve Studies	Reserve Studies



## Five Year Maintenance Summary from 2018 Through 2022

The following reserve funded expenses are expected to occur in the next five years at The Village at Lake Chelan.

Year	Component Maintenance	Estimated Cost
1 (2018)	2.6.1 Asphalt Pavement - Repair	\$11,590
1 (2018)	2.9.2 Landscaping - Plant Replacement @ Hwy 150	\$10,000
1 (2018)	12.1.1 Patio Furniture - Contingency	\$1,500
1 (2018)	15.2.1 Drainage System - Contingency	\$2,500
3 (2020)	20.1.1 Reserve Study Update - With Site Visit	\$3,800
4 (2021)	2.6.1 Asphalt Pavement - Repair	\$11,590
4 (2021)	2.6.2 Asphalt Pavement - Seal Coat & Restriping	\$39,680
5 (2022)	2.7.1 Wood Perimeter Fence - Replace	\$26,240
5 (2022)	8.3.2 Gate Operators - Replace	\$3,030
5 (2022)	10.5.1 Mailbox Clusters - Add	\$2,060
5 (2022)	15.3.1 Pool Equipment - Contingency	\$2,000
5 (2022)	15.3.2 Irrigation System - Replace	\$26,890



#### INTRODUCTION

#### **Purpose of a Reserve Study**

The purpose of a Reserve Study is to recommend a reasonable annual reserve Contribution Rate made by an association to its reserve account. Reserve accounts are established to fund major maintenance, repair, and replacement of common elements, including limited common elements, expected within the next thirty years. A Reserve Study is intended to project availability of adequate funds for the replacement or major repair of any significant component of the property as it becomes necessary without relying on special assessments. It is a budget planning tool which identifies the current status of the reserve account and a stable and equitable Funding Plan to offset the anticipated future major shared expenditures.

Each reserve component is evaluated to determine the current condition, the remaining useful life, and the estimated replacement cost. This information is combined into a spreadsheet to determine funding requirements and establish the annual contribution rate needed to minimize the potential for special assessments. All costs and annual reserve fund balances are shown in constant dollars, and with adjustments for annual inflation and interest earned. Ideally, an even level of contributions is established that maintains a positive balance in the reserve account over the timeline the study examines.

A Reserve Study also calculates a theoretical "Fully Funded Balance". Fully Funded Balance is the sum total of the reserve components' depreciated value using a straight line depreciation method. To calculate each component's depreciated value:

$$Depreciated\ Value = Current\ Replacement\ Cost\ \times \frac{Effective\ Age}{Expected\ Useful\ Life}$$

By comparing the actual current reserve fund balance, to the theoretical Fully Funded Balance a **Percent Fully Funded** is derived. This acts as a measuring tool to assess an association's ability to absorb unplanned expenses. These expenses could be emergency repairs not covered by insurance, or expenses that differ from the existing Reserve Study in terms of timing or cost.

The Fully Funded Balance is neither the present replacement cost of all of the Association's reserve components, nor does it have a mathematical relationship to the recommended reserve contribution funding plans.



#### **Three levels of Reserve Studies:**

<u>Level 1</u>: The first level, an initial Reserve Study, must be based upon a visual site inspection conducted by a Reserve Study Professional. This is also known as a full Level 1 Reserve Study with a site visit.

<u>Level 2</u>: Thereafter at least every three years, an updated Reserve Study must be prepared, which again is based upon a visual site inspection conducted by a Reserve Study Professional. This is also known as a Level 2 update with a site visit.

Level 3: As noted earlier, the Association is required to update its Reserve Study every year. However, in two of the three years, the annual updates do not require a site visit. This is also known as a Level 3 update without a site visit.

Note: This study is a <u>Level 2</u> - Reserve Study update with a site visit.

#### **Government Requirements for a Reserve Study**

The content of a Reserve Study for a homeowners' association is regulated by the Washington State government (RCW 64.38.070 §2). The required content is:

- (a) A reserve component list, including any reserve component that would cost more than one percent of the annual budget of the association, not including the reserve account, for major maintenance, repair, or replacement. If one of these reserve components is not included in the Reserve Study, the study should provide commentary explaining the basis for its exclusion. The study must also include quantities and estimates for useful life of each reserve component, remaining useful life of each reserve component, and current repair and replacement cost for each component;
- (b) The date of the study, and a statement that the study meets the requirements of this section:
- (c) The following level of reserve study performed (i) Level I Full reserve study funding analysis and plan; (ii) Level II Update with visual site inspection; or (iii) Level III Update with no visual site inspection;
- (d) The association's reserve account balance;
- (e) The percentage of the fully funded balance that the reserve account is funded;
- (f) Special assessments already implemented or planned;
- (g) Interest and inflation assumptions;
- (h) Current reserve account contribution rates for a full funding plan and baseline funding plan;
- (i) A recommended reserve account contribution rate; a contribution rate for a full funding plan to achieve one hundred percent fully funded reserves by the end of the thirty-year study period, a baseline funding plan to maintain the reserve (fund) balance above zero throughout the thirty-year study period without special assessments, and a contribution rate recommended by the reserve study professional;



- (a) A projected reserve account balance for thirty years and a funding plan to pay for projected costs from those reserves without reliance on future unplanned special assessments; and
- (b) A statement on whether the reserve study was prepared with the assistance of a reserve study professional.

The Washington State government further requires the following disclosure in every Reserve Study (RCW 64.38.070 §3):

"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."

The full Washington Homeowners' Association Act may be reviewed on the Washington State Legislature's website at:

http://apps.leg.wa.gov/rcw/default.aspx?cite=64.38 and parts of 64.38.065 to 64.38.090 for the Reserve Study Amendment's portions. In April 2011, the Act was amended to change the required content within the Reserve Studies, add reporting of the Reserve Study results as part of the budget summary to owners, and extend the Reserve Study requirement to homeowners' associations with significant assets. For questions regarding the Act, we recommend contacting an attorney familiar with homeowners' associations' legal requirements.





#### **Limitations and Assumptions of a Reserve Study**

This Reserve Study is not a report on the condition of the assets maintained by the Association, or a detailed report of necessary maintenance to the assets. It is also not an investigation into or comment on the quality of construction of the reserve components, or whether the construction complies with the building code or the requirements of the Washington Homeowners' Association Act.

The observations made by Reserve Consultants LLC are limited to a visual inspection of a sample of the reserve components. Unless informed otherwise, our assumption is that the components are constructed in substantial compliance with the building code and to industry standards, and that they will receive ordinary and reasonable maintenance and repair by the Association. These assumptions include that most reserve components will achieve their normal useful lives for similar components in the Pacific Northwest, and that they will be replaced when necessary to prevent damage to other reserve components.

This Reserve Study assumes that the Association will be maintained to keep a good level of appearance, with a special emphasis on retaining the original appearance of the assets to the greatest possible extent. The analysis also assumes that the Association will replace materials as they are required with good quality materials, installed by qualified, licensed, contractors. We further assume that the assets will experience the full typical useful life for the new materials installed.

The long term nature of this study requires that certain assumptions and predictions be made about future events. Since there can be no guarantee that these future events will occur as assumed, this analysis must be viewed in light of the circumstances under which it was conducted. Reasonable effort has been made to ensure that the conclusions of this report are based on reliable information and sound reasoning.

The assumptions in this report should be updated annually with experienced repair costs, actual reserve fund balances, etc. In addition, this report should be updated every three years with a site inspection and professional review. Such regular updating will allow changes based on actual occurrences and adjustments for the cost of repairs to be incorporated into the annual reserve contributions. This will allow any savings or additional costs to be properly allocated among unit owners.



### Our Approach to a Reserve Study

Reserve Consultants LLC employs a "Reasonable Approach" when evaluating reserve components in order to draft a study that is of greatest value to our clients. This means we attempt to predict, based on the costs involved and the client's objectives, what a reasonable person will decide to have done when maintenance, repairs, or replacement become necessary. For example, a reasonable person will not replace a fence when it only needs to be repainted. The benefit of this is that reserve contributions are minimized to allow for what is most likely to occur. Our studies are not based on a worst case scenario, but rather on what we expect is most likely to occur. Our approach assumes minor problems will be corrected as they occur, before they become major problems.

Many sources were used in drafting this report. These include:

- Site visit and visual inspection of a sampling of the components;
- Input provided by association representatives;
- Review of a list of components the Association is responsible for;
- Generally accepted construction, maintenance, and repair guidelines.

The costs estimated for this Reserve Study are based on several sources

- Costs experienced by The Village at Lake Chelan;
- Costs experienced by other associations in the area;
- RS Means Building Construction Cost Data 2017.

Several factors may influence the actual costs that the Association will experience. The quality of replacement materials of items can significantly impact cost, as well as the timing between replacements. The use of Architects or independent construction managers to specify and oversee work may also cause additional expenses. Condominium associations typically experience higher costs than other comparable multifamily projects, in part due to the difficulty contractors have obtaining insurance to work on condominium buildings.





#### **Inflation and Interest Rate Projections**

When making estimates on the future inflation and interest rates, we use a staggered approach to more accurately reflect future economic projections.

For inflation, we use the construction industry inflation rates published by RS Means, which differ from the consumer inflation index. The average annual construction inflation increase since 1966 is 4.20%. We do not apply inflation to the annual reserve contribution in Year 0. Likewise, we do not apply inflation to the recommended reserve contribution in Year 1 since this is the first year at the recommended contribution rate. Inflation applied to the components on the inflated spreadsheet is compounded annually; the values are listed for each year at the bottom of the inflated spreadsheet.

For interest rates, we analyze the historical data provided by the Board of Governors of the Federal Reserve. The average annual interest rate since 1986 is 3.63%. The interest for associations is typically lower than average due to conservative investing options that are usually employed by associations. Interest is applied to Year 0 only in the constant spreadsheet so that the starting reserve fund balance in Year 1 is the same for both the constant and inflated spreadsheets, as illustrated on the following page.

Below is a chart of values applied for inflation and interest over the next 30 years for The Village at Lake Chelan.

#### **Inflation and Interest Rate Projections**

Years Applied	Contribution Inflation	Inflation	Interest
Year 0 (2017) through Year 1 (2018)	0%	2%	1%
Year 2 (2019) through Year 10 (2027)	3%	3%	2%
Year 11 (2028) through Year 30 (2047)	4%	4%	3%





### **Starting Reserve Fund Balance for Year 1 (2018)**

The starting reserve fund balance for 2018 has been estimated by combining the following figures that were provided by an association representative:

\$158,157 reserve fund balance as of October 27, 2017

- (\$ 0) anticipated remaining maintenance expenses in 2017
- + \$ 0 planned special assessment in 2017
- + \$ 0 remaining reserve contributions for 2017
- + \$1,582 projected interest on the 2017 reserve fund balance
- \$159,739 estimated balance for the fiscal year beginning in 2018

Below is a summary of the anticipated remaining maintenance expenses for 2017.

The actual or projected total reserve fund balance presented in the Reserve Study is based upon information provided to RCL and was not audited.



#### **ASSOCIATION OVERVIEW**

The Village at Lake Chelan is a 107 lot residential community located in Manson, Washington. The community has 70 individual resident buildings currently constructed and one community pool with two covered patios and a restroom/equipment building. Construction of the community is ongoing, with roads and buildings first completed in about 2005.

