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## Update “No Site-Visit” Reserve Study



### HMC Management Lakebay, WA

**Report #: 24901-2**  
**For Period Beginning: October 1, 2015**  
**Expires: September 30, 2016**

**Date Prepared: March 13, 2015**



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**Hello, and welcome to your Reserve Study!**

**W**e don't want you to be surprised. This Report is designed to help you anticipate, and prepare for, the major common area expenses your association will face. Inside you will find:

- 1) **The Reserve Component List** (the “Scope and Schedule” of your Reserve projects) – telling you what your association is Reserving for, what condition they are in now, and what they'll cost to replace.
- 2) **An Evaluation of your current Reserve Fund Size and Strength** (Percent Funded). This tells you your financial starting point, revealing your risk of deferred maintenance and special assessments.
- 3) **A Recommended Multi-Year Reserve Funding Plan**, answering the question... “What do we do now?”

**More Questions?**

Visit our website at [www.ReserveStudy.com](http://www.ReserveStudy.com) or call us at:

253/661-5437

Relax, it's from



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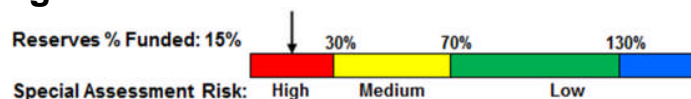
## 3- Minute Executive Summary

**Association:** HMC Management **#:** 24901-2  
**Location:** Lakebay, WA **# of Units:** 388  
**Report Period:** October 1, 2015 through September 30, 2016

### *Findings/Recommendations as-of 10/1/2015:*

Projected Starting Reserve Balance: .....	\$546,244
Current Fully Funded Reserve Balance: .....	\$3,692,235
Average Reserve Deficit (Surplus) Per Unit:.....	\$8,108
100% 2015/2016 Annual "Full Funding" Contributions:.....	\$331,352
70% 2015/2016 Annual "Threshold Funding" Contributions:.....	\$262,500
Baseline contribution (min to keep Reserves above \$0): .....	\$106,880
Recommended 2015/2016 Special Assessment for Reserves:.....	\$465,600

**Most Recent Budgeted Reserve Contribution Rate: .....**\$118,250



### *Economic Assumptions:*

**Net Annual "After Tax" Interest Earnings Accruing to Reserves.....** 1.00%  
**Annual Inflation Rate .....** 3.00%

- This is an "Update No-Site-Visit" Reserve Study, based on our most recent NSV Report prepared for your 2014/2015 Fiscal Year. Refer to photo pages of the 2013/2014 Full report for additional component information. No site inspection was performed as part of this Reserve Study, which was prepared by, or under the supervision of a credentialed Reserve Specialist (RS 153).
- Your Reserve Fund is currently 15% Funded. This means the association's special assessment & deferred maintenance risk is currently low. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.
- Based on this starting point and your anticipated future expenses, **we are forced to recommend levy of Four-Year Special Assessment of \$465,000 in each year FY 2015/2016 through and including FY 2018/2019. Additionally, our recommendation is to substantially increase your Reserve contributions to within the 70% to 100% level as noted above.** 100% "Full" and 70% contribution rates are designed to achieve these funding objectives *by the end of our 30-year report scope*. No assets appropriate for Reserve designation were knowingly excluded. See appendix for component details; the basis of our assumptions.

Table 1: Executive Summary

24901-2

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
<b>Site/Grounds/Recreation</b>				
200	Asphalt Roads - Repair/Resurface	30	10	\$24,500
204	Gravel Roads/Lots - Maintain/Repair	5	4	\$28,000
280	Play Equipment - Replace	20	2	\$40,000
282	Basketball Court - Repair/Replace	25	23	\$18,000
290	Pavilion - Replace Roof	25	13	\$7,400
<b>Small Boat Marina</b>				
302	Small Boat Docks/Floats-Replace	30	16	\$120,000
306	Small Boat Dock Pilings - Replace	50	46	\$200,000
320	Small Boat Trestle/Ramp - Replace	30	16	\$82,000
336	Small Boat Gangway - Replace	30	16	\$7,250
<b>Community Building</b>				
410	Community Building Siding-Replace	50	39	\$21,500
430	Community Building Roof - Replace	40	27	\$17,000
460	Community Blding Septic - Replace	50	16	\$8,200
<b>Equipment</b>				
540	Dust/Water Truck - Replace	12	1	\$15,000
<b>Ferry System</b>				
700	Ferry Terminals - Inspect/Repair	2	2	\$18,000
702	Ferry Terminals - Paint	12	12	\$240,000
704	Ferry Terminal Cables - Replace	6	5	\$27,500
707	Ferry Terminal Structures - Replace	60	38	\$2,250,000
708	Ferry Ramp Dolphins - Replace	50	3	\$2,000,000
712	Ferry Ramp Generators - Replace	20	11	\$36,500
740	Ferry Vessel - Shipyard	2	1	\$92,500
744	Ferry Vessel - Overhaul Engines	5	3	\$36,500
746	Ferry Vessel - Replace Engines	50	48	\$157,500
755	Ferry Vessel-Overhaul Transmissions	5	3	\$13,500
757	Ferry Vessel-Replace Transmissions	25	23	\$31,500
760	Ferry Vessel - Replace	60	34	\$1,500,000
<b>Professional/Special Projects</b>				
940	Legal Contingency Fund	N/A	0	\$35,000
26	Total Funded Components			

Note:

A Useful Life of “N/A” means a one-time expense, not expected to repeat.

Yellow highlighted line items are expected to require attention in the initial year.

Green highlighted items are expected to occur within the first five years.

Cross reference component numbers with inventory appendix.

A reserve-funding threshold of \$6,000 is recommended for your association (expenses below this level expected to be factored within operating budget).

## Introduction



A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the *scope and schedule* of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.



Reserve contributions are not "for the future". Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

## Methodology



For this [Update No-Site-Visit](#) Reserve Study, we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and

researched any well-established association precedents. We *updated and adjusted* your Reserve Component List on the basis of time elapsed since the last Reserve Study and interviews with association representatives.



### *Which Physical Assets are Funded by Reserves?*

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.



### *How do we establish Useful Life and Remaining Useful Life estimates?*

- 1) Visual Inspection (observed wear and age)
- 2) Association Reserves database of experience
- 3) Client History (install dates & previous life cycle information)
- 4) Vendor Evaluation and Recommendation

### *How do we establish Current Repair/Replacement Cost Estimates?*

In this order...

- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

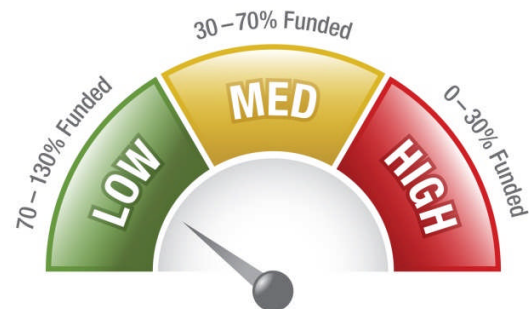


### *How much Reserves are enough?*

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the *amount* of current Reserve cash is compared to Reserve component deterioration (the *needs of the association*). Having *enough* means the association can execute its projects in a timely manner with existing Reserve funds. Not having *enough* typically creates deferred maintenance or special assessments.

