Comp #: 490 Clubhouse Plumbing - Repair/Replace **Approx Quantity: 1 supply & drain lines**
Location: Clubhouse plumbing
Funded?: No. There is no basis for reserve funding at this time.
History: No major projects reported
Comments: Until a qualified engineering firm has performed an evaluation of your plumbing systems, and provided specific recommendations, there is no predictable basis for system replacement reserves funding at this time.

Manufacturing defects become apparent from time to time, and certain site conditions (e.g. galvanic corrosion, dissimilar metals in contact with piping, chemical reactions, etc.) can contribute to premature deterioration of the plumbing systems.

Treat minor repairs as an ongoing maintenance expense.

Useful Life:

Remaining Life:

Lower Estimate: **Higher Estimate:**

Cost Source:

Comp #: 493 Clubhouse Septic System - Repair/Replace **Approx Quantity: 2 systems**
Location: Ground level of clubhouse
Funded?: Yes.
History: No major projects reported
Comments: No issues were reported of the septic system.

It is assumed that the clubhouse septic system is maintained similar to the individual residents and is pumped regularly. The Association maintains a maintenance allowance for larger scale septic system repairs. Keep track of actual expenses and update future reserve studies as needed.

Useful Life:
30 years

Remaining Life:
2 years

Lower Estimate: $ 18,000 **Higher Estimate:** $ 22,000

Cost Source:

Comp #: 495 Clubhouse Electrical System - Modernize **Approx Quantity: 1 Allowance**
Location: Clubhouse electrical system
Funded?: No. There is no basis for reserve funding at this time.
History: No major projects reported
Comments: The majority of the electrical system is not visible for review. Analysis of the electrical system, beyond a limited visual review, is not within the scope of a reserve study. No large issues or problems/defects were reported.

We recommend periodic evaluation by engineer/master electrician to evaluate the system for safety, code-compliance, maintenance, and repair and replacement needs. Any predictable expenses identified that meet the criteria for reserves funding can be included in the reserves plan. Some electrical system components are known to be life limited. Manufacturing defects become known from time to time, and certain site conditions can contribute to premature deterioration of electrical components.

Useful Life:

Remaining Life:

Lower Estimate: **Higher Estimate:**

Cost Source:

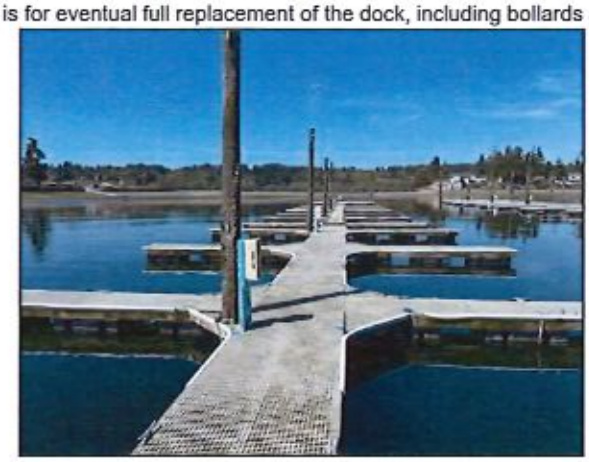
Marina

Comp #: 1101 Mooring Dock A - Replace **Approx Quantity: 3,900 SF**
Location: Marina
Funded?: Yes.
History: 2025-Partial replacement, added bollards and plumbing at $335K; 2022, 2021, 2018-Partial replacements at $110,000; 2014-Main section replaced;1974-Installed
Comments: The Association reported plans to replace remaining old section of mooring dock A in 2025 (~1,900 SF including 6 fingers). Bollard lights will replace overhead lighting, and brass water outlets will be added.

Replacement estimate, below, is for eventual full replacement of the dock, including bollards and plumbing.

Useful Life:
45 years

Remaining Life:
44 years



Lower Estimate: **Higher Estimate:**

Cost Source:

Comp #: 1103 Mooring Dock B - Replace **Approx Quantity: 3,900 SF**
Location: Marina
Funded?: Yes.
History: 2022-Remaining dock and floats replaced $131K; 2021, 2018-Partial replacement
Comments: The dock and fingers of Dock B have been replaced incrementally since 2018. Funding is provided, below, for replacement of the dock and floats, including bollards and plumbing, based on estimates provided for Dock A in 2025.

Additional work may be added to Dock B to install bollards and plumbing. As these plans are developed, include funding in future reserve studies.

Useful Life:
45 years

Remaining Life:
41 years

Lower Estimate: $ 674,000 **Higher Estimate:** $ 824,000

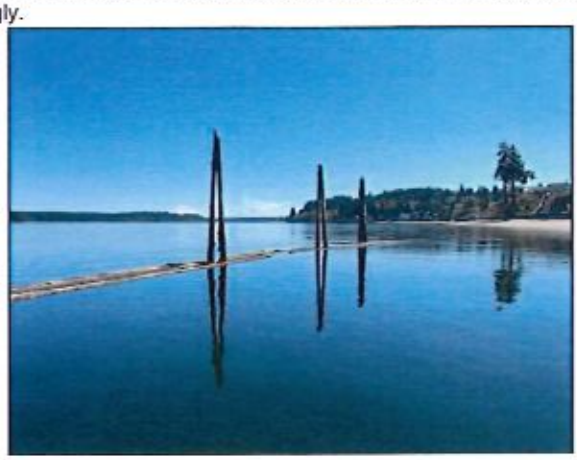
Cost Source:

Comp #: 1105 Log Boom - Repair/Replace **Approx Quantity: 550 LF**
Location: Outer perimeter of marina
Funded?: Yes.
History: 2021-Repaired/stabilized; 2018-Replaced $20K
Comments: The Association reported that the log boom was due for repairs and partial replacements.

Funding is provided, below, for cyclical repairs and replacements of the log boom. Keep track of actual expenses and update future reserve studies accordingly.

Useful Life:
10 years

Remaining Life:
0 years



Lower Estimate: **Higher Estimate:**

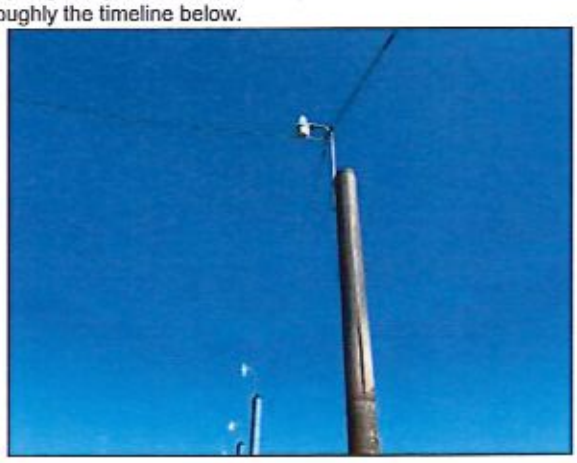
Cost Source: Client Cost History: 2018 at $20K

Comp #: 1110 Marina Metal Pilings - Replace **Approx Quantity: 22 Metal pilings**
Location: Marina
Funded?: Yes.
History: 2018-Replaced
Comments: No problems were reported of the metal pilings.

While the useful life of the metal pilings may extend beyond 50 years, due to the corrosive nature of seawater, we recommend budgeting for replacements at roughly the timeline below.

Useful Life:
50 years

Remaining Life:
42 years



Lower Estimate: $ 188,000 **Higher Estimate:** $ 230,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 1111 Marina Wood Pilings - Replace **Approx Quantity: 35 Wood pilings**
Location: Marina
Funded?: Yes.
History: No major projects reported
Comments: No professional evaluation of the wood pilings was available at the time of this report. Previous Association documents indicate that the replacement of the wood pilings with required metal pilings was anticipated in 2025/26, but no plans had been made.

Funding is provided, below, for the replacement of the wood pilings in the current fiscal year. Future reserve studies can be updated as evaluations and plans are finalized.

Useful Life:
50 years

Remaining Life:
0 years

Lower Estimate: $ 268,000 **Higher Estimate:** $ 327,000

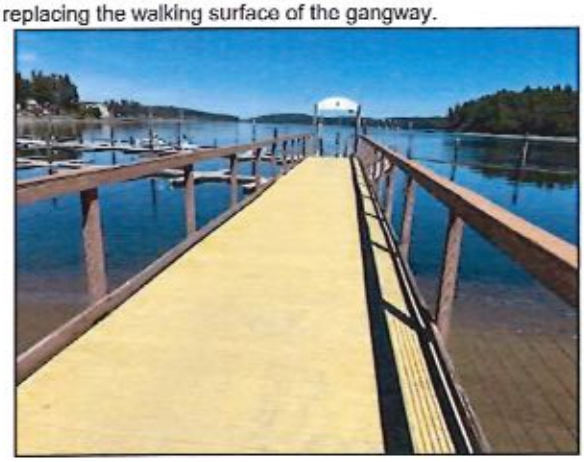
Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 1114 Marina Wood Gangway - Rpr/Rplc **Approx Quantity: 616 SF**
Location: Main gangway leading to docks
Funded?: Yes.
History: No major projects reported
Comments: No problems were reported regarding the structure of the wood gangway. The surface of the gangway appeared worn of it's exterior surface. The metal cables on the railings appeared to be loose, allowing for penetration of larger objects. We recommend that the cables be tightened as a health and safety precaution.

Funding is provided, below, for replacing the walking surface of the gangway.