The Association has asphalt roads and parking areas lined by concrete curbs. There are open grassy spaces between building clusters that are maintained by the Association.

#### **REVIEW OF GENERAL CONDITIONS**

The overall appearance of the community was very good. The asphalt paving was repaired and seal coated in 2015. Sidewalks and curbs are repaired as needed. The grounds and landscaping seemed to be regularly maintained.

The exterior cement fiberboard siding of the common building located at the pool appeared to be in good condition; the paint on the siding and trim is weathering as expected. The pool surface was recoated in 2016 and the pool deck looked as if it was performing as expected. There were no issues reported with the asphalt shingle roofs of the pool building and the two patio structures.

No problems were reported with the plumbing, electrical or drainage systems. Minor and major repair projects have been conducted on a regular basis.





#### COMPONENTS INCLUDED IN THE RESERVE STUDY

Reserve studies for homeowners' associations are required to include any reserve component that would cost more than one percent of the annual budget for major maintenance, repair or replacement (RCW 64.38.070). While the law defines the inclusion threshold to be \$ 670, components valued less than the legal threshold may be included to better capture reserve funding for The Village at Lake Chelan.

#### Component Funding Excluded from the Reserve Study

The following components may qualify for inclusion within the Reserve Study, but have been excluded from the budget because they are maintained with funds from the operating budget:

concrete curbs & walkways
 sport court

In addition, there are items that individual unit owners are responsible to maintain and pay for, including, but not limited to:

individual residences
 damage by residents or their pets

Not all components that are the individual unit owners' responsibility are described in the report. The costs for items maintained by individual unit owners are not included in the budget for the reserve account contribution recommendations. Individual owners are financially responsible for repairs for elements that are not the responsibility of the Association to maintain. We recommend that associations establish policies and processes regarding the maintenance on these "owner responsibility" items.

#### **Adjustments to Component Reserve Recommendations**

This reserve study provides updated information on the components from prior reserve studies and is intended to be used with the component sheets from those studies. All cost estimates were adjusted to reflect the actual inflation rate for construction work in the Pacific Northwest, and costs actually experienced by The Village at Lake Chelan or others in the area.

To complete the report, we were provided with a record of recent expenditures on reserve components. We use those figures, where applicable, for updating component cost projections, applying an appropriate inflation factor. Where updated figures from actual work performed are not available, cost projections from the previous reserve study are updated for inflation and rounded to the nearest \$10, using the RS Means 2011 to 2017 inflation figure of 9.05% for construction work.



## **RESERVE COMPONENT SUMMARY SHEETS**



2.6.1 Asphalt Pavement - repair

**Maintenance Cycle:** years **Next Maintenance:** Year 4 (2021) Quantity: 146,700 Square Feet / SF **Unit Cost:** \$7.30

Estimate: 146,700 SF X 1% X \$7.30/SF = \$10,709 + tax = \$11,590

Notes: The overall appearance of the asphalt roads was good. The Association reported frequent construction truck traffic at the main entrance is causing damage to the road, as well as damage caused by snow removal equipment. Additional funds for the next year were requested to address the damaged areas. The reserve budget funds for repairs of 1% of the entire asphalt surface at the time of seal coating.

#### 2.6.2 Asphalt Pavement - seal coat & restriping

**Maintenance Cycle:** years **Next Maintenance:** 4 (2021) 6 Year 146,700 Square Feet **Quantity:** Unit Cost: \$0.25 / SF

**Estimate:** 146,700 SF X 100% X \$0.25/SF = \$36,675 + tax = \$39,680

Notes: All of the asphalt was seal coated twice in 2015. The asphalt seemed to be in good condition, with no major cracks or fading paint noted. The budget provides funds for seal coating and restriping the entire asphalt pavement including parking areas, and is scheduled in conjunction with asphalt pavement repairs.

### 2.6.3 Asphalt Pavement - overlay

**Maintenance Cycle:** 25 **Next Maintenance:** vears Year 20 (2037) Quantity: 146,700 Square Feet Unit Cost: \$2.00 / SF

**Estimate:** 146,700 SF X 33% X \$2.00/SF = \$96,822 + tax = \$104,760

Notes: We fund for an overlay of the asphalt driveway and parking area when the asphalt has reached the end of useful life, and seal coating and repairs no longer provide an adequate driving surface. We have budgeted for overlay of approximately one third

of the entire asphalt with each maintenance cycle.

#### 2.7.1 Wood Perimeter Fence - replace

**Maintenance Cycle:** 5 years **Next Maintenance:** Year 5 (2022) **Quantity:** 2,100 Linear Feet Unit Cost: \$35.00 / LF

**Estimate:** 2.100 LF X 33% X \$35.00/LF = \$24.255 + tax = \$26.240

**Notes:** The wood fence along the east and west perimeter of the property was in varied condition. Sections of the fence had exposed wood and faded paint. The Association reported plans to replace the wood fencing with vinyl in the future. The perimeter fence along Highway 150 has been replaced with vinyl fencing. The budget allows for replacing sections of about 1/3 of the wood fence with vinyl fencing in 5 year maintenance cycles ending in Year 15 when all the wood

fence has been replaced.

#### 2.7.2 Steel Fence Pool Enclosure - replace

**Maintenance Cycle:** 40 vears **Next Maintenance:** Year 28 (2045) **Quantity:** 380 \$76.00 Linear Feet Unit Cost: / LF

**Estimate:** 380 LF X 100% X \$76.00/LF = \$28,880 + tax = \$31,250

Notes: The factory coated steel fence surrounding the pool appeared to be weathering well. There were no signs of damaged or unstable fencing. We budget for a complete fence replacement to allow for changing health code regulations regarding pool

areas.



2.7.3 Vinyl Fence - replace

**Maintenance Cycle:** 40 39 (2056) years **Next Maintenance:** Year Quantity: 986 **Unit Cost:** / LF Linear Feet \$40.00

**Estimate:** 986 LF X 100% X \$40.00/LF = \$39,440 + tax = \$42,670

Notes: A new vinyl fence was installed in 2016 along Highway 150 at a cost of approximately \$40,000. We budget for a replacement of the fence when it has reached the

approximate end of useful life. This budget may need to be adjusted in the future, as more sections of the wood perimeter fence are replaced with vinyl fencing.

2.7.4 Chain Link Fence - repair

**Maintenance Cycle:** 18 (2035) 30 **Next Maintenance:** vears Year Quantity: Unit Cost: \$18.00 1,400 Linear Feet / LF

**Estimate:** 1,400 LF X 10% X \$18.00/LF = \$2,520 + tax = \$2,730

Notes: The chain link perimeter fence at the north of the property is reported to be in good condition. There were no visible signs of damaged fencing. The budget provides

funds for repair of 10% of the total chai link fencing. Funds may be drawn from as

2.9.1 Landscaping - contingency

**Maintenance Cycle: Next Maintenance:** years Year 6 (2023) Quantity: Unit Cost: 1 Lump Sum \$5,000.00 / LS

**Estimate:** \$5.000

Notes: The Association has requested a budget to fund for major landscaping projects such as lawn replacement and large tree removal. This is a discretionary fund and may be

drawn from to meet the needs of the Association.

2.9.2 Landscaping - plant replacement @ Hwy 150

Maintenance Cycle: **Next Maintenance:** year Year 1 (2018)

**Quantity:** 1 Lump Sum **Unit Cost:** \$10,000.00 / LS

**Estimate:** \$10.000

Notes: The Association plans to replace the plantings of an estimated 8,500 sf area of landscaping that runs along Highway 150 with rock in 2018 at a cost of \$10,000. We

have budgeted a lump sum amount for the next year to fund the one-time project.

3.3.1 Pool Deck - repair & resurface

Maintenance Cycle: 25 vears **Next Maintenance:** Year 13 (2030)

**Quantity:** 3,800 Unit Cost: \$10.00 Square Feet / SF

**Estimate:** 3,800 SF X 100% X \$10.00/SF = \$38,000 + tax = \$41,120

Notes: The pool deck is seal coated once a year and appears to be in good condition. We budget for major repairs and resurfacing of the pool deck when the concrete is

anticipated to present large cracks and tripping hazards.



6.2.1 Pool/Restroom/Equip Room - contingency

**Maintenance Cycle: Next Maintenance:** 10 (2027) 10 years Year Quantity: **Unit Cost:** \$5,000.00 / LS Lump Sum

**Estimate:** \$5,000

**Notes:** The Association has requested to budget a lump sum for repairs or replacement of components related to the building located at the pool. The components include cement fiberboard siding, common doors, asphalt shingle roof, gutters and downspouts, windows, restrooms, water heater, exterior lighting, as well as an electrical system and plumbing system contingency. This is a discretionary budget and funds may be drawn from to meet the needs of the Association.

7.4.1 Covered Patio Roofs - replace

**Maintenance Cycle:** 35 years **Next Maintenance:** 23 (2040) Year Quantity: **Roofing Squares** Unit Cost: \$500.00 / SQ

**Estimate:** 9 SQ X 100% X \$500.00/SQ = \$4,500 + tax = \$4,870

**Notes:** The roofing material installed on the two covered patios located at the pool are midquality asphalt shingle roofing. The roofs appeared to be in very good condition. The

budget allows for replacing the entire roofing with a similar quality roofing material.

8.3.1 Entry Gate & Fencing - replace

**Maintenance Cycle:** 40 years **Next Maintenance:** Year 28 (2045) Quantity: 170 Linear Feet Unit Cost: \$120.00 / LF

Estimate: 170 LF X 100% X \$120.00/LF = \$20,400 + tax = \$22,070

**Notes:** The coated aluminum entry gate and fencing at the main entrance seemed to be in

good condition. There were no issues noted at the time at our site visit. The budget allocates funds to replace the gates and fence at the approximate end of useful life.

8.3.2 Gate Operators - replace

**Maintenance Cycle:** 5 vears **Next Maintenance:** Year 5 (2022)

Quantity: 2 Each **Unit Cost:** \$2,800.00 / EA

**Estimate:** 2 EA X 50% X \$2,800.00/EA = \$2,800 + tax = \$3,030

**Notes:** The Association representative reported that the motor of the gate operator had to be reset a few times in 2016. No other repairs have been needed and the operators are reportedly in working condition. The entry gates remain open during the daytime

which reduces the amount of usage. The budgeted amount allows for the

replacement of 1 gate operator with each maintenance cycle.

10.4.1 Entry Sign - replace

**Maintenance Cycle:** 10 **Next Maintenance:** 9 (2026) years Year **Quantity: Unit Cost:** \$1,500.00 / LS Lump Sum

**Estimate:** \$1.500

Notes: In 2016, the front entry monument sign was refurbished with new tiles and lettering. The sign was clean and in good condition. We budget reserves to replace the sign at

the time the materials have worn and the lettering becomes illegible.



10.5.1 Mailbox Clusters - add

Maintenance Cycle: 5 (2022) years **Next Maintenance:** Year Quantity: **Unit Cost:** 1 Each \$1,900.00 / EA

Estimate: 1 EA X 100% X \$1,900.00/EA = \$1,900 + tax = \$2,060

Notes: In 2016, three new mailbox clusters were added making the current total six clusters. The Association anticipates that one additional cluster may need to be added in the

future as more lots are developed.

### 10.5.2 Mailbox Clusters - replace

Maintenance Cycle: 25 years **Next Maintenance:** Year 15 (2032) 7 \$1,900.00 **Quantity:** Each Unit Cost: / EA

**Estimate:** 7 EA X 100% X \$1,900.00/EA = \$13,300 + tax = \$14,390

Notes: In 2016, three new mailbox clusters were added making the current total six clusters. We have budgeted for adding one additional cluster in the future as more lots are developed, bringing the anticipated total to 7 mailboxes that need to be maintained. The mailboxes were reported to be in working condition. We budget for replacing the mailbox clusters when they reach the end of their anticipated useful age.

#### 12.1.1 Patio Furniture - contingency

1 (2018) **Maintenance Cycle:** 5 years **Next Maintenance:** Year Quantity: 1 Lump Sum Unit Cost: \$1.500.00 / LS

**Estimate:** \$1,500

**Notes:** Replacing the patio furniture is at the discretion of the Association. We understand the Association plans to replace furniture in the next year. The lump sum budget may be drawn from to meet the needs of the Association.

#### 13.2.1 Pool - resurface & tile

**Maintenance Cycle: Next Maintenance:** 15 years Year 14 (2031) Quantity: \$22.50 1,030 Unit Cost: / SF Square Feet

**Estimate:** 1,030 SF X 100% X \$22.50/SF = \$23,175 + tax = \$25,080

Notes: The pool was resurfaced and new tiles were installed in 2016 at a cost of about \$25,000. The budget has been adjusted to reflect the recently experience cost and

the maintenance cycle has been reset.

#### 15.2.1 Drainage System - contingency

**Maintenance Cycle: Next Maintenance:** 1 (2018) years Year **Quantity:** 1 Lump Sum **Unit Cost:** \$2,500.00 / LS

**Estimate:** \$2.500

Notes: The contingency budget provides funds to address repairs and major maintenance of

the drainage system, including catch basin clean out and drain repair.



15.3.1 Pool Equipment - contingency

Maintenance Cycle:5yearsNext Maintenance:Year5 (2022)Quantity:1Lump SumUnit Cost:\$2,000.00/ LS

**Estimate:** \$2,000

**Notes:** The pool equipment contingency provides funds for replacing 2 pool pumps, 2 pool heaters, 2 pool filters, and one water heater. The funds may be drawn from as

needed.

15.3.2 Irrigation System - replace

Maintenance Cycle:20yearsNext Maintenance:Year5 (2022)Quantity:35ZoneUnit Cost:\$710.00/ Zone

**Estimate:** 35 Zone X 100% X \$710.00/Zone = \$24,850 + tax = \$26,890

**Notes:** We have been informed that the irrigation system is reaching the end of useful life and needs to be replaced in the near future. We have budgeted funds to repair and

replace irrigation equipment including sprinkler heads, controllers, shutoff valves and

PVC piping for 35 zones.

20.1.1 Reserve Study Update - with site visit

Maintenance Cycle:3yearsNext Maintenance:Year3 (2020)Quantity:1Lump SumUnit Cost:\$3,800.00/ LS

**Estimate:** \$3,800

Notes: We continue to budget for a reserve study with a site visit at least once every three

years as required by Washington State law.



#### FINANCIAL ANALYSIS & RESERVE CONTRIBUTION RECOMMENDATIONS

For budgeting purposes, we recommend that The Village at Lake Chelan set the contribution rate at \$25,300 for reserves beginning in 2018. This amount should increase annually with inflation. This amount is determined using the Cash Flow method with a Threshold Funding plan, to provide adequate reserves each time an expense is anticipated, with a minimum level of reserves (the threshold) equal to one year's contribution to reserves at all times during the study period, so that no special assessments will be required. The Village at Lake Chelan should determine the best reserve funding level for their association based on their maintenance needs and risk aversion.

Recommended 2018 Contribution	\$25,300
Recommended Contribution per Month	\$2,108
Average Contribution per Unit per Year	\$ 236
Average Contribution per Unit Per Month	\$ 20

The contribution as a percentage of average unit value is calculated to provide a way for owners, and prospective owners, to compare the reserve requirements of one association with that of another association or of single-family home ownership. Using an average unit value of \$300,000, the average contribution per unit per year as a percentage of the average unit value at The Village at Lake Chelan is 0.08%.

Typically, condominium associations in the Puget Sound area need to set aside from 1/2% to 1% of their average unit value, homeowners' associations need to put aside 1/3% to 1/2% and single family homeowners should put aside 1% to 2% each year.





#### **FUNDING PLANS**

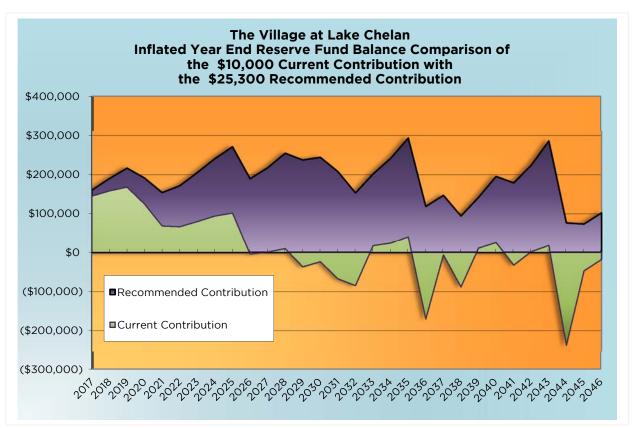
A starting annual contribution of \$25,300 fulfills the definition of a **Threshold Funding** plan which provides funding as expenses are incurred over time, while always maintaining a minimum reserve fund balance of one year's contribution to reserves. Absent specific instructions from clients, or unusual circumstances, this is our recommended funding plan.

An alternative strategy The Village at Lake Chelan could employ is **Baseline Funding**. This provides for necessary expenditures without maintaining a minimum reserve fund balance. To pursue such a strategy, the recommended Baseline Funding contribution rate would be \$24,300.

The Village at Lake Chelan could also consider contributions to obtain and maintain the level of reserves to be **Fully Funded**, so that the Percent Fully Funded is 100% by Year 30. The recommended Full Funding contribution rate would be \$29,800.

We recommend that The Village at Lake Chelan adopt a policy regarding their reserve funding which would address the level of funding that the Association would strive to maintain, as well as methods of investing reserve funds to best match risk with return and investment length with expected expenses.

Below is a graph illustrating the projected year end reserve fund balance using both the current (2017) budgeted annual contribution and the recommended (2018) funding.





## **Five Year Funding Plan Comparison**

Below is a comparison of the fully funded balance and year end reserve fund balance using the budgeted reserve funding for 2017 and the three funding plans presented in the report. The calculations include inflated values, interest and special assessments through Year 5 (2022).

# The Village at Lake Chelan Five Year Funding Plan Comparison

Including Inflated Values, Interest and Special Assessments

\$10.000 Current Funding Plan

	, i.e., e.e. e.e. e.e. e.e. e.e.								
Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance		Funding Status				
1 (2018)	\$10,000	\$0	\$145,154	113%	Fully Funded				
2 (2019)	\$10,300	\$0	\$158,460	93%	Well Funded				
3 (2020)	\$10,609	\$0	\$168,191	82%	Well Funded				
4 (2021)	\$10,927	\$0	\$124,875	66%	Well Funded				
5 (2022)	\$11,255	\$0	\$68,916	43%	Adequately Funded				

\$24,300 Baseline Funding Plan

	<del>+</del>								
Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Funding Status				
1 (2018)	\$24,300	\$0	\$159,525	124%	Fully Funded				
2 (2019)	\$25,029	\$0	\$187,995	110%	Fully Funded				
3 (2020)	\$25,780	\$0	\$213,640	105%	Fully Funded				
4 (2021)	\$26,553	\$0	\$187,015	99%	Well Funded				
5 (2022)	\$27,350	\$0	\$148,554	92%	Well Funded				

\$25,300 Recommended (Threshold) Funding Plan

Year	Annual Reserve	Special	Year End Reserve Balance	% Funded	Funding Status
		Assessment	Reserve Balance		
1 (2018)	\$25,300	\$0	\$160,530	125%	Fully Funded
2 (2019)	\$26,059	\$0	\$190,061	111%	Fully Funded
3 (2020)	\$26,841	\$0	\$216,818	106%	Fully Funded
4 (2021)	\$27,646	\$0	\$191,361	102%	Fully Funded
5 (2022)	\$28,475	\$0	\$154,123	96%	Well Funded

\$29.600 Full Funding Plan

	425,000 rain rainaing riain									
Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Funding Status					
1 (2018)	\$29,600	\$0	\$164,852	128%	Fully Funded					
2 (2019)	\$30,488	\$0	\$198,942	117%	Fully Funded					
3 (2020)	\$31,403	\$0	\$230,484	113%	Fully Funded					
4 (2021)	\$32,345	\$0	\$210,046	111%	Fully Funded					
5 (2022)	\$33,315	\$0	\$178,070	110%	Fully Funded					



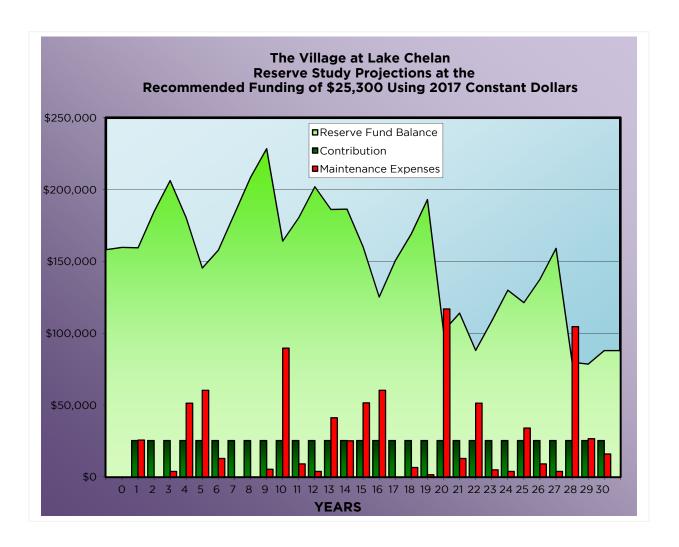
### **Reserve Study Projections using Constant Dollar Values**

Below is a graph depicting the projected fiscal year end running reserve fund balance over 30 years, the annual contribution and the anticipated yearly maintenance expenses using constant dollar values.

**Bright Green Line Graph:** The year-end running reserve fund balance is shown as a line graph in bright green. Our recommended funding plan is a threshold funding plan which ensures that the reserve account balance does not dip below a designated "threshold", which is set to one year's contribution to reserves.

**Dark Green Bars:** The annual reserve fund contributions are shown as green bars. This chart depicts the annual contribution in constant dollars, so the contributions are constantly \$25,300 over the 30 year timeline of the study.

**Red Bars:** The anticipated yearly maintenance expenses are shown as red bars, depicting the anticipated expenses over the next 30 years.





Reserve Study Projections at the Starting Recommended Funding of \$25,300

Using Constant Dollar Values



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

: 31-Oct-		MAINT.	NEXT	1	2	3	4	5
#	COMPONENT NAME	CYCLE	MAINT.	2018	2019	2020	2021	2022
2.6.1	Asphalt Pavement - repair	6	4	\$11,590			\$11,590	
2.6.2	Asphalt Pavement - seal coat & restriping	6	4				\$39,680	
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					\$26,24
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6					
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1	\$10,000				
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.1	Entry Sign - replace	10	9					
10.5.1	Mailbox Clusters - add	5	5					\$2,06
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,500				
13.2.1	Pool - resurface & tile	15	14					
15.2.1	Drainage System - contingency	5	1	\$2,500				
15.3.1	Pool Equipment - contingency	5	5					\$2,00
15.3.2	Irrigation System - replace	20	5					\$26,89
20.1.1	Reserve Study Update - with site visit	3	3			\$3,800		
	TOTAL EXPENDED BY YEAR			\$25,590	\$0	\$3,800	\$51,270	\$60,22
	CARRY OVER RESERVES ANNUAL RESERVE CONTRIB			\$159,739 \$25,300	\$159,449 \$25,300	\$184,749 \$25,300	\$206,249 \$25,300	\$180,27
	RESERVE EXPENDITURES			\$25,500 \$25,590	\$25,300 <b>\$</b> 0	\$3,800	\$25,300 \$51,270	\$25,30 \$60,22
	ACCUMULATED RESERVES			\$159,449	\$184,749	\$206,249	\$180,279	\$145,35
	INTEREST EARNED			\$0	\$0	\$0	\$0	\$
	SPECIAL ASSESSMENT YEAR-END BALANCE			\$159,449	\$184,749	\$206,249	\$180,279	\$145.35

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\$2,000

\$3,800



DATE: 31-Oct-17

## The Village at Lake Chelan

## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS
PER YEAR EXPENSES IN 2017 DOLLARS

MAINT. NEXT 6

#	COMPONENT NAME	CYCLE	MAINT.	2023	2024	2025	2026	2027
2.6.1	Asphalt Pavement - repair	6	4					\$11,590
2.6.2	Asphalt Pavement - seal coat & restriping	6	4					\$39,680
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					\$26,240
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$5,000				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$5,000
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.	Entry Sign - replace	10	9				\$1,500	
10.5.	Mailbox Clusters - add	5	5					\$2,060
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,500				
13.2.7	Pool - resurface & tile	15	14					

\$12,800	\$0	\$0	\$5,300	\$89,600
\$145,359	\$157,859	\$183,159	\$208,459	\$228,459
\$25,300	\$25,300	\$25,300	\$25,300	\$25,300
\$12,800	<b>\$</b> O	<b>\$</b> O	\$5,300	\$89,600
\$157,859	\$183,159	\$208,459	\$228,459	\$164,159
\$0	\$0	\$0	\$0	\$0
\$157,859	\$183,159	\$208,459	\$228,459	\$164,159
6 (2023)	7 (2024)	8 (2025)	9 (2026)	10 (2027)
	\$25,300 \$12,800 \$157,859 \$0	\$145,359 \$157,859 \$25,300 \$25,300 \$12,800 \$0 \$157,859 \$183,159 \$0 \$157,859 \$183,159	\$145,359 \$157,859 \$183,159 \$25,300 \$25,300 \$25,300 \$25,300 \$25,300 \$157,859 \$183,159 \$208,459 \$0 \$0 \$157,859 \$183,159 \$208,459 \$0 \$157,859 \$183,159 \$208,459	\$145,359 \$157,859 \$183,159 \$208,459 \$25,300 \$25,300 \$25,300 \$5,300 \$157,859 \$183,159 \$208,459 \$208,459 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0

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\$2,500

\$3,800

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15.3.1 Pool Equipment - contingency

20.1.1 Reserve Study Update - with site visit

15.3.2 Irrigation System - replace



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	11 <b>2028</b>	12 <b>2029</b>	13 <b>2030</b>	14 <b>2031</b>	15 <b>2032</b>
2.6.1	Asphalt Pavement - repair	6	4	2028	2029	2030	2031	2032
2.6.2	Asphalt Pavement - seal coat & restriping	6	4					
2.6.3	Asphalt Pavement - overlay	25	20					
		5	5					¢2C 240
2.7.1	Wood Perimeter Fence - replace							\$26,240
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$5,000				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13			\$41,120		
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.1	Entry Sign - replace	10	9					
10.5.1	Mailbox Clusters - add	5	5					\$2,060
10.5.2	Mailbox Clusters - replace	25	15					\$14,390
12.1.1	Patio Furniture - contingency	5	1	\$1,500				
13.2.1	Pool - resurface & tile	15	14				\$25,080	
15.2.1	Drainage System - contingency	5	1	\$2,500				
15.3.1	Pool Equipment - contingency	5	5					\$2,000
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3		\$3,800			\$3,800
	TOTAL EXPENDED BY YEAR			\$9,000	\$3,800	\$41,120	\$25,080	\$51,520
	CARRY OVER RESERVES			\$164,159	\$180,459	\$201,959	\$186,139	\$186,359
	ANNUAL RESERVE CONTRIB RESERVE EXPENDITURES			\$25,300 \$9,000	\$25,300 <b>\$3,800</b>	\$25,300 <b>\$41,120</b>	\$25,300 <b>\$25,080</b>	\$25,300 \$51,520
	ACCUMULATED RESERVES			\$9,000 \$180,459	\$201,959	\$186,139	\$186,359	\$160,139
	INTEREST EARNED			\$0	\$0	\$0	\$0	\$C
	SPECIAL ASSESSMENT							
	YEAR-END BALANCE			\$180,459	\$201,959	\$186,139	\$186,359	\$160,139



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS
PER YEAR EXPENSES IN 2017 DOLLARS

TF:		

# #	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	16 <b>2033</b>	17 <b>2034</b>	18 <b>2035</b>	19 <b>2036</b>	20 <b>2037</b>
2.6.1	Asphalt Pavement - repair	6	4	\$11,590	2004	2000	2000	200,
2.6.2	Asphalt Pavement - seal coat & restriping	6	4	\$39,680				
2.6.3	Asphalt Pavement - overlay	25	20					\$104,760
2.7.1	Wood Perimeter Fence - replace	5	5					
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18			\$2,730		
2.9.1	Landscaping - contingency	5	6	\$5,000				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$5,000
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.1	Entry Sign - replace	10	9				\$1,500	
10.5.1	Mailbox Clusters - add	5	5					\$2,060
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,500				
13.2.1	Pool - resurface & tile	15	14					
15.2.1	Drainage System - contingency	5	1	\$2,500				
15.3.1	Pool Equipment - contingency	5	5					\$2,000
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3			\$3,800		
	TOTAL EXPENDED BY YEAR  CARRY OVER RESERVES			<b>\$60,270</b> \$160,139	<b>\$0</b> \$125,169	<b>\$6,530</b> \$150,469	<b>\$1,500</b> \$169,239	<b>\$116,85</b> \$193,03
	ANNUAL RESERVE CONTRIB			\$25,300	\$25,300	\$25,300	\$25,300	\$25,300
	RESERVE EXPENDITURES			\$60,270	\$0	\$6,530	\$1,500	\$116,85
	ACCUMULATED RESERVES			\$125,169	\$150,469	\$169,239	\$193,039	\$101,48
	INTEREST EARNED SPECIAL ASSESSMENT			\$0	\$0	\$0	\$0	\$0
	YEAR-END BALANCE			\$125,169	\$150,469	\$169,239	\$193,039	\$101,489
	STUDY YEAR		,	16 (2033)	17 (2034)	18 (2035)	19 (2036 )	20 (2037



DATE: 31-Oct-17

## The Village at Lake Chelan

## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS
PER YEAR EXPENSES IN 2017 DOLLARS

DATE: 31-Oct-	-17			1				
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	21 <b>2038</b>	22 <b>2039</b>	23 <b>2040</b>	24 <b>2041</b>	25 <b>2042</b>
2.6.1	Asphalt Pavement - repair	6	4		\$11,590			
2.6.2	Asphalt Pavement - seal coat & restriping	6	4		\$39,680			
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$5,000				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					
7.4.1	Covered Patio Roofs - replace	35	23			\$4,870		
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.1	Entry Sign - replace	10	9					
10.5.1	Mailbox Clusters - add	5	5					\$2,060
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,500				

TOTAL EVENINES BY VEAR	_	410.000	A	44070	47.000	477.000
TOTAL EXPENDED BY YEAR		\$12,800	\$51,270	\$4,870	\$3,800	\$33,980
CARRY OVER RESERVES		\$101,489	\$113,989	\$88,019	\$108,449	\$129,949
ANNUAL RESERVE CONTRIB		\$25,300	\$25,300	\$25,300	\$25,300	\$25,300
RESERVE EXPENDITURES		\$12,800	\$51,270	\$4,870	\$3,800	\$33,980
ACCUMULATED RESERVES		\$113,989	\$88,019	\$108,449	\$129,949	\$121,269
INTEREST EARNED		\$0	\$0	\$0	\$0	\$0
SPECIAL ASSESSMENT						
YEAR-END BALANCE		\$113,989	\$88,019	\$108,449	\$129,949	\$121,269
STUDY YEAR		21 (2038)	22 (2039)	23 (2040)	24 (2041)	25 (2042)

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\$2,500

\$3,800

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13.2.1 Pool - resurface & tile

15.3.1 Pool Equipment - contingency

20.1.1 Reserve Study Update - with site visit

15.3.2 Irrigation System - replace

\$2,000

\$26,890

\$3,800



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

TE: <b>31-Oct-</b>		YEAR EXI	PENSES IN	2017 DOLLARS				
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	26 <b>2043</b>	27 <b>2044</b>	28 <b>2045</b>	29 <b>2046</b>	30 <b>2047</b>
2.6.1	Asphalt Pavement - repair	6	4			\$11,590		
2.6.2	Asphalt Pavement - seal coat & restriping	6	4			\$39,680		
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					
2.7.2	Steel Fence Pool Enclosure - replace	40	28			\$31,250		
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$5,000				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$5,000
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28			\$22,070		
8.3.2	Gate Operators - replace	5	5					\$3,030
10.4.1	Entry Sign - replace	10	9				\$1,500	
10.5.1	Mailbox Clusters - add	5	5					\$2,060
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,500				
13.2.1	Pool - resurface & tile	15	14				\$25,080	
15.2.1	Drainage System - contingency	5	1	\$2,500				
15.3.1	Pool Equipment - contingency	5	5					\$2,000
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3		\$3,800			\$3,800
	TOTAL EXPENDED BY YEAR			\$9,000	\$3,800	\$104,590	\$26,580	\$15,890
	CARRY OVER RESERVES ANNUAL RESERVE CONTRIB			\$121,269 \$25,300	\$137,569 \$25,300	\$159,069 \$25,300	\$79,779 \$25,300	\$78,499 \$25,300
	RESERVE EXPENDITURES			\$9,000	\$3,800	\$104,590	\$26,580	\$15,890
	ACCUMULATED RESERVES			\$137,569	\$159,069	\$79,779	\$78,499	\$87,909
	INTEREST EARNED SPECIAL ASSESSMENT			\$0	\$0	\$0	\$0	\$0
	YEAR-END BALANCE STUDY YEAR			<b>\$137,569</b> 26 (2043)	<b>\$159,069</b> 27 (2044 )	<b>\$79,779</b> 28 (2045 )	<b>\$78,499</b> 29 (2046 )	<b>\$87,909</b> 30 (2047)