Adequacy is measured in a two-step process:

- 1) Calculate the *value of deterioration* at the association (called Fully Funded Balance, or FFB).
- 2) Compare that to the Reserve Fund Balance, and express as a percentage.



**SPECIAL ASSESSMENT RISK**

Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is high risk of special assessments and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% -130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

### How much should we contribute?



#### RESERVE FUNDING PRINCIPLES

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Board members to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Board members invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

### What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the *value* of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up", the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that associations in the 70-130% range *enjoy a low risk of special assessments or deferred maintenance.*



#### FUNDING OBJECTIVES

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0-30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away. Your *first five years* of projected Reserve expenses total \$2,600,198. Adding the next five years, your *first ten years* of projected Reserve expenses are \$3,117,933. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in Table 5, while details of the projects that make up these expenses are shown in Table 6.

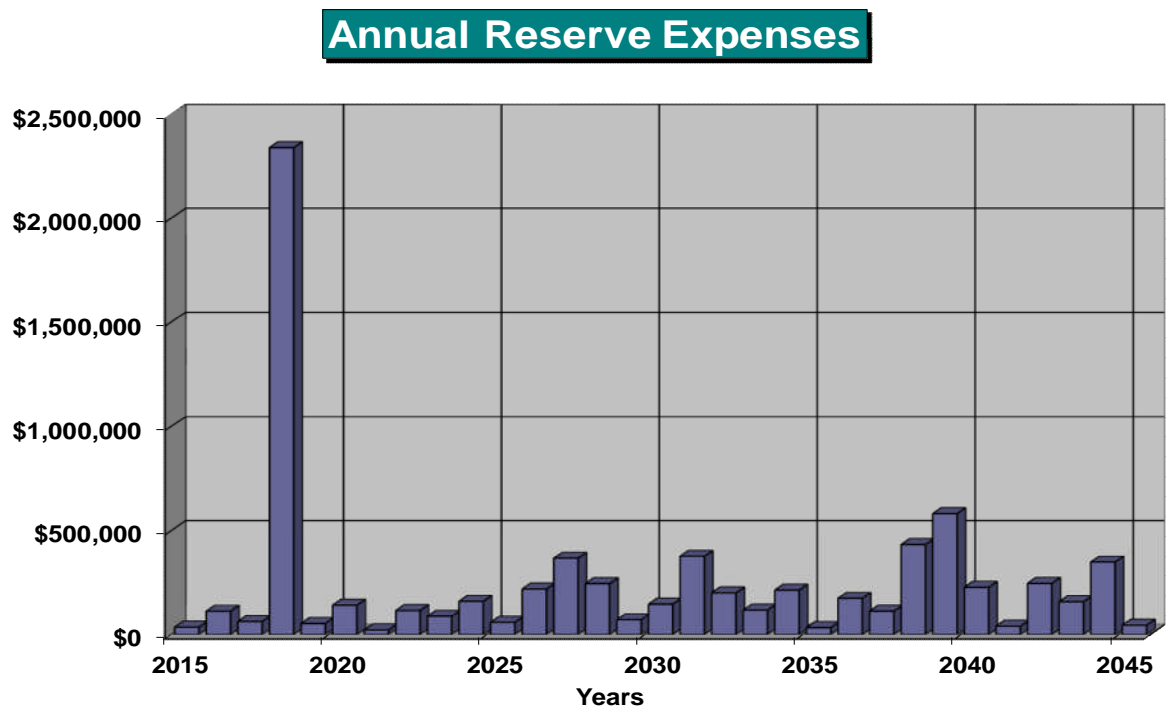


Figure 1

## Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$546,244 as-of the start of your Fiscal Year on October 1, 2015. As of October 1, 2015, your Fully Funded Balance is computed to be \$3,692,235 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 15% Funded. Across the country, approx 48% of associations in this range experience special assessments or deferred maintenance.

## Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$331,352 this Fiscal Year along with a special assessment of \$465,600. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both Table 5 and Table 6.

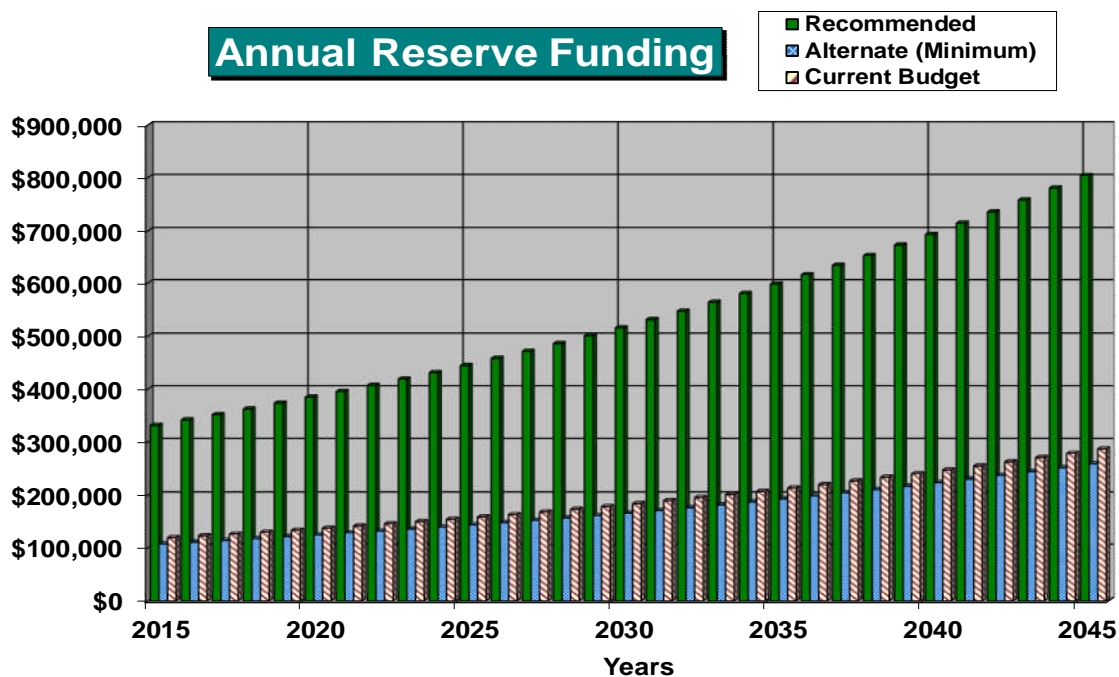


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate, compared to your always-changing Fully Funded Balance target.