Useful Life:
25 years

Remaining Life:
0 years



Lower Estimate: $ 23,400 **Higher Estimate:** $ 28,600

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 1115 Marina Metal Gangway - Repair/Replace **Approx Quantity: 250 SF**
Location: Metal gangway leading to dock.
Funded?: Yes.
History: No major projects reported
Comments: No problems were reported of the metal gangway leading to the main dock. The railings showed loss of paint coverage with some rust showing through. The gangway should be evaluated by a qualified engineer.

Funding is provided, below, for replacing the aluminum gangway and grating.

Useful Life:
50 years

Remaining Life:
5 years

Lower Estimate: $ 56,300 **Higher Estimate:** $ 68,800

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 1116 Main Floating Docks - Repair/Replace **Approx Quantity: 1,570 SF**
Location: Marina
Funded?: Yes.
History: 2012 - Replaced
Comments: No problems were reported of the main floating dock of the marina. The condition of the dock is best determined by a qualified engineer. The remaining useful life is set, below, according to Association documents and historical satellite imagery.

Useful Life:
50 years

Remaining Life:
46 years

Lower Estimate: $ 268,000 **Higher Estimate:** $ 328,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 1120 Bulkhead Retaining Walls - Repair **Approx Quantity: 830 LF**
Location: Along north perimater at the Marina
Funded?: Yes.
History: 2014-Repairs at $400K
Comments: Association documents indicate a partial repair of the bulkhead in 2014, with the remaining repairs due in 2026. The concrete wall showed some disintegration and areas of rust showing through cracks in the walls.

We recommend a professional evaluation by a qualified engineer to establish a maintenance and repair plan for the bulkhead. Funding is provided, below, based on previous Association documentation.

Useful Life:
50 years

Remaining Life:
0 years

Lower Estimate: **Higher Estimate:**

Cost Source: Client Cost History: 2014

Comp #: 1144 Chain Link Fence - Repair/Replace **Approx Quantity: 2 Chain link fences**
Location: The community perimeters.
Funded?: Yes.
History: Assumed replaced with dock in 2014.
Comments: For financial planning purposes, plan on replacing at roughly the time frame shown below. Evaluate the fence as the remaining useful life approaches zero years, and adjust the remaining useful life accordingly.

Chain link fencing is generally a low maintenance item. Inspect periodically, and repair as needed. If corrosion is observed, apply a rust inhibitor to prevent corrosion from decreasing the useful life.

Useful Life:
35 years

Remaining Life:
23 years

Lower Estimate: $ 2,700 **Higher Estimate:** $ 3,300

Cost Source: ARI Cost Database: Similar Project Cost History

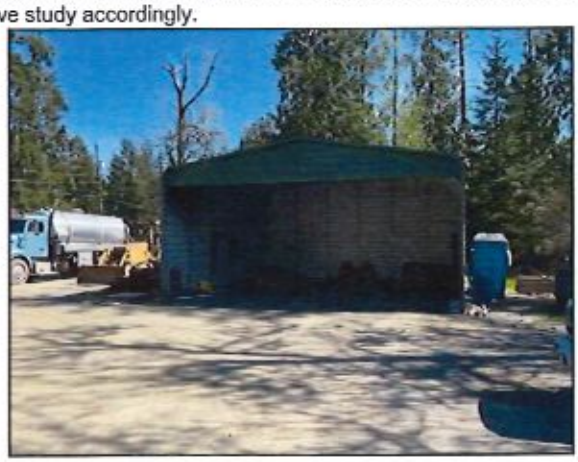
Maintenance Building

Comp #: 2100 Carports - Repair/Replace **Approx Quantity: 1 Metal structure**
Location: Maintenance area
Funded?: Yes.
History: 2018-Installed
Comments: No problems were reported of the metal car port.

Inspect regularly and repair, as needed, with operating funds. Evaluate the condition of the carport as remaining useful life approaches 0 and update reserve study accordingly.

Useful Life:
25 years

Remaining Life:
17 years



Lower Estimate: **Higher Estimate:**

Cost Source: Client Cost History: 2018

Comp #: 2500 Maintenance Roof - Repair/Replace **Approx Quantity: 2,300 SF**
Location: The rooftops of maintenance buildings
Funded?: Yes.
History: 2021-Replaced at $9.5K
Comments: Observation of the rooftops was limited during our site review. No problems were reported.

Evaluate the condition of the roof as remaining useful life approaches 0 and update reserve study accordingly.

Useful Life:
25 years

Remaining Life:
20 years

Lower Estimate: **Higher Estimate:**

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2510 Riding Mower - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: 2014-Purchased used at $6,500
Comments: Observation of the riding mower was not available at the time of the site visit.

Funding is provided for replacement of a comparable new riding mower.

Useful Life:
10 years

Remaining Life:
0 years

No Photo Available

Lower Estimate: $ 6,300 **Higher Estimate:** $ 7,700

Cost Source:

Comp #: 2511 Backhoe - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: No major projects reported
Comments: Association documents show that the backhoe is repaired as an operating expense as needed. Replacement with a used backhoe is planned for 2028.

Useful Life:
20 years

Remaining Life:
2 years

Lower Estimate: $ 45,000 **Higher Estimate:** $ 55,000

Cost Source: Client Cost Estimate

Comp #: 2512 Hydroexcavator - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: 2007-Purchased at $23.5K
Comments: The Association anticipates replacing the hydroexcavator in 2025.

Useful Life:
20 years

Remaining Life:
0 years

Lower Estimate: $ 33,300 **Higher Estimate:** $ 40,700

Cost Source: Client Cost Estimate

Comp #: 2513 Vehicles - Contingency **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: No major projects reported
Comments: The Association requested funding to replace one of four vehicles every 5 years, for a 20 year cycle.

Useful Life:
5 years

Remaining Life:
0 years

Lower Estimate: $ 27,000 **Higher Estimate:** $ 33,000

Cost Source: Client Cost Estimate

Comp #: 2515 Main Pump Truck - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: 2018-Purchased
Comments: The Association owns two pump trucks - a main pump truck and a backup pump truck. The Association requested funding for replacing one truck every 10 years.

Useful Life:
10 years

Remaining Life:
2 years

Lower Estimate: **Higher Estimate:**

Cost Source: Client Cost History: 2018

Comp #: 2520 Dump Trailer - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: No major projects reported
Comments: No problems were reported of the dump trailer.

Useful Life:
20 years

Remaining Life:
5 years

Lower Estimate: $ 9,000 **Higher Estimate:** $ 11,000

Cost Source: Client Cost Estimate

Comp #: 2525 Diesel Tank - Replace **Approx Quantity: 1 Allowance**
Location:
Funded?: Yes.
History: No major projects reported
Comments: The Association owns two diesel tanks; one 150 gallon tank located at the treatment plant and a second located at the Maintenance area.

Funds are provided for replacing one tank every 15 years for a 30 year cycle.

Useful Life:
15 years

Remaining Life:
0 years

Lower Estimate: $ 9,000 **Higher Estimate:** $ 11,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2530 Emergency Generator - Replace **Approx Quantity: 1 Allowance**
Location: Maintenance area
Funded?: Yes.
History: No major projects reported
Comments: Specifications of the emergency generator were not available at the time of the site review.

Funding is provided for periodic major repairs of the generator.

Useful Life:
10 years

Remaining Life:
0 years

Lower Estimate: $ 31,500 **Higher Estimate:** $ 38,500

Cost Source: Client Cost Estimate

Water System

Comp #: 3100 Water Tower - Paint **Approx Quantity: 1 Allowance**
Location: Water tower
Funded?: Yes.
History: 2000-Installed
Comments: The Association plans to paint the exterior of the water tower in 2025/26 to protect the surface from corrosion.

Useful Life:
20 years

Remaining Life:
0 years

Lower Estimate: $ 54,000 **Higher Estimate:** $ 66,000

Cost Source: Client Cost Estimate

Comp #: 3105 Water Tower Liner - Refurbish **Approx Quantity: 1 Allowance**
Location: Water tower
Funded?: Yes.
History: 2000-Instsalled
Comments: The Association plans to refurbish the water tower liner in 2025.

Useful Life:
30 years

Remaining Life:
7 years

Lower Estimate: **Higher Estimate:**

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3110 Water Tower - Replace **Approx Quantity: 1 Allowance**
Location: Water system - 420,000 gallon reservoir
Funded?: Yes.
History: 2000-Installed
Comments: Due to the expense of replacing the water tower reservoir, funding is included to provide for equitable replacement costs over the life of the component.

Useful Life:
100 years

Remaining Life:
77 years

Lower Estimate: **Higher Estimate:**

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3120 Blow off assembly - Replace **Approx Quantity: 59 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of blow off assembly recommended by NW Water Systems Plan 2025.

Useful Life:
50 years

Remaining Life:
27 years

No Photo Available

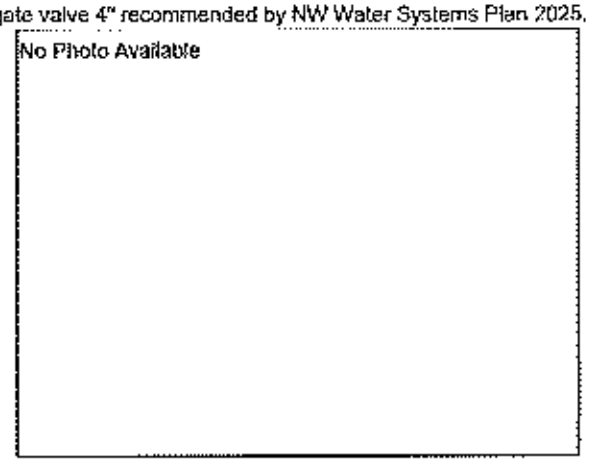
Lower Estimate: $ 133,000 **Higher Estimate:** $ 162,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3130 Gate Valve 4" - Replace **Approx Quantity: 79 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of gate valve 4" recommended by NW Water Systems Plan 2025.

Useful Life:
50 years

Remaining Life:
27 years



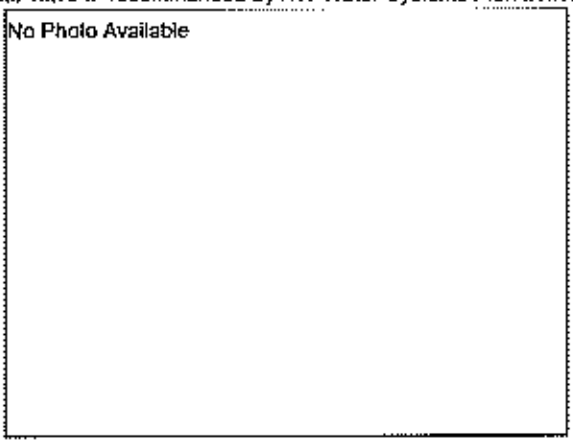
Lower Estimate: $ 142,000 **Higher Estimate:** $ 174,000

Cost Source:

Comp #: 3132 Gate Valve 8" - Replace **Approx Quantity: 5 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of gate valve 8" recommended by NW Water Systems Plan 2025.

Useful Life:
50 years

Remaining Life:
26 years



Lower Estimate: **Higher Estimate:**

Cost Source:

Comp #: 3135 Hydropneumatic Tank - Replace **Approx Quantity: 2 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of hydropneumatic tank recommended by NW Water Systems Plan 2025.

Useful Life:
50 years

Remaining Life:
30 years

Lower Estimate: $ 7,200 **Higher Estimate:** $ 8,800

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3136 Pump, Booster - Replace **Approx Quantity: 2 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of the pump booster recommended by NW Water Systems Plan 2025.

Useful Life:
10 years

Remaining Life:
10 years

Lower Estimate: $ 5,400 **Higher Estimate:** $ 6,600

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3137 Pump, Chlorine - Replace **Approx Quantity: 2 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of the chlorine pumps recommended by NW Water Systems Plan 2025.

Useful Life:
10 years

Remaining Life:
10 years

Lower Estimate: $ 2,700 **Higher Estimate:** $ 3,300

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3138 Pump, Source **Approx Quantity: 2 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of the source pumps recommended by NW Water Systems Plan 2025.

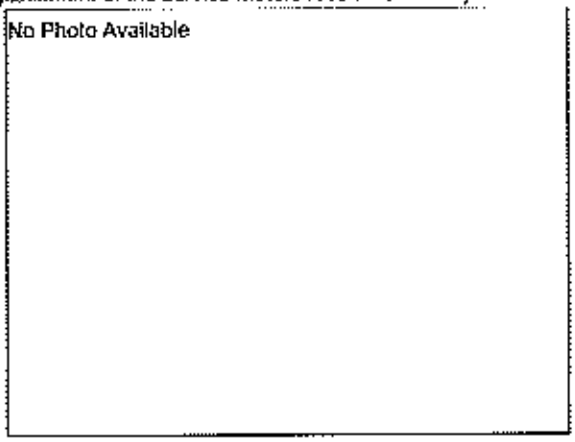
Useful Life:
10 years

Remaining Life:

Lower Estimate: $ 45,000 **Higher Estimate:** $ 55,000

Cost Source:

Comp #: 3140 Service meter - Replace **Approx Quantity: 547 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Schedule of the replacement of the service meters recommended by NW Water Systems - Water System Plan 2025.



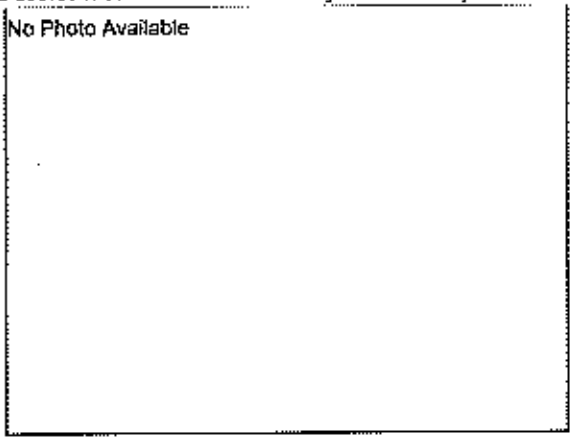
Useful Life:
20 years

Remaining Life:
20 years

Lower Estimate:	$ 345,000	**Higher Estimate:**	$ 421,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3145 Source meter 3" - Replace **Approx Quantity: 1 Allowance**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of the source meter 3" recommended by NW Water Systems - Water System Plan 2025.



Useful Life:
20 years

Remaining Life:
10 years

Lower Estimate:	$ 900	**Higher Estimate:**	$ 1,100

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3146 Source meter 4" - Replace **Approx Quantity: 1 Allowance**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Recommended replacement of the source meter 4" by NW Water Systems - Water System Plan 2025.

Useful Life:
20 years

Remaining Life:
10 years

No Photo Available

Lower Estimate: $ 900 **Higher Estimate:** $ 1,100

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3150 Telemetry system - Replace **Approx Quantity: 1 Allowance**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of the telemetry system recommended by NW Water Systems - Water System Plan 2025.

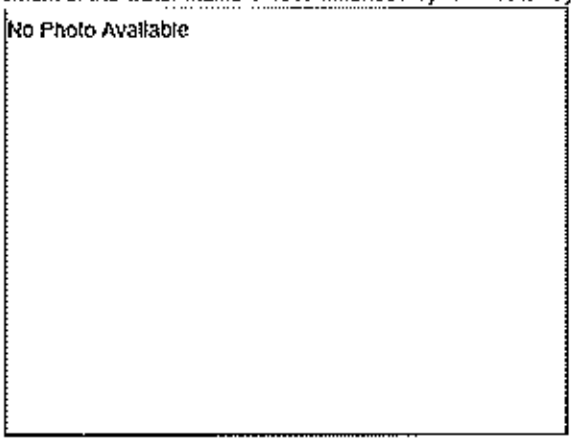
Useful Life:
20 years

Remaining Life:
19 years

Lower Estimate: $ 24,800 **Higher Estimate:** $ 30,300

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3160 Water Mains 4" - Replace **Approx Quantity: 20,000 LF**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Schedule of replacement of the water mains 4" recommended by NW Water Systems - Water System Plan 2025.



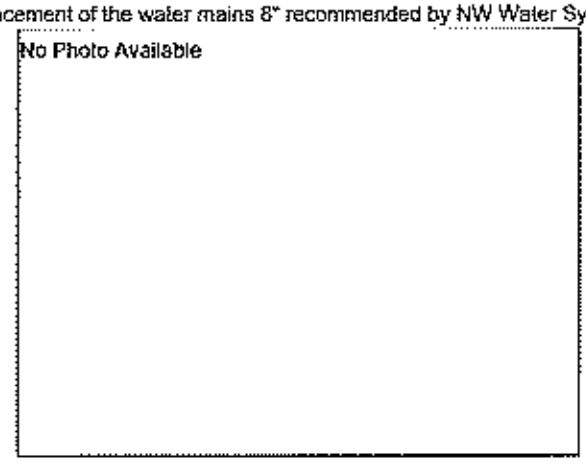
Useful Life:
70 years

Remaining Life:
27 years

Lower Estimate:	$ 2,090,000	**Higher Estimate:**	$ 2,550,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3165 Water Mains 8" - Replace **Approx Quantity: 5,200 LF**
Location: Water system
Funded?: Yes.
History:
Comments: Schedule of replacement of the water mains 8" recommended by NW Water Systems - Water System Plan 2025.



Useful Life:
100 years

Remaining Life:
26 years

Lower Estimate:	$ 468,000	**Higher Estimate:**	$ 572,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3170 Well 2 - Replace **Approx Quantity: 1 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of Well 2 recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
100 years

Remaining Life:
57 years

Lower Estimate: $ 450,000 **Higher Estimate:** $ 550,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3171 Well 3 - Replace **Approx Quantity: 1 Each**
Location: Water system
Funded?: Yes.
History: 2025-replaced
Comments: Replacement of Well 3 recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
100 years

Remaining Life:
100 years

Lower Estimate: $ 450,000 **Higher Estimate:** $ 550,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3175 Well 2 pump - Replace **Approx Quantity: 1 Each**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of Well 2 pump recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
15 years

Remaining Life:
10 years

Lower Estimate: $ 71,100 **Higher Estimate:** $ 86,900

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3176 Well 3 pump - Replace **Approx Quantity: 1 Each**
Location: Water system
Funded?: Yes.
History: 2025-Installed
Comments: Replacement of well 3 pump recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
15 years

Remaining Life:
15 years

Lower Estimate: $ 71,100 **Higher Estimate:** $ 86,900

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3180 Building, Pump Houses - Replace **Approx Quantity: 2 Allowance**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Recommended replacement of pump house buildings recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
70 years

Remaining Life:
27 years

Lower Estimate: $ 36,000 **Higher Estimate:** $ 44,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3185 Building, Booster Station - Replace **Approx Quantity: 2 Allowances**
Location: Water system
Funded?: Yes.
History: No major projects reported
Comments: Replacement of booster station buildings recommended by NW Water Systems - Water System Plan 2025.

Useful Life:
70 years

Remaining Life:
27 years

Lower Estimate: $ 36,000 **Higher Estimate:** $ 44,000

Cost Source: NW Water Systems - Water System Plan 2025

Comp #: 3195 Fire Hydrant & PSV - Maintenance **Approx Quantity: 1 Allowance**
Location: Clubhouse
Funded?: Yes.
History: Pressure valve applied to fire hydrant by requirement of fire department
Comments: It was reported that the fire department had historically shut off the water to the fire hydrant at the Clubhouse due to concerns that the water pressure would collapse the water lines to the fire hydrant. Funds are provided to updating the lines leading to the fire hydrant and for maintaining the pressure valvue.

Useful Life:
25 years

Remaining Life:
8 years

Lower Estimate: $ 9,000 **Higher Estimate:** $ 11,000

Cost Source: Carlyon Beach Association documentation

Waste Water Treatment

Comp #: 4110 Decanter Unit - Replace **Approx Quantity: 2 Allowance**
Location: Water treatment plant
Funded?: Yes.
History: 2018-One unit replaced
Comments: The waste water treatment facility has two decanter units. This budget provides funds to replace one decanter unit every 10 years, for a total Useful Life of 20 years per decanter.

Useful Life:
10 years

Remaining Life:
2 years

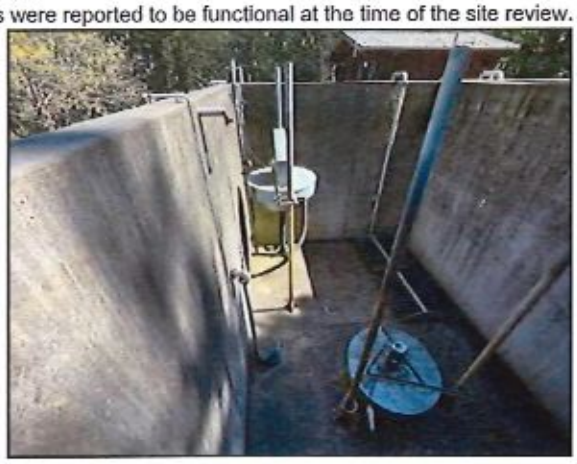
Lower Estimate: $ 17,400 **Higher Estimate:** $ 21,200

Cost Source: Carlyon Beach Association documentation

Comp #: 4115 Alration Manifold - Replace **Approx Quantity: 2 Each**
Location: Waste water facility
Funded?: Yes.
History: No major projects reported
Comments: Aeration manifolds were reported to be functional at the time of the site review.

Useful Life:
10 years

Remaining Life:
2 years



Lower Estimate: $ 20,300 **Higher Estimate:** $ 24,900

Cost Source: Carlyon Beach Association documentation

Comp #: 4120 Aerobic System Controls - Maintain **Approx Quantity: 1 Allowance**
Location: Waste water facility
Funded?: Yes.
History: No major projects reported
Comments: The aerobic system controls were reported to be functioning during our site review. An update to the system is anticipated.

Useful Life:
20 years

Remaining Life:
1 years

Lower Estimate: $ 19,800 **Higher Estimate:** $ 24,200

Cost Source: Carlyon Beach Association documentation

Comp #: 4125 Mixer Unit - Maintain/Replace **Approx Quantity: 2 Each**
Location: Waste water treatment
Funded?: Yes.
History: No major projects reported
Comments: The mixer units were reported to be functioning during our site review.

Useful Life:
20 years

Remaining Life:
2 years

Lower Estimate: $ 20,700 **Higher Estimate:** $ 25,300

Cost Source: Carlyon Beach Association documentation

Comp #: 4130 Small Air Compressor - Replace **Approx Quantity: 2 Each**
Location: Waste water treatment
Funded?: Yes.
History: No major projects reported
Comments: Small air compressors were reported to be functioning during our site review.

Useful Life:
5 years

Remaining Life:
0 years

Lower Estimate: $ 11,300 **Higher Estimate:** $ 13,900

Cost Source:

Comp #: 4135 Large Air Compressor - Replace **Approx Quantity: 2 Each**
Location: Waste water facility
Funded?: Yes.
History: No major projects reported
Comments: Large air compressor was reported to be functional during our site review.

Useful Life:
5 years

Remaining Life:
0 years

Lower Estimate: $ 16,700 **Higher Estimate:** $ 20,500

Cost Source: Carlyon Beach Association documentation

Comp #: 4140 UV Disinfection Controller - Replace **Approx Quantity: 1 Allowance**
Location: Waste water facilty
Funded?: Yes.
History: 2017-Replaced
Comments: The UV Disinfection Controller was reported to be functional at our site review.

Useful Life:
20 years

Remaining Life:
13 years

Lower Estimate: $ 38,700 **Higher Estimate:** $ 47,300

Cost Source:

Comp #: 4145 WW Treatment Buildings - Maintenance **Approx Quantity: 1 Allowance**
Location: Building maintenance, roof, periodic holding tank cleaning, etc.
Funded?: Yes.
History: 2023-Blower $10,500; 2022-Tank cleaning $4.6K; 2017-Major maintenance
Comments: Due to the age and recurring major maintenance expenses in the facility's recent history, funds for major maintenance have been provided, below, at 10 year cycles. Keep track of actual expenses and update future reserve studies accordingly.

Useful Life:
10 years

Remaining Life:
5 years

Lower Estimate: $ 40,500 **Higher Estimate:** $ 49,500

Cost Source:

Comp #: 4150 Treatment Plant Outfall - Maintain **Approx Quantity: 1 Allowance**
Location: Waste water system
Funded?: Yes.
History: 2020-Inspection and repair at $20K
Comments: No problems were reported of the outfall into the ocean during our site review.

Useful Life:
15 years

Remaining Life:
11 years

Lower Estimate: $ 18,900 **Higher Estimate:** $ 23,100

Cost Source: Carlyon Beach Association documentation

Comp #: 4155 WW Generator - Repair/Replace **Approx Quantity: 1 Allowance**
Location: Waste water facility
Funded?: Yes.
History: 2021-Repairs
Comments: The Association reported plans to replace the generator in 2025.

Useful Life:
10 years

Remaining Life:
0 years

Lower Estimate: $ 23,400 **Higher Estimate:** $ 28,600

Cost Source: Client Cost Estimate

Comp #: 945 Surveillance System - Repair/Replace **Approx Quantity: 1 Allowance**
Location: 16 cameras and DVR system
Funded?: Yes.
History: 2018-Replacement of surveillance cameras
Comments: The surveillance system appeared operational at time of our site visit. The association reported no problems with the existing setup.

Although it is difficult to predict the timing, cost, and scope of future replacement, we suggest a general funding allowance for periodic upgrades and significant repair/replacements. Costs and timing can vary greatly depending upon the number and quality of the cameras, and other system specifications. Expect some local repair/replacement maintained with operating funds in between overhaul cycles.

Another option is to set up a lease arrangement with the vendor. Typically, the lease covers hardware, maintenance, and operation costs for a given time period (usually 10 years). At the end of the lease, there may be an option of purchasing the existing system for a nominal fee, or installing new hardware with either another lease option or outright purchase.

Useful Life:
10 years

Remaining Life:
2 years

Lower Estimate: $ 19,800 **Higher Estimate:** $ 24,200

Cost Source: Client Cost Estimate

Comp #: 990 Ancillary Evaluations **Approx Quantity: 1 specialty evaluations**
Location: To augment reserve planning.
Funded?: No. Operating expense in year of occurrence
History: Ongoing evaluations of the waste water system, water system, marina, etc.
Comments: A reserve study is a budget model, limited to visual exterior observations and research. As there are some key details and factors of buildings and grounds hidden from view, it is prudent to conduct additional ancillary evaluations from time to time. The purpose of these evaluations is to aid planning and assess for any basis of predictable funding that may be incorporated into the reserve study. We recommend that you periodically engage specialty evaluations in the following areas/fields as applicable to your property:

- Civil Engineering review: Soils & drainage, pavement specifications, below grade waterproofing
- Arborist: Trees & landscape - plan of care and life cycle forecast
- Legal Responsibility Matrix: Governing document review for clear expense delineation between the association and unit owners
- Legal Governing Document review periodically to incorporate changes in law over time and best practices
- Investment consultant: Maximize return and cash flow management while protecting principal
- Insurance policy & coverage review: Understand what is and is not covered and by whom (association vs. owner policies)
- Masonry consultant: Assess mortar condition and waterproofing, and provide forecast and recommendations
- Surveillance: Have local law enforcement visit the community to assess potential risks and provide suggestions for security and safety. This is typically completed free of charge. This assessment can help guide a service vendor in the bid process.

Note: There are several other important professional evaluations to augment reserves planning that are of heightened importance such as Life-Safety and/or Building Envelope & Structural issues, and Plumbing. Those components are addressed separately within this report.

Useful Life:

Remaining Life:

Lower Estimate: **Higher Estimate:**

Cost Source:

Comp #: 999 Reserve Study - Update **Approx Quantity: 1 annual update**
Location: The community common and limited common elements.
Funded?: No. Costs are best handled with operating funds.
History: 2025/26 - FULL
Comments: Per Washington State law (RCW), reserve studies are to be updated annually, with site inspections by an independent reserve study professional to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc), and the resulting effect on the community's long-term reserves plan. Reserve Study costs are most appropriately factored within the annual operating budget, not as a reserves component.

Useful Life:

Remaining Life:

Lower Estimate: **Higher Estimate:**

Cost Source:
