



# LUMMI ISLAND SCENIC ESTATES

Lummi Island, Washington



## STANDARD

### LEVEL 2 RESERVE STUDY UPDATE WITH A SITE VISIT

*With funding recommendations for the 2020 fiscal year*

Issued June, 2019

Next Update: **Level 3** by June, 2020

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## EXECUTIVE SUMMARY

### Description

Lummi Island Scenic Estates is a 399-unit residential community located at 1211 Island Drive on Lummi Island in Washington. This Reserve Study meets the requirements of the Washington Homeowners' Association Act and the Washington Unified Common Interest Owner Act for a Level 2 Reserve Study update with a site visit, and was prepared by an independent Reserve Study Professional.

### Background

The community has 399 dues-paying lots in addition to five community buildings, a shared water supply system and a community marina. Lot owners are responsible for all improvements to their parcels. The community was established in about 1962.

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The recommended annual contribution to reserves for 2020 is \$50,000.

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### Financial Information for the Current 2019 Fiscal Year

Reserve Account Balance on <b>April 30, 2019</b>	\$493,829
Annual Operating Budget	\$337,595
Component Inclusion Threshold (1% of the Operating Budget)	\$3,376
Annual Budgeted Contribution to Reserves (2019)	\$45,000
Remaining Contributions to Reserves for the Year	\$45,000
Planned or Implemented Special Assessment	None
Fully Funded Balance	\$596,258
Percent Funded at Time of Study	83%
Funding Status at Time of Study	Low Risk for Special Assessment

### Recommended Contribution to Reserves Starting in 2020

<b>2020 Annual Contribution to Reserves</b>	<b>\$50,000</b>
Recommended Contribution per Month	\$4,167
Average Contribution per Unit per Year	\$125
Average Contribution per Unit Per Month	\$10
Recommended Special Assessment	None
2020 Baseline Funding Plan Contribution Rate	\$43,700
2020 Full Funding Plan Contribution Rate	\$59,900

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 with a current 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.



## Five Years At A Glance 2020 Through 2024

The following reserve funded expenses are expected to occur in the next five years at Lummi Island Scenic Estates in constant dollar values.

<b>Year 1 (2020) Anticipated Maintenance</b>	<b>Estimated Cost</b>
2.9.3 Swim Lake Dock & Beach - Upgrades	\$10,000
<b>Total Estimated Expenses for Year 1 (2020)</b>	<b>\$10,000</b>

<b>Year 2 (2021) Anticipated Maintenance</b>	<b>Estimated Cost</b>
None anticipated	\$0
<b>Total Estimated Expenses for Year 2 (2021)</b>	<b>\$0</b>

<b>Year 3 (2022) Anticipated Maintenance</b>	<b>Estimated Cost</b>
2.6.2 Asphalt Pavement - Major Repair	\$52,080
<b>Total Estimated Expenses for Year 3 (2022)</b>	<b>\$52,080</b>

<b>Year 4 (2023) Anticipated Maintenance</b>	<b>Estimated Cost</b>
11.1.2 Truck - Replace	\$48,830
11.1.4 Road Sweeper - Maintenance	\$1,090
12.1.1 Clubhouse - Repair Contingency	\$27,860
12.1.2 Common Buildings - Repair Contingency	\$22,350
15.5.1 Water Mains - Repair	\$91,990
<b>Total Estimated Expenses for Year 4 (2023)</b>	<b>\$192,120</b>

<b>Year 5 (2024) Anticipated Maintenance</b>	<b>Estimated Cost</b>
15.1.2 Pressure Reducing Valve Vaults - Maintenance	\$10,000
15.1.5 Pressure Reducing Valve - Replace	\$15,000
<b>Total Estimated Expenses for Year 5 (2024)</b>	<b>\$25,000</b>



## 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.

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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:

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

By comparing the actual current reserve fund balance, to the theoretical Fully Funded Balance a Percent Fully Funded is derived.

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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 threshold reserve contribution funding plan.

The percent fully funded acts as a measuring tool to assess an association’s ability to absorb unplanned expenses.



### Three levels of Reserve Studies:

**Level 1:** 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.

**Level 2:** 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.

This study  
is a Level 2  
Reserve Study  
update with a site  
visit.

The next required update for  
Lummi Island Scenic Estates  
is a **Level 3** study by June,  
2020

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### 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 problem.

#### Several 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

Many 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.





### **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).

- (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;
- (j) 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
- (k) 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.

Effective July 1, 2018, the **Washington Unified Common Interest Act (WUCIOA)** has impacted common interest communities. Our reserve studies also comply with WUCIOA.

RCW 64.90.550 §2 states that a reserve study must include:

- (a) A reserve component list, including any reserve component, the replacement cost of which exceeds one percent of the annual budget of the association, excluding contributions to the reserves for that reserve component. If one of these reserve components is not included in the reserve study, the study must explain the basis for its exclusion. The study must also include quantities and estimates for the useful life of each reserve component, the remaining useful life of each reserve component, and current major replacement costs for each reserve component;
- (b) The date of the study and a disclosure as to whether the study meets the requirements of this section;
- (c) The following level of reserve study performed:
  - a. Level I: Full reserve study funding analysis and plan;
  - b. Level II: Update with visual site inspection; or
  - c. Level III: Update with no visual site inspection;
- (d) The association's reserve account balance;
- (e) The percentage of the fully funded balance to which 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 a baseline funding plan;
- (i) A recommended reserve account 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 recommended reserve account contribution rate for a baseline funding plan to maintain the reserve account balance above zero throughout the thirty-year study period without special assessments, and a reserve account contribution rate recommended by the reserve study professional;
- (j) A projected reserve account balance for thirty years based on each funding plan presented in the reserve study;
- (k) A disclosure on whether the reserve study was prepared with the assistance of a reserve study professional, and whether the reserve study professional was independent; and
- (l) A statement of the amount of any current deficit or surplus in reserve funding expressed on a dollar per unit basis. The amount is calculated by subtracting the association's reserve account balance as of the date of the study from the fully funded balance, and then multiplying the result by the fraction or percentage of the common expenses of the association allocable to each unit; except that if the fraction or percentage of the common expenses of the association allocable vary by unit, the association must calculate any current deficit or surplus in a manner that reflects the variation.

In addition, the WUCIOA requires the following disclosure in every Reserve Study (RCW 64.90.550 § 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 the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement."**

Furthermore, RCW 64.90.550 §2 states that the budget must include:

- (d) the current amount of regular assessments budgeted for contribution to the reserve account;
- (e) A statement of whether the association has a reserve study that meets the requirements of RCW 64.90.550 of this act and, if so, the extent to which the budget meets or deviates from the recommendations of that reserve study; and
- (f) The current deficiency or surplus in reserve funding expressed on a per unit basis.

RCW 64.90.550 §2 (d) – (f) requirements are covered by the Supplemental Budget Information disclosure that is prepared with each reserve study when the Association is ready to ratify the budget.



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

This Reserve Study is not a report on the condition of the assets maintained by Lummi Island Scenic Estates, 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 and the Washington Common Interest Ownership Act (WUCIOA).

The component list is based on information provided by Lummi Island Scenic Estates. Reserve Consultants LLC does not provide legal interpretations of governing documents or auditing services on account information provided.

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 it will receive ordinary and reasonable maintenance and repair by Lummi Island Scenic Estates. 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 assets 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 Lummi Island Scenic Estates 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.

This report should be updated annually with actual repair costs, reserve fund balances, etc. Every three years it should be updated with a site inspection and professional review. 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.



## 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 4.16%. 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 1987 is 3.44%. 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.

## Inflation and Interest Rate Projections for Lummi Island Scenic Estates

Years Applied	Contribution Inflation	Inflation	Interest
Year 0 (2019) through Year 1 (2020)	0%	3%	2%
Year 2 (2021) through Year 10 (2029)	3%	3%	2%
Year 11 (2030) through Year 30 (2049)	4%	4%	3%



### Starting Reserve Fund Balance for Year 1 (2020)

The starting reserve fund balance for 2020 has been estimated by combining the following figures that were provided by an association representative:

<b>\$493,829</b>	reserve fund balance as of April 30, 2019
<b>- (\$155,000)</b>	anticipated remaining maintenance expenses in 2019
<b>+ \$0</b>	planned special assessment in 2019
<b>+ \$45,000</b>	remaining reserve contributions for 2019
<b>+ \$5,851</b>	projected interest on the 2019 reserve fund balance
<b>\$389,680</b>	estimated beginning balance for fiscal year 2020

Below is a summary of the anticipated remaining maintenance expenses for 2019.

Component Maintenance	Estimated Cost
2.9.1 Dock Work - Repair	\$45,000
11.1.1 Backhoe - Replace	\$80,000
15.1.3 Pressure Reducing Valve - Replace	\$15,000
15.3.1 Holiday Lake Overflow - Refurbish	\$15,000
<b>Total Estimated Costs for 2019:</b>	<b>\$155,000</b>

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



## ASSOCIATION OVERVIEW

Lummi Island Scenic Estates is a 399-unit residential community located on Lummi Island in Washington. The community has 399 dues-paying lots in addition to common amenities. Lot owners are responsible for all improvements to their parcels. The community was established in 1962.

The common amenities include asphalt roads, a water supply reservoir and dam, and a swim lake with docks. There are five community buildings: a water treatment plant with offices, a supply shed, a maintenance building with overhead garage doors, a Cabana with a covered picnic patio and restrooms, as well as a waterfront Clubhouse with parking areas and a driveway that provides access the community marina.



## Review of General Conditions

The overall appearance of the community was very good. The water treatment system is regularly maintained and monitored by on site staff. We understand that a leaking pressure reducing valve will be replaced this year.

The community buildings are regularly maintained as needed. The paving adjacent to the Clubhouse was recently repaired. It was reported that the marina dock is budgeted to have major repairs in 2019. The ramp to the marina was updated in 2018.

The roads throughout the community were in good condition overall. A new tractor and street sweeper attachment were purchased last year for continued maintenance.





## 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 1% of the operating budget, or \$3,376, components valued less than the legal threshold may be included to better capture reserve funding for Lummi Island Scenic Estates.

### Component Funding Excluded from the Reserve Study

#### Operating Budget

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:

- play equipment
- reserve study updates

#### Unit Owner Responsibility

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

- individual parcels of land

The Holiday Lake dam has been excluded from the reserve budget because it does not require maintenance.

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. All cost estimates were adjusted to reflect the actual inflation rate for construction work in the Pacific Northwest, and costs actually experienced by Lummi Island Scenic Estates 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 2018 to 2019 inflation figure of 3.95% for construction work.





## **RESERVE COMPONENT SUMMARY**



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**2.6.1 Asphalt Pavement - Repair**

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**Maintenance Cycle:** 10 years**Next Maintenance:** Year 9 (2028)**Quantity:** 1 Lump Sum**Unit Cost:** \$22,350.00 / LS**Estimate:** \$22,350

The Association has completed pavement repair project of the Clubhouse parking area in 2018 at a cost of approximately \$6,000. We continue to budget funds for asphalt pavement repairs. The roads throughout appear to be wearing well overall. We anticipate that the Association will continue to make repairs as needed to the roads and parking areas.

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**2.6.2 Asphalt Pavement - Major Repair**

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**Maintenance Cycle:** 40 years**Next Maintenance:** Year 3 (2022)**Quantity:** 16,000 Square Feet**Unit Cost:** \$3.00 / SF**Estimate:** 16,000 SF X 100% X \$3.00/SF = \$48,000 + tax = \$52,080

It was noted during the site visit that the paving on the road around Holiday Lake has need for major repairs in the future, specifically along Rosewood Terrace and Carol Lane. We budget for future major repairs to the surface and subgrade approximately 16,000 sf of paving.

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**2.6.3 Asphalt Parking Lot - Overlay**

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**Maintenance Cycle:** 40 years**Next Maintenance:** Year 10 (2029)**Quantity:** 14,000 Square Feet**Unit Cost:** \$3.00 / SF**Estimate:** 14,000 SF X 100% X \$3.00/SF = \$42,000 + tax = \$45,570

The Association has explored a pavement overlayment at the parking lot adjacent to the Clubhouse. Due to the higher than anticipated costs, the project has been delayed and repairs were made in 2018 instead of an overlayment. We have budgeted funds for future overlayment based on the cost quoted to the Association in 2018.

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**2.7.1 Chain Link Fence - Replace**

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**Maintenance Cycle:** 30 years**Next Maintenance:** Year 14 (2033)**Quantity:** 320 Linear Feet**Unit Cost:** \$24.53 / LF**Estimate:** 320 LF X 100% X \$24.53/LF = \$7,850 + tax = \$8,520

The budget maintains funds to repair and/or replace sections of the chain-link fence around the water supply pond. The Association completes ongoing minor repairs with funds from the operating budget. One section of the fencing, closest to the bank below the water towers, was in need of reinstallation at the time of the site visit.

**2.9.1 Dock Work - Repair****Maintenance Cycle:** 15 years**Quantity:** 1 Lump Sum**Estimate:** \$45,000**Next Maintenance:** Year 0 (2019)**Unit Cost:** \$45,000.00 / LS

The Association reported that repairs of the marina dock decking and structural beams were completed in March 2015 at a cost of \$12,989. Rails at the ramp to the Marina were repaired in 2018 at a cost of \$7,755. Additional work is planned in 2019 at an estimated cost of \$45,000. The budget provides funds to perform periodic maintenance of the dock to keep the structure safe.

**2.9.2 Dock Pilings - Replace****Maintenance Cycle:** 50 years**Quantity:** 1 Lump Sum**Estimate:** \$110,700**Next Maintenance:** Year 14 (2033)**Unit Cost:** \$110,700.00 / LS

The reserve budget saves for replacing the creosote wood dock pilings with metal pilings. At the time of the site visit no concerns were reported regarding the pilings. We understand that they were recently treated and protective HDPE covers were put on the wood pilings for added protection.

**2.9.3 Swim Lake Dock & Beach - Upgrades****Maintenance Cycle:** 30 years**Quantity:** 1 Lump Sum**Estimate:** \$10,000**Next Maintenance:** Year 1 (2020)**Unit Cost:** \$10,000.00 / LS

The swim lake docks are planned to be repaired in the near future. We budget funds to replace the current decking with a composite material for low maintenance.

**7.4.1 Sloped Metal Roofs - Replace****Maintenance Cycle:** 40 years**Quantity:** 33 Roofing Squares**Estimate:** 33 SQ X 100% X \$832.14/SQ = \$27,461 + tax = \$29,790**Next Maintenance:** Year 11 (2030)**Unit Cost:** \$832.14 / SQ

We budget funds to replace the metal roofing on the common buildings, including the cabana, the office/treatment plant building, the supply shed, and the maintenance building. The roofs were weathering as expected.



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**7.4.2 Low Sloped Roofs - Replace**

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**Maintenance Cycle:** 20 years**Next Maintenance:** Year 17 (2036)**Quantity:** 17 Roofing Squares**Unit Cost:** \$1,157.93 / SQ**Estimate:** 17 SQ X 100% X \$1,157.93/SQ = \$19,685 + tax = \$21,360

The Clubhouse roof was replaced in 2016 at a cost of \$18,213. We budget to replace the roof at the end of its typical useful life. We understand that the roof is performing as expected.

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**8.3.1 Garage Doors - Replace**

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**Maintenance Cycle:** 20 years**Next Maintenance:** Year 19 (2038)**Quantity:** 3 Each**Unit Cost:****Estimate:** 3 EA X 100% X \$1,473.59/EA = \$4,421 + tax = \$4,800      \$1,473.59 / EA

In 2017, the overhead garage doors of the maintenance shed were replaced at a cost of \$4,265. The budget provides funds to replace three overhead garage doors per maintenance cycle.

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**11.1.1 Backhoe - Replace**

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**Maintenance Cycle:** 25 years**Next Maintenance:** Year 0 (2019)**Quantity:** 1 Each**Unit Cost:** \$73,730.00 / EA**Estimate:** 1 EA X 100% X \$73,730.00/EA = \$73,730 + tax = \$80,000

The Association reported that they regularly repair the backhoe which dates from 1974. Substantial repairs were made in 2016 with funds from the operating budget. The reserve budget is intended to cover the costs of replacing the machine when repairs are no longer sufficient to keep it operational. We have updated the next replacement in 2019 at a budget of \$80,000.

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**11.1.2 Truck - Replace**

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**Maintenance Cycle:** 10 years**Next Maintenance:** Year 4 (2023)**Quantity:** 1 Each**Unit Cost:** \$45,000.00 / EA**Estimate:** 1 EA X 100% X \$45,000.00/EA = \$45,000 + tax = \$48,830

The reserve funds are intended to cover the costs of replacing the maintenance truck with a truck, such as a Ford F250, at the time the current truck has reached the end of useful life. The current truck is functional, but is reported to be underpowered for some of the tasks required on the Island.

### 11.1.3 Tractor Mower - Replace

**Maintenance Cycle:** 20 years

**Next Maintenance:** Year 19 (2038)

**Quantity:** 1 Each

**Unit Cost:** \$8,700.00 / EA

**Estimate:** 1 EA X 100% X \$8,700.00/EA = \$8,700 + tax = \$9,440

In 2018 the tractor mower was replaced with a John Deere X570 model. A road sweeper attachment was purchased at the same time. We have reset the next replacement after the equipment has been in service 20 years. The future budget includes funds to replace both the tractor and sweeper attachment. Maintenance of the sweeper brushes is included in the following component.

### 11.1.4 Road Sweeper - Maintenance

**Maintenance Cycle:** 5 years

**Next Maintenance:** Year 4 (2023)

**Quantity:** 1 Lump Sum

**Unit Cost:** \$1,000.00 / LS

**Estimate:** 1 LS X 100% X \$1,000.00/LS = \$1,000 + tax = \$1,090

According to the Association, a new sweeper attachment was purchased with the John Deere X570 mower in 2018. We budget a maintenance fund for replacing the brushes as needed. We understand that the walk-behind sweeper will be kept, but not replaced.

### 12.1.1 Clubhouse - Repair Contingency

**Maintenance Cycle:** 10 years

**Next Maintenance:** Year 4 (2023)

**Quantity:** 1 Lump Sum

**Unit Cost:** \$27,860.00 / LS

**Estimate:** \$27,860

According to the Association representative, minor repairs are being completed on an ongoing basis and paid with funds from the operating budget, which included pressure washing, cleaning gutters, painting the Clubhouse deck. The chimney was repaired in 2017 at a cost of \$3,011. In 2018 new tables and chairs were purchased for \$2,500. In early 2019 \$6,170 was spent on replacing the Clubhouse door. We noted that the appliances may be due for replacement soon. The reserve budget saves funds for major repair and upgrades to the interior and exterior of the building, including siding and decking repairs. The Association reported that they are looking into possible erosion issues at the base of the Clubhouse. The impact was not known at the time of the site visit and no funds are currently allocated for mitigation.

### 12.1.2 Common Buildings - Repair Contingency

**Maintenance Cycle:** 10 years

**Next Maintenance:** Year 4 (2023)

**Quantity:** 1 Lump Sum

**Unit Cost:** \$22,350.00 / LS

**Estimate:** \$22,350

The Association reported ongoing minor repairs are being completed with funds from the operation budget. The repair contingency is intended for major repairs and upgrades of the interior and exterior of the Cabana, the offices/treatment plant building, the supply shed, and the maintenance building. Funds may be drawn from to meet the needs of the Association.

**15.1.1 Water Meters - Replace****Maintenance Cycle:** 20 years**Next Maintenance:** Year 11 (2030)**Quantity:** 218 Each**Unit Cost:** \$256.99 / EA**Estimate:** 218 EA X 100% X \$256.99/EA = \$56,024 + tax = \$60,790

The Association reported spending \$8,000 on water meter repairs in December of 2018. The Association has approximately 30 water meters on hand for replacement; the meters were purchased in 2011. The budgeted funds to replace water meters and the water meter computer are intended to be drawn from as needed to keep the system functional.

**15.1.2 Pressure Reducing Valve Vaults - Maint.****Maintenance Cycle:** 5 years**Next Maintenance:** Year 5 (2024)**Quantity:** 1 Lump Sum**Unit Cost:** \$10,000.00 / LS**Estimate:** \$10,000

While on site it was pointed out that the valve vault enclosing the pressure reducing valve (PRV) located near Holiday Lake is experiencing settling issues and may need shoring or repairs. This component budgets funds for repairing and maintaining the valve vaults for all of the PRV's throughout the Association.

**15.1.3 Pressure Reducing Valve - Replace****Maintenance Cycle:** 40 years**Next Maintenance:** Year 39 (2058)**Quantity:** 1 Lump Sum**Unit Cost:** \$15,000.00 / LS**Estimate:** \$15,000

The pressure reducing valve (PRV) located near Holiday Lake was replaced in 2018. We have budgeted for future replacement on a 40 year cycle. While the next replacement does not fall in the scope of the study, we include it as a place holder and so that the fully funded balance is more accurately calculated.

**15.1.4 Pressure Reducing Valve - Replace****Maintenance Cycle:** 40 years**Next Maintenance:** Year 0 (2019)**Quantity:** 1 Lump Sum**Unit Cost:** \$15,000.00 / LS**Estimate:** \$15,000

The pressure reducing valve (PRV) off Mount Vista Drive is actively leaking and will be replaced in 2019 for an estimated cost of \$15,000.





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**15.1.5 Pressure Reducing Valve - Replace**

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**Maintenance Cycle:** 40 years**Next Maintenance:** Year 5 (2024)**Quantity:** 1 Lump Sum**Unit Cost:** \$15,000.00 / LS**Estimate:** \$15,000

The third pressure reducing valve (PRV) located at 1155 Island Drive is over 40 years old and will need to be replaced eventually. We have budgeted for replacement within the next 5 years.

---

**15.2.1 Water Towers - Circulation System**

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**Maintenance Cycle:** 30 years**Next Maintenance:** Year 27 (2046)**Quantity:** 2 Each**Unit Cost:** \$11,112.14 / EA**Estimate:** 2 EA X 100% X \$11,112.14/EA = \$22,224 + tax = \$24,110

The Association installed two new mixers for circulation systems of the water towers in 2016 at a cost of \$23,707. At the time of our sit visit the system was functional with no issues reported. We budget funds for future replacement.

---

**15.2.2 Water Towers - Repair**

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**Maintenance Cycle:** 50 years**Next Maintenance:** Year 47 (2066)**Quantity:** 2 Each**Unit Cost:** \$7,062.09 / EA**Estimate:** 2 EA X 100% X \$7,062.09/EA = \$14,124 + tax = \$15,320

The water towers were repaired in 2013 at a cost of \$12,900 with highly durable materials. We include the reserve budget to repair catwalks, railings, and sight gauges when they have reached the approximate end of useful life. At the time of our site visit the water towers were in good repair.

---

**15.2.3 Reservoir & Dam - Maintenance**

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**Maintenance Cycle:** 10 years**Next Maintenance:** Year 7 (2026)**Quantity:** 1 Lump Sum**Unit Cost:** \$21,620.00 / LS**Estimate:** \$21,620

The Association reported in 2016 that they are maintaining the reservoir and dam properly and in compliance with the WA Department of Ecology. An abutment was installed around 2005. The maintenance budget provides funds to keep the reservoir and dam functioning properly in accordance with state regulations. Funds should be used as needed.



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**15.2.4 Mixer Unit & Storage Tanks - Maintenance**

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**Maintenance Cycle:** 20 years**Next Maintenance:** Year 18 (2037)**Quantity:** 1 Lump Sum**Unit Cost:** \$26,920.00 / LS**Estimate:** \$26,920

In 2016, the storage tank mixer was installed at a cost of approximately \$30,000. The budget provides funds to maintain the storage tanks and mixer unit to keep the system functioning properly at all times. It was reported that the mixer is functioning as expected.

---

**15.3.1 Holiday Lake Overflow - Refurbish**

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**Maintenance Cycle:** 40 years**Next Maintenance:** Year 0 (2019)**Quantity:** 1 Lump Sum**Unit Cost:** \$15,000.00 / LS**Estimate:** \$15,000

The overflow which helps regulate the water level of Holiday Lake is showing signs of deterioration and will need to be relined or replaced. The overflow consists of a 4' galvanized pipe that runs through the dam and allows water into the spillway and out to Aiston Creek. Depending on the repair strategy, the cost to repair the pipe will vary greatly. We budget a placeholder until a repair strategy is determined.

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**15.4.1 Treatment Plant - Repair**

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**Maintenance Cycle:** 20 years**Next Maintenance:** Year 9 (2028)**Quantity:** 1 Lump Sum**Unit Cost:** \$85,860.00 / LS**Estimate:** \$85,860

The reserve budget provides funds to replace the treatment plant equipment. Monitoring units were replaced in 2018 at a cost of \$7,840. It was reported that the chlorine analyzer will likely need to be replaced within the next three years. Funds from this budget should be used as needed to maintain the treatment plant equipment.

---

**15.5.1 Water Mains - Repair**

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**Maintenance Cycle:** 10 years**Next Maintenance:** Year 4 (2023)**Quantity:** 17,849 Linear Feet**Unit Cost:** \$4.75 / LF**Estimate:** 17,849 LF X 100% X \$4.75/LF = \$84,783 + tax = \$91,990

The Association reported regular maintenance of the water mains. No specific concerns were reported, so we maintain a repair contingency with the intention that funds be used as needed to repair the water mains as required.



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**15.6.1 Septic Systems - Replace**

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**Maintenance Cycle:** 15 years**Next Maintenance:** Year 9 (2028)**Quantity:** 2 Each**Unit Cost:** \$11,709.92 / EA**Estimate:** 2 EA X 100% X \$11,709.92/EA = \$23,420 + tax = \$25,410

We continue to budget for major repairs of the Clubhouse and Cabana septic systems. We understand that both systems were in good repair.

---

**16.5.1 Generator - Replace**

---

**Maintenance Cycle:** 45 years**Next Maintenance:** Year 9 (2028)**Quantity:** 1 Each**Unit Cost:** \$13,429.10 / EA**Estimate:** 1 EA X 100% X \$13,429.10/EA = \$13,429 + tax = \$14,570

According to the Association, the generator is frequently tested and maintained. We continue to budget for replacement of this equipment. No immediate concerns were reported.



## FINANCIAL ANALYSIS & RESERVE CONTRIBUTION RECOMMENDATIONS

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 \$320,000, the average contribution per unit per year as a percentage of the average unit value at Lummi Island Scenic Estates is 0.04%. 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.

Lummi Island Scenic Estates should determine the best reserve funding level for their association based on their maintenance needs and risk aversion.

<b>Recommended 2020 Contribution</b>	<b>\$50,000</b>
Recommended Contribution per Month	\$4,167
Average Contribution per Unit per Year	\$125
Average Contribution per Unit Per Month	\$10

For budgeting purposes, we recommend that Lummi Island Scenic Estates set the contribution rate at \$50,000 for reserves beginning in 2020. The annual reserve contribution 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.

## FUNDING PLANS

THRESHOLD FUNDING \$50,000	BASELINE FUNDING \$43,700	FULLY FUNDING \$59,900
A starting annual contribution of \$50,000 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. This is our recommended funding plan.	An alternative strategy Lummi Island Scenic Estates 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 \$43,700.	Lummi Island Scenic Estates 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 \$59,900.

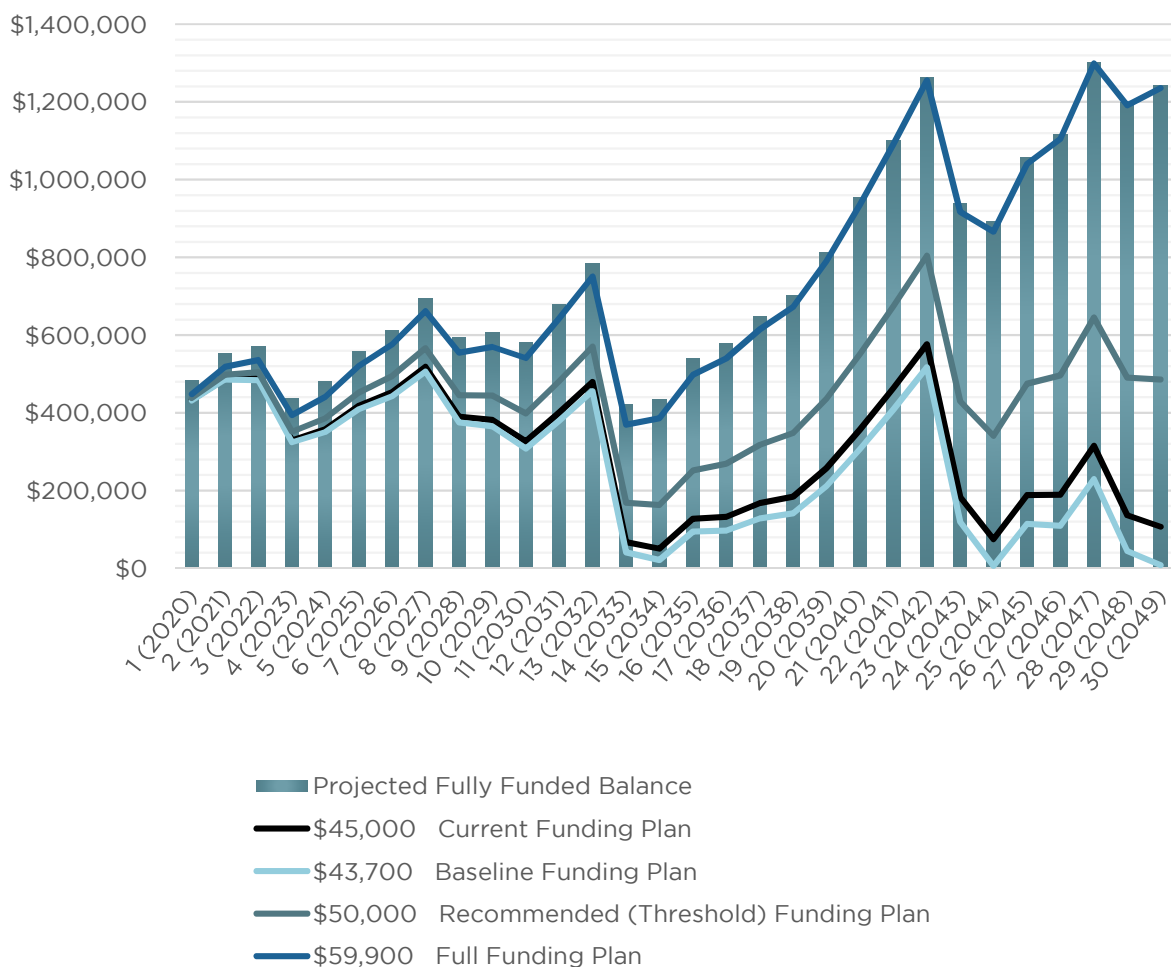


## Comparison of Funding Plans and Fully Funded Balance Over 30 Years

Below is a line graph in compliance with RCW 64.90.550 §2(j) which depicts the projected fiscal year end reserve balance for the Current, Baseline, Recommended and Full Funding Plans for Lummi Island Scenic Estates.

The bar graph represents the projected Fully Funded Balance each year for the next 30 years.

**Lummi Island Scenic Estates  
Comparison of Fully Funded Balance and Funding Plans**





### Projected Reserve Account Balance for Funding Plans Over 30 Years

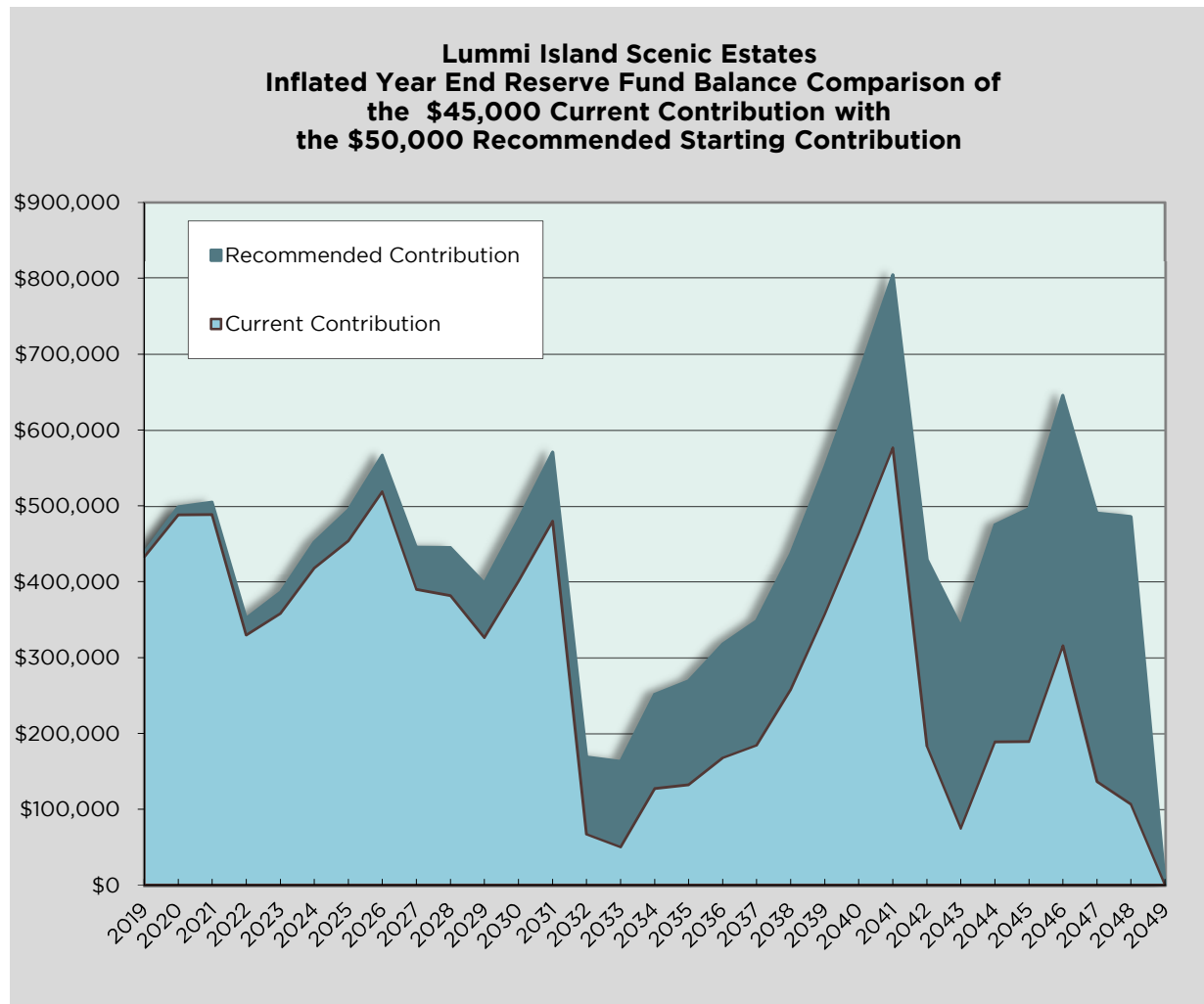
Per RCW 64.90.550 §2 (j) of the Washington Unified Common Interest Owners Act (WUCIOA), the projected reserve account balance for each of the funding plans over the next 30 years is provided, along with the current funding plan projections.

Fiscal Year End	\$45,000 Current Funding Plan	\$50,000 Recommended (Threshold) Funding Plan	\$43,700 Baseline Funding Plan	\$59,900 Full Funding Plan
1 (2020)	\$432,521	\$437,571	\$431,208	\$447,570
2 (2021)	\$487,985	\$498,337	\$485,293	\$518,835
3 (2022)	\$488,484	\$504,401	\$484,345	\$535,917
4 (2023)	\$329,523	\$351,277	\$323,867	\$394,349
5 (2024)	\$357,996	\$385,869	\$350,749	\$441,056
6 (2025)	\$417,845	\$452,129	\$408,931	\$520,012
7 (2026)	\$453,616	\$494,616	\$442,956	\$575,796
8 (2027)	\$518,586	\$566,617	\$506,098	\$661,718
9 (2028)	\$389,808	\$445,197	\$375,407	\$554,866
10 (2029)	\$381,478	\$444,563	\$365,076	\$569,473
11 (2030)	\$326,401	\$398,266	\$307,716	\$540,558
12 (2031)	\$400,652	\$481,835	\$379,544	\$642,576
13 (2032)	\$479,708	\$570,775	\$456,031	\$751,087
14 (2033)	\$66,989	\$168,534	\$40,587	\$369,594
15 (2034)	\$50,228	\$162,876	\$20,939	\$385,919
16 (2035)	\$127,142	\$251,548	\$94,796	\$497,872
17 (2036)	\$132,229	\$269,081	\$96,648	\$540,048
18 (2037)	\$167,502	\$317,521	\$128,497	\$614,560
19 (2038)	\$184,194	\$348,139	\$141,568	\$672,750
20 (2039)	\$257,744	\$436,409	\$211,291	\$790,166
21 (2040)	\$357,221	\$551,440	\$306,724	\$935,993
22 (2041)	\$463,352	\$673,999	\$408,583	\$1,091,080
23 (2042)	\$576,483	\$804,475	\$517,205	\$1,255,900
24 (2043)	\$183,142	\$429,441	\$119,105	\$917,112
25 (2044)	\$74,869	\$340,482	\$5,809	\$866,396
26 (2045)	\$188,736	\$474,720	\$114,380	\$1,040,968
27 (2046)	\$188,976	\$496,438	\$109,036	\$1,105,212
28 (2047)	\$315,375	\$645,475	\$229,549	\$1,299,073
29 (2048)	\$136,277	\$490,231	\$44,249	\$1,191,060
30 (2049)	\$106,560	\$485,641	\$7,998	\$1,236,223





Below is a graph illustrating the projected year end reserve fund balance using both the current (2019) budgeted annual contribution and the recommended starting (2020) contribution.



We recommend that Lummi Island Scenic Estates 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.



## 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 the current 2019 fiscal year and the three funding plans presented in the report. The calculations include inflated values, interest and special assessments (if applicable) through Year 5 (2024).

### Lummi Island Scenic Estates Five Year Funding Plan Comparison

Including Inflated Values, Interest and Special Assessments

#### \$45,000 Current Funding Plan

Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Special Assessment Risk Level
1 (2020)	\$45,000	\$0	\$432,521	89%	Nominal Risk
2 (2021)	\$46,350	\$0	\$487,985	88%	Nominal Risk
3 (2022)	\$47,741	\$0	\$488,484	86%	Nominal Risk
4 (2023)	\$49,173	\$0	\$329,523	76%	Nominal Risk
5 (2024)	\$50,648	\$0	\$357,996	74%	Nominal Risk

#### \$43,700 Baseline Funding Plan

Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Special Assessment Risk Level
1 (2020)	\$43,700	\$0	\$431,208	89%	Nominal Risk
2 (2021)	\$45,011	\$0	\$485,293	88%	Nominal Risk
3 (2022)	\$46,361	\$0	\$484,345	85%	Nominal Risk
4 (2023)	\$47,752	\$0	\$323,867	74%	Nominal Risk
5 (2024)	\$49,185	\$0	\$350,749	73%	Nominal Risk

#### \$50,000 Recommended (Threshold) Funding Plan

Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Special Assessment Risk Level
1 (2020)	\$50,000	\$0	\$437,571	90%	Nominal Risk
2 (2021)	\$51,500	\$0	\$498,337	90%	Nominal Risk
3 (2022)	\$53,045	\$0	\$504,401	88%	Nominal Risk
4 (2023)	\$54,636	\$0	\$351,277	81%	Nominal Risk
5 (2024)	\$56,275	\$0	\$385,869	80%	Nominal Risk

#### \$59,900 Full Funding Plan

Year	Annual Reserve Contribution	Special Assessment	Year End Reserve Balance	% Funded	Special Assessment Risk Level
1 (2020)	\$59,900	\$0	\$447,570	92%	Nominal Risk
2 (2021)	\$61,697	\$0	\$518,835	94%	Nominal Risk
3 (2022)	\$63,548	\$0	\$535,917	94%	Nominal Risk
4 (2023)	\$65,454	\$0	\$394,349	90%	Nominal Risk
5 (2024)	\$67,418	\$0	\$441,056	92%	Nominal Risk



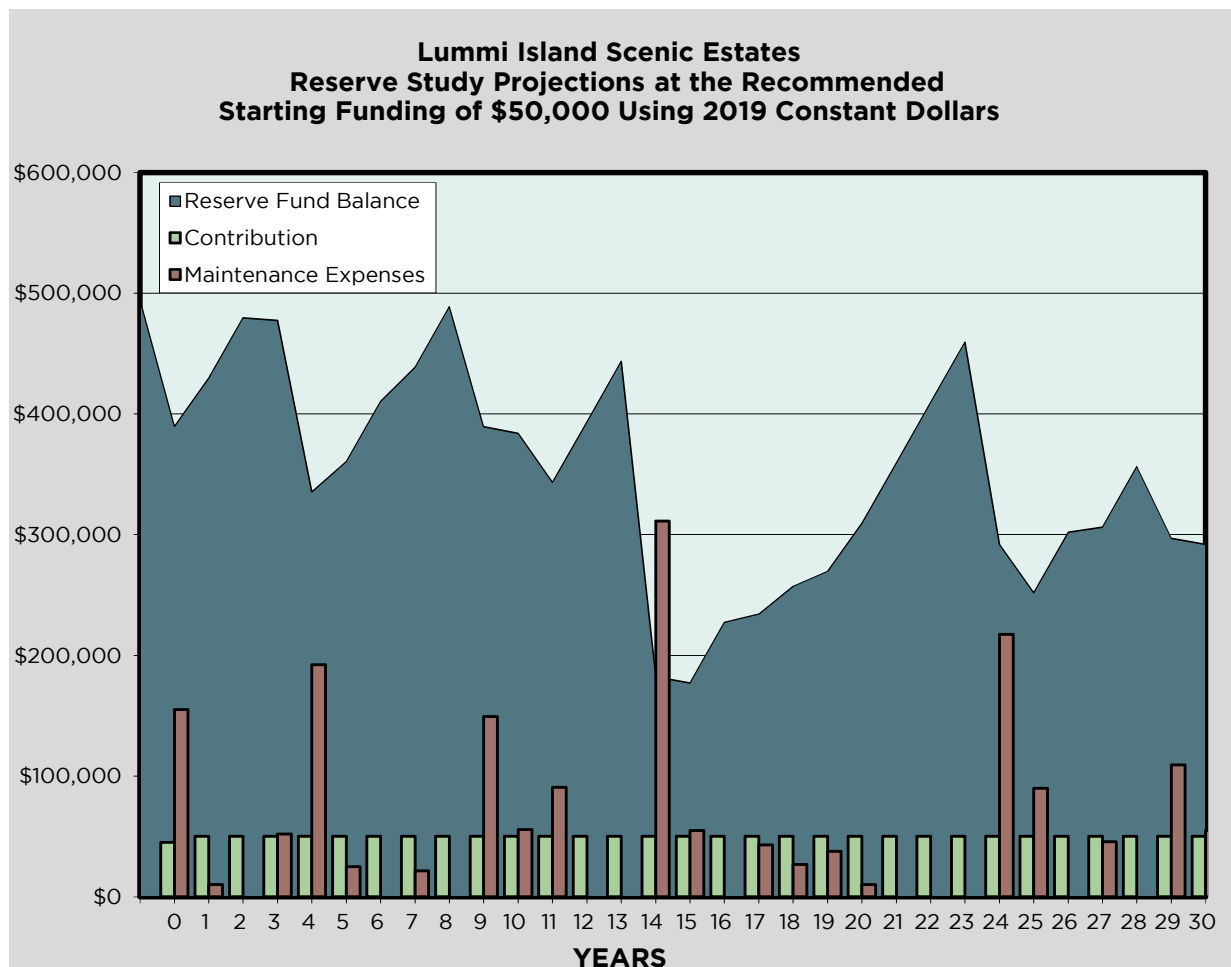
## Reserve Study Projections using Constant Dollar Values

**Teal Line Graph:** The year-end running reserve fund balance is shown as a line graph in teal. 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.

**Mint Green Bars:** The annual reserve fund contributions are shown as mint green bars. This chart depicts the annual contribution in constant dollars, so the contributions are constantly \$50,000 over the 30 year timeline of the study.

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

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.





**Reserve Study Projections at the Starting Recommended Funding of \$50,000  
Using Constant Dollar Values**



## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	1 2020	2 2021	3 2022	4 2023	5 2024
2.6.1	Asphalt Pavement - Repair	10	9					
2.6.2	Asphalt Pavement - Major Repair	40	3			\$52,080		
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1	\$10,000				
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4				\$48,830	
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4				\$27,860	
12.1.2	Common Buildings - Repair Contingency	10	4				\$22,350	
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					\$15,000
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7					
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4				\$91,990	
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$10,000	\$0	\$52,080	\$192,120	\$25,000
CARRY OVER RESERVES				\$389,680	\$429,680	\$479,680	\$477,600	\$335,480
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$10,000	\$0	\$52,080	\$192,120	\$25,000
ACCUMULATED RESERVES				\$429,680	\$479,680	\$477,600	\$335,480	\$360,480
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$429,680	\$479,680	\$477,600	\$335,480	\$360,480
STUDY YEAR				1 (2020 )	2 (2021 )	3 (2022 )	4 (2023 )	5 (2024 )

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	6 2025	7 2026	8 2027	9 2028	10 2029
2.6.1	Asphalt Pavement - Repair	10	9				\$22,350	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					\$45,570
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$21,620			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9				\$85,860	
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9				\$25,410	
16.5.1	Generator - Replace	45	9				\$14,570	
<b>TOTAL EXPENDED BY YEAR</b>				<b>\$0</b>	<b>\$21,620</b>	<b>\$0</b>	<b>\$149,280</b>	<b>\$55,570</b>
CARRY OVER RESERVES				\$360,480	\$410,480	\$438,860	\$488,860	\$389,580
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$0	\$21,620	\$0	\$149,280	\$55,570
ACCUMULATED RESERVES				\$410,480	\$438,860	\$488,860	\$389,580	\$384,010
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
<b>SPECIAL ASSESSMENT</b>								
YEAR-END BALANCE				<b>\$410,480</b>	<b>\$438,860</b>	<b>\$488,860</b>	<b>\$389,580</b>	<b>\$384,010</b>
STUDY YEAR				6 (2025)	7 (2026)	8 (2027)	9 (2028)	10 (2029)

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	11 2030	12 2031	13 2032	14 2033	15 2034
2.6.1	Asphalt Pavement - Repair	10	9					
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14				\$8,520	
2.9.1	Dock Work - Repair	15	0					\$45,000
2.9.2	Dock Pilings - Replace	50	14				\$110,700	
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11	\$29,790				
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4				\$48,830	
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4				\$27,860	
12.1.2	Common Buildings - Repair Contingency	10	4				\$22,350	
15.1.1	Water Meters - Replace	20	11	\$60,790				
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7					
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4				\$91,990	
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
<b>TOTAL EXPENDED BY YEAR</b>				<b>\$90,580</b>	<b>\$0</b>	<b>\$0</b>	<b>\$311,340</b>	<b>\$55,000</b>
CARRY OVER RESERVES				\$384,010	\$343,430	\$393,430	\$443,430	\$182,090
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$90,580	\$0	\$0	\$311,340	\$55,000
ACCUMULATED RESERVES				\$343,430	\$393,430	\$443,430	\$182,090	\$177,090
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
<b>SPECIAL ASSESSMENT</b>								
YEAR-END BALANCE				<b>\$343,430</b>	<b>\$393,430</b>	<b>\$443,430</b>	<b>\$182,090</b>	<b>\$177,090</b>
STUDY YEAR				11 (2030 )	12 (2031 )	13 (2032 )	14 (2033 )	15 (2034 )