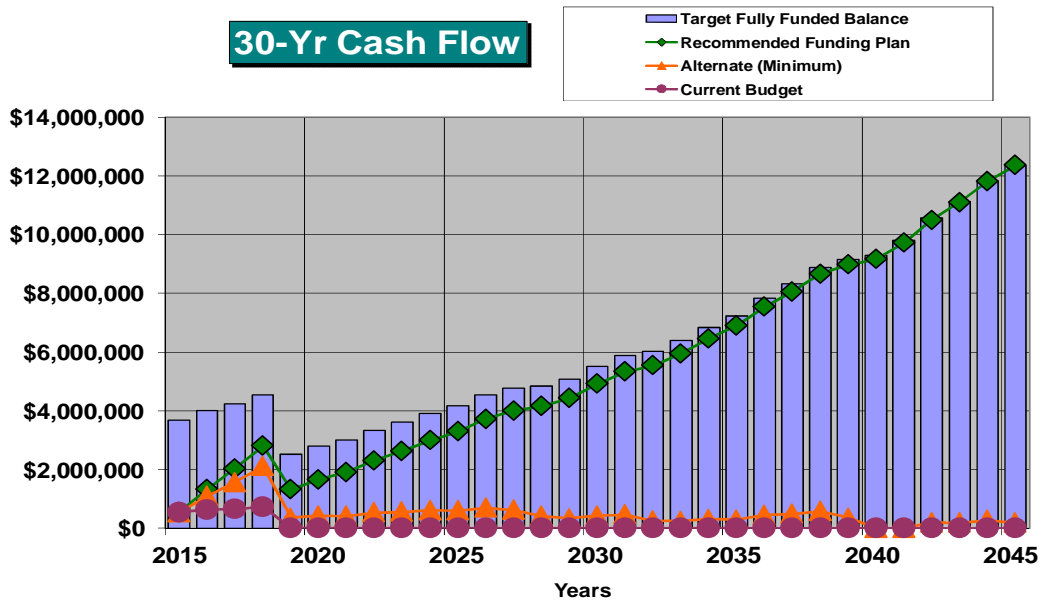


Figure 3

This figure shows this same information, plotted on a [Percent Funded](#) scale.

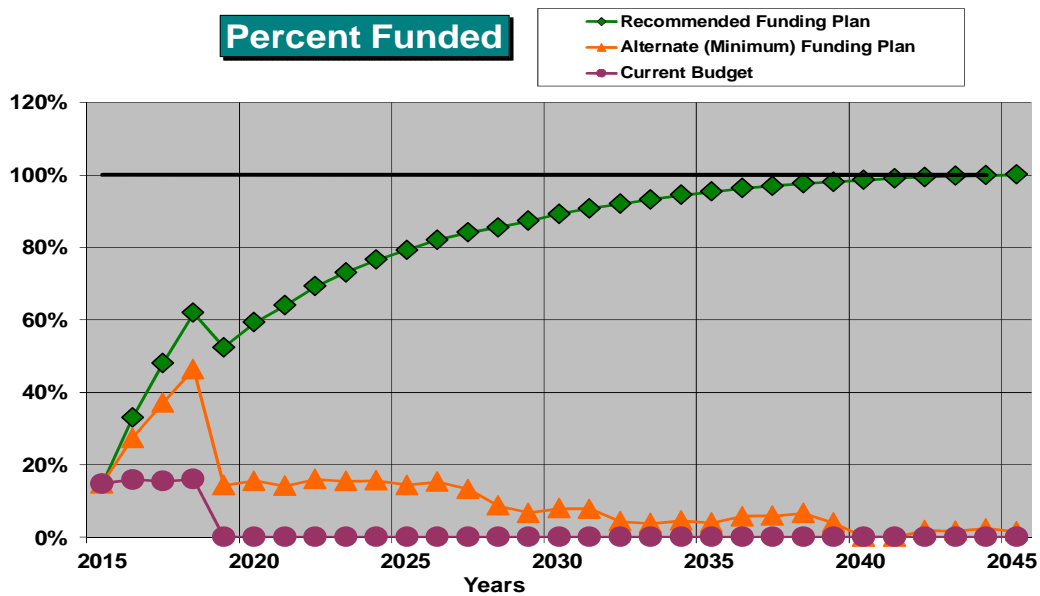


Figure 4

## **Table Descriptions**

The tabular information in this Report is broken down into six tables.

Table 1 is a summary of your Reserve Components (your Reserve Component List), the information found in Table 2.

Table 2 is your Reserve Component List, which forms the foundation of this Reserve Study. This table represents the information from which all other tables are derived.

Table 3 shows the calculation of your Fully Funded Balance, the measure of your current Reserve component deterioration. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Table 4 shows the significance of each component to Reserve needs of the association, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/year of each component is calculated by dividing the estimated Current Replacement Cost by Useful Life, then that component's percentage of the total is displayed.

Table 5: This table provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk for each year.

Table 6: This table shows the cash flow detail for the next 30 years. This table makes it possible to see which components are projected to require repair or replacement each year, and the size of those individual expenses.

**Table 2: Reserve Component List Detail****24901-2**

#	Component	Quantity	Useful Life	Rem. Useful Life	[ --- Current Cost Estimate --- ]	
					Best Case	Worst Case
Site/Grounds/Recreation						
200	Asphalt Roads - Repair/Resurface	Approx 10,500 square feet	30	10	\$22,000	\$27,000
204	Gravel Roads/Lots - Maintain/Repair	Approx 500,000 surface SF	5	4	\$24,000	\$32,000
280	Play Equipment - Replace	(5) assorted	20	2	\$35,000	\$45,000
282	Basketball Court - Repair/Replace	Approx 1,100 SF, total	25	23	\$17,000	\$19,000
290	Pavilion - Replace Roof	Approx 2,200 SF	25	13	\$6,800	\$8,000
Small Boat Marina						
302	Small Boat Docks/Floats-Replace	Approx 2,600 square feet	30	16	\$110,000	\$130,000
306	Small Boat Dock Pilings - Replace	(15) steel	50	46	\$190,000	\$210,000
320	Small Boat Trestle/Ramp - Replace	Approx 630 square feet	30	16	\$66,000	\$98,000
336	Small Boat Gangway - Replace	(1) aluminum, ~4'x20'	30	16	\$6,200	\$8,300
Community Building						
410	Community Building Siding-Replace	Approx 1,400 GSF	50	39	\$17,000	\$26,000
430	Community Building Roof - Replace	Approx 2,700 GSF	40	27	\$14,000	\$20,000
460	Community Blding Septic - Replace	(1) system	50	16	\$6,400	\$10,000
Equipment						
540	Dust/Water Truck - Replace	(1) 1991 Chevy Kodiak	12	1	\$12,000	\$18,000
Ferry System						
700	Ferry Terminals - Inspect/Repair	Approx 6,100 square feet	2	2	\$16,000	\$20,000
702	Ferry Terminals - Paint	Approx 6,100 square feet	12	12	\$230,000	\$250,000
704	Ferry Terminal Cables - Replace	Extensive linear feet	6	5	\$25,000	\$30,000
707	Ferry Terminal Structures - Replace	Approx 6,100 square feet	60	38	\$2,000,000	\$2,500,000
708	Ferry Ramp Dolphins - Replace	(8) assemblies	50	3	\$1,500,000	\$2,500,000
712	Ferry Ramp Generators - Replace	(2) Generac 35kw	20	11	\$33,000	\$40,000
740	Ferry Vessel - Shipyard	65' LOA	2	1	\$85,000	\$100,000
744	Ferry Vessel - Overhaul Engines	(2) GM 300 HP, diesel	5	3	\$31,000	\$42,000
746	Ferry Vessel - Replace Engines	(2) GM 300 HP, diesel	50	48	\$150,000	\$165,000
755	Ferry Vessel-Overhaul Transmissions	(2) Twin Disc MG 5091 SC	5	3	\$12,000	\$15,000
757	Ferry Vessel-Replace Transmissions	(2) Twin Disc MG 5091 SC	25	23	\$29,500	\$33,500
760	Ferry Vessel - Replace	65' LOA	60	34	\$1,300,000	\$1,700,000
Professional/Special Projects						
940	Legal Contingency Fund	\$35,000	N/A	0	\$34,000	\$36,000



**Table 2: Reserve Component List Detail****24901-2**

#	Component	Quantity	Useful	Rem. Useful	[ --- Current Cost Estimate --- ]	
			Life	Life	Best Case	Worst Case
26	Total Funded Components					

**Table 3: Fully Funded Balance****24901-2**

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
<b>Site/Grounds/Recreation</b>								
200	Asphalt Roads - Repair/Resurface	\$24,500	X	20	/	30	=	\$16,333
204	Gravel Roads/Lots - Maintain/Repair	\$28,000	X	1	/	5	=	\$5,600
280	Play Equipment - Replace	\$40,000	X	18	/	20	=	\$36,000
282	Basketball Court - Repair/Replace	\$18,000	X	2	/	25	=	\$1,440
290	Pavilion - Replace Roof	\$7,400	X	12	/	25	=	\$3,552
<b>Small Boat Marina</b>								
302	Small Boat Docks/Floats-Replace	\$120,000	X	14	/	30	=	\$56,000
306	Small Boat Dock Pilings - Replace	\$200,000	X	4	/	50	=	\$16,000
320	Small Boat Trestle/Ramp - Replace	\$82,000	X	14	/	30	=	\$38,267
336	Small Boat Gangway - Replace	\$7,250	X	14	/	30	=	\$3,383
<b>Community Building</b>								
410	Community Building Siding-Replace	\$21,500	X	11	/	50	=	\$4,730
430	Community Building Roof - Replace	\$17,000	X	13	/	40	=	\$5,525
460	Community Bldg Septic - Replace	\$8,200	X	34	/	50	=	\$5,576
<b>Equipment</b>								
540	Dust/Water Truck - Replace	\$15,000	X	11	/	12	=	\$13,750
<b>Ferry System</b>								
700	Ferry Terminals - Inspect/Repair	\$18,000	X	0	/	2	=	\$0
702	Ferry Terminals - Paint	\$240,000	X	0	/	12	=	\$0
704	Ferry Terminal Cables - Replace	\$27,500	X	1	/	6	=	\$4,583
707	Ferry Terminal Structures - Replace	\$2,250,000	X	22	/	60	=	\$825,000
708	Ferry Ramp Dolphins - Replace	\$2,000,000	X	47	/	50	=	\$1,880,000
712	Ferry Ramp Generators - Replace	\$36,500	X	9	/	20	=	\$16,425
740	Ferry Vessel - Shipyard	\$92,500	X	1	/	2	=	\$46,250
744	Ferry Vessel - Overhaul Engines	\$36,500	X	2	/	5	=	\$14,600
746	Ferry Vessel - Replace Engines	\$157,500	X	2	/	50	=	\$6,300
755	Ferry Vessel-Overhaul Transmissions	\$13,500	X	2	/	5	=	\$5,400
757	Ferry Vessel-Replace Transmissions	\$31,500	X	2	/	25	=	\$2,520
760	Ferry Vessel - Replace	\$1,500,000	X	26	/	60	=	\$650,000
<b>Professional/Special Projects</b>								
940	Legal Contingency Fund	\$35,000	X	0	/	0	=	\$35,000

**Table 3: Fully Funded Balance**

**24901-2**

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
								\$3,692,235

**Table 4: Component Significance****24901-2**

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
<b>Site/Grounds/Recreation</b>					
200	Asphalt Roads - Repair/Resurface	30	\$24,500	\$817	0.4%
204	Gravel Roads/Lots - Maintain/Repair	5	\$28,000	\$5,600	2.5%
280	Play Equipment - Replace	20	\$40,000	\$2,000	0.9%
282	Basketball Court - Repair/Replace	25	\$18,000	\$720	0.3%
290	Pavilion - Replace Roof	25	\$7,400	\$296	0.1%
<b>Small Boat Marina</b>					
302	Small Boat Docks/Floats-Replace	30	\$120,000	\$4,000	1.8%
306	Small Boat Dock Pilings - Replace	50	\$200,000	\$4,000	1.8%
320	Small Boat Trestle/Ramp - Replace	30	\$82,000	\$2,733	1.2%
336	Small Boat Gangway - Replace	30	\$7,250	\$242	0.1%
<b>Community Building</b>					
410	Community Building Siding-Replace	50	\$21,500	\$430	0.2%
430	Community Building Roof - Replace	40	\$17,000	\$425	0.2%
460	Community Blding Septic - Replace	50	\$8,200	\$164	0.1%
<b>Equipment</b>					
540	Dust/Water Truck - Replace	12	\$15,000	\$1,250	0.6%
<b>Ferry System</b>					
700	Ferry Terminals - Inspect/Repair	2	\$18,000	\$9,000	4.1%
702	Ferry Terminals - Paint	12	\$240,000	\$20,000	9.0%
704	Ferry Terminal Cables - Replace	6	\$27,500	\$4,583	2.1%
707	Ferry Terminal Structures - Replace	60	\$2,250,000	\$37,500	16.9%
708	Ferry Ramp Dolphins - Replace	50	\$2,000,000	\$40,000	18.1%
712	Ferry Ramp Generators - Replace	20	\$36,500	\$1,825	0.8%
740	Ferry Vessel - Shipyard	2	\$92,500	\$46,250	20.9%
744	Ferry Vessel - Overhaul Engines	5	\$36,500	\$7,300	3.3%
746	Ferry Vessel - Replace Engines	50	\$157,500	\$3,150	1.4%
755	Ferry Vessel-Overhaul Transmissions	5	\$13,500	\$2,700	1.2%
757	Ferry Vessel-Replace Transmissions	25	\$31,500	\$1,260	0.6%
760	Ferry Vessel - Replace	60	\$1,500,000	\$25,000	11.3%
<b>Professional/Special Projects</b>					
940	Legal Contingency Fund	N/A	\$35,000	\$0	0.0%

