

**Washington Office**  
505 South 336th Street #620  
Federal Way, WA 98003

Tel: (253) 661-5437  
Fax: (253) 661-5430  
www.reservestudy.com



**Regional Offices**

Arizona  
California  
Colorado  
Florida  
Hawaii  
Nevada  
North Carolina  
Washington

## Update "No-Site-Visit" Reserve Study



### HMC Management Lakebay, WA

**Report #: 24901-4**  
**For Period Beginning: October 1, 2017**  
**Expires: September 30, 2018**

**Date Prepared: May 2, 2017**



---

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

**T**his Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

**W**ith respect to Reserves, this Report will tell you "where you are," and "where to go from here."

**In this Report, you will find...**

- 1) A List of What you're Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

**More Questions?**

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

**253-661-5437**



## Table of Contents

<b>3-Minute Executive Summary</b>	<b>1</b>
Reserve Study Summary	1
Reserve Component List	3
<b>Introduction, Objectives, and Methodology</b>	<b>4</b>
Which Physical Assets are Funded by Reserves?	5
How do we establish Useful Life and Remaining Useful Life estimates?	5
How do we establish Current Repair/Replacement Cost Estimates?	5
How much Reserves are enough?	6
How much should we contribute?	7
What is our Recommended Funding Goal?	7
<b>Projected Expenses</b>	<b>8</b>
Expense Graph	8
<b>Reserve Fund Status &amp; Recommended Funding Plan</b>	<b>9</b>
Funding Plan Graph	9
Cash Flow Graph	10
% Funded Graph	10
<b>Table Descriptions</b>	<b>11</b>
Reserve Component List Detail	12
Fully Funded Balance	13
Component Significance	14
30-Year Reserve Plan Summary	15
30 Year Reserve Plan Summary	15
30 Year Reserve Plan Year by Year Detail	16
<b>Accuracy, Limitations, and Disclosures</b>	<b>22</b>
<b>Terms and Definitions</b>	<b>23</b>
<b>Component Details</b>	<b>24</b>

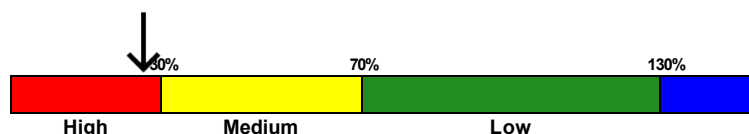
### 3- Minute Executive Summary

**Association:** HMC Management **Assoc. #: 24901-4**  
**Location:** Lakebay, WA **# of Units: 379**  
**Report Period:** October 1, 2017 through September 30, 2018

#### Findings/Recommendations as-of: October 1, 2017

Starting Reserve Balance . . . . .	\$619,601
Current Fully Funded Reserve Balance . . . . .	\$2,275,211
Percent Funded . . . . .	27.2 %
Average Reserve Deficit or (Surplus) Per Unit . . . . .	\$4,368
2017/2018 100% Annual "Full Funding" Contributions . . . . .	\$338,200
2017/2018 70% Annual "Threshold Funding" Contributions . . . . .	\$266,000
2017/2018 "Baseline Funding" to keep Reserves above \$0 . . . . .	\$102,175
Most Recent Budgeted Contribution Rate . . . . .	\$55,800

Reserves % Funded: 27.2%



Special Assessment Risk:

#### 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 WSV Report prepared for your 2016/2017 Fiscal Year. Refer to photo pages of that 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).

Advanced deterioration for existing wood dolphins was previously noted. Recent comprehensive expert evaluations were indicated; Management confirmed current plans for FY 2017/2018 replacement. Total projected expense is reportedly ~\$1,300,000 (including construction, design, oversight, etc...) with apparent intention to procure long term USDA loan for sum of ~\$940,000 to finance vast majority of project (\$360,000 monies are already committed/earmarked). Current projection is that total of annual P&I payments will likely be somewhere near \$37,318 with a 40 year term. No future impact upon HMC maintenance reserves is factored since collections and payments will reportedly be handled in a separate account for this debt obligation (similar to separate Water System indebtedness).

• Assuming the preceding understanding, your Reserve Fund is therefore 27% Funded. This means the association's risk of special assessment and/or deferred maintenance is currently high. 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, our recommendation is to substantially increase your Reserve contributions to within the 70% to 100% level as noted above. Going forward, collection of reserve monies to provide for fair distribution of expense burden to offset ongoing deterioration of reserve category projects and improve reserve fund status should be undertaken. In other words, current owners should contribute “their fair share” to maintenance reserves. The reader should note that the FY 2017/2018 “Annual Deterioration” of reserve components is \$215,032. The 100% “Full” and 70% contribution rates are designed to gradually achieve these funding objectives by the end of our 30-year report scope.
  - No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions.
-

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site/Grounds/Recreation				
200	Asphalt Roads - Repair/Resurface	25	1	\$43,250
204	Gravel Roads/Lots - Maintain/Repair	5	2	\$46,350
350	Play Equipment - Replace	10	1	\$10,320
356	Basketball Court - Repair/Replace	30	26	\$19,100
370	Pavilion - Replace Roof	25	11	\$7,850
Small Boat Marina				
302	Small Boat Docks/Floats-Replace	30	14	\$127,500
306	Small Boat Dock Pilings - Replace	50	44	\$212,500
320	Small Boat Trestle/Ramp - Replace	30	14	\$87,500
336	Small Boat Gangway - Replace	30	14	\$7,700
Community Building				
410	Community Building Siding-Replace	50	38	\$22,800
430	Community Building Roof - Replace	40	25	\$18,000
460	Community Bldg Septic - Replace	50	15	\$10,320
Equipment				
540	Dust/Water Truck - Replace	12	1	\$16,000
Ferry System				
700	Ferry Terminals - Inspect/Repair	4	1	\$19,100
702	Ferry Terminals - Paint	12	10	\$180,500
704	Ferry Terminal Cables - Replace	6	3	\$29,200
706	Ferry Terminal Wood Decks - Replace	24	22	\$177,500
707	Ferry Terminal Structures - Replace	60	34	\$2,385,000
708	Ferry Ramp Dolphins-Future Replace	50	50	\$1,300,000
712	Ferry Ramp Generators - Replace	20	10	\$38,700
740	Ferry Vessel - Shipyard	2	1	\$92,700
744	Ferry Vessel - Overhaul Engines	5	1	\$38,800
746	Ferry Vessel - Replace Engines	50	46	\$167,000
755	Ferry Vessel-Overhaul Transmissions	5	1	\$14,400
757	Ferry Vessel-Replace Transmissions	25	21	\$33,400
760	Ferry Vessel - Replace	60	32	\$1,590,000
Professional/Special Projects				
940	Legal Contingency Fund	0	0	\$35,000
<b>27 Total Funded Components</b>				

Note 1: Yellow highlighted line items are expected to require attention in this initial year, green highlighted items are expected to occur within the first-five years.