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	16 2035	17 2036	18 2037	19 2038	20 2039
2.6.1	Asphalt Pavement - Repair	10	9				\$22,350	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17		\$21,360			
8.3.1	Garage Doors - Replace	20	19				\$4,800	
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19				\$9,440	
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$21,620			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18			\$26,920		
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$42,980	\$26,920	\$37,680	\$10,000
CARRY OVER RESERVES				\$177,090	\$227,090	\$234,110	\$257,190	\$269,510
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$0	\$42,980	\$26,920	\$37,680	\$10,000
ACCUMULATED RESERVES				\$227,090	\$234,110	\$257,190	\$269,510	\$309,510
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$227,090	\$234,110	\$257,190	\$269,510	\$309,510
STUDY YEAR				16 (2035)	17 (2036)	18 (2037)	19 (2038)	20 (2039)

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	21 2040	22 2041	23 2042	24 2043	25 2044
2.6.1	Asphalt Pavement - Repair	10	9					
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					\$80,000
11.1.2	Truck - Replace	10	4				\$48,830	
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4				\$27,860	
12.1.2	Common Buildings - Repair Contingency	10	4				\$22,350	
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7					
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4				\$91,990	
15.6.1	Septic Systems - Replace	15	9				\$25,410	
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$0	\$0	\$217,530	\$90,000
CARRY OVER RESERVES				\$309,510	\$359,510	\$409,510	\$459,510	\$291,980
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$0	\$0	\$0	\$217,530	\$90,000
ACCUMULATED RESERVES				\$359,510	\$409,510	\$459,510	\$291,980	\$251,980
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$359,510	\$409,510	\$459,510	\$291,980	\$251,980
STUDY YEAR				21 (2040)	22 (2041)	23 (2042)	24 (2043)	25 (2044)

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH CONSTANT DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	26 2045	27 2046	28 2047	29 2048	30 2049
2.6.1	Asphalt Pavement - Repair	10	9				\$22,350	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					\$45,000
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,090	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$10,000
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27		\$24,110			
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$21,620			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9				\$85,860	
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$45,730	\$0	\$109,300	\$55,000
CARRY OVER RESERVES				\$251,980	\$301,980	\$306,250	\$356,250	\$296,950
ANNUAL RESERVE CONTRIB				\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
RESERVE EXPENDITURES				\$0	\$45,730	\$0	\$109,300	\$55,000
ACCUMULATED RESERVES				\$301,980	\$306,250	\$356,250	\$296,950	\$291,950
INTEREST EARNED				\$0	\$0	\$0	\$0	\$0
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$301,980	\$306,250	\$356,250	\$296,950	\$291,950
STUDY YEAR				26 (2045)	27 (2046)	28 (2047)	29 (2048)	30 (2049)

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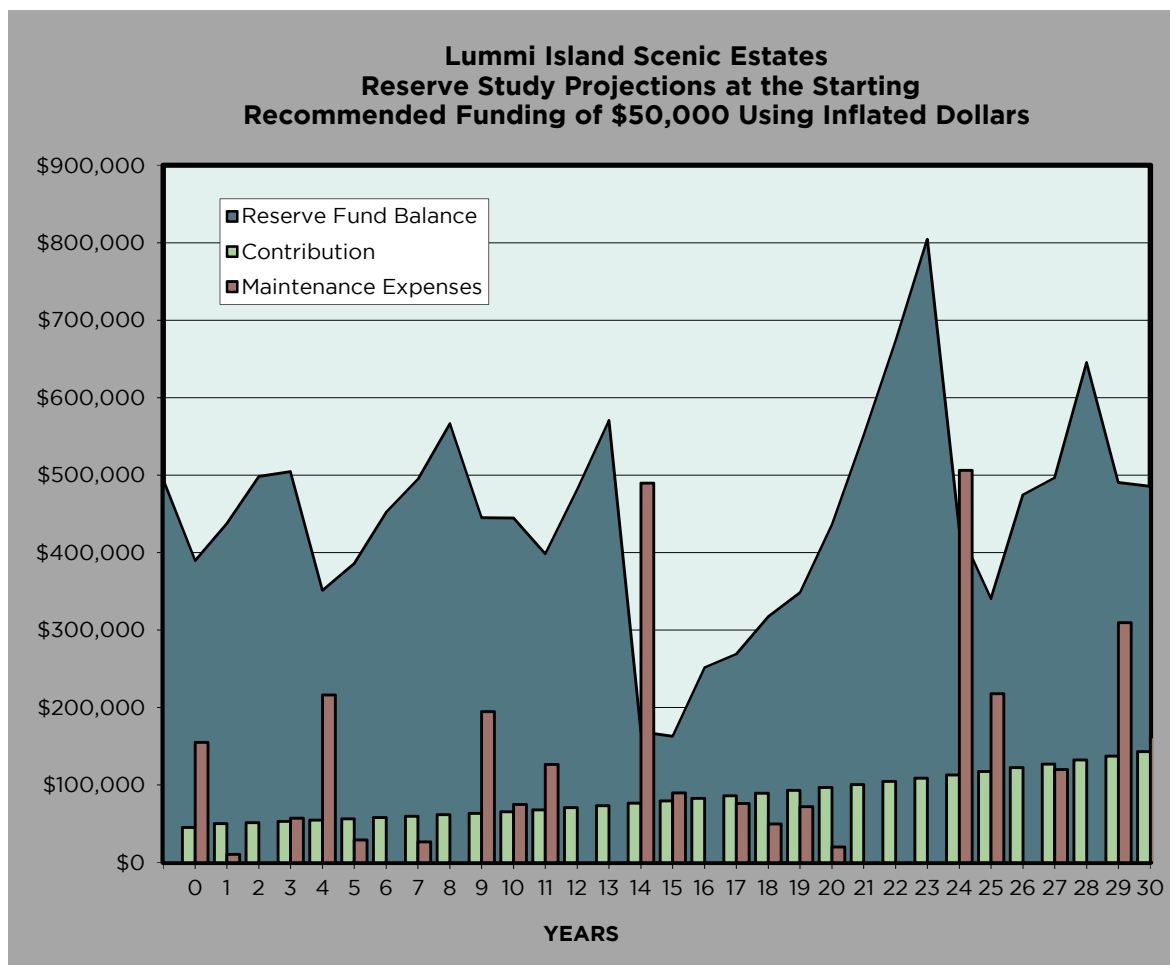
## Reserve Study Projections using Inflated Dollar Values

**Teal Line Graph:** The year-end running reserve fund balance is shown as a line graph in teal and includes compound interest. 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.

**Mint Green Bars:** The annual reserve fund contributions are shown as mint green bars. This chart depicts the annual contribution in inflated dollars, so the contributions are increasing over the 30 year timeline of the study.

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

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





**Reserve Study Projections at the Starting Recommended Funding of \$50,000  
Using Inflated Dollar Values**



## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS  
PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	1 2020	2 2021	3 2022	4 2023	5 2024			
2.6.1	Asphalt Pavement - Repair	10	9	\$56,909							
2.6.2	Asphalt Pavement - Major Repair	40	3								
2.6.3	Asphalt Parking Lot - Overlay	40	10								
2.7.1	Chain Link Fence - Replace	30	14								
2.9.1	Dock Work - Repair	15	0								
2.9.2	Dock Pilings - Replace	50	14	\$10,300							
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1								
7.4.1	Sloped Metal Roofs - Replace	40	11								
7.4.2	Low Sloped Roofs - Replace	20	17								
8.3.1	Garage Doors - Replace	20	19								
11.1.1	Backhoe - Replace	25	0								
11.1.2	Truck - Replace	10	4				\$54,959				
11.1.3	Tractor Mower - Replace	20	19								
11.1.4	Road Sweeper - Maintenance	5	4				\$1,227				
12.1.1	Clubhouse - Repair Contingency	10	4				\$31,357				
12.1.2	Common Buildings - Repair Contingency	10	4				\$25,155				
15.1.1	Water Meters - Replace	20	11								
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$11,593			
15.1.3	Pressure Reducing Valve - Replace	40	39								
15.1.4	Pressure Reducing Valve - Replace	40	0								
15.1.5	Pressure Reducing Valve - Replace	40	5					\$17,389			
15.2.1	Water Towers - Circulation System	30	27								
15.2.2	Water Towers - Repair	50	47								
15.2.3	Reservoir & Dam - Maintenance	10	7								
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18								
15.3.1	Holiday Lake Overflow - Refurbish	40	0								
15.4.1	Treatment Plant - Repair	20	9								
15.5.1	Water Mains - Repair	10	4				\$103,536				
15.6.1	Septic Systems - Replace	15	9								
16.5.1	Generator - Replace	45	9								
TOTAL EXPENDED BY YEAR				\$10,300	\$0	\$56,909	\$216,233	\$28,982			
CARRY OVER RESERVES				\$389,680	\$437,571	\$498,337	\$504,401	\$351,277			
ANNUAL RESERVE CONTRIB				\$50,000	\$51,500	\$53,045	\$54,636	\$56,275			
RESERVE EXPENDITURES				\$10,300	\$0	\$56,909	\$216,233	\$28,982			
ACCUMULATED RESERVES				\$429,380	\$489,071	\$494,473	\$342,805	\$378,570			
INTEREST EARNED				\$8,191	\$9,266	\$9,928	\$8,472	\$7,298			
SPECIAL ASSESSMENT											
YEAR-END BALANCE				\$437,571	\$498,337	\$504,401	\$351,277	\$385,869			
YEARS				0-1	2-10	11-30	1 (2020 )	2 (2021 )	3 (2022 )	4 (2023 )	5 (2024 )
CONTRIBUTION INFLATION				0%	3%	4%	0%	3%	3%	3%	3%
COMPONENT COMPOUND INFLATION				3%	3%	4%	103%	106%	109%	113%	116%
INTEREST RATE MULTIPLIER				2%	2%	3%	2%	2%	2%	2%	2%

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS

PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	6 2025	7 2026	8 2027	9 2028	10 2029
2.6.1	Asphalt Pavement - Repair	10	9				\$29,162	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					\$61,242
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$1,422	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$13,439
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$26,590			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9				\$112,028	
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9				\$33,154	
16.5.1	Generator - Replace	45	9				\$19,011	
TOTAL EXPENDED BY YEAR				\$0	\$26,590	\$0	\$194,777	\$74,681
CARRY OVER RESERVES				\$385,869	\$452,129	\$494,616	\$566,617	\$445,197
ANNUAL RESERVE CONTRIB				\$57,964	\$59,703	\$61,494	\$63,339	\$65,239
RESERVE EXPENDITURES				\$0	\$26,590	\$0	\$194,777	\$74,681
ACCUMULATED RESERVES				\$443,832	\$485,242	\$556,110	\$435,179	\$435,754
INTEREST EARNED				\$8,297	\$9,374	\$10,507	\$10,018	\$8,810
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$452,129	\$494,616	\$566,617	\$445,197	\$444,563
YEARS	0-1	2-10	11-30	6 (2025 )	7 (2026 )	8 (2027 )	9 (2028 )	10 (2029 )
CONTRIBUTION INFLATION	0%	3%	4%	3%	3%	3%	3%	3%
COMPONENT COMPOUND INFLATION	3%	3%	4%	119%	123%	127%	130%	134%
INTEREST RATE MULTIPLIER	2%	2%	3%	2%	2%	2%	2%	2%

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS  
PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	11 2030	12 2031	13 2032	14 2033	15 2034			
2.6.1	Asphalt Pavement - Repair	10	9								
2.6.2	Asphalt Pavement - Major Repair	40	3								
2.6.3	Asphalt Parking Lot - Overlay	40	10								
2.7.1	Chain Link Fence - Replace	30	14				\$13,395				
2.9.1	Dock Work - Repair	15	0					\$73,579			
2.9.2	Dock Pilings - Replace	50	14				\$174,042				
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1								
7.4.1	Sloped Metal Roofs - Replace	40	11	\$41,637							
7.4.2	Low Sloped Roofs - Replace	20	17								
8.3.1	Garage Doors - Replace	20	19								
11.1.1	Backhoe - Replace	25	0								
11.1.2	Truck - Replace	10	4				\$76,770				
11.1.3	Tractor Mower - Replace	20	19								
11.1.4	Road Sweeper - Maintenance	5	4				\$1,714				
12.1.1	Clubhouse - Repair Contingency	10	4				\$43,801				
12.1.2	Common Buildings - Repair Contingency	10	4				\$35,138				
15.1.1	Water Meters - Replace	20	11	\$84,965							
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$16,351			
15.1.3	Pressure Reducing Valve - Replace	40	39								
15.1.4	Pressure Reducing Valve - Replace	40	0								
15.1.5	Pressure Reducing Valve - Replace	40	5								
15.2.1	Water Towers - Circulation System	30	27								
15.2.2	Water Towers - Repair	50	47								
15.2.3	Reservoir & Dam - Maintenance	10	7								
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18								
15.3.1	Holiday Lake Overflow - Refurbish	40	0								
15.4.1	Treatment Plant - Repair	20	9								
15.5.1	Water Mains - Repair	10	4				\$144,626				
15.6.1	Septic Systems - Replace	15	9								
16.5.1	Generator - Replace	45	9								
TOTAL EXPENDED BY YEAR				\$126,601	\$0	\$0	\$489,486	\$89,929			
CARRY OVER RESERVES				\$444,563	\$398,266	\$481,835	\$570,775	\$168,534			
ANNUAL RESERVE CONTRIB				\$67,848	\$70,562	\$73,385	\$76,320	\$79,373			
RESERVE EXPENDITURES				\$126,601	\$0	\$0	\$489,486	\$89,929			
ACCUMULATED RESERVES				\$385,810	\$468,828	\$555,219	\$157,609	\$157,978			
INTEREST EARNED				\$12,456	\$13,006	\$15,556	\$10,926	\$4,898			
SPECIAL ASSESSMENT											
YEAR-END BALANCE				\$398,266	\$481,835	\$570,775	\$168,534	\$162,876			
YEARS				0-1	2-10	11-30	11 (2030 )	12 (2031 )	13 (2032 )	14 (2033 )	15 (2034 )
CONTRIBUTION INFLATION				0%	3%	4%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION				3%	3%	4%	140%	145%	151%	157%	164%
INTEREST RATE MULTIPLIER				2%	2%	3%	3%	3%	3%	3%	3%

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS  
PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	16 2035	17 2036	18 2037	19 2038	20 2039
2.6.1	Asphalt Pavement - Repair	10	9				\$42,751	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17		\$37,775			
8.3.1	Garage Doors - Replace	20	19				\$9,181	
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19				\$18,057	
11.1.4	Road Sweeper - Maintenance	5	4				\$2,085	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$19,893
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$38,235			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18			\$49,512		
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$76,010	\$49,512	\$72,075	\$19,893
CARRY OVER RESERVES				\$162,876	\$251,548	\$269,081	\$317,521	\$348,139
ANNUAL RESERVE CONTRIB				\$82,548	\$85,850	\$89,284	\$92,855	\$96,569
RESERVE EXPENDITURES				\$0	\$76,010	\$49,512	\$72,075	\$19,893
ACCUMULATED RESERVES				\$245,423	\$261,387	\$308,852	\$338,302	\$424,815
INTEREST EARNED				\$6,124	\$7,694	\$8,669	\$9,837	\$11,594
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$251,548	\$269,081	\$317,521	\$348,139	\$436,409
YEARS				0-1	2-10	11-30		
CONTRIBUTION INFLATION				0%	3%	4%	4%	4%
COMPONENT COMPOUND INFLATION				3%	3%	4%	191%	199%
INTEREST RATE MULTIPLIER				2%	2%	3%	3%	3%

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS  
PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	21 2040	22 2041	23 2042	24 2043	25 2044
2.6.1	Asphalt Pavement - Repair	10	9					
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					\$193,625
11.1.2	Truck - Replace	10	4				\$113,639	
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$2,537	
12.1.1	Clubhouse - Repair Contingency	10	4				\$64,837	
12.1.2	Common Buildings - Repair Contingency	10	4				\$52,014	
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$24,203
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27					
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7					
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9					
15.5.1	Water Mains - Repair	10	4				\$214,082	
15.6.1	Septic Systems - Replace	15	9				\$59,135	
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$0	\$0	\$506,242	\$217,829
CARRY OVER RESERVES				\$436,409	\$551,440	\$673,999	\$804,475	\$429,441
ANNUAL RESERVE CONTRIB				\$100,432	\$104,449	\$108,627	\$112,972	\$117,491
RESERVE EXPENDITURES				\$0	\$0	\$0	\$506,242	\$217,829
ACCUMULATED RESERVES				\$536,841	\$655,889	\$782,626	\$411,206	\$329,104
INTEREST EARNED				\$14,599	\$18,110	\$21,849	\$18,235	\$11,378
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$551,440	\$673,999	\$804,475	\$429,441	\$340,482
YEARS	0-1	2-10	11-30	21 (2040 )	22 (2041 )	23 (2042 )	24 (2043 )	25 (2044 )
CONTRIBUTION INFLATION	0%	3%	4%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION	3%	3%	4%	207%	215%	224%	233%	242%
INTEREST RATE MULTIPLIER	2%	2%	3%	3%	3%	3%	3%	3%

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## Lummi Island Scenic Estates

### Reserve Study Projections at Recommended Funding of \$50,000

#### Reserve Consultants LLC

30-YEAR SPREADSHEET WITH INFLATED DOLLARS  
PER YEAR EXPENSES IN 2019 DOLLARS

19-Jun-19

#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	26 2045	27 2046	28 2047	29 2048	30 2049
2.6.1	Asphalt Pavement - Repair	10	9				\$63,282	
2.6.2	Asphalt Pavement - Major Repair	40	3					
2.6.3	Asphalt Parking Lot - Overlay	40	10					
2.7.1	Chain Link Fence - Replace	30	14					
2.9.1	Dock Work - Repair	15	0					\$132,511
2.9.2	Dock Pilings - Replace	50	14					
2.9.3	Swim Lake Dock & Beach - Upgrades	30	1					
7.4.1	Sloped Metal Roofs - Replace	40	11					
7.4.2	Low Sloped Roofs - Replace	20	17					
8.3.1	Garage Doors - Replace	20	19					
11.1.1	Backhoe - Replace	25	0					
11.1.2	Truck - Replace	10	4					
11.1.3	Tractor Mower - Replace	20	19					
11.1.4	Road Sweeper - Maintenance	5	4				\$3,086	
12.1.1	Clubhouse - Repair Contingency	10	4					
12.1.2	Common Buildings - Repair Contingency	10	4					
15.1.1	Water Meters - Replace	20	11					
15.1.2	Pressure Reducing Valve Vaults - Maint.	5	5					\$29,447
15.1.3	Pressure Reducing Valve - Replace	40	39					
15.1.4	Pressure Reducing Valve - Replace	40	0					
15.1.5	Pressure Reducing Valve - Replace	40	5					
15.2.1	Water Towers - Circulation System	30	27		\$63,116			
15.2.2	Water Towers - Repair	50	47					
15.2.3	Reservoir & Dam - Maintenance	10	7		\$56,597			
15.2.4	Mixer Unit & Storage Tanks - Maintenance	20	18					
15.3.1	Holiday Lake Overflow - Refurbish	40	0					
15.4.1	Treatment Plant - Repair	20	9				\$243,107	
15.5.1	Water Mains - Repair	10	4					
15.6.1	Septic Systems - Replace	15	9					
16.5.1	Generator - Replace	45	9					
TOTAL EXPENDED BY YEAR				\$0	\$119,713	\$0	\$309,475	\$161,958
CARRY OVER RESERVES				\$340,482	\$474,720	\$496,438	\$645,475	\$490,231
ANNUAL RESERVE CONTRIB				\$122,191	\$127,078	\$132,162	\$137,448	\$142,946
RESERVE EXPENDITURES				\$0	\$119,713	\$0	\$309,475	\$161,958
ACCUMULATED RESERVES				\$462,672	\$482,086	\$628,599	\$473,448	\$471,220
INTEREST EARNED				\$12,047	\$14,352	\$16,876	\$16,784	\$14,422
SPECIAL ASSESSMENT								
YEAR-END BALANCE				\$474,720	\$496,438	\$645,475	\$490,231	\$485,641
YEARS	0-1	2-10	11-30	26 (2045 )	27 (2046 )	28 (2047 )	29 (2048 )	30 (2049 )
CONTRIBUTION INFLATION	0%	3%	4%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION	3%	3%	4%	252%	262%	272%	283%	294%
INTEREST RATE MULTIPLIER	2%	2%	3%	3%	3%	3%	3%	3%

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### 30 Year Summary at the Recommended Starting Funding of \$50,000 Using Inflated Dollar Values

#### Inflation & Interest Assumptions

	Inflation	Interest
Years 0-1	0%	2%
Years 2-10	3%	2%
Years 11-30	4%	3%

#### Risk of Special Assessment

Nominal Risk	100% and above
Low Risk	70% 99%
Moderate Risk	25% to 69%
Highest Risk	0% to 24%

Fiscal Year End	Fiscal Year Beginning Reserve Balance	Recommended Annual Reserve Contribution	Average Contribution per Unit per Month	Projected Reserve Expenditures	Projected Interest Earned	Fiscal Year End Reserve Balance	Projected Fully Funded Balance	% Funded
1 (2020)	\$389,680	\$50,000	\$10	(\$10,300)	\$8,191	\$437,571	\$484,279	90%
2 (2021)	\$437,571	\$51,500	\$11	(\$0)	\$9,266	\$498,337	\$553,420	90%
3 (2022)	\$498,337	\$53,045	\$11	(\$56,909)	\$9,928	\$504,401	\$571,022	88%
4 (2023)	\$504,401	\$54,636	\$11	(\$216,233)	\$8,472	\$351,277	\$436,156	81%
5 (2024)	\$351,277	\$56,275	\$12	(\$28,982)	\$7,298	\$385,869	\$480,779	80%
6 (2025)	\$385,869	\$57,964	\$12	(\$0)	\$8,297	\$452,129	\$556,669	81%
7 (2026)	\$452,129	\$59,703	\$12	(\$26,590)	\$9,374	\$494,616	\$610,864	81%
8 (2027)	\$494,616	\$61,494	\$13	(\$0)	\$10,507	\$566,617	\$694,400	82%
9 (2028)	\$566,617	\$63,339	\$13	(\$194,777)	\$10,018	\$445,197	\$593,295	75%
10 (2029)	\$445,197	\$65,239	\$14	(\$74,681)	\$8,810	\$444,563	\$607,769	73%
11 (2030)	\$444,563	\$67,848	\$14	(\$126,601)	\$12,456	\$398,266	\$581,115	69%
12 (2031)	\$398,266	\$70,562	\$15	(\$0)	\$13,006	\$481,835	\$679,186	71%
13 (2032)	\$481,835	\$73,385	\$15	(\$0)	\$15,556	\$570,775	\$784,173	73%
14 (2033)	\$570,775	\$76,320	\$16	(\$489,486)	\$10,926	\$168,534	\$421,242	40%
15 (2034)	\$168,534	\$79,373	\$17	(\$89,929)	\$4,898	\$162,876	\$434,952	37%
16 (2035)	\$162,876	\$82,548	\$17	(\$0)	\$6,124	\$251,548	\$539,886	47%
17 (2036)	\$251,548	\$85,850	\$18	(\$76,010)	\$7,694	\$269,081	\$578,723	46%
18 (2037)	\$269,081	\$89,284	\$19	(\$49,512)	\$8,669	\$317,521	\$648,481	49%
19 (2038)	\$317,521	\$92,855	\$19	(\$72,075)	\$9,837	\$348,139	\$702,911	50%
20 (2039)	\$348,139	\$96,569	\$20	(\$19,893)	\$11,594	\$436,409	\$814,119	54%
21 (2040)	\$436,409	\$100,432	\$21	(\$0)	\$14,599	\$551,440	\$953,185	58%
22 (2041)	\$551,440	\$104,449	\$22	(\$0)	\$18,110	\$673,999	\$1,102,074	61%
23 (2042)	\$673,999	\$108,627	\$23	(\$0)	\$21,849	\$804,475	\$1,261,349	64%
24 (2043)	\$804,475	\$112,972	\$24	(\$506,242)	\$18,235	\$429,441	\$940,105	46%
25 (2044)	\$429,441	\$117,491	\$25	(\$217,829)	\$11,378	\$340,482	\$890,817	38%
26 (2045)	\$340,482	\$122,191	\$26	(\$0)	\$12,047	\$474,720	\$1,056,025	45%
27 (2046)	\$474,720	\$127,078	\$27	(\$119,713)	\$14,352	\$496,438	\$1,116,798	44%
28 (2047)	\$496,438	\$132,162	\$28	(\$0)	\$16,876	\$645,475	\$1,301,618	50%
29 (2048)	\$645,475	\$137,448	\$29	(\$309,475)	\$16,784	\$490,231	\$1,198,976	41%
30 (2049)	\$490,231	\$142,946	\$30	(\$161,958)	\$14,422	\$485,641	\$1,241,279	39%

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, as defined by RCW 64.38.010 (9).

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

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.

## Example of how it works: A Roof Replacement

SCENARIO	ANALYSIS
<p><b>If you have a roof that will last 10 years and cost \$100,000 to replace:</b></p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	<p>A. 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 higher than predicted, and expenses that are required earlier than anticipated.</p> <p>B. 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.</p> <p>C. By looking at cash flow demands we are able to determine how much money is needed to fund anticipated replacement and maintenance of the reserve components and recommend a steady contribution over the 30 year span of the study. Budgeting to maintain a minimum balance, or threshold, helps to ensure that a special assessment will not be required if an unexpected expense arises.</p>



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 usually 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.

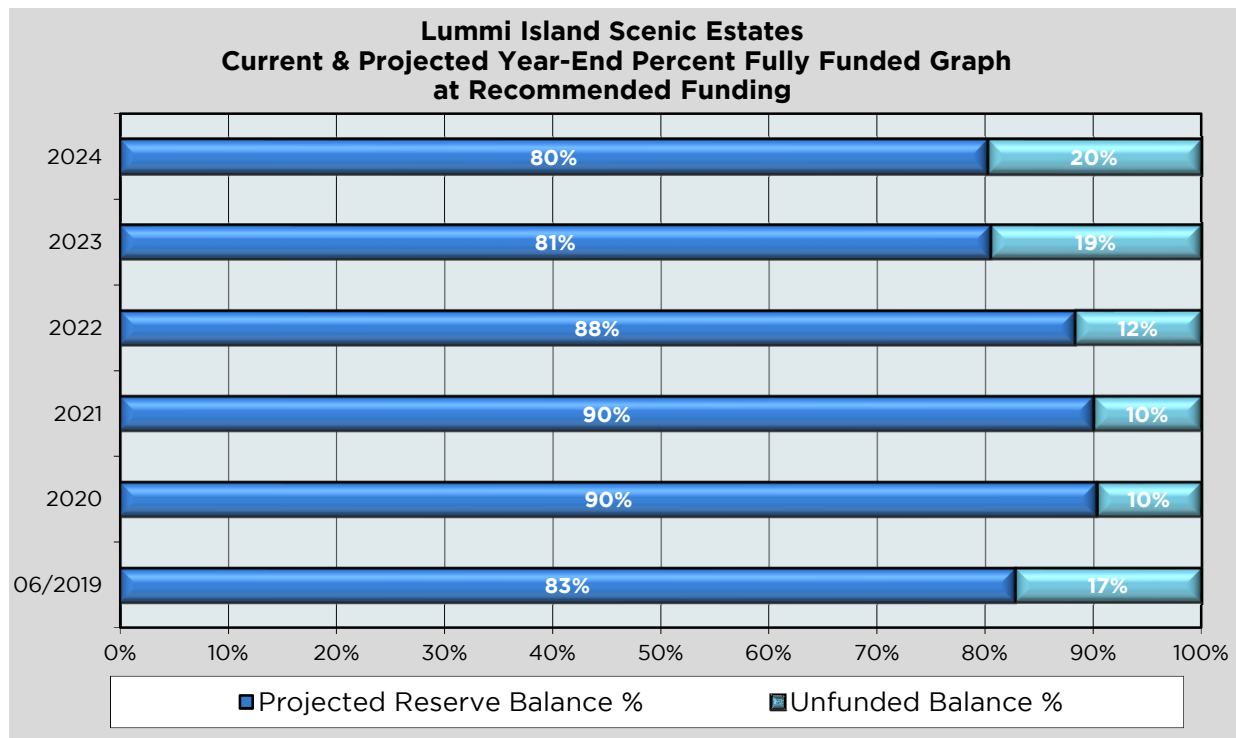
The Fully Funded Balance for Lummi Island Scenic Estates is \$596,258. The actual current funding is \$493,829. The Association is approximately 83% funded.

This means that based on a straight line savings for each reserve component, the Association saved 83% of the accumulated depreciation of the reserve components.

At 83%, Lummi Island Scenic Estates is considered to be at **low risk for a special assessment**.

% Funded	Special Assessment Risk Level	
100% +	Nominal Risk	
70% to 99%	Low Risk	
25% to 69%	Moderate Risk	
24% or less	High Risk	

Below is a graph with the current and projected year-end percent fully funded calculated at the recommended starting annual reserve contribution of \$50,000.





### Deficit or Surplus in Reserve Funding

RCW 64.90.550 §2(l) requires that the reserve study include the amount of any current deficit or surplus in reserve funding expressed on a dollars per unit basis. This is calculated by subtracting the association's reserve account balance as of the date of the study from the fully funded balance, and then multiplying the result by the fraction or percentage of the common expenses of the association allocable to each unit.

Reserve Account Balance as of April 30, 2019	\$493,829
Current Fully Funded Balance	\$596,258
Reserve Fund (Deficit)	(\$102,429)
Number of Units	399
Average (Deficit) per Unit	(\$257)

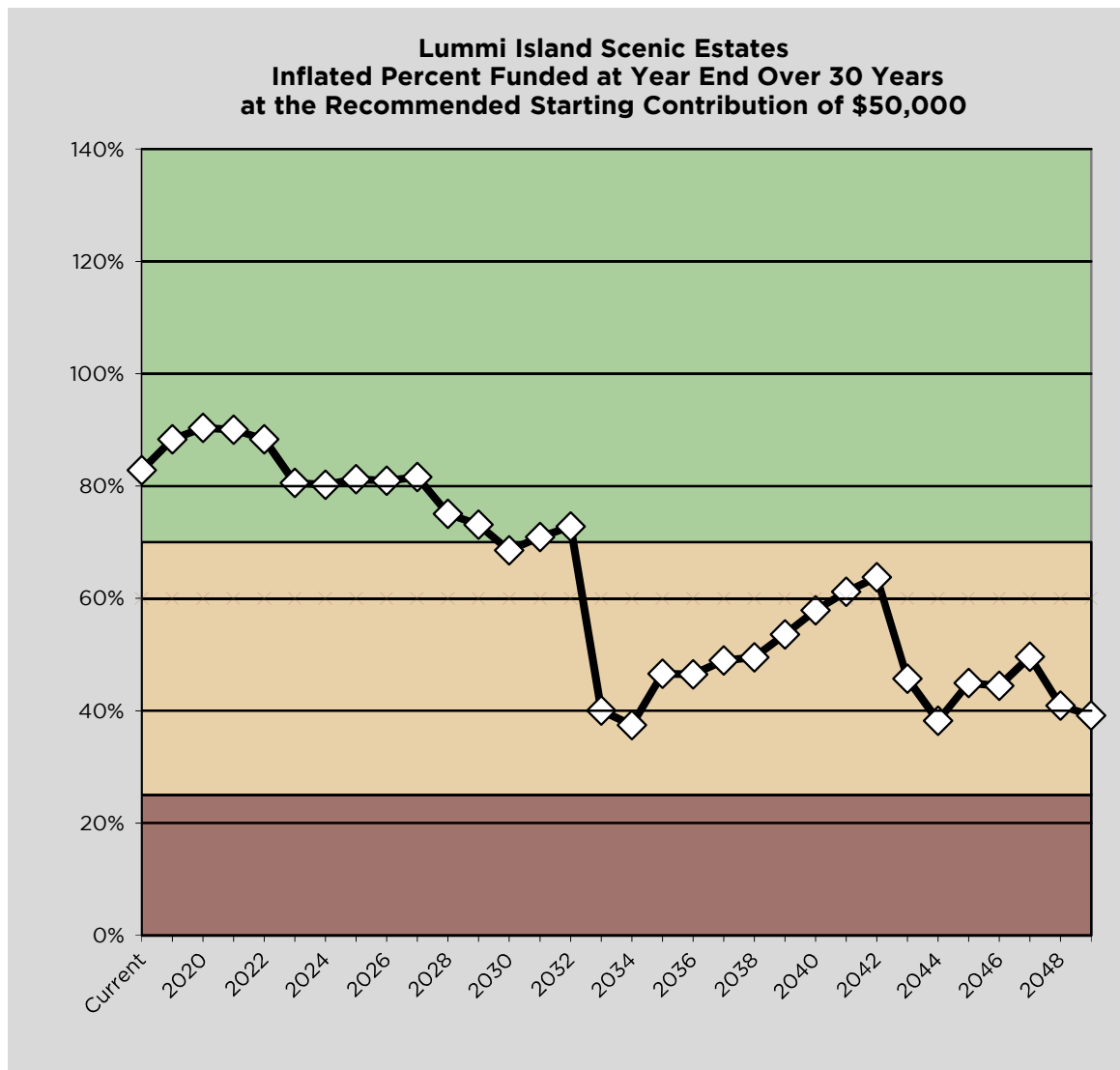
Allocated interest is divided evenly between the units at Lummi Island Scenic Estates.





### Inflated Percent Funded at Year End Over 30 Years

The following chart illustrates the projected percent funded at year end over the next 30 years at the recommended starting contribution rate of \$50,000 . The values include interest and inflation rate assumptions, planned and recommended special assessments.





## **FULLY FUNDED BALANCE CALCULATION TABLE**



## Fully Funded Balance Calculations

## Lummi Island Scenic Estates

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

		Component Description	Quantity	Unit	Maintenance Cycle (Useful Life)	Remaining Useful Life	Effective Age	Current Replacement Cost	Fully Funded Balance
100%	2.6.1	Asphalt Pavement - Repair	1	LS	10	9	1	\$22,350	\$2,235
100%	2.6.2	Asphalt Pavement - Major Repair	16000	SF	40	3	37	\$52,080	\$48,174
100%	2.6.3	Asphalt Parking Lot - Overlay	14000	SF	40	10	30	\$45,570	\$34,178
100%	2.7.1	Chain Link Fence - Replace	320	LF	30	14	16	\$8,520	\$4,544
100%	2.9.1	Dock Work - Repair	1	LS	15	0	15	\$45,000	\$45,000
100%	2.9.2	Dock Pilings - Replace	1	LS	50	14	36	\$110,700	\$79,704
100%	2.9.3	Swim Lake Dock & Beach - Upgrades	1	LS	30	1	29	\$10,000	\$9,667
100%	7.4.1	Sloped Metal Roofs - Replace	33	SQ	40	11	29	\$29,790	\$21,598
100%	7.4.2	Low Sloped Roofs - Replace	17	SQ	20	17	3	\$21,360	\$3,204
100%	8.3.1	Garage Doors - Replace	3	EA	20	19	1	\$4,800	\$240
100%	11.1.1	Backhoe - Replace	1	EA	25	0	25	\$80,000	\$80,000
100%	11.1.2	Truck - Replace	1	EA	10	4	6	\$48,830	\$29,298
100%	11.1.3	Tractor Mower - Replace	1	EA	20	19	1	\$9,440	\$472
100%	11.1.4	Road Sweeper - Maintenance	1	LS	5	4	1	\$1,090	\$218
100%	12.1.1	Clubhouse - Repair Contingency	1	LS	10	4	6	\$27,860	\$16,716
100%	12.1.2	Common Buildings - Repair Contingency	1	LS	10	4	6	\$22,350	\$13,410
100%	15.1.1	Water Meters - Replace	218	EA	20	11	9	\$60,790	\$27,356
100%	15.1.2	Pressure Reducing Valve Vaults - Maint.	1	LS	5	5	-	\$10,000	\$0
100%	15.1.3	Pressure Reducing Valve - Replace	1	LS	40	39	1	\$15,000	\$375
100%	15.1.4	Pressure Reducing Valve - Replace	1	LS	40	0	40	\$15,000	\$15,000
100%	15.1.5	Pressure Reducing Valve - Replace	1	LS	40	5	35	\$15,000	\$13,125
100%	15.2.1	Water Towers - Circulation System	2	EA	30	27	3	\$24,110	\$2,411
100%	15.2.2	Water Towers - Repair	2	EA	50	47	3	\$15,320	\$919
100%	15.2.3	Reservoir & Dam - Maintenance	1	LS	10	7	3	\$21,620	\$6,486
100%	15.2.4	Mixer Unit & Storage Tanks - Maintenance	1	LS	20	18	2	\$26,920	\$2,692
100%	15.3.1	Holiday Lake Overflow - Refurbish	1	LS	40	0	40	\$15,000	\$15,000
100%	15.4.1	Treatment Plant - Repair	1	LS	20	9	11	\$85,860	\$47,223
100%	15.5.1	Water Mains - Repair	17849	LF	10	4	6	\$91,990	\$55,194
100%	15.6.1	Septic Systems - Replace	2	EA	15	9	6	\$25,410	\$10,164
100%	16.5.1	Generator - Replace	1	EA	45	9	36	\$14,570	\$11,656
FULLY FUNDED BALANCE								Total	\$596,258

CURRENT RESERVE BALANCE = \$493,829

PERCENT FULLY FUNDED = 83%

June 19, 2019

## ABBREVIATION KEY

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

LF linear foot  
LS lump sum  
SF square feet

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 §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.

### Supplemental Budget Information on Reserves for Sample Association

In Compliance with RCW 64.34.308 & RCW 64.38.025

April 4, 2018

Funding Information		
\$19,000	Proposed annual contribution to reserves for the fiscal year ending in 2019 per the budget.	
\$80,000	Projected fiscal year end 2018 reserve balance per the budget.	
\$17,800	Budgeted annual contribution to reserves for the current fiscal year ending in 2018.	

Information from the Most Recent Reserve Study		
65%	Percent fully funded as of the date of the most recent reserve study.	
\$19,700	Recommended annual contribution to reserves for the fiscal year ending in 2019.	
Threshold	Type of funding plan used for recommended annual funding per the most recent reserve study.	
\$90,563	Projected fiscal year end 2018 reserve balance per the most recent reserve study.	
Yes	Based upon the most recent reserve study, will the Association have funds to meet obligations for the next 30 years at the <b>current contribution rate</b> ?	

\* We assume the current contribution rate will be adjusted annually for inflation. Not doing so may cause a failure to meet obligations

Anticipated Reserve Funding Shortfalls Over the Next 30 Years					
\$17,800 Current Fiscal Year Reserve Contribution			\$19,000 Proposed Annual Reserve Contribution		
Fiscal Year End	Projected Funding Shortfall	Average Shortfall Per Unit Per Year	Fiscal Year End	Projected Funding Shortfall	Average Shortfall Per Unit Per Year
None			None		

Proposed Additional Regular or Special Assessment for Fiscal Year End 2019		
No	Is additional funding (Regular or Special Assessment) planned in the proposed budget?	
N/A	Amount of additional Regular or Special Assessment.	The purpose for the additional funding:
N/A	Average amount per unit per year.	N/A
N/A	Average amount per unit per month.	
N/A	Date assessment is due.	

Comparison of Fiscal Year End Projections for Next Five Years								
\$17,800 Current Reserve Contribution			\$19,700 Recommended Reserve Contribution			\$19,000 Proposed Reserve Contribution		
Fiscal Year End	Reserve Account Balance	Percent Fully Funded	Fiscal Year End	Reserve Account Balance	Percent Fully Funded	Fiscal Year End	Reserve Account Balance	Percent Fully Funded
2019	\$91,070	72%	2019	\$92,970	73%	2019	\$92,270	73%
2020	\$102,582	73%	2020	\$106,458	75%	2020	\$105,030	74%
2021	\$116,924	74%	2021	\$122,854	78%	2021	\$120,669	76%
2022	\$123,895	74%	2022	\$131,961	79%	2022	\$128,990	77%
2023	\$128,184	73%	2023	\$138,469	79%	2023	\$134,680	77%

Contributions and expenses are both inflated for the 5 Year Projection calculations

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RCW 64.90.525 §2 of the WUCIOA requires that the budget disclosure include:

- (d) The current amount of regular assessments budgeted for contribution to the reserve account;
- (e) A statement of whether the association has a reserve study that meets the requirements of RCW 64.90.550 of this act and, if so, the extent to which the budget meets or deviates from the recommendations of that reserve study; and
- (f) The current deficiency or surplus in reserve funding expressed on a per unit basis

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 WUCIOA SBI at no additional charge within one year of issuing the draft of the reserve study report.

### Supplemental Budget Information on Reserves for Sample Association

In Compliance with RCW 64.90.525 (Washington Uniform Common Interest Owners Act - WUCIOA) Sections 2(d) through 2(f)  
September 18, 2018

#### Funding Information

✓	Sample Association does have a current reserve study that complies with RCW 64.90.550 (WUCIOA).
✓	Sample Association does have a reserve study that complies with RCW 64.34.382 (Condominium Act).
\$17,800	The current regular reserve assessments budgeted for annual contribution to the reserve account.
\$19,700	The Recommended annual contribution to reserves for the fiscal year ending in 2019.
\$19,500	The Proposed annual contribution to reserves for the fiscal year ending in 2019 per the budget.
✗	<b>The proposed budget does not meet or exceed the reserve study recommendations.</b>
(\$200)	Difference between the Proposed and Recommended annual contribution to reserves.

#### Current (Deficiency) In Reserve Funds Compared to the Fully Funded Balance on a per Unit Basis

\$102,000	The projected fiscal year end 2018 reserve balance per the budget.
\$117,106	The projected fiscal year end 2018 Fully Funded Balance per the reserve study.
(\$15,106)	The total (deficiency) in reserves, compared to the Fully Funded Balance.

Unit Number	Allocated Interest	(Deficiency) per Unit	Unit Number	Allocated Interest	(Deficiency) per Unit	Unit Number	Allocated Interest	(Deficiency) per Unit
101	6.00%	(\$906.35)	201	6.00%	(\$906.35)	301	6.00%	(\$906.35)
102	7.00%	(\$1,057.40)	202	7.00%	(\$1,057.40)	302	7.00%	(\$1,057.40)
103	9.00%	(\$1,359.52)	203	9.00%	(\$1,359.52)	303	9.00%	(\$1,359.52)
104	11.30%	(\$1,706.95)	204	11.30%	(\$1,706.95)	304	11.40%	(\$1,722.06)
<b>Column Total</b>	<b>33.30%</b>	<b>(\$5,030.22)</b>	<b>Column Total</b>	<b>33.30%</b>	<b>(\$5,030.22)</b>	<b>Column Total</b>	<b>33.40%</b>	<b>(\$5,045.33)</b>



## 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 the Community Associations 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 record.





## APPENDIX - GLOSSARY OF TERMS

**Allocated Interests** - the following interests allocated to each unit: (a) In a condominium, the undivided interest in the common elements, the common expense liability, and votes in the association; (b) In a cooperative, the common expense liability, the ownership interest, and votes in the association; and (c) In a plat community and miscellaneous community, the common expense liability and the votes in the association, and also the undivided interest in the common elements if owned in common by the unit owners rather than an association. RCW 64.90.010 §2.

**Assessment** - all sums chargeable by the association against a unit, including any assessments levied pursuant to RCW 64.90.480, fines or fees levied or imposed by the association pursuant to this chapter or the governing documents, interest and late charges on any delinquent account, and all costs of collection incurred by the association in connection with the collection of a delinquent owner's account, including reasonable attorneys' fees. RCW 64.90.010 §3.

**Association or Unit Owners Association** - the unit owners association organized under RCW 64.90.400 of WUCIOA and, to the extent necessary to construe sections of this chapter made applicable to common interest communities pursuant to RCW 64.90.085, 64.90.095, or 64.90.100 of WUCIOA, the association organized or created to administer such common interest communities. RCW §64.90.010 §4)

**Baseline Funding Plan** - 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 excess funds some years.

**Board** - the body, regardless of name, designated in the declaration, map, or organizational documents, with primary authority to manage the affairs of the association. RCW §64.90.010 §6.

**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. The numbers are based roughly on the Construction Specification Institute system.

**Common Elements** - (a) In a condominium or cooperative, all portions of the common interest community other than the units; (b) In a plat community or miscellaneous community, any real estate other than a unit within a plat community or miscellaneous community that is owned or leased either by the association or in common by the unit owners rather than an association; and (c) In all common interest communities, any other interests in real estate for the benefit of any unit owners that are subject to the declaration. RCW §64.90.010 §7.

**Common Expense** - any expense of the association, including allocations to reserves, allocated to all of the unit owners in accordance with common expense liability. RCW §64.90.010 §8.

**Common Expense Liability** - the liability for common expenses allocated to each unit pursuant to RCW 64.90.040 of RCW. RCW §64.90.010 §9.

**Common Interest Community** - real estate described in a declaration with respect to which a person, by virtue of the person's ownership of a unit, is obligated to pay for a share of real estate taxes, insurance premiums, maintenance, or improvement of, or services or other expenses related to, common elements, other units, or other real estate described in the declaration. "Common interest community" does not include an arrangement described in RCW 64.90.110 or RCW 64.90.115. A common interest community may be a part of another common interest community. RCW §64.90.010 §10.

**Contribution Rate** - in a Reserve Study as described in RCW 64.38, 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** - costs and contributions are provided in today's dollars, no matter how far in the future they occur. Inflation and interest are not factored in.

**Effective Age** - the difference between the useful life and the remaining useful life. RCW 64.38.010 §7 & RCW §64.90.010 §21.

**Full Funding Plan** - a reserve funding goal of achieving one hundred percent fully funded reserves by the end of the thirty-year study period described under RCW 64.90.550 of WUCIOA, in which the reserve account balance equals the sum of the estimated costs required to maintain, repair, or replace the deteriorated portions of all reserve components. RCW §64.90.010 §25.

**Fully Funded Balance** - 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 & RCW §64.90.010 §26.

**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** - a portion of the common elements allocated by the declaration or by operation of RCW 64.90.210 §1(b) or §2

for the exclusive use of one or more, but fewer than all, of the unit owners. RCW §64.90.010 §30.

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.

**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.

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

**Nominal Reserve Costs** - the current estimated total replacement costs of the reserve components are less than fifty percent of the annual budgeted expense of the association, excluding contributions to the reserve funds, for a condominium or cooperative containing horizontal unit boundaries and less than seventy five percent of the annual budgeted expenses of the association, excluding contributions to the reserve fund for all other common interest communities. RCW §64.90.010 §34.

**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 formed prior to June 30, 2018.

RCW 64.90 is the Uniform Common Interest Ownership Act (**WUCIOA**) and governs common interest properties formed after July 1, 2018 and requires all common interest properties in Washington State to comply with RCW 64.90.525.

**Remaining useful life** - the estimated time, in years, that a reserve component can be expected to continue to serve its intended function. RCW 64.38.010 §14.

Or the estimated time before a reserve component will require major maintenance, repair or replacement to perform its intended function. RCW §64.90.010 §44.

**Replacement Cost** - the current cost of replacing, repairing, or restoring a reserve component to its original functional condition. RCW 64.38.010 §15.





Or the estimated total cost to maintain, repair, or replace a reserve component to its original functional condition. RCW §64.90.010 §45.

**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 Component** - 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.

Or a physical component of the common interest community which the association is obligated to maintain, repair, or replace, which has an estimated useful life of less than thirty years, and for which the cost of such maintenance, repair or replacement is infrequent, significant, and impractical to include in an annual budget. RCW §64.90.010 §46.

**Reserve Contribution Rate** - 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 ([www.caionline.org](http://www.caionline.org)) 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, RCW 64.90.545 and RCW 64.90.550. For

the purposes of WUCIOA, "independent" means a person who is not an employee, officer, or director, and has no pecuniary interest in the declarant, association, or any other party for whom the reserve study is prepared. RCW §64.90.010 §47.

**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 or the estimated time during which a reserve component is expected to perform its intended function without major maintenance, repair or replacement. RCW §64.90.010 §59.

**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 - EVALUATOR'S CREDENTIALS

### Denise Dana

#### **Principal**

Reserve Consultants LLC

B.S. Education,  
M. Architecture

Washington Registered  
Architect, #8702

LEED Accredited Professional

Reserve Specialist, #291

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.