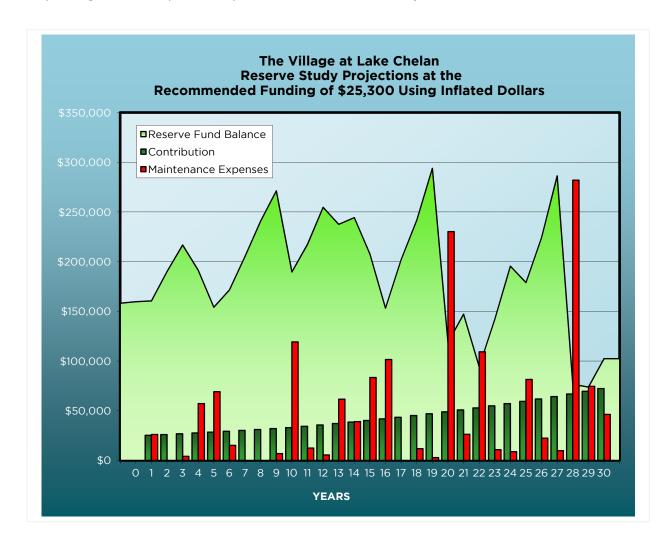
## **Reserve Study Projections using Inflated Dollar Values**

Below is a graph depicting the projected fiscal year end running reserve fund balance over 30 years, the annual contribution and the anticipated yearly maintenance expenses using inflated dollar values.

**Bright Green Line Graph:** The year-end running reserve fund balance is shown as a line graph in bright green. Our recommended funding plan is a threshold funding plan which ensures that the reserve account balance does not dip below a designated "threshold", which is set to one year's contribution to reserves.

**Dark Green Bars:** The annual reserve fund contributions are shown as green bars. This chart depicts the annual contribution in constant dollars, so the contributions are constantly \$25,300 over the 30 year timeline of the study.

**Red Bars:** The anticipated yearly maintenance expenses are shown as red bars, depicting the anticipated expenses over the next 30 years.





Reserve Study Projections at the Starting Recommended Funding of \$25,300

Using Inflated Dollar Values



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE	: 31-0	Oct-17

#	COMPONENT NAME		MAINT. CYCLE	NEXT MAINT.	1 <b>2018</b>	2 <b>2019</b>	3 <b>2020</b>	4 <b>2021</b>	5 <b>2022</b>
2.6.1	Asphalt Pavement - repair		6	4	\$11,822			\$12,918	
2.6.2	Asphalt Pavement - seal coat & restrip	ing	6	4				\$44,227	
2.6.3	Asphalt Pavement - overlay		25	20					
2.7.1	Wood Perimeter Fence - replace		5	5					\$30,124
2.7.2	Steel Fence Pool Enclosure - replace		40	28					
2.7.3	Vinyl Fence - replace		40	39					
2.7.4	Chain Link Fence - repair		30	18					
2.9.1	Landscaping - contingency		5	6					
2.9.2	Landscaping - plant replacement @ Hv	wy 150	1	1	\$10,200				
3.3.1	Pool Deck - repair & resurface		25	13					
6.2.1	Pool/Restroom/Equip Room - conting	ency	10	10					
7.4.1	Covered Patio Roofs - replace		35	23					
8.3.1	Entry Gate & Fencing - replace		40	28					
8.3.2	Gate Operators - replace		5	5					\$3,478
10.4.1	Entry Sign - replace		10	9					
10.5.1	Mailbox Clusters - add		5	5					\$2,365
10.5.2	Mailbox Clusters - replace		25	15					
12.1.1	Patio Furniture - contingency		5	1	\$1,530				
13.2.1	Pool - resurface & tile		15	14					
15.2.1	Drainage System - contingency		5	1	\$2,550				
15.3.1	Pool Equipment - contingency		5	5					\$2,296
15.3.2	Irrigation System - replace		20	5					\$30,870
20.1.1	Reserve Study Update - with site visit		3	3			\$4,112		
		R RESERVES VE CONTRIB PENDITURES D RESERVES EST EARNED			\$26,102 \$159,739 \$25,300 \$26,102 \$158,937 \$1,593	\$0 \$160,530 \$26,059 \$0 \$186,589 \$3,471	\$4,112 \$190,061 \$26,841 \$4,112 \$212,789 \$4,029	\$57,145 \$216,818 \$27,646 \$57,145 \$187,319 \$4,041	\$69,134 \$191,36 \$28,475 \$69,134 \$150,702 \$3,42
	YEAR-EN	SSESSMENT D BALANCE			\$160,530	\$190,061	\$216,818	\$191,361	\$154,123
	YEARS CONTRIBUTION INFLATION	<b>0-1</b> 0%	<b>2-10</b> 3%	11 <b>-30</b> 4%	1 (2018 ) 0%	2 (2019 ) 3%	3 (2020 ) 3%	4 (2021) 3%	5 (2022



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE		

1-Oct-1 #	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	6 <b>2023</b>	7 <b>2024</b>	8 <b>2025</b>	9 <b>2026</b>	10 <b>2027</b>
2.6.1	Asphalt Pavement - repair	6	4					\$15,425
2.6.2	Asphalt Pavement - seal coat & restriping	6	4					\$52,809
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					\$34,922
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$5,912				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$6,654
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$4,033
10.4.1	Entry Sign - replace	10	9				\$1,938	
10.5.1	Mailbox Clusters - add	5	5					\$2,742
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$1,774				
13.2.1	Pool - resurface & tile	15	14					
15.2.1	Drainage System - contingency	5	1	\$2,956				
15.3.1	Pool Equipment - contingency	5	5					\$2,662
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3	\$4,493			\$4,910	
	TOTAL EXPENDED BY YEAR			\$15,135	\$0	\$0	\$6,848	\$119,246
	CARRY OVER RESERVE ANNUAL RESERVE CONTRIE			\$154,123 \$29,330	\$171,541 \$30,210	\$205,484 \$31,116	\$241,021 \$32,049	\$271,294 \$33,01
	RESERVE EXPENDITURES	5		\$15,135	<b>\$</b> O	\$0	\$6,848	\$119,246
	ACCUMULATED RESERVES	5		\$168,317	\$201,751	\$236,600	\$266,222	\$185,059
	INTEREST EARNEI SPECIAL ASSESSMEN			\$3,224	\$3,733	\$4,421	\$5,072	\$4,56
	YEAR-END BALANCI			\$171,541	\$205,484	\$241,021	\$271,294	\$189,62
	YEARS 0-1 CONTRIBUTION INFLATION 0%	<b>2-10</b>	11-30	6 (2023 ) 3%	7 (2024 ) 3%	8 (2025 ) 3%	9 (2026 ) 3%	10 (2027 3
	CONTRIBUTION INFLATION 0%  COMPONENT COMPOUND INFLATION 2%	3% 3%	4% 4%	118%	3% 122%	3% 125%	3% 129%	133
	INTEREST RATE MULTIPLIER 1%	2%	3%	2%	2%	2%	2%	2



## Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE: 31-Oct-17

31-Oct-	17		Lueve		40	47		45
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	11 <b>2028</b>	12 <b>2029</b>	13 <b>2030</b>	14 <b>2031</b>	15 <b>2032</b>
2.6.1	Asphalt Pavement - repair	6	4					
2.6.2	Asphalt Pavement - seal coat & restriping	6	4					
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					\$42,48
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$6,921				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13			\$61,559		
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$4,90
10.4.1	Entry Sign - replace	10	9					
10.5.1	Mailbox Clusters - add	5	5					\$3,33
10.5.2	Mailbox Clusters - replace	25	15					\$23,30
12.1.1	Patio Furniture - contingency	5	1	\$2,076				
13.2.1	Pool - resurface & tile	15	14				\$39,048	
15.2.1	Drainage System - contingency	5	1	\$3,460				
15.3.1	Pool Equipment - contingency	5	5					\$3,23
15.3.2	Irrigation System - replace	20	5					
20.1.1	<u> </u>	3	3		\$5,470			\$6,15
	TOTAL EXPENDED BY YEAR CARRY OVER RESERVES			\$12,457 \$189.623	<b>\$5,470</b> \$217,514	<b>\$61,559</b> \$254,727	\$39,048 \$237.577	\$83,4
	ANNUAL RESERVE CONTRIB			\$189,623 \$34,331	\$217,514 \$35,704	\$254,727 \$37,133	\$237,577 \$38,618	\$244,26 \$40,16
	RESERVE EXPENDITURES			\$12,457	\$5,470	\$61,559	\$39,048	\$83,4
	ACCUMULATED RESERVES			\$211,497	\$247,748	\$230,301	\$237,147	\$201,00
	INTEREST EARNED SPECIAL ASSESSMENT			\$6,017	\$6,979	\$7,275	\$7,121	\$6,6
	YEAR-END BALANCE			\$217,514	\$254,727	\$237,577	\$244,268	\$207,6
	TEAR-END BALANCE				40 (0000)	17 (0070)	44 (00 74 )	15 (007
	YEARS 0-1	2-10	11-30	11 (2028 )	12 (2029 )	13 (2030 )	14 (2031)	
		2-10 3% 3%	4% 4%	11 (2028 ) 4% 138%	12 (2029 ) 4% 144%	13 (2030 ) 4% 150%	14 (2031) 4% 156%	15 (203 16:



## The Village at Lake Chelan

# Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE: 31-Oct-17

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	16 <b>2033</b>	17 <b>2034</b>	18 <b>2035</b>	19 <b>2036</b>	20 <b>2037</b>
2.6.1	Asphalt Pavement - repair	6	4	\$19,517	<u> </u>			
2.6.2	Asphalt Pavement - seal coat & restriping	6	4	\$66,820				
2.6.3	Asphalt Pavement - overlay	25	20					\$206,378
2.7.1	Wood Perimeter Fence - replace	5	5					
2.7.2	Steel Fence Pool Enclosure - replace	40	28					
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18			\$4,972		
2.9.1	Landscaping - contingency	5	6	\$8,420				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$9,850
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28					
8.3.2	Gate Operators - replace	5	5					\$5,969
10.4.1	Entry Sign - replace	10	9				\$2,841	
10.5.1	Mailbox Clusters - add	5	5					\$4,058
10.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$2,526				
13.2.1	Pool - resurface & tile	15	14					
15.2.1	Drainage System - contingency	5	1	\$4,210				
15.3.1	Pool Equipment - contingency	5	5					\$3,940
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3			\$6,921		
	TOTAL EXPENDED BY YEAR CARRY OVER RESERVES ANNUAL RESERVE CONTRIE RESERVE EXPENDITURES ACCUMULATED RESERVES INTEREST EARNED SPECIAL ASSESSMENT			\$101,493 \$207,688 \$41,769 \$101,493 \$147,964 \$5,335	\$153,299 \$43,440 \$0 \$196,739 \$5,251	\$11,894 \$201,989 \$45,178 \$11,894 \$235,273 \$6,559	\$2,841 \$241,832 \$46,985 \$2,841 \$285,975 \$7,917	\$230,196 \$293,892 \$48,864 \$230,196 \$112,561 \$6,097
	YEAR-END BALANCE YEARS YEARS		11-30	<b>\$153,299</b> 16 (2033)	<b>\$201,989</b> 17 (2034 )	<b>\$241,832</b> 18 (2035 )	<b>\$293,892</b> 19 (2036 )	<b>\$118,657</b> 20 (2037 )
	CONTRIBUTION INFLATION 0% COMPONENT COMPOUND INFLATION 2%	3% 3%	4% 4%	4% 168%	4% 175%	4% 182%	4% 189%	4% 197%
	INTEREST RATE MULTIPLIER 1%	2%	3%	3%	3%	3%	3%	3%



## The Village at Lake Chelan

# Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE: 31-Oct-17

#	COMPONENT NAME		MAINT. CYCLE	NEXT MAINT.	21 <b>2038</b>	22 <b>2039</b>	23 <b>2040</b>	24 <b>2041</b>	25 <b>2042</b>
2.6.1	Asphalt Pavement - repair		6	4		\$24,696			
2.6.2	Asphalt Pavement - seal coat & restrip	ing	6	4		\$84,549			
2.6.3	Asphalt Pavement - overlay		25	20					
2.7.1	Wood Perimeter Fence - replace		5	5					
2.7.2	Steel Fence Pool Enclosure - replace		40	28					
2.7.3	Vinyl Fence - replace		40	39					
2.7.4	Chain Link Fence - repair		30	18					
2.9.1	Landscaping - contingency		5	6	\$10,244				
2.9.2	Landscaping - plant replacement @ Hv	vy 150	1	1					
3.3.1	Pool Deck - repair & resurface		25	13					
6.2.1	Pool/Restroom/Equip Room - continge	ency	10	10					
7.4.1	Covered Patio Roofs - replace		35	23			\$10,792		
8.3.1	Entry Gate & Fencing - replace		40	28					
8.3.2	Gate Operators - replace		5	5					\$7,262
10.4.1	Entry Sign - replace		10	9					
10.5.1	Mailbox Clusters - add		5	5					\$4,937
10.5.2	Mailbox Clusters - replace		25	15					
12.1.1	Patio Furniture - contingency		5	1	\$3,073				
13.2.1	Pool - resurface & tile		15	14					
15.2.1	Drainage System - contingency		5	1	\$5,122				
15.3.1	Pool Equipment - contingency		5	5					\$4,794
15.3.2	Irrigation System - replace		20	5					\$64,450
20.1.1	Reserve Study Update - with site visit		3	3	\$7,785			\$8,758	
		R RESERVES /E CONTRIB PENDITURES O RESERVES EST EARNED			\$26,225 \$118,657 \$50,819 \$26,225 \$143,251 \$3,929	\$109,244 \$147,180 \$52,851 \$109,244 \$90,787 \$3,569	\$10,792 \$94,356 \$54,965 \$10,792 \$138,530 \$3,493	\$8,758 \$142,023 \$57,164 \$8,758 \$190,429 \$4,987	\$81,44 \$195,41 \$59,45 \$81,44 \$173,42 \$5,53
	YEAR-EN	D BALANCE 0-1	2-10	11-30	<b>\$147,180</b> 21 (2038 )	<b>\$94,356</b> 22 (2039 )	<b>\$142,023</b> 23 (2040 )	<b>\$195,416</b> 24 (2041)	<b>\$178,95</b> ! 25 (2042
	YEARS CONTRIBUTION INFLATION COMPONENT COMPOUND INFLATION INTEREST RATE MULTIPLIER	0% 2% 1%	3% 3% 2%	4% 4% 3%	21 (2038 ) 4% 205% 3%	22 (2039 ) 4% 213% 3%	23 (2040 ) 4% 222% 3%	24 (2041) 4% 230% 3%	25 (2042 4' 240' 3'



## The Village at Lake Chelan

# Reserve Study Projections at Recommended Funding of \$25,300 Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS PER YEAR EXPENSES IN 2017 DOLLARS

DATE:	31	-Oc	+-1	17

\$1-Oct-1 #	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	26 <b>2043</b>	27 <b>2044</b>	28 <b>2045</b>	29 <b>2046</b>	30 <b>2047</b>
2.6.1	Asphalt Pavement - repair	6	4			\$31,248		
2.6.2	Asphalt Pavement - seal coat & restriping	6	4			\$106,981		
2.6.3	Asphalt Pavement - overlay	25	20					
2.7.1	Wood Perimeter Fence - replace	5	5					
2.7.2	Steel Fence Pool Enclosure - replace	40	28			\$84,253		
2.7.3	Vinyl Fence - replace	40	39					
2.7.4	Chain Link Fence - repair	30	18					
2.9.1	Landscaping - contingency	5	6	\$12,463				
2.9.2	Landscaping - plant replacement @ Hwy 150	1	1					
3.3.1	Pool Deck - repair & resurface	25	13					
6.2.1	Pool/Restroom/Equip Room - contingency	10	10					\$14,580
7.4.1	Covered Patio Roofs - replace	35	23					
8.3.1	Entry Gate & Fencing - replace	40	28			\$59,503		
8.3.2	Gate Operators - replace	5	5					\$8,836
10.4.1	Entry Sign - replace	10	9				\$4,206	
0.5.1	Mailbox Clusters - add	5	5					\$6,007
0.5.2	Mailbox Clusters - replace	25	15					
12.1.1	Patio Furniture - contingency	5	1	\$3,739				
13.2.1	Pool - resurface & tile	15	14				\$70,323	
15.2.1	Drainage System - contingency	5	1	\$6,232				
15.3.1	Pool Equipment - contingency	5	5					\$5,832
15.3.2	Irrigation System - replace	20	5					
20.1.1	Reserve Study Update - with site visit	3	3		\$9,851			\$11,081
	TOTAL EXPENDED BY YEAR CARRY OVER RESERVES			<b>\$22,434</b> \$178,955	<b>\$9,851</b> \$224,309	<b>\$281,985</b> \$286,306	<b>\$74,529</b> \$76,557	<b>\$46,337</b> \$73,799
	ANNUAL RESERVE CONTRIB			\$61,829	\$64,302	\$66,874	\$69,549	\$72,331
	RESERVE EXPENDITURES ACCUMULATED RESERVES			<b>\$22,434</b> <b>\$218,350</b>	<b>\$9,851</b> \$278,760	<b>\$281,985</b> \$71,195	<b>\$74,529</b> <b>\$71,577</b>	\$46,337 \$99,793
	INTEREST EARNED			\$216,330 \$5,960	\$276,760 \$7,546	\$71,195 \$5,363	\$71,377 \$2,222	\$99,793 \$2,604
	SPECIAL ASSESSMENT			\$224.700	\$206.70C	\$76 EE7	\$77.700	£102 707
	YEAR-END BALANCE YEARS  YEAR-END BALANCE	2-10	11-30	<b>\$224,309</b> 26 (2043 )	<b>\$286,306</b> 27 (2044 )	<b>\$76,557</b> 28 (2045 )	<b>\$73,799</b> 29 (2046 )	<b>\$102,397</b> 30 (2047
	CONTRIBUTION INFLATION 0%	3%	4%	4%	4%	4%	4%	49
	COMPONENT COMPOUND INFLATION 2%	3%	4%	249%	259%	270%	280%	292%



# 30 Year Summary at the Starting Recommended Funding of \$25,300 Using Inflated Dollar Values

Inflation 8	Interest Ass	umptions	Percent Funded
	Inflation	Interest	Fully Funded 100% and above
Years 0-1	0%	1%	Well Funded 60% 99%
Years 2-10	3%	2%	Adequately Funded 25% to 59%
Years 11-30	4%	3%	At Risk for Special Assessment 0% to 24%

Fiscal Year End	Fiscal Year Beginning Reserve Balance	Recommended Annual Reserve Contribution	Projected Reserve Expenditures	Special Assessment	Projected Interest Earned	Fiscal Year End Reserve Balance	Projected Fully Funded Balance	% Funded	d
1 (2018)	\$159,739	\$25,300	(\$26,102)	\$O	\$1,593	\$160,530	\$128,739	125%	6
2 (2019)	\$160,530	\$26,059	(\$O)	\$O	\$3,471	\$190,061	\$170,485	111%	;
3 (2020)	\$190,061	\$26,841	(\$4,112)	\$O	\$4,029	\$216,818	\$204,440	106%	6
4 (2021)	\$216,818	\$27,646	(\$57,145)	\$O	\$4,041	\$191,361	\$188,407	102%	6
5 (2022)	\$191,361	\$28,475	(\$69,134)	\$O	\$3,421	\$154,123	\$161,155	96%	;
6 (2023)	\$154,123	\$29,330	(\$15,135)	\$O	\$3,224	\$171,541	\$187,071	92%	,
7 (2024)	\$171,541	\$30,210	(\$O)	\$O	\$3,733	\$205,484	\$229,680	89%	;
8 (2025)	\$205,484	\$31,116	(\$O)	\$O	\$4,421	\$241,021	\$274,678	88%	;
9 (2026)	\$241,021	\$32,049	(\$6,848)	\$O	\$5,072	\$271,294	\$315,455	86%	;
10 (2027)	\$271,294	\$33,011	(\$119,246)	\$O	\$4,564	\$189,623	\$248,439	76%	<u>,</u>
11 (2028)	\$189,623	\$34,331	(\$12,457)	\$O	\$6,017	\$217,514	\$288,210	75%	,
12 (2029)	\$217,514	\$35,704	(\$5,470)	\$O	\$6,979	\$254,727	\$338,103	75%	;
13 (2030)	\$254,727	\$37,133	(\$61,559)	\$O	\$7,275	\$237,577	\$336,751	71%	,
14 (2031)	\$237,577	\$38,618	(\$39,048)	\$O	\$7,121	\$244,268	\$359,235	68%	;
15 (2032)	\$244,268	\$40,163	(\$83,421)	\$O	\$6,679	\$207,688	\$341,005	61%	,
16 (2033)	\$207,688	\$41,769	(\$101,493)	\$O	\$5,335	\$153,299	\$297,633	52%	,
17 (2034)	\$153,299	\$43,440	(\$O)	\$O	\$5,251	\$201,989	\$353,728	57%	<u>,</u>
18 (2035)	\$201,989	\$45,178	(\$11,894)	\$O	\$6,559	\$241,832	\$402,175	60%	5
19 (2036)	\$241,832	\$46,985	(\$2,841)	\$O	\$7,917	\$293,892	\$463,272	63%	;
20 (2037)	\$293,892	\$48,864	(\$230,196)	\$O	\$6,097	\$118,657	\$305,828	39%	;
21 (2038)	\$118,657	\$50,819	(\$26,225)	\$O	\$3,929	\$147,180	\$344,047	43%	5
22 (2039)	\$147,180	\$52,851	(\$109,244)	\$O	\$3,569	\$94,356	\$304,470	31%	,
23 (2040)	\$94,356	\$54,965	(\$10,792)	\$O	\$3,493	\$142,023	\$361,983	39%	;
24 (2041)	\$142,023	\$57,164	(\$8,758)	\$O	\$4,987	\$195,416	\$426,028	46%	5
25 (2042)	\$195,416	\$59,451	(\$81,444)	\$O	\$5,533	\$178,955	\$423,699	42%	Ś
26 (2043)	\$178,955	\$61,829	(\$22,434)	\$O	\$5,960	\$224,309	\$481,549	47%	Ś
27 (2044)	\$224,309	\$64,302	(\$9,851)	\$O	\$7,546	\$286,306	\$556,565	51%	,
28 (2045)	\$286,306	\$66,874	(\$281,985)	\$O	\$5,363	\$76,557	\$370,400	21%	
29 (2046)	\$76,557	\$69,549	(\$74,529)	\$O	\$2,222	\$73,799	\$382,899	19%	,
30 (2047)	\$73,799	\$72,331	(\$46,337)	\$O	\$2,604	\$102,397	\$426,366	24%	Ś

Note: The long term nature of this study requires that certain assumptions and predictions be made about future events. Since there can be no guarantee that these future events will occur as assumed, this analysis must be viewed in light of the circumstances under which it was conducted. Reasonable effort has been made to ensure that the conclusions of this report are based on reliable information and sound reasoning.



#### **FULLY FUNDED BALANCE CALCULATIONS**

RCW 64.38.070 (j) states that a reserve study shall include: "Projected reserve account balance for thirty years and a funding plan to pay for projected costs from those reserves without reliance on future unplanned special assessments". Furthermore, RCW 64.38.070 (e) stipulates that a reserve study shall include "The percentage of the fully funded balance that the reserve account is funded".

"Fully funded balance" means the current value of the deteriorated portion, not the total replacement value, of all the reserve components. The fully funded balance for each reserve component is calculated by multiplying the current replacement cost of that reserve component by its effective age, then dividing the result by that reserve component's useful life. The sum total of all reserve components' fully funded balances is the association's fully funded balance. RCW 64.38.010 (9)

$$FFB = the \ sum \ of \ \frac{replacement \ cost \ * \ effective \ age}{useful \ life} \ for \ all \ reserve \ components$$

The **percent fully funded** relates to how much the building has deteriorated, or been used up, compared to the cost of making it new again. Another way of thinking of this is the percent fully funded illustrates how much you should have saved thus far to pay for the future replacement of a component, based on the replacement cost and how many years you have to save.

For example, if you have a roof that will last 10 years and cost \$100,000 to replace:

- To pay for the future replacement in 10 years, you should save \$10,000 each year to have enough money to cover the replacement cost.
- When it is 2 years old, it is 20% used up, and the Fully Funded Balance for its future replacement is \$20,000. If you have saved \$10,000 for the future replacement in 2 years, you are 50% fully funded. If you have saved \$20,000, you are 100% fully funded.
- When the roof is 8 years old it will be 80% deteriorated, and its Fully Funded Balance would be \$80,000. If you have saved only \$10,000 by Year 8 you are 13% fully funded. If you have saved \$20,000, you are at 25%, and at \$80,000 you are at 100% fully funded.

In effect the percent fully funded is a measure of how well an association can withstand the risk of unexpected expenses. Such unexpected expenses include: emergency expenses not covered by insurance, expenses that are more expensive than predicted, and expenses that are required earlier than anticipated.

A higher percent funded means more money is in the bank, and that lowers the risk of special assessment when unexpected expenses occur. A poorly funded association



would have less money available for unexpected expenses, and a higher risk of a special assessment to generate the needed funds.

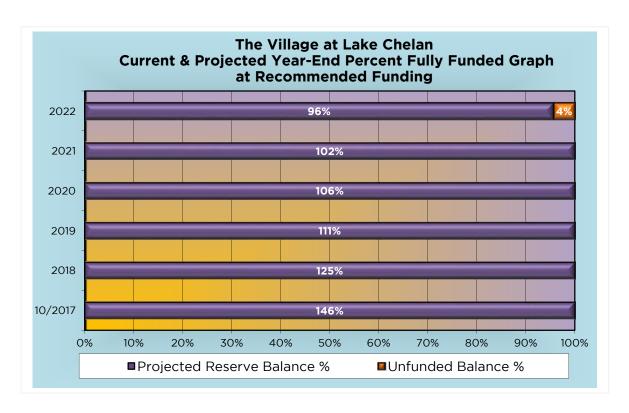
We typically recommend that an association select a minimum reserve account balance (or Threshold) it wants to maintain, and select a contribution rate to maintain that minimum rather than try to build their account to 100% fully funded. We typically recommend that an association consider a threshold equal to the recommended annual reserve contribution because this is the average maintenance expense over the thirty years. However, each association must judge their unique risk tolerance.

The Fully Funded Balance for The Village at Lake Chelan is \$108,550. The actual current funding is \$158,157. The Association is approximately 146% funded. This means that based on a straight line savings for each reserve component, the Association saved 146% of the accumulated depreciation of the reserve components.

Percent Funded Considered
100% or more Fully Funded
60% to 99% Reasonably Well Funded
25% to 59% Adequately Funded
24% or less At High Risk for a Special Assessment

At 146%, The Village at Lake Chelan is considered well funded.

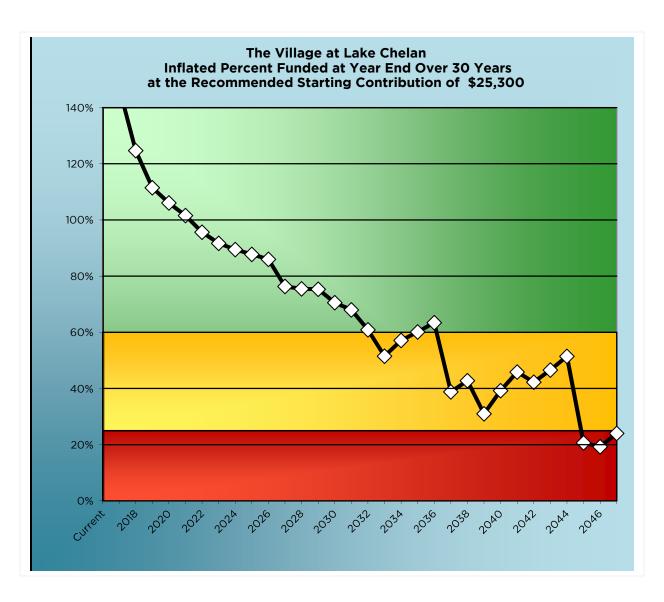
Below is a graph with the current and projected year-end percent fully funded calculated at the recommended starting annual reserve contribution of \$25,300.





The following chart illustrates the projected percent funded at year end over the next 30 years at the recommended starting contribution rate of \$25,300. The values include interest and inflation rate assumptions.

Note: The long term nature of this study requires that certain assumptions and predictions be made about future events. Since there can be no guarantee that these future events will occur as assumed, this analysis must be viewed in light of the circumstances under which it was conducted. Reasonable effort has been made to ensure that the conclusions of this report are based on reliable information and sound reasoning.





### **FULLY FUNDED BALANCE CALCULATION TABLE**



#### **Fully Funded Balance Calculations**

#### The Village at Lake Chelan

# $FFB = the \ sum \ of \ \frac{replacement \ cost \ * \ effective \ age}{useful \ life} \ for \ all \ reserve \ components$

	Component Description	Quantity	Unit	Maintenance Cycle (Useful Life)	Remaining Useful Life	Effective Age		Current lacement Cost	ly Funded Balance
2.6.1	Asphalt Pavement - repair	146700	SF	6	4	2	\$	11,590	\$ 3,863
2.6.2	Asphalt Pavement - seal coat & restriping	146700	SF	6	4	2	\$	39,680	\$ 13,227
2.6.3	Asphalt Pavement - overlay	146700	SF	25	20	5	\$	104,760	\$ 20,952
2.7.1	Wood Perimeter Fence - replace	2100	LF	5	5	-	\$	26,240	\$ -
2.7.2	Steel Fence Pool Enclosure - replace	380	LF	40	28	12	\$	31,250	\$ 9,375
2.7.3	Vinyl Fence - replace	986	LF	40	39	1	\$	42,670	\$ 1,067
2.7.4	Chain Link Fence - repair	1400	LF	30	18	12	\$	2,730	\$ 1,092
2.9.1	Landscaping - contingency	1	LS	5	6	-	\$	5,000	\$ -
2.9.2	Landscaping - plant replacement @ Hwy 150	1	LS	1	1	-	\$	10,000	\$ -
3.3.1	Pool Deck - repair & resurface	3800	SF	25	13	12	\$	41,120	\$ 19,738
6.2.1	Pool/Restroom/Equip Room - contingency	1	LS	10	10	-	\$	5,000	\$ -
7.4.1	Covered Patio Roofs - replace	9	SQ	35	23	12	\$	4,870	\$ 1,670
8.3.1	Entry Gate & Fencing - replace	170	LF	40	28	12	\$	22,070	\$ 6,62
8.3.2	Gate Operators - replace	2	EA	5	5	-	\$	3,030	\$ -
10.4.1	Entry Sign - replace	1	EA	10	9	1	\$	1,500	\$ 150
10.5.1	Mailbox Clusters - add	1	EA	5	5	-	\$	2,060	\$ -
10.5.2	Mailbox Clusters - replace	7	EA	25	15	10	\$	14,390	\$ 5,75
12.1.1	Patio Furniture - contingency	1	LS	5	1	4	\$	1,500	\$ 1,200
13.2.1	Pool - resurface & tile	1030	SF	15	14	1	\$	25,080	\$ 1,67
15.2.1	Drainage System - contingency	1	LS	5	1	4	\$	2,500	\$ 2,000
15.3.1	Pool Equipment - contingency	1	LS	5	5	-	\$	2,000	\$ -
15.3.2	Irrigation System - replace	35	Zone	20	5	15	\$	26,890	\$ 20,16
20.1.1	Reserve Study Update - with site visit	1	LS	3	3	-	\$	3,800	\$ -
			1	FULLY FUN	DED BALANCE	<u> </u>	٠.	Total	\$ 108,550

**CURRENT RESERVE BALANCE = \$158,157** 

PERCENT FULLY FUNDED = 146%

#### ABBREVIATION KEY

EA each
BLDG building(s)
FIXT fixture(s)

LF linear foot LS lump sum SF square feet October 31, 2017
SQ roofing square
SY square yard

ZN zone



#### **SUPPLEMENTAL BUDGET INFORMATION (SBI)**

RCW 64.38.025 states that within thirty days after adoption of any proposed budget for the association, the board of directors shall provide a summary of the budget to all the unit owners and shall set a date for a meeting of the unit owners to consider ratification of the budget not less than fourteen nor more than sixty days after mailing of the summary. As part of the summary of the budget to all owners, the board of directors shall disclose the supplemental budget information as outlined in RCW 64.38.025 section (4), which we refer to as the Supplemental Budget Information (SBI). Below is a sample of the SBI we will compile when the association is ready to provide a summary of the budget to the unit owners. Please contact RCL one week before the Association plans on sending the budget summary to unit owners and we will issue a completed SBI at no additional charge within one year of issuing the draft of the reserve study report.

#### Sample Association - Fiscal Year End 2018 Proposed Budget Supplemental Budget Information on Reserves In Compliance with RCW 64.34.308 & RCW 64.38.025 February 3, 2017 Proposed annual contribution to reserves for the fiscal year ending in 2018 per the budget Projected fiscal year end 2017 reserve balance per the budget. Budgeted annual contribution to reserves for the current fiscal year ending in 2017 Percent fully funded as of the date of the most recent reserve study ded annual contribution to reserves for the fiscal year ending in 2018 Type of funding plan used for recommended annual funding per the most recent re \$164,676 Projected fiscal year end 2017 reserve balance per the most recent reserve study. Based upon the most recent reserve study, will the Association have funds to meet obligations for the next 30 years at the current contribution rate\*? rume the current contribution rate will be adjusted annually for inflation. Not doing so may cause a failure to meet obligatio Inticipated Reserve Funding Shortfalls Over the Next 30 Years \$15,000 Pro \$36,000 Current Fiscal Year Contribution Contributio Average Per Unit Per Year Average Per Unit Per Year Projected Funding Projected Year Shortfal 2041 \$12,764 \$3,450 Is additional funding (Regular or Special Assessment) plant N/A Amount of additional Regular or Special Assessment N/A Average amount per unit per mo N/A Date assessment is due. \$36,000 Current Reserve Funding Projected Percent Fully Funded at end of Fiscal Year \$36,000 Recommended Reserve Funding d Account Balance at End of Fiscal Year Projected Percent Fully Funded at end of Fiscal Year \$15,000 Proposed Contribution 2018 2019 2020 2021 2022 \$179,7 Projected Account Balance at End of Fiscal Year \$204,426 cted Percent Fully Funded at end of Fiscal Year



#### **DISCLOSURES**

- 1 Reserve Consultants LLC also provides construction inspection services for condominiums, and does design and construction oversight for major repair projects, including roofing, decks and building envelope replacement.
- 2 No shareholder or employee of Reserve Consultants LLC has any interest in, or obligation to, any construction company, management company, or development entity that creates condominiums.
- 3 Reserve Consultants LLC has been a member of Community Association Institute since about 1993, and has worked with a variety of management companies, associations and other types of clients in Washington State.
- 4 This report and analysis is based upon observations of the visible and apparent condition of the building and its major components on the date of the inspection. Although care has been taken in the performance of this inspection, Reserve Consultants LLC (and/or its representatives) make no representations regarding latent or concealed defects which may exist and no warranty or guarantee is expressed or implied. This report is made only in the best exercise of our ability and judgment. Conclusions in this report are based on estimates of the age and normal working life of various items of equipment and appliances. Predictions of life expectancy and the balance of useful life are necessarily based on industry and/or statistical comparisons. It is essential to understand that actual conditions can alter the useful life of any item. The previous use or misuse, irregularity of servicing, faulty manufacture, unfavorable conditions, acts of god, and unforeseen circumstances make it impossible to state precisely when each item would require replacement. The client herein should be aware that certain components within the above referenced property may function consistent with their purpose at the time of inspection, but due to their nature, are subject to deterioration without notice.
- 5 Unless otherwise noted, all reserve components are assumed to meet the building code requirements in force at the time of construction. Any on-site inspection should not be considered a project audit or quality inspection.
- 6 Conclusions reached in this report assume responsible ownership and competent management of the property. Information provided by others is believed to be reliable. Information provided by others was not audited; we assume no responsibility for accuracy thereof.
- 7 The reserve study is a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses or background checks of historical records.



#### **APPENDIX - GLOSSARY OF TERMS**

Baseline Funding (contribution rate) - A Reserve Contribution Rate that is constant, increasing with inflation, to provide funds for all anticipated Reserve Expenses so that no special assessments are required for 30 years, but with no contingency some years.

**Building Codes** - Nationally recognized standards used to gauge the acceptability of a particular material or building procedure. Typically, if something is built to "code," it is acceptable to all concerned. Some often used codes are International Building Code (IBC) (applicable to most multifamily housing), International Residential Code (IRC) (applicable to one and two family structures), Washington Energy Code, National Electric Code (NEC), Uniform Plumbing Code (UPC), and the National Fire Protection Association Standards (NFPA). These are usually amended slightly by each city or county.

Building Component - see "Reserve Component".

**Component Number** - A number assigned to each building component that allows grouping of like components. Based roughly on Construction Industry Standards.

**Common Elements** – Those portions of the building which are owned collectively by all Unit owners in a condominium, and for which the association is responsible.

"Contribution Rate" means, in a Reserve Study as described in RCW64.38, the amount contributed to the reserve account so that the association will have cash reserves to pay major maintenance, repair, or replacement costs without the need of a special assessment. RCW 64.38.010 (6)

Constant Dollars - Pretends that inflation does not exist. Shows all costs and contributions in today's dollars, no matter how far in the future they occur.

"Effective Age" means the difference between the useful life and the remaining useful life. RCW 64.38.010 (7)

"Fully Funded Balance" means the value of the deteriorated portion of all the reserve components. The fully funded balance for each reserve component is calculated by multiplying the current replacement cost of that reserve component by its effective age, then dividing the result by that reserve component's useful life. The sum total of all reserve components' fully funded balances is the association's fully funded balance. RCW 64.38.010 (9)

**Fully Funded (contribution rate)** - A Reserve Contribution Rate that is constant, increasing with inflation, that will bring the Reserve Account balance up to the "Fully Funded Balance" level and keep it there.

Inflated Dollars - As opposed to constant dollars, inflated dollars recognize that costs in the future will probably be higher than today because each dollar will buy fewer goods and services. A rate of inflation must be assumed and applied to all future costs. Also referred to as future cost.





Inflation Multiplier - 100% plus the assumed rate of inflation. Thus, for an assumed yearly inflation rate of 5%, the "multiplier" would be 105% or 1.05 if expressed as a decimal number rather than as a percentage. Each successive year the previous year's "multiplier" is multiplied by this number to arrive at the next year's "multiplier."

Interest Rate Multiplier - The assumed rate of interest earned on the average annual reserve bank account balance. Thus, 4% interest would be 0.04 expressed as a decimal number. A rate of interest earned must be assumed for all future years. Typically this is lower than the rate of inflation.

**Limited Common Element** – those common elements which are assigned exclusively to one or some Units. Unit owners may be responsible for the cost to repair and maintain limited common elements, so those costs may not appear in a Reserve Study.

**Next Repair** - the next time the "Repair Cycle" starts with work on a component.

Maintenance Cycle - the frequency of maintenance on a component to reach or extend its Useful Life. Often shorter than the full "Useful Life" for repairs that occur in lieu of complete replacement.

**Percent Fully Funded** – The percentage of the "Fully Funded Balance" which the current condominium Reserve Account actually has in it.

**RCW** - the Revised Code of Washington. RCW 64.38 is the Washington Homeowners' Act, the statute that governs homeowners' associations.

"Remaining useful life" means the estimated time, in years, that a reserve component can be expected to continue to serve its intended function. RCW 64.38.010 (14)

"Replacement cost" means the current cost of replacing, repairing, or restoring a reserve component to its original functional condition. RCW 64.38.010 (15)

**Reserve Account** - Money set aside for future repair and replacement projects. For condominiums, the RCW requires a separate Reserve Account be maintained to hold reserves to fund repair or replacement of Reserve Components.

"Reserve components" means common elements whose cost of maintenance, repair, or replacement is infrequent, significant, and impractical to include in an annual budget. RCW 64.38.010 (16)

**Reserve Contribution** - The amount of money saved to fund "replacement Costs" for maintenance and repairs of Common Elements. See "Contribution Rate". Current contributions and recommended contributions may be different.

**Reserve Specialist** - A designation for those professionals who have met the standards established by Community Associations Institute (<a href="www.caionline.org">www.caionline.org</a>) for Reserve Study providers.

**Reserve Study** - A physical assessment of a building and a subsequent report which estimates the anticipated major maintenance, repair, and replacement costs, whose infrequent and significant nature make them impractical to be included in an annual budget, which will need to be repaired or replaced over the next 30 years. It



provides estimates of these replacement costs and details expected annual expenditures. It is used to calculate the Reserve Contribution Rate required to maintain a facility in good condition both functionally and cosmetically. The Washington Condominium Act sets out requirements for annual reserve studies.

"Reserve study professional" means an independent person suitably qualified by knowledge, skill, experience, training, or education to prepare a reserve study in accordance with RCW 64.38. RCW 64.38.010 (17)

**Special Assessment** - A levy against all unit owners that is necessary when a needed repair/replacement/upgrade has not been planned for, and for which insufficient money has been saved.

Threshold Funding (contribution rate) - A Reserve Contribution Rate that is constant, increasing with inflation, to provide funds for all anticipated Reserve Expenses for the life of the study, but leaving a minimum level of Reserves (the "threshold") at all times. Our default minimum threshold is one year's contribution.

**Typ.** - Abbreviation for 'typical'; used on photographs and in text to refer to a problem that is shown or described once, but applies to many locations.

**Typical Life** - An average expected life for an average building component. As in any statistical average, there is a range of years over which each individual item might fall. This is the same as "Useful life"

"Useful life" means the estimated time, in years, that a reserve component can be expected to serve its intended function. RCW 64.38.010 (20)

Year End Reserve Balance or Reserve Fund Balance - What is projected to be left in the reserve account after the expected yearly expenses and contributions are added to the prior year's carryover balance. Assumes that the reserve contributions and expenses occur as predicted.

**Yearly Expenses** - The total labor and material costs associated with all of the repairs/maintenance that are scheduled in that particular year.

**30 Year Spreadsheet** - A summary listing each building component and its yearly cost to maintain/repair over the next 30 years. It also lists the annual reserve fund balance, reserve contributions, reserve expenses and bank interest earned on any reserve fund balance.



#### **APPENDIX - EVALUATORS' CREDENTIALS**

**Denise Dana** Principal, Reserve Consultants LLC

B.S. Education, M. Architecture

Washington Registered Architect, #8702

LEED Accredited Professional

Denise Dana first obtained licensure as an Architect and became a LEED accredited professional in 2003. She is currently a licensed Architect in the State of Washington and is certified by the National Council of Architectural Registration Boards. With over fifteen years of experience in architecture, her resume includes a variety of project types ranging from residential to corporate. She has worked through all phases of construction including design development, construction documentation and construction administration with project budgets varying from a few thousand dollars to over sixty million dollars. Denise has been conducting reserve studies since joining Reserve Consultants in 2008; in 2011 she was recognized as a "Reserve Specialist" by the Community Associations Institute.

Mahria Sooter Associate, Reserve Consultants LLC

B.A. Springfield College, MA

Mahria joined Reserve Consultants in 2016. Mahria holds a Bachelor of Science degree from Springfield College, MA. She has over 20 years of experience with marketing and various aspects of integrated communication in the construction industry. Mahria excels at listening to clients' goals and providing attainable solutions to their needs. Her attention to detail lends well to providing clear and concise recommendations that clients can utilize to make informed decisions.