**Table 4: Component Significance****24901-2**

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
26	Total Funded Components			\$221,245	100.0%

**Table 5: 30-Year Reserve Plan Summary**
**24901-2**
**Fiscal Year Start: 10/01/15**
**Interest: 1.0%**
**Inflation: 3.0%**
**Reserve Fund Strength Calculations**  
**(All values as of Fiscal Year Start Date)**
**Projected Reserve Balance Changes**

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loans or Special Assmts	Interest Income	Reserve Expenses
2015	\$546,244	\$3,692,235	14.8%	High	\$331,352	\$465,600	\$9,315	\$35,000
2016	\$1,317,511	\$3,994,834	33.0%	Med	\$341,293	\$465,600	\$16,732	\$110,725
2017	\$2,030,411	\$4,235,351	47.9%	Med	\$351,531	\$465,600	\$24,193	\$61,532
2018	\$2,810,203	\$4,540,794	61.9%	Med	\$362,077	\$465,600	\$20,629	\$2,341,168
2019	\$1,317,341	\$2,514,628	52.4%	Med	\$372,940	\$0	\$14,847	\$51,773
2020	\$1,653,355	\$2,793,224	59.2%	Med	\$384,128	\$0	\$17,840	\$139,113
2021	\$1,916,210	\$2,997,913	63.9%	Med	\$395,652	\$0	\$21,130	\$21,493
2022	\$2,311,498	\$3,337,816	69.3%	Med	\$407,521	\$0	\$24,697	\$113,763
2023	\$2,629,953	\$3,601,041	73.0%	Low	\$419,747	\$0	\$28,096	\$86,140
2024	\$2,991,655	\$3,909,022	76.5%	Low	\$432,339	\$0	\$31,436	\$157,225
2025	\$3,298,205	\$4,161,685	79.3%	Low	\$445,309	\$0	\$35,084	\$57,116
2026	\$3,721,482	\$4,533,961	82.1%	Low	\$458,669	\$0	\$38,602	\$216,633
2027	\$4,002,119	\$4,762,290	84.0%	Low	\$472,429	\$0	\$40,730	\$367,846
2028	\$4,147,432	\$4,851,183	85.5%	Low	\$486,602	\$0	\$42,893	\$242,161
2029	\$4,434,765	\$5,081,946	87.3%	Low	\$501,200	\$0	\$46,720	\$69,579
2030	\$4,913,105	\$5,507,430	89.2%	Low	\$516,236	\$0	\$51,226	\$144,112
2031	\$5,336,455	\$5,879,251	90.8%	Low	\$531,723	\$0	\$54,383	\$377,828
2032	\$5,544,732	\$6,032,150	91.9%	Low	\$547,674	\$0	\$57,457	\$198,342
2033	\$5,951,522	\$6,385,477	93.2%	Low	\$564,105	\$0	\$62,041	\$115,765
2034	\$6,461,902	\$6,845,757	94.4%	Low	\$581,028	\$0	\$66,773	\$211,297
2035	\$6,898,405	\$7,233,087	95.4%	Low	\$598,459	\$0	\$72,144	\$32,510
2036	\$7,536,498	\$7,828,175	96.3%	Low	\$616,412	\$0	\$77,943	\$172,077
2037	\$8,058,776	\$8,309,709	97.0%	Low	\$634,905	\$0	\$83,589	\$111,134
2038	\$8,666,136	\$8,881,178	97.6%	Low	\$653,952	\$0	\$88,168	\$433,202
2039	\$8,975,054	\$9,151,161	98.1%	Low	\$673,570	\$0	\$90,626	\$581,379
2040	\$9,157,871	\$9,290,113	98.6%	Low	\$693,778	\$0	\$94,354	\$225,081
2041	\$9,720,922	\$9,814,118	99.1%	Low	\$714,591	\$0	\$101,050	\$38,819
2042	\$10,497,744	\$10,560,007	99.4%	Low	\$736,029	\$0	\$107,935	\$243,231
2043	\$11,098,477	\$11,132,472	99.7%	Low	\$758,109	\$0	\$114,521	\$155,579
2044	\$11,815,528	\$11,827,578	99.9%	Low	\$780,853	\$0	\$120,869	\$348,772

**Table 6: 30-Year Income/Expense Detail (yrs 0 through 4)****24901-2**

Fiscal Year	2015	2016	2017	2018	2019
Starting Reserve Balance	\$546,244	\$1,317,511	\$2,030,411	\$2,810,203	\$1,317,341
Annual Reserve Contribution	\$331,352	\$341,293	\$351,531	\$362,077	\$372,940
Recommended Special Assessments	\$465,600	\$465,600	\$465,600	\$465,600	\$0
Interest Earnings	\$9,315	\$16,732	\$24,193	\$20,629	\$14,847
Total Income	\$1,352,511	\$2,141,136	\$2,871,735	\$3,658,509	\$1,705,128
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$31,514
280 Play Equipment - Replace	\$0	\$0	\$42,436	\$0	\$0
282 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
290 Pavilion - Replace Roof	\$0	\$0	\$0	\$0	\$0
<b>Small Boat Marina</b>					
302 Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$0
306 Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320 Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$0
336 Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$0
<b>Community Building</b>					
410 Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430 Community Building Roof - Replace	\$0	\$0	\$0	\$0	\$0
460 Community Blding Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$0	\$15,450	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$0	\$19,096	\$0	\$20,259
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$2,185,454	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$0	\$95,275	\$0	\$101,077	\$0
744 Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$39,885	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$14,752	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0



**Table 6: 30-Year Income/Expense Detail (yrs 0 through 4)****24901-2**

Fiscal Year		2015	2016	2017	2018	2019
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$35,000	\$0	\$0	\$0	\$0
	Total Expenses	\$35,000	\$110,725	\$61,532	\$2,341,168	\$51,773
	Ending Reserve Balance:	\$1,317,511	\$2,030,411	\$2,810,203	\$1,317,341	\$1,653,355

**Table 6: 30-Year Income/Expense Detail (yrs 5 through 9)**
**24901-2**

Fiscal Year	2020	2021	2022	2023	2024
Starting Reserve Balance	\$1,653,355	\$1,916,210	\$2,311,498	\$2,629,953	\$2,991,655
Annual Reserve Contribution	\$384,128	\$395,652	\$407,521	\$419,747	\$432,339
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$17,840	\$21,130	\$24,697	\$28,096	\$31,436
Total Income	\$2,055,323	\$2,332,991	\$2,743,716	\$3,077,796	\$3,455,430
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$36,534
280 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
282 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
290 Pavilion - Replace Roof	\$0	\$0	\$0	\$0	\$0
<b>Small Boat Marina</b>					
302 Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$0
306 Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320 Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$0
336 Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$0
<b>Community Building</b>					
410 Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430 Community Building Roof - Replace	\$0	\$0	\$0	\$0	\$0
460 Community Blding Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$0	\$0	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$21,493	\$0	\$22,802	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$31,880	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$107,233	\$0	\$113,763	\$0	\$120,692
744 Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$46,237	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$17,101	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0

**Table 6: 30-Year Income/Expense Detail (yrs 5 through 9)****24901-2**

Fiscal Year		2020	2021	2022	2023	2024
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$139,113	\$21,493	\$113,763	\$86,140	\$157,225
	Ending Reserve Balance:	\$1,916,210	\$2,311,498	\$2,629,953	\$2,991,655	\$3,298,205

**Table 6: 30-Year Income/Expense Detail (yrs 10 through 14)****24901-2**

Fiscal Year		2025	2026	2027	2028	2029
Starting Reserve Balance		\$3,298,205	\$3,721,482	\$4,002,119	\$4,147,432	\$4,434,765
Annual Reserve Contribution		\$445,309	\$458,669	\$472,429	\$486,602	\$501,200
Recommended Special Assessments		\$0	\$0	\$0	\$0	\$0
Interest Earnings		\$35,084	\$38,602	\$40,730	\$42,893	\$46,720
Total Income		\$3,778,598	\$4,218,752	\$4,515,279	\$4,676,927	\$4,982,685
#	Component					
<b>Site/Grounds/Recreation</b>						
200	Asphalt Roads - Repair/Resurface	\$32,926	\$0	\$0	\$0	\$0
204	Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$42,353
280	Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
282	Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
290	Pavilion - Replace Roof	\$0	\$0	\$0	\$10,867	\$0
<b>Small Boat Marina</b>						
302	Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$0
306	Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320	Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$0
336	Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$0
<b>Community Building</b>						
410	Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430	Community Building Roof - Replace	\$0	\$0	\$0	\$0	\$0
460	Community Blding Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>						
540	Dust/Water Truck - Replace	\$0	\$0	\$0	\$22,028	\$0
<b>Ferry System</b>						
700	Ferry Terminals - Inspect/Repair	\$24,190	\$0	\$25,664	\$0	\$27,227
702	Ferry Terminals - Paint	\$0	\$0	\$342,183	\$0	\$0
704	Ferry Terminal Cables - Replace	\$0	\$38,066	\$0	\$0	\$0
707	Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708	Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$0	\$0
712	Ferry Ramp Generators - Replace	\$0	\$50,525	\$0	\$0	\$0
740	Ferry Vessel - Shipyard	\$0	\$128,042	\$0	\$135,839	\$0
744	Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$53,601	\$0
746	Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755	Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$19,825	\$0
757	Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0

**Table 6: 30-Year Income/Expense Detail (yrs 10 through 14)****24901-2**

Fiscal Year		2025	2026	2027	2028	2029
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$57,116	\$216,633	\$367,846	\$242,161	\$69,579
	Ending Reserve Balance:	\$3,721,482	\$4,002,119	\$4,147,432	\$4,434,765	\$4,913,105

**Table 6: 30-Year Income/Expense Detail (yrs 15 through 19)****24901-2**

Fiscal Year	2030	2031	2032	2033	2034
Starting Reserve Balance	\$4,913,105	\$5,336,455	\$5,544,732	\$5,951,522	\$6,461,902
Annual Reserve Contribution	\$516,236	\$531,723	\$547,674	\$564,105	\$581,028
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$51,226	\$54,383	\$57,457	\$62,041	\$66,773
Total Income	\$5,480,567	\$5,922,561	\$6,149,864	\$6,577,667	\$7,109,703
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$49,098
280 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
282 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
290 Pavilion - Replace Roof	\$0	\$0	\$0	\$0	\$0
<b>Small Boat Marina</b>					
302 Small Boat Docks/Floats-Replace	\$0	\$192,565	\$0	\$0	\$0
306 Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320 Small Boat Trestle/Ramp - Replace	\$0	\$131,586	\$0	\$0	\$0
336 Small Boat Gangway - Replace	\$0	\$11,634	\$0	\$0	\$0
<b>Community Building</b>					
410 Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430 Community Building Roof - Replace	\$0	\$0	\$0	\$0	\$0
460 Community Blding Septic - Replace	\$0	\$13,159	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$0	\$0	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$28,885	\$0	\$30,644	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$45,453	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$144,112	\$0	\$152,888	\$0	\$162,199
744 Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$62,139	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$22,983	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0

**Table 6: 30-Year Income/Expense Detail (yrs 15 through 19)****24901-2**

Fiscal Year		2030	2031	2032	2033	2034
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$144,112	\$377,828	\$198,342	\$115,765	\$211,297
	Ending Reserve Balance:	\$5,336,455	\$5,544,732	\$5,951,522	\$6,461,902	\$6,898,405



**Table 6: 30-Year Income/Expense Detail (yrs 20 through 24)****24901-2**

Fiscal Year		2035	2036	2037	2038	2039
Starting Reserve Balance		\$6,898,405	\$7,536,498	\$8,058,776	\$8,666,136	\$8,975,054
Annual Reserve Contribution		\$598,459	\$616,412	\$634,905	\$653,952	\$673,570
Recommended Special Assessments		\$0	\$0	\$0	\$0	\$0
Interest Earnings		\$72,144	\$77,943	\$83,589	\$88,168	\$90,626
Total Income		\$7,569,008	\$8,230,853	\$8,777,270	\$9,408,256	\$9,739,250
#	Component					
<b>Site/Grounds/Recreation</b>						
200	Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204	Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$56,918
280	Play Equipment - Replace	\$0	\$0	\$76,644	\$0	\$0
282	Basketball Court - Repair/Replace	\$0	\$0	\$0	\$35,525	\$0
290	Pavilion - Replace Roof	\$0	\$0	\$0	\$0	\$0
<b>Small Boat Marina</b>						
302	Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$0
306	Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320	Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$0
336	Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$0
<b>Community Building</b>						
410	Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430	Community Building Roof - Replace	\$0	\$0	\$0	\$0	\$0
460	Community Blding Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>						
540	Dust/Water Truck - Replace	\$0	\$0	\$0	\$0	\$0
<b>Ferry System</b>						
700	Ferry Terminals - Inspect/Repair	\$32,510	\$0	\$34,490	\$0	\$36,590
702	Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$487,871
704	Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$54,274	\$0
707	Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708	Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$0	\$0
712	Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740	Ferry Vessel - Shipyard	\$0	\$172,077	\$0	\$182,557	\$0
744	Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$72,036	\$0
746	Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755	Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$26,643	\$0
757	Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$62,168	\$0

**Table 6: 30-Year Income/Expense Detail (yrs 20 through 24)****24901-2**

Fiscal Year		2035	2036	2037	2038	2039
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$32,510	\$172,077	\$111,134	\$433,202	\$581,379
	Ending Reserve Balance:	\$7,536,498	\$8,058,776	\$8,666,136	\$8,975,054	\$9,157,871

**Table 6: 30-Year Income/Expense Detail (yrs 25 through 29)****24901-2**

Fiscal Year	2040	2041	2042	2043	2044
Starting Reserve Balance	\$9,157,871	\$9,720,922	\$10,497,744	\$11,098,477	\$11,815,528
Annual Reserve Contribution	\$693,778	\$714,591	\$736,029	\$758,109	\$780,853
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$94,354	\$101,050	\$107,935	\$114,521	\$120,869
Total Income	\$9,946,003	\$10,536,563	\$11,341,708	\$11,971,107	\$12,717,250
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$0	\$0	\$65,984
280 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
282 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
290 Pavilion - Replace Roof	\$0	\$0	\$0	\$0	\$0
<b>Small Boat Marina</b>					
302 Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$0
306 Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320 Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$0
336 Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$0
<b>Community Building</b>					
410 Community Building Siding-Replace	\$0	\$0	\$0	\$0	\$0
430 Community Building Roof - Replace	\$0	\$0	\$37,762	\$0	\$0
460 Community Blding Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$31,407	\$0	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$38,819	\$0	\$41,183	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$0	\$64,806
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins - Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$193,674	\$0	\$205,469	\$0	\$217,982
744 Ferry Vessel - Overhaul Engines	\$0	\$0	\$0	\$83,509	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$0	\$0	\$30,887	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0

**Table 6: 30-Year Income/Expense Detail (yrs 25 through 29)****24901-2**

Fiscal Year		2040	2041	2042	2043	2044
760	Ferry Vessel - Replace	\$0	\$0	\$0	\$0	\$0
<b>Professional/Special Projects</b>						
940	Legal Contingency Fund	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$225,081	\$38,819	\$243,231	\$155,579	\$348,772
	Ending Reserve Balance:	\$9,720,922	\$10,497,744	\$11,098,477	\$11,815,528	\$12,368,478

## Accuracy, Limitations, and Disclosures

### Washington disclosure, per RCW:

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 circumstance, 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.

Because we have no control over future events, we do not expect that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect Reserve funds to continue to earn interest, so we believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. We can control measurements, which we attempt to establish within 5% accuracy through a combination of on-site measurements, drawings, and satellite imagery. The starting Reserve Balance and interest rate earned on deposited Reserve funds that you provided to us were considered reliable and were not confirmed independently. We have considered the association's representation of current and historical Reserve projects reliable, and we have considered the representations made by its vendors and suppliers to also be accurate and reliable. Component Useful Life, Remaining Useful Life, and Current Cost estimates assume a stable economic environment and lack of natural disasters.

Because the physical condition of your components, the association's Reserve balance, the economic environment, and legislative environment change each year, this Reserve Study is by nature a "one-year" document. Because a long-term perspective improves the accuracy of near-term planning, this Report projects expenses for the next 30 years. It is our recommendation and that of the Financial Accounting Standards Board (FASB) that your Reserve Study be updated each year as part of the annual budget process.

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James D. Talaga R.S., company president, is a credentialed Reserve Specialist (#66). All work done by Association Reserves WA, LLC is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association's situation.

Component quantities indicated in this Report were found in prior Reserve Studies unless otherwise noted. No destructive or intrusive testing was performed. This Report and this site inspection were accomplished only for Reserve budget purposes (to help identify and address the normal deterioration of properly built and installed components with predictable life expectancies). The Funding Plan in this Report was developed using the cash-flow methodology to achieve the specified Funding Objective.

Association Reserves' liability in any matter involving this Reserve Study is limited to our Fee for services rendered.

## Terms and Definitions

<b>BTU</b>	British Thermal Unit (a standard unit of energy)
<b>DIA</b>	Diameter
<b>GSF</b>	Gross Square Feet (area). Equivalent to Square Feet
<b>GSY</b>	Gross Square Yards (area). Equivalent to Square Yards
<b>HP</b>	Horsepower
<b>LF</b>	Linear Feet (length)

**Effective Age:** The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.

**Fully Funded Balance (FFB):** The value of the deterioration of the Reserve Components. This is the fraction of life “used up” of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age}) / \text{Useful Life}$$

**Inflation:** Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on Table 6.

**Interest:** Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded Annual using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.

**Percent Funded:** The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

**Remaining Useful Life (RUL):** The estimated time, in years, that a common area component can be expected to continue to serve its intended function.

**Useful Life (UL):** The estimated time, in years, that a common area component can be expected to serve its intended function.

## Component Details

The primary purpose of the appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The appendix herein represent a wide range of elements that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

- 1) Common area maintenance, repair & replacement responsibility
- 2) Components must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost ranged termed "Best Cost" and "Worst Cost". There are many factors that can result in a wide variety of potential costs, we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.



# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

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**Comp # : 100 Water System - Maintain/Repair**

Quantity : Extensive systems

Location : Throughout community

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 200 Asphalt Roads - Repair/Resurface**

Quantity : Approx 10,500 square feet

Location : Partial East Herron Boulevard and Ferry Street

Funded? : Yes

History :

Comments :

Useful Life : 30 years

Remaining Life : 12 years

Best Case : \$21,000

Worst Case : \$26,250

---

**Comp # : 204 Gravel Roads/Lots - Maintain/Repair**

Quantity : Approx 500,000 surface SF

Location : Common areas, Island and Mainland

Funded? : Yes

History :

Comments :

Useful Life : 5 years

Remaining Life : 4 years

Best Case : \$20,000

Worst Case : \$26,000

---

**Comp # : 210 Site Lighting - Replace**

Quantity : Small quantity

Location : North Beach, Mainland Terminal, etc...

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 212 Small Structures - Maintain/Replace**

Quantity : (5) assorted

Location : Community Building, North Beach and Ferry Terminals

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

Client: 24901A HMC Management

---

**Comp # : 214 Community Signage - Replace**

Quantity : Extensive quantity

Location : Common areas, Island and Mainland

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 216 Community Kiosks/Readers - Replace**

Quantity : (2) wood

Location : Common areas, Island and Mainland

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 217 Chain Link Fence - Replace**

Quantity : Approx 100 linear feet

Location : Mainland Generator, Goodpastor Park Backstop

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 220 Wood Fence - Replace**

Quantity : Moderate linear feet

Location : Mainland Parking Lot

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 226 Landscape - Maintain/Refurbish**

Quantity : Extensive square feet

Location : Common areas

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 230 Site Electrical - Repair/Replace**

Quantity : Extensive systems

Location : North Beach, Ferry Terminals, etc...

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 250 Mailboxes - Replace**

Quantity : (4) clusters, assorted

Location : Mainland Parking Lot

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 302 Small Boat Docks/Floats-Replace**

Quantity : Approx 2,600 square feet

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life : 30 years

Remaining Life : 18 years

Best Case : \$104,000

Worst Case : \$130,000

---

**Comp # : 306 Small Boat Dock Pilings - Replace**

Quantity : (15) steel

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life : 50 years

Remaining Life : 48 years

Best Case : \$180,000

Worst Case : \$210,000

---

**Comp # : 320 Small Boat Trestle/Ramp - Replace**

Quantity : Approx 630 square feet

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life : 30 years

Remaining Life : 18 years

Best Case : \$63,000

Worst Case : \$94,500

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 336 Small Boat Gangway - Replace**

Quantity : (1) aluminum, ~4'x20'

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life : 30 years

Remaining Life : 18 years

Best Case : \$6,000

Worst Case : \$8,000

---

**Comp # : 340 Small Boat Launch - Repair/Replace**

Quantity : Approx 1,400 square feet

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 350 Play Equipment - Replace**

Quantity : (6) assorted

Location : Goodpastor Park

Funded? : Yes

History :

Comments :

Useful Life : 20 years

Remaining Life : 4 years

Best Case : \$40,000

Worst Case : \$60,000

---

**Comp # : 355 Basketball Court - Repair/Replace**

Quantity : Approx 1,100 SF, total

Location : Goodpastor Park

Funded? : Yes

History :

Comments :

Useful Life : 25 years

Remaining Life : 24 years

Best Case : \$18,000

Worst Case : \$22,000

---

**Comp # : 360 Picnic Assets - Replace**

Quantity : (31) assorted

Location : Community Building, Goodpastor Park, North Beach

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 370 Pavilion - Replace Roof**

Quantity : Approx 2,200 SF

Location : North Beach

Funded? : Yes

History :

Comments :

Useful Life : 25 years

Remaining Life : 15 years

Best Case : \$6,600

Worst Case : \$7,700

---

**Comp # : 410 Community Building Siding-Replace**

Quantity : Approx 1,400 GSF

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life : 50 years

Remaining Life : 41 years

Best Case : \$16,800

Worst Case : \$25,200

---

**Comp # : 420 Community Building Exterior-Paint**

Quantity : Approx 1,400 GSF

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 430 Community Building Roof - Replace**

Quantity : Approx 2,700 GSF

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life : 40 years

Remaining Life : 29 years

Best Case : \$13,500

Worst Case : \$18,900

---

**Comp # : 450 Community Blding Interior-Refinish**

Quantity : Moderate GSF

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

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# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

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**Comp # : 454 Community Blding Kitchen-Refurbish**

Quantity : Moderate square feet

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 456 Community Blding Bathrooms-Maintain**

Quantity : (2) small, two-piece

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 460 Community Blding Septic - Replace**

Quantity : (1) system

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life : 50 years

Remaining Life : 18 years

Best Case : \$6,000

Worst Case : \$10,000

---

**Comp # : 464 CB Windows/Doors-Replace**

Quantity : Moderate quantity

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 466 CB Electrical/Plumbing-Replace**

Quantity : Extensive systems

Location : 901 West Yew Blvd KPN

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 510 Office Equipment/Furniture-Replace**

Quantity : Minor equipment

Location : Community Building

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 520 Small Equipment/Tools - Replace**

Quantity : Minor equipment

Location : Community and Pavilion Buildings

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 530 Utility Tractor/Mower - Replace**

Quantity : (1) John Deere L130

Location : Community Building Shed

Funded? : Yes

History :

Comments :

Useful Life : 10 years

Remaining Life : 3 years

Best Case : \$12,000

Worst Case : \$15,000

---

**Comp # : 540 Dust/Water Truck - Replace**

Quantity : (1) 1991 Chevy Kodiak

Location : Community Building

Funded? : Yes

History :

Comments :

Useful Life : 12 years

Remaining Life : 1 years

Best Case : \$12,000

Worst Case : \$18,000

---

**Comp # : 700 Ferry Terminals - Inspect/Repair**

Quantity : Approx 6,100 square feet

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 2 years

Remaining Life : 0 years

Best Case : \$18,000

Worst Case : \$26,000

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 702 Ferry Terminals - Paint**

Quantity : Approx 6,100 square feet

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 12 years

Remaining Life : 3 years

Best Case : \$223,200

Worst Case : \$243,200

---

**Comp # : 704 Ferry Terminal Cables - Replace**

Quantity : Extensive linear feet

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 6 years

Remaining Life : 1 years

Best Case : \$32,000

Worst Case : \$37,000

---

**Comp # : 706 Ferry Terminal Wood Decks - Replace**

Quantity : Approx 2,940 square feet

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 707 Ferry Terminal Structures - Replace**

Quantity : Approx 6,100 square feet

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 60 years

Remaining Life : 39 years

Best Case : \$2,000,000

Worst Case : \$2,500,000

---

**Comp # : 708 Ferry Ramp Dolphins - Replace**

Quantity : (8) assemblies

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 50 years

Remaining Life : 7 years

Best Case : \$740,000

Worst Case : \$950,000

---



# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

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**Comp # : 710 Ferry Ramp Bulkhead - Repair**

Quantity : Moderate square feet

Location : Island Terminal

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 712 Ferry Ramp Generators - Replace**

Quantity : (2) Generac 35kw

Location : Island and Mainland Terminals

Funded? : Yes

History :

Comments :

Useful Life : 20 years

Remaining Life : 13 years

Best Case : \$32,000

Worst Case : \$38,000

---

**Comp # : 718 Ferry Ramp Surveillance - Replace**

Quantity : (2) camera, DVR

Location : Select common areas

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life :

Best Case :

Worst Case :

---

**Comp # : 740 Ferry Vessel - Shipyard**

Quantity : 65' LOA

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 2 years

Remaining Life : 1 years

Best Case : \$85,000

Worst Case : \$100,000

---

**Comp # : 744 Ferry Vessel - Overhaul Engines**

Quantity : (2) GM 300 HP, diesel

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 5 years

Remaining Life : 5 years

Best Case : \$30,000

Worst Case : \$40,000

# Association Reserves Washington, LLC

# Component Summary

Client: 24901A HMC Management

---

**Comp # : 746 Ferry Vessel - Replace Engines**

Quantity : (2) GM 300 HP, diesel

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 50 years

Remaining Life : 0 years

Best Case : \$160,000

Worst Case : \$170,000

---

**Comp # : 755 Ferry Vessel-Overhaul Transmissions**

Quantity : (2) Twin Disc MG 5091 SC

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 5 years

Remaining Life : 5 years

Best Case : \$12,000

Worst Case : \$14,000

---

**Comp # : 757 Ferry Vessel-Replace Transmissions**

Quantity : (2) Twin Disc MG 5091 SC

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 25 years

Remaining Life : 0 years

Best Case : \$30,000

Worst Case : \$40,000

---

**Comp # : 760 Ferry Vessel - Replace**

Quantity : 65' LOA

Location : M/V Charlie Wells

Funded? : Yes

History :

Comments :

Useful Life : 60 years

Remaining Life : 36 years

Best Case : \$1,300,000

Worst Case : \$1,700,000

---

**Comp # : 940 Legal Contingency Fund**

Quantity : \$35,000

Location : Reserve funds

Funded? : Yes

History :

Comments :

Useful Life :

Remaining Life : 0 years

Best Case : \$34,000

Worst Case : \$36,000

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Client: 24901A HMC Management

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Comp # : 999 Reserve Study Update  
Quantity : Annual Update  
Location : Common areas  
Funded? : Yes  
History :  
Comments :  
Useful Life : Remaining Life :  
Best Case : Worst Case :

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