## 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



RESERVE COMPONENT "FOUR-PART TEST"

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.



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 a 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 Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers 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.

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 the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

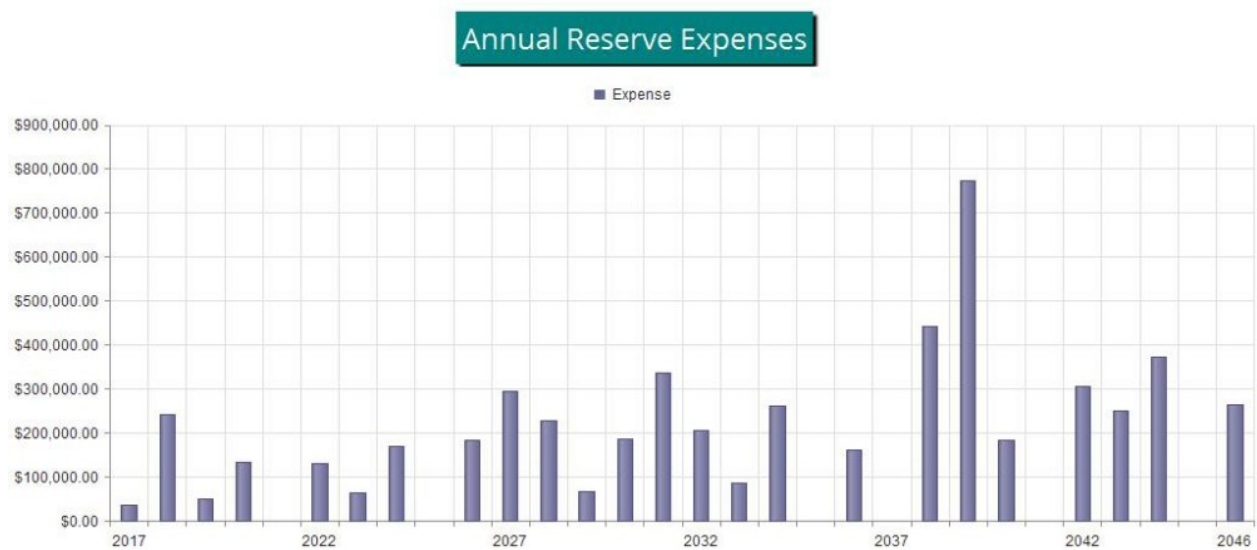


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$619,601 as-of the start of your Fiscal Year on 10/1/2017. As of that date , your Fully Funded Balance is computed to be \$2,275,211 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$338,200 this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

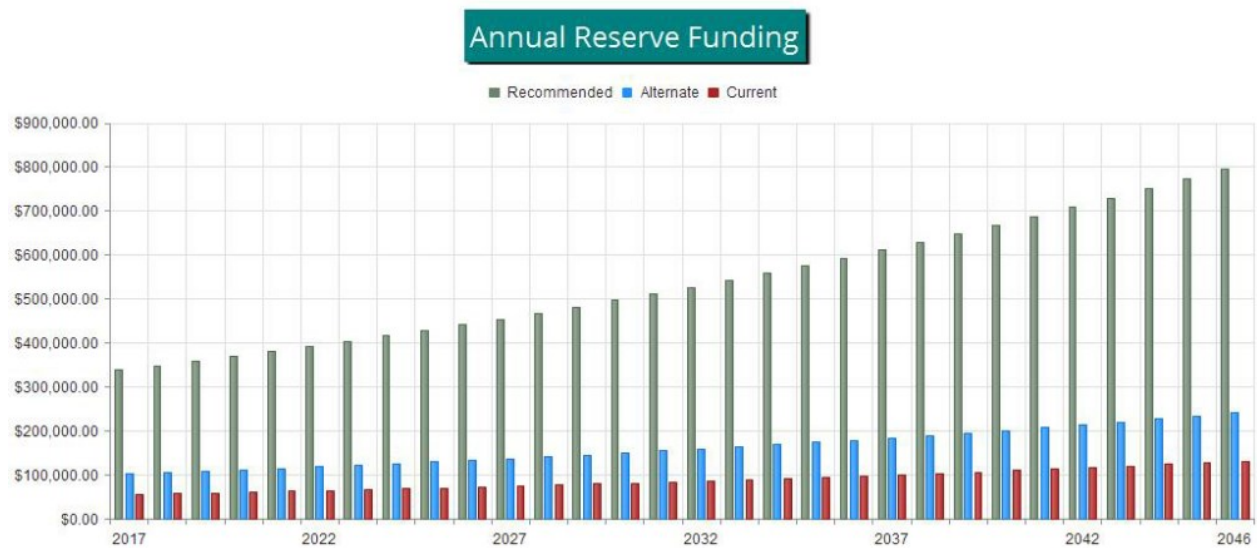


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan (not recommended), and at your current budgeted contribution rate (assumes future increases), compared to your always-changing Fully Funded Balance target.

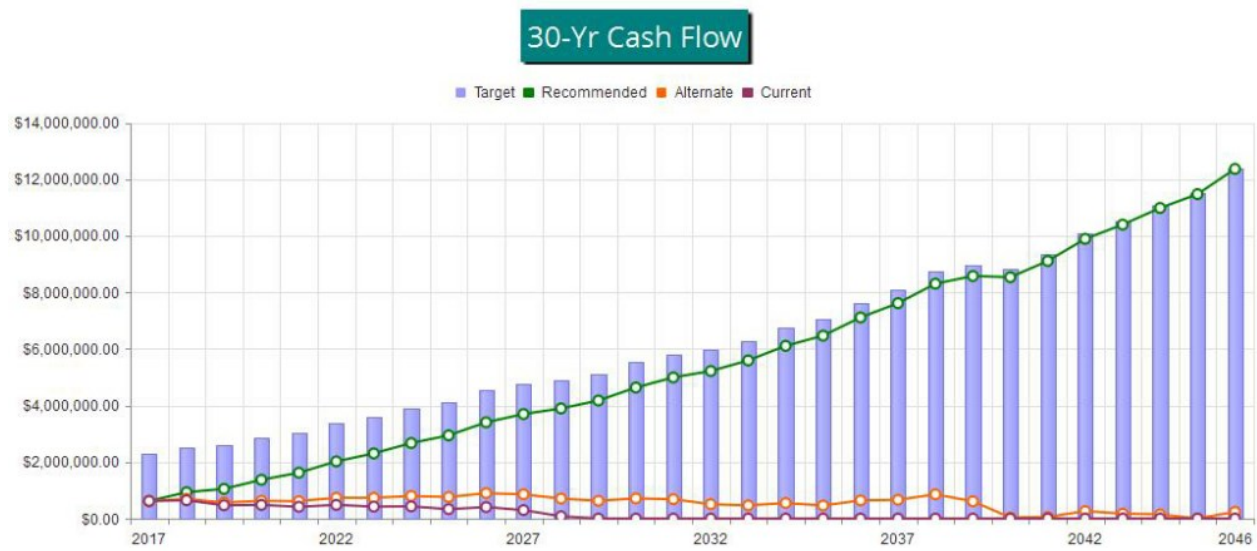


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan.

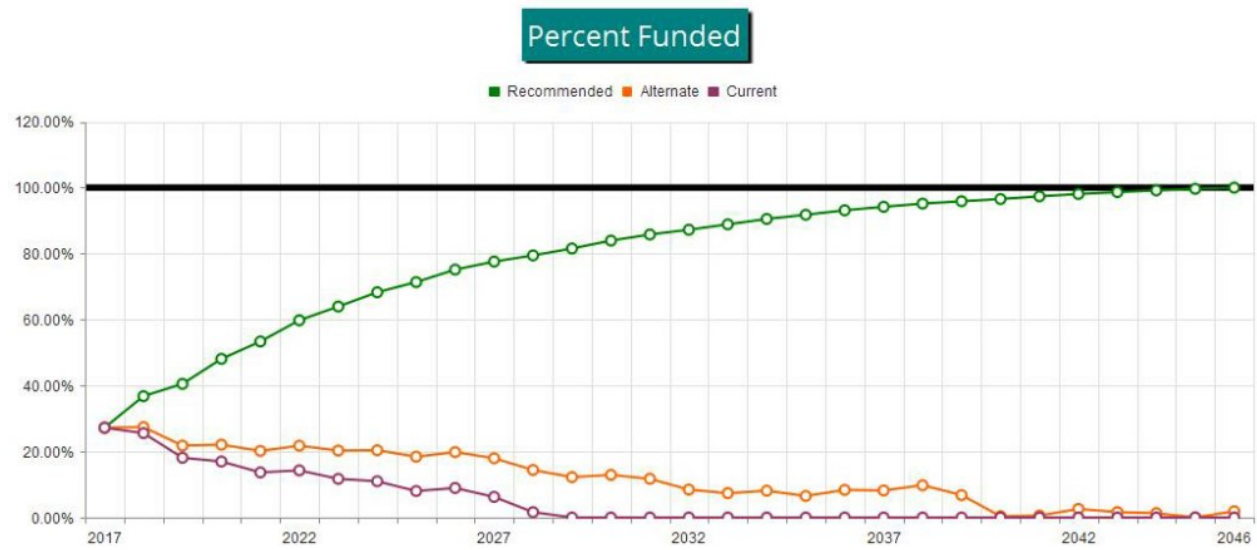


Figure 4

## Table Descriptions

The tabular information in this Report is broken down into nine tables, not all which may have been chosen by your Project Manager to appear in your report. Tables are listed in the order in which they appear in your Report.

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings of your Reserve Components.

Analysis Summary provides a summary of the starting financial information and your Project Manager's Financial Analysis decision points.

Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the association total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding 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/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

Acct/Tax Summary provides information on each Component's proportionate portion of key totals, valuable to accounting professionals primarily during tax preparation time of year.

30-Yr Summary 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 at the beginning of each year.

Cash Flow Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

# Reserve Component List Detail

24901-4  
NSV

#	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	25	1	\$41,100	\$45,400
204	Gravel Roads/Lots - Maintain/Repair	Approx 500,000 surface SF	5	2	\$41,200	\$51,500
350	Play Equipment - Replace	(6) assorted	10	1	\$8,240	\$12,400
356	Basketball Court - Repair/Replace	Approx 1,100 SF, total	30	26	\$18,000	\$20,200
370	Pavilion - Replace Roof	Approx 2,200 SF	25	11	\$7,210	\$8,490
Small Boat Marina						
302	Small Boat Docks/Floats-Replace	Approx 2,600 square feet	30	14	\$117,000	\$138,000
306	Small Boat Dock Pilings - Replace	(15) steel	50	44	\$202,000	\$223,000
320	Small Boat Trestle/Ramp - Replace	Approx 630 square feet	30	14	\$70,000	\$105,000
336	Small Boat Gangway - Replace	(1) aluminum, ~4'x20'	30	14	\$6,590	\$8,810
Community Building						
410	Community Building Siding-Replace	Approx 1,400 GSF	50	38	\$18,000	\$27,600
430	Community Building Roof - Replace	Approx 2,700 GSF	40	25	\$14,800	\$21,200
460	Community Bldg Septic - Replace	(1) system	50	15	\$8,240	\$12,400
Equipment						
540	Dust/Water Truck - Replace	(1) 1991 Chevy Kodiak	12	1	\$12,800	\$19,200
Ferry System						
700	Ferry Terminals - Inspect/Repair	Approx 6,100 square feet	4	1	\$17,000	\$21,200
702	Ferry Terminals - Paint	Approx 6,100 square feet	12	10	\$155,000	\$206,000
704	Ferry Terminal Cables - Replace	Extensive linear feet	6	3	\$26,600	\$31,800
706	Ferry Terminal Wood Decks - Replace	Approx 2,940 square feet	24	22	\$167,000	\$188,000
707	Ferry Terminal Structures - Replace	Approx 6,100 square feet	60	34	\$2,120,000	\$2,650,000
708	Ferry Ramp Dolphins-Future Replace	(8) assemblies	50	50	\$1,100,000	\$1,500,000
712	Ferry Ramp Generators - Replace	(2) Generac 35kw	20	10	\$35,000	\$42,400
740	Ferry Vessel - Shipyard	65' LOA	2	1	\$90,700	\$94,700
744	Ferry Vessel - Overhaul Engines	(2) GM 300 HP, diesel	5	1	\$33,000	\$44,600
746	Ferry Vessel - Replace Engines	(2) GM 300 HP, diesel	50	46	\$159,000	\$175,000
755	Ferry Vessel-Overhaul Transmissions	(2) Twin Disc MG 5091 SC	5	1	\$12,800	\$16,000
757	Ferry Vessel-Replace Transmissions	(2) Twin Disc MG 5091 SC	25	21	\$31,300	\$35,500
760	Ferry Vessel - Replace	65' LOA	60	32	\$1,380,000	\$1,800,000
Professional/Special Projects						
940	Legal Contingency Fund	\$35,000	0	0	\$34,000	\$36,000
27	Total Funded Components					



#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Site/Grounds/Recreation								
200	Asphalt Roads - Repair/Resurface	\$43,250	X	24	/	25	=	\$41,520
204	Gravel Roads/Lots - Maintain/Repair	\$46,350	X	3	/	5	=	\$27,810
350	Play Equipment - Replace	\$10,320	X	9	/	10	=	\$9,288
356	Basketball Court - Repair/Replace	\$19,100	X	4	/	30	=	\$2,547
370	Pavilion - Replace Roof	\$7,850	X	14	/	25	=	\$4,396
Small Boat Marina								
302	Small Boat Docks/Floats-Replace	\$127,500	X	16	/	30	=	\$68,000
306	Small Boat Dock Pilings - Replace	\$212,500	X	6	/	50	=	\$25,500
320	Small Boat Trestle/Ramp - Replace	\$87,500	X	16	/	30	=	\$46,667
336	Small Boat Gangway - Replace	\$7,700	X	16	/	30	=	\$4,107
Community Building								
410	Community Building Siding-Replace	\$22,800	X	12	/	50	=	\$5,472
430	Community Building Roof - Replace	\$18,000	X	15	/	40	=	\$6,750
460	Community Bldg Septic - Replace	\$10,320	X	35	/	50	=	\$7,224
Equipment								
540	Dust/Water Truck - Replace	\$16,000	X	11	/	12	=	\$14,667
Ferry System								
700	Ferry Terminals - Inspect/Repair	\$19,100	X	3	/	4	=	\$14,325
702	Ferry Terminals - Paint	\$180,500	X	2	/	12	=	\$30,083
704	Ferry Terminal Cables - Replace	\$29,200	X	3	/	6	=	\$14,600
706	Ferry Terminal Wood Decks - Replace	\$177,500	X	2	/	24	=	\$14,792
707	Ferry Terminal Structures - Replace	\$2,385,000	X	26	/	60	=	\$1,033,500
708	Ferry Ramp Dolphins-Future Replace	\$1,300,000	X	0	/	50	=	\$0
712	Ferry Ramp Generators - Replace	\$38,700	X	10	/	20	=	\$19,350
740	Ferry Vessel - Shipyard	\$92,700	X	1	/	2	=	\$46,350
744	Ferry Vessel - Overhaul Engines	\$38,800	X	4	/	5	=	\$31,040
746	Ferry Vessel - Replace Engines	\$167,000	X	4	/	50	=	\$13,360
755	Ferry Vessel-Overhaul Transmissions	\$14,400	X	4	/	5	=	\$11,520
757	Ferry Vessel-Replace Transmissions	\$33,400	X	4	/	25	=	\$5,344
760	Ferry Vessel - Replace	\$1,590,000	X	28	/	60	=	\$742,000
Professional/Special Projects								
940	Legal Contingency Fund	\$35,000	X	0	/	0	=	\$35,000
								\$2,275,211

# Component Significance

24901-4  
NSV

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Site/Grounds/Recreation					
200	Asphalt Roads - Repair/Resurface	25	\$43,250	\$1,730	0.80 %
204	Gravel Roads/Lots - Maintain/Repair	5	\$46,350	\$9,270	4.31 %
350	Play Equipment - Replace	10	\$10,320	\$1,032	0.48 %
356	Basketball Court - Repair/Replace	30	\$19,100	\$637	0.30 %
370	Pavilion - Replace Roof	25	\$7,850	\$314	0.15 %
Small Boat Marina					
302	Small Boat Docks/Floats-Replace	30	\$127,500	\$4,250	1.98 %
306	Small Boat Dock Pilings - Replace	50	\$212,500	\$4,250	1.98 %
320	Small Boat Trestle/Ramp - Replace	30	\$87,500	\$2,917	1.36 %
336	Small Boat Gangway - Replace	30	\$7,700	\$257	0.12 %
Community Building					
410	Community Building Siding-Replace	50	\$22,800	\$456	0.21 %
430	Community Building Roof - Replace	40	\$18,000	\$450	0.21 %
460	Community Blding Septic - Replace	50	\$10,320	\$206	0.10 %
Equipment					
540	Dust/Water Truck - Replace	12	\$16,000	\$1,333	0.62 %
Ferry System					
700	Ferry Terminals - Inspect/Repair	4	\$19,100	\$4,775	2.22 %
702	Ferry Terminals - Paint	12	\$180,500	\$15,042	7.00 %
704	Ferry Terminal Cables - Replace	6	\$29,200	\$4,867	2.26 %
706	Ferry Terminal Wood Decks - Replace	24	\$177,500	\$7,396	3.44 %
707	Ferry Terminal Structures - Replace	60	\$2,385,000	\$39,750	18.49 %
708	Ferry Ramp Dolphins-Future Replace	50	\$1,300,000	\$26,000	12.09 %
712	Ferry Ramp Generators - Replace	20	\$38,700	\$1,935	0.90 %
740	Ferry Vessel - Shipyard	2	\$92,700	\$46,350	21.55 %
744	Ferry Vessel - Overhaul Engines	5	\$38,800	\$7,760	3.61 %
746	Ferry Vessel - Replace Engines	50	\$167,000	\$3,340	1.55 %
755	Ferry Vessel-Overhaul Transmissions	5	\$14,400	\$2,880	1.34 %
757	Ferry Vessel-Replace Transmissions	25	\$33,400	\$1,336	0.62 %
760	Ferry Vessel - Replace	60	\$1,590,000	\$26,500	12.32 %
Professional/Special Projects					
940	Legal Contingency Fund	0	\$35,000	\$0	0.00 %
27	Total Funded Components			\$215,032	100.00 %

# 30-Year Reserve Plan Summary

24901-4  
NSV

Fiscal Year Start: 2017

Interest:

1.00 %

Inflation:

3.00 %

Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2017	\$619,601	\$2,275,211	27.2 %	High	\$338,200	\$0	\$7,747	\$35,000
2018	\$930,548	\$2,528,900	36.8 %	Medium	\$348,346	\$0	\$9,884	\$241,607
2019	\$1,047,172	\$2,584,039	40.5 %	Medium	\$358,796	\$0	\$12,075	\$49,173
2020	\$1,368,871	\$2,845,883	48.1 %	Medium	\$369,560	\$0	\$14,939	\$133,203
2021	\$1,620,166	\$3,036,081	53.4 %	Medium	\$380,647	\$0	\$18,188	\$0
2022	\$2,019,001	\$3,376,444	59.8 %	Medium	\$392,066	\$0	\$21,601	\$129,607
2023	\$2,303,062	\$3,601,002	64.0 %	Medium	\$403,828	\$0	\$24,846	\$63,524
2024	\$2,668,213	\$3,908,064	68.3 %	Medium	\$415,943	\$0	\$28,035	\$171,014
2025	\$2,941,177	\$4,121,558	71.4 %	Low	\$428,422	\$0	\$31,699	\$0
2026	\$3,401,298	\$4,525,772	75.2 %	Low	\$441,274	\$0	\$35,462	\$183,973
2027	\$3,694,061	\$4,761,038	77.6 %	Low	\$454,513	\$0	\$37,914	\$294,586
2028	\$3,891,901	\$4,898,100	79.5 %	Low	\$468,148	\$0	\$40,309	\$227,111
2029	\$4,173,246	\$5,117,702	81.5 %	Low	\$482,192	\$0	\$44,014	\$66,084
2030	\$4,633,369	\$5,518,948	84.0 %	Low	\$496,658	\$0	\$48,099	\$187,679
2031	\$4,990,447	\$5,816,463	85.8 %	Low	\$511,558	\$0	\$51,011	\$336,854
2032	\$5,216,162	\$5,979,010	87.2 %	Low	\$526,905	\$0	\$54,013	\$205,994
2033	\$5,591,086	\$6,291,269	88.9 %	Low	\$542,712	\$0	\$58,465	\$85,370
2034	\$6,106,892	\$6,747,491	90.5 %	Low	\$558,993	\$0	\$62,844	\$261,398
2035	\$6,467,332	\$7,046,753	91.8 %	Low	\$575,763	\$0	\$67,863	\$0
2036	\$7,110,957	\$7,635,216	93.1 %	Low	\$593,036	\$0	\$73,599	\$162,550
2037	\$7,615,041	\$8,085,217	94.2 %	Low	\$610,827	\$0	\$79,569	\$0
2038	\$8,305,437	\$8,727,796	95.2 %	Low	\$629,152	\$0	\$84,373	\$442,601
2039	\$8,576,360	\$8,945,774	95.9 %	Low	\$648,026	\$0	\$85,521	\$774,776
2040	\$8,535,131	\$8,840,512	96.5 %	Low	\$667,467	\$0	\$88,177	\$182,951
2041	\$9,107,824	\$9,354,403	97.4 %	Low	\$687,491	\$0	\$94,950	\$0
2042	\$9,890,265	\$10,085,264	98.1 %	Low	\$708,116	\$0	\$101,381	\$305,273
2043	\$10,394,489	\$10,537,127	98.6 %	Low	\$729,359	\$0	\$106,834	\$249,194
2044	\$10,981,488	\$11,074,218	99.2 %	Low	\$751,240	\$0	\$112,216	\$373,732
2045	\$11,471,212	\$11,513,479	99.6 %	Low	\$773,777	\$0	\$119,126	\$0
2046	\$12,364,115	\$12,365,620	100.0 %	Low	\$796,990	\$0	\$126,889	\$263,464

# 30-Year Income/Expense Detail (yrs 0 through 4)

24901-4  
NSV

Fiscal Year	2017	2018	2019	2020	2021
Starting Reserve Balance	\$619,601	\$930,548	\$1,047,172	\$1,368,871	\$1,620,166
Annual Reserve Contribution	\$338,200	\$348,346	\$358,796	\$369,560	\$380,647
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,747	\$9,884	\$12,075	\$14,939	\$18,188
Total Income	\$965,548	\$1,288,779	\$1,418,043	\$1,753,370	\$2,019,001
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$44,548	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$49,173	\$0	\$0
350 Play Equipment - Replace	\$0	\$10,630	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
370 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 Bldg Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$0	\$16,480	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$19,673	\$0	\$0	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$31,908	\$0
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$0	\$95,481	\$0	\$101,296	\$0
744 Ferry Vessel - Overhaul Engines	\$0	\$39,964	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$14,832	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0
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	\$241,607	\$49,173	\$133,203	\$0
Ending Reserve Balance	\$930,548	\$1,047,172	\$1,368,871	\$1,620,166	\$2,019,001

<b>Fiscal Year</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
Starting Reserve Balance	\$2,019,001	\$2,303,062	\$2,668,213	\$2,941,177	\$3,401,298
Annual Reserve Contribution	\$392,066	\$403,828	\$415,943	\$428,422	\$441,274
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$21,601	\$24,846	\$28,035	\$31,699	\$35,462
Total Income	\$2,432,669	\$2,731,736	\$3,112,191	\$3,401,298	\$3,878,034
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$57,005	\$0	\$0
350 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
370 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 Bldg 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	\$22,142	\$0	\$0	\$0	\$24,921
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$0	\$38,099
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$107,465	\$0	\$114,009	\$0	\$120,952
744 Ferry Vessel - Overhaul Engines	\$0	\$46,329	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$17,194	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0
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	\$129,607	\$63,524	\$171,014	\$0	\$183,973
Ending Reserve Balance	\$2,303,062	\$2,668,213	\$2,941,177	\$3,401,298	\$3,694,061

<b>Fiscal Year</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>
Starting Reserve Balance	\$3,694,061	\$3,891,901	\$4,173,246	\$4,633,369	\$4,990,447
Annual Reserve Contribution	\$454,513	\$468,148	\$482,192	\$496,658	\$511,558
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$37,914	\$40,309	\$44,014	\$48,099	\$51,011
Total Income	\$4,186,487	\$4,400,357	\$4,699,453	\$5,178,125	\$5,553,016
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$66,084	\$0	\$0
350 Play Equipment - Replace	\$0	\$14,285	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
370 Pavilion - Replace Roof	\$0	\$10,866	\$0	\$0	\$0
<b>Small Boat Marina</b>					
302 Small Boat Docks/Floats-Replace	\$0	\$0	\$0	\$0	\$192,855
306 Small Boat Dock Pilings - Replace	\$0	\$0	\$0	\$0	\$0
320 Small Boat Trestle/Ramp - Replace	\$0	\$0	\$0	\$0	\$132,352
336 Small Boat Gangway - Replace	\$0	\$0	\$0	\$0	\$11,647
<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 Bldg Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$0	\$0	\$0	\$23,497	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$0	\$0	\$0	\$28,049	\$0
702 Ferry Terminals - Paint	\$242,577	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$0	\$0	\$0
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$52,010	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$0	\$128,318	\$0	\$136,133	\$0
744 Ferry Vessel - Overhaul Engines	\$0	\$53,708	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$19,933	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0
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	\$294,586	\$227,111	\$66,084	\$187,679	\$336,854
Ending Reserve Balance	\$3,891,901	\$4,173,246	\$4,633,369	\$4,990,447	\$5,216,162

<b>Fiscal Year</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>
Starting Reserve Balance	\$5,216,162	\$5,591,086	\$6,106,892	\$6,467,332	\$7,110,957
Annual Reserve Contribution	\$526,905	\$542,712	\$558,993	\$575,763	\$593,036
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$54,013	\$58,465	\$62,844	\$67,863	\$73,599
Total Income	\$5,797,080	\$6,192,262	\$6,728,729	\$7,110,957	\$7,777,591
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$76,609	\$0	\$0
350 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
370 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 Bldg Septic - Replace	\$16,078	\$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	\$0	\$31,569	\$0	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$45,493	\$0	\$0	\$0	\$0
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$144,424	\$0	\$153,219	\$0	\$162,550
744 Ferry Vessel - Overhaul Engines	\$0	\$62,263	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$23,108	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0
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	\$205,994	\$85,370	\$261,398	\$0	\$162,550
Ending Reserve Balance	\$5,591,086	\$6,106,892	\$6,467,332	\$7,110,957	\$7,615,041



<b>Fiscal Year</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>	<b>2041</b>
Starting Reserve Balance	\$7,615,041	\$8,305,437	\$8,576,360	\$8,535,131	\$9,107,824
Annual Reserve Contribution	\$610,827	\$629,152	\$648,026	\$667,467	\$687,491
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$79,569	\$84,373	\$85,521	\$88,177	\$94,950
Total Income	\$8,305,437	\$9,018,962	\$9,309,908	\$9,290,775	\$9,890,265
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$0	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$88,811	\$0	\$0
350 Play Equipment - Replace	\$0	\$19,198	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$0	\$0	\$0	\$0
370 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 Bldg 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	\$35,532	\$0	\$0	\$0
702 Ferry Terminals - Paint	\$0	\$0	\$345,857	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$54,321	\$0	\$0	\$0
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$340,108	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$0	\$172,449	\$0	\$182,951	\$0
744 Ferry Vessel - Overhaul Engines	\$0	\$72,179	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$26,788	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$62,134	\$0	\$0	\$0
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	\$0	\$442,601	\$774,776	\$182,951	\$0
Ending Reserve Balance	\$8,305,437	\$8,576,360	\$8,535,131	\$9,107,824	\$9,890,265

<b>Fiscal Year</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>	<b>2046</b>
Starting Reserve Balance	\$9,890,265	\$10,394,489	\$10,981,488	\$11,471,212	\$12,364,115
Annual Reserve Contribution	\$708,116	\$729,359	\$751,240	\$773,777	\$796,990
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$101,381	\$106,834	\$112,216	\$119,126	\$126,889
Total Income	\$10,699,761	\$11,230,682	\$11,844,944	\$12,364,115	\$13,287,995
# Component					
<b>Site/Grounds/Recreation</b>					
200 Asphalt Roads - Repair/Resurface	\$0	\$93,273	\$0	\$0	\$0
204 Gravel Roads/Lots - Maintain/Repair	\$0	\$0	\$102,957	\$0	\$0
350 Play Equipment - Replace	\$0	\$0	\$0	\$0	\$0
356 Basketball Court - Repair/Replace	\$0	\$41,191	\$0	\$0	\$0
370 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	\$37,688	\$0	\$0	\$0	\$0
460 Community Bldg Septic - Replace	\$0	\$0	\$0	\$0	\$0
<b>Equipment</b>					
540 Dust/Water Truck - Replace	\$33,500	\$0	\$0	\$0	\$0
<b>Ferry System</b>					
700 Ferry Terminals - Inspect/Repair	\$39,991	\$0	\$0	\$0	\$45,010
702 Ferry Terminals - Paint	\$0	\$0	\$0	\$0	\$0
704 Ferry Terminal Cables - Replace	\$0	\$0	\$64,862	\$0	\$0
706 Ferry Terminal Wood Decks - Replace	\$0	\$0	\$0	\$0	\$0
707 Ferry Terminal Structures - Replace	\$0	\$0	\$0	\$0	\$0
708 Ferry Ramp Dolphins-Future Replace	\$0	\$0	\$0	\$0	\$0
712 Ferry Ramp Generators - Replace	\$0	\$0	\$0	\$0	\$0
740 Ferry Vessel - Shipyard	\$194,093	\$0	\$205,913	\$0	\$218,454
744 Ferry Vessel - Overhaul Engines	\$0	\$83,676	\$0	\$0	\$0
746 Ferry Vessel - Replace Engines	\$0	\$0	\$0	\$0	\$0
755 Ferry Vessel-Overhaul Transmissions	\$0	\$31,055	\$0	\$0	\$0
757 Ferry Vessel-Replace Transmissions	\$0	\$0	\$0	\$0	\$0
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	\$305,273	\$249,194	\$373,732	\$0	\$263,464
Ending Reserve Balance	\$10,394,489	\$10,981,488	\$11,471,212	\$12,364,115	\$13,024,531

## Accuracy, Limitations, and Disclosures

Washington disclosure, per RCW:

"The 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."

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 WA, LLC 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

## 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)
<b>Effective Age</b>	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
<b>Fully Funded Balance (FFB)</b>	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.
<b>Inflation</b>	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 the "30-yr Income/Expense Detail" table.
<b>Interest</b>	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 monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
<b>Percent Funded</b>	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.
<b>Remaining Useful Life (RUL)</b>	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
<b>Useful Life (UL)</b>	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 Component Details appendix is to provide the reader with the basis of our funding assumptions resulting from our research and analysis. The information presented here represents a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

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

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

## Site/Grounds/Recreation

---

**Comp #: 100 Water System - Maintain/Repair****Quantity: Extensive systems**

Location: Throughout community

Funded?: No. Separate entity with a segregated budget/reserves

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 200 Asphalt Roads - Repair/Resurface****Quantity: Approx 10,500 square feet**

Location: Partial East Herron Boulevard and Ferry Street

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 25 years

Remaining Life: 1 years

Best Case: \$ 41,100

Worst Case: \$45,400

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 204 Gravel Roads/Lots - Maintain/Repair****Quantity: Approx 500,000 surface SF**

Location: Common areas, Island and Mainland

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Delivery of barge loads of gravel occurred last in FY 2014/2015 at an expense of ~\$42,300

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 5 years

Remaining Life: 2 years

Best Case: \$ 41,200

Worst Case: \$51,500

Lower allowance

Higher allowance

Cost Source: Client Cost History

---

**Comp #: 210 Site Lighting - Replace****Quantity: Small quantity**

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

Funded?: No. Cost projected to be too small

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 212 Small Structures - Maintain/Replace****Quantity: (5) assorted**

Location: Community Building, North Beach and Ferry Terminals

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 214 Community Signage - Replace****Quantity: Extensive quantity**

Location: Common areas, Island and Mainland

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 216 Community Kiosks/Readers - Replace****Quantity: (2) wood**

Location: Common areas, Island and Mainland

Funded?: No. Cost projected to be too small

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 217 Chain Link Fence - Replace****Quantity: Approx 500 linear feet**

Location: Mainland Generator, Goodpastor Park Backstop

Funded?: No. Cost projected to be too small

History: Addition by basketball court, playground, etc. in FY 2014/2015, mainland generator fencing in 2007

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 220 Wood Fence - Replace****Quantity: Moderate linear feet**

Location: Mainland Parking Lot

Funded?: No. Research suggests association not responsible

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 226 Landscape - Maintain/Refurbish****Quantity: Extensive square feet**

Location: Common areas

Funded?: No. Annual cost best handled as operating expense

History: Tree removal events of \$8,000 in FY 2014/2015 and \$5,400 FY 2015/2016 YTD

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 230 Site Electrical - Repair/Replace****Quantity: Extensive systems**

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

Funded?: No. Useful life not predictable or extended

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 250 Mailboxes - Replace****Quantity: (4) clusters, assorted**

Location: Mainland Parking Lot

Funded?: No. Board suggests owner responsibility, not association

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 260 Beach Armor/Bulkhead - Add****Quantity: Extensive square feet**

Location: North Beach

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:



**Comp #: 350 Play Equipment - Replace****Quantity: (6) assorted**

Location: Goodpastor Park and North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: No change in RUL, annual inflation adjustment 3%

Useful Life: 10 years

Remaining Life: 1 years

Best Case: \$ 8,240

Worst Case: \$12,400

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client

---

**Comp #: 356 Basketball Court - Repair/Replace****Quantity: Approx 1,100 SF, total**

Location: Goodpastor Park

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Concrete replacement in FY 2013/2014 at expense of \$17,500

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 30 years

Remaining Life: 26 years

Best Case: \$ 18,000

Worst Case: \$20,200

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client

---

**Comp #: 360 Picnic Assets - Replace****Quantity: Extensive quantity**

Location: Community Building, Goodpastor Park, North Beach, etc...

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 370 Pavilion - Replace Roof****Quantity: Approx 2,200 SF**

Location: North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Roof was replaced last in FY 2003/2004

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 25 years

Remaining Life: 11 years

Best Case: \$ 7,210

Worst Case: \$8,490

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

## Small Boat Marina

---

**Comp #: 302 Small Boat Docks/Floats-Replace****Quantity: Approx 2,600 square feet**

Location: North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Replacement occurred last in 1997 along with another project in 2006 for finger expansion

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 30 years

Remaining Life: 14 years

Best Case: \$ 117,000

Worst Case: \$138,000

Lower allowance

Higher allowance

Cost Source: Client Cost History Inflated/Research  
with Local Contractor

---

**Comp #: 306 Small Boat Dock Pilings - Replace****Quantity: (15) steel**

Location: North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Metal pilings installed in FY 2011/2012 at expense of \$188,000

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 50 years

Remaining Life: 44 years

Best Case: \$ 202,000

Worst Case: \$223,000

Lower allowance

Higher allowance

Cost Source: Client Cost History, Inflation Adjusted

---

**Comp #: 320 Small Boat Trestle/Ramp - Replace****Quantity: Approx 630 square feet**

Location: North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Significant replacement reportedly occurred last in 1997

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 30 years

Remaining Life: 14 years

Best Case: \$ 70,000

Worst Case: \$105,000

Lower allowance

Higher allowance

Cost Source: Research with Local Contractors

---

**Comp #: 336 Small Boat Gangway - Replace****Quantity: (1) aluminum, ~4'x20'**

Location: North Beach

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 30 years

Remaining Life: 14 years

Best Case: \$ 6,590

Worst Case: \$8,810

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project  
Cost History

---

**Comp #: 340 Small Boat Launch - Repair/Replace****Quantity: Approx 1,400 square feet**

Location: North Beach

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

## Community Building

**Comp #: 410 Community Building Siding-Replace****Quantity: Approx 1,400 GSF**

Location: 901 West Yew Blvd KPN

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Cement-fiber siding was reportedly installed in FY 2005/2006

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 50 years

Remaining Life: 38 years

Best Case: \$ 18,000

Worst Case: \$27,600

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 420 Community Building Exterior-Paint****Quantity: Approx 1,400 GSF**

Location: 901 West Yew Blvd KPN

Funded?: No. Cost projected to be too small

History: Painting reportedly occurred last in FY 2015/2016 at expense of \$2,000; previous project in FY 2005/2006

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 430 Community Building Roof - Replace****Quantity: Approx 2,700 GSF**

Location: 901 West Yew Blvd KPN

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 40 years

Remaining Life: 25 years

Best Case: \$ 14,800

Worst Case: \$21,200

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 450 Community Blding Interior-Refinish****Quantity: Moderate GSF**

Location: 901 West Yew Blvd KPN

Funded?: No. Cost projected to be too small

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 454 Community Blding Kitchen-Refurbish****Quantity: Moderate square feet**

Location: 901 West Yew Blvd KPN

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 456 Community Blding Bathrooms-Maintain****Quantity: (2) small, two-piece**

Location: 901 West Yew Blvd KPN

Funded?: No. Cost projected to be too small

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 460 Community Blding Septic - Replace****Quantity: (1) system**

Location: 901 West Yew Blvd KPN

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Likely installed in 1982

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 50 years

Remaining Life: 15 years

Best Case: \$ 8,240

Worst Case: \$12,400

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 464 CB Windows/Doors-Replace****Quantity: Moderate quantity**

Location: 901 West Yew Blvd KPN

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 466 CB Electrical/Plumbing-Replace****Quantity: Extensive systems**

Location: 901 West Yew Blvd KPN

Funded?: No. Useful life not predictable or extended

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

## Equipment

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

**Quantity: Minor equipment**

Location: Community Building

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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

**Quantity: Minor equipment**

Location: Community and Pavilion Buildings

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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

**Quantity: (1) small riding mower**

Location: Community Building Shed

Funded?: No. Cost projected to be too small

History: 2014/2015 replacement at only \$3,260 expense

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

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

**Quantity: (1) 1991 Chevy Kodiak**

Location: Community Building

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: No change in RUL, annual inflation adjustment 3%

Useful Life: 12 years

Remaining Life: 1 years

Best Case: \$ 12,800

Worst Case: \$19,200

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

## Ferry System

---

**Comp #: 700 Ferry Terminals - Inspect/Repair****Quantity: Approx 6,100 square feet**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History:

Comments: Adjusted UL / RUL and annual inflation adjustment 3%

Useful Life: 4 years

Remaining Life: 1 years

Best Case: \$ 17,000

Worst Case: \$21,200

Lower allowance

Higher allowance

Cost Source: Client Cost History/Estimate Provided  
by Client

---

**Comp #: 702 Ferry Terminals - Paint****Quantity: Approx 6,100 square feet**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2015/2016 segregated construction cost was reportedly \$155,000 plus portion of \$46,000 for other costs

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 12 years

Remaining Life: 10 years

Best Case: \$ 155,000

Worst Case: \$206,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

---

**Comp #: 704 Ferry Terminal Cables - Replace****Quantity: Extensive linear feet**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2014/2015 replacement at \$27,200 expense

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 6 years

Remaining Life: 3 years

Best Case: \$ 26,600

Worst Case: \$31,800

Lower allowance

Higher allowance

Cost Source: Client Cost History/Estimate Provided  
by Client

---

**Comp #: 706 Ferry Terminal Wood Decks - Replace****Quantity: Approx 2,940 square feet**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2014/2015 replacement at \$144,000 plus portion of \$46,000 "soft" costs

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 24 years

Remaining Life: 22 years

Best Case: \$ 167,000

Worst Case: \$188,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

---

**Comp #: 707 Ferry Terminal Structures - Replace****Quantity: Approx 6,100 square feet**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Terminals were built in 1994

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 60 years

Remaining Life: 34 years

Best Case: \$ 2,120,000

Worst Case: \$2,650,000

Lower allowance

Higher allowance

Cost Source: Previous Research with Local  
Contractor, Inflation Adjusted

---

**Comp #: 708 Ferry Ramp Dolphins - FY 2017/2018****Quantity: (8) assemblies**

Location: Island and Mainland Terminals

Funded?: No. \$360,000 monies already earmarked, otherwise utilizing USDA loan for sum of ~\$940,000

History: Assumed FY 2017/2018 ~\$1,300,000 project completion; utilizing USDA loan for sum of ~\$940,000 (\$360,000 monies earmarked)

Comments: Assumed FY 2017/2018 ~\$1,300,000 project completion; utilizing USDA loan for sum of ~\$940,000 (\$360,000 monies earmarked)

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 708 Ferry Ramp Dolphins-Future Replace****Quantity: (8) assemblies**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Assumes planned FY 2017/2018 project completion, USDA financing occurs

Comments: Adjusted RUL and cost allowance / estimate per client estimate Assumes planned FY 2017/2018 project completion, USDA financing occurs

Useful Life: 50 years

Remaining Life: 50 years

Best Case: \$ 1,100,000

Worst Case: \$1,500,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client

---

**Comp #: 710 Ferry Ramp Bulkhead - Repair****Quantity: Moderate square feet**

Location: Island Terminal

Funded?: No. Useful life not predictable or extended

History: Some repair occurred in 2006; no further project history was provided

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 712 Ferry Ramp Generators - Replace****Quantity: (2) Generac 35kw**

Location: Island and Mainland Terminals

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: Installed in FY 2007/2008 at an expense of \$33,000

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 20 years

Remaining Life: 10 years

Best Case: \$ 35,000

Worst Case: \$42,400

Lower allowance

Higher allowance

Cost Source: Client Cost History Inflated/Similar

Project Cost History

---

**Comp #: 718 Ferry Ramp Surveillance - Replace****Quantity: (2) camera, DVR**

Location: Select common areas

Funded?: No. Cost projected to be too small

History: Modest system installed at Mainland Terminal in 2012 at an expense of \$2,300

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 740 Ferry Vessel - Shipyard****Quantity: 65' LOA**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2016/2017 expense was reportedly \$90,000, FY 2014/2015 \$84,600

Comments: Adjusted RUL and cost allowance / estimate per recent FY 2016/2017 reported cost, annual inflation adjustment 3%

Useful Life: 2 years

Remaining Life: 1 years

Best Case: \$ 90,700

Worst Case: \$94,700

Lower allowance

Higher allowance

Cost Source: Client Cost History/Estimate Provided by Client

---

**Comp #: 744 Ferry Vessel - Overhaul Engines****Quantity: (2) GM 300 HP, diesel**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: New four-cycle John Deere units in FY 2013/2014; overhaul anticipated next in FY 2018/2019

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 5 years

Remaining Life: 1 years

Best Case: \$ 33,000

Worst Case: \$44,600

Lower allowance

Higher allowance

Cost Source: Client Cost History/Estimate Provided by Client



**Comp #: 746 Ferry Vessel - Replace Engines****Quantity: (2) GM 300 HP, diesel**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: New four-cycle John Deere units in FY 2013/2014 at \$152,000 expense

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 50 years

Remaining Life: 46 years

Best Case: \$ 159,000

Worst Case: \$175,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

---

**Comp #: 755 Ferry Vessel-Overhaul Transmissions****Quantity: (2) Twin Disc MG 5091 SC**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2013/2014 new transmissions; overhaul anticipated next in FY 2018/2019

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 5 years

Remaining Life: 1 years

Best Case: \$ 12,800

Worst Case: \$16,000

Lower allowance

Higher allowance

Cost Source: Client Cost History/Research with  
Local Contractor

---

**Comp #: 757 Ferry Vessel-Replace Transmissions****Quantity: (2) Twin Disc MG 5091 SC**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: FY 2013/2014 new transmissions at \$31,500 expense

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 25 years

Remaining Life: 21 years

Best Case: \$ 31,300

Worst Case: \$35,500

Lower allowance

Higher allowance

Cost Source: Client Cost History/Research with  
Local Contractor

---

**Comp #: 760 Ferry Vessel - Replace****Quantity: 65' LOA**

Location: M/V Charlie Wells

Funded?: Yes. Meets National Reserve Study Standards criteria for Reserve Funding

History: 1989 replacement with new

Comments: Deducted 1 yr. from RUL, annual inflation adjustment 3%

Useful Life: 60 years

Remaining Life: 32 years

Best Case: \$ 1,380,000

Worst Case: \$1,800,000

Lower allowance

Higher allowance

Cost Source: Estimate Provided by Client, Inflation  
Adjusted

## Professional/Special Projects

**Comp #: 940 Legal Contingency Fund****Quantity: \$35,000**

Location: Reserve funds

Funded?: Yes. Board directed assumption

History:

Comments: No change in RUL and cost allowance / estimate same as last report

Useful Life: 0 years

Remaining Life: 0 years

Best Case: \$ 34,000

Worst Case: \$36,000

Lower legal contingency

Higher legal contingency

Cost Source: Estimate Provided by Client

---

**Comp #: 999 Reserve Study Update****Quantity: Annual Update**

Location: Common areas

Funded?: No. Annual cost best handled as operating expense

History:

Comments:

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source: