



CARLYON BEACH HOA

Olympia, Washington

Standard Level 2 Reserve Study update with a site visit

2023/2024 FUNDING RECOMMENDATIONS

Issued August, 2022

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Next Update: **Level 3** study by **2022**





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ABBREVIATION KEY

EA	each
BLDG	building(s)
FIXT	fixture(s)
LF	linear foot
LS	lump sum
SF	square feet
SQ	roofing square
SY	square yard
ZN	zone



EXECUTIVE SUMMARY

This Reserve Study meets the requirements of the Washington Homeowners' Association Act and the Washington Unified Common Interest Owner Act for a Level 2 Reserve Study update with a site visit, and was prepared by an independent Reserve Study Professional.

Construction of Carlyon Beach HOA infrastructure was completed in about 1959. The community maintains a clubhouse and a maintenance/shop building, in addition to maintenance equipment for a potable water system, a sewage treatment facility, waterfront park, community dock and marina.

CARLYON BEACH HOA RESERVE FUND STATUS	
CARLYON BEACH HOA'S FISCAL YEAR	July 1st - June 30th
RESERVE ACCOUNT BALANCE ON JULY 1, 2022	\$516,862 ¹
FULLY FUNDED BALANCE YEAR 2022/2023	\$1,519,222 ²
PERCENT FUNDED AT TIME OF STUDY	34% ³
FUNDING STATUS - RISK OF SPECIAL ASSESSMENT	Moderate Risk
2022/2023 PLANNED OR IMPLEMENTED SPECIAL ASSESSMENT	None
COMPONENT INCLUSION THRESHOLD VALUE	\$4,693
CARLYON BEACH HOA CURRENT AND RECOMMENDED RESERVE CONTRIBUTIONS	
CURRENT BUDGETED ANNUAL CONTRIBUTION TO RESERVES	\$305,640
2023/2024 RECOMMENDED ANNUAL CONTRIBUTION RATE	\$305,640 ⁵
2032 RECOMMENDED CONTRIBUTION ADJUSTMENT	\$335,195 ⁴
2024 AVERAGE CONTRIBUTION PER UNIT PER YEAR	\$444
2024 AVERAGE CONTRIBUTION PER UNIT PER MONTH	\$37
2023/2024 BASELINE FUNDING PLAN CONTRIBUTION RATE	\$244,200
2023/2024 FULL FUNDING PLAN CONTRIBUTION RATE	\$276,000

¹ The actual or projected total reserve fund balance presented in the Reserve Study is based on information provided by the Association representative and was not audited by RCL.

² The fully funded balance for each reserve component is calculated by multiplying the current replacement cost of that reserve component by its effective age, then dividing the result by that reserve component's useful life. The sum total of all reserve components' fully funded balances is the association's fully funded balance as defined in RCW 64.38.010 §9 & RCW 64.90.010 §26. The fully funded balance changes from year to year.

³ The percent fully funded acts as a measuring tool to assess an association's ability to absorb unplanned expenses. These expenses could be emergency repairs not covered by insurance, or expenses that differ from the existing Reserve Study in terms of timing or cost.

⁴ To help ensure the Association has the appropriate funds for the anticipated expenses over the next 30 years, we recommend that the annual reserve contribution be adjusted to \$335,195 in 2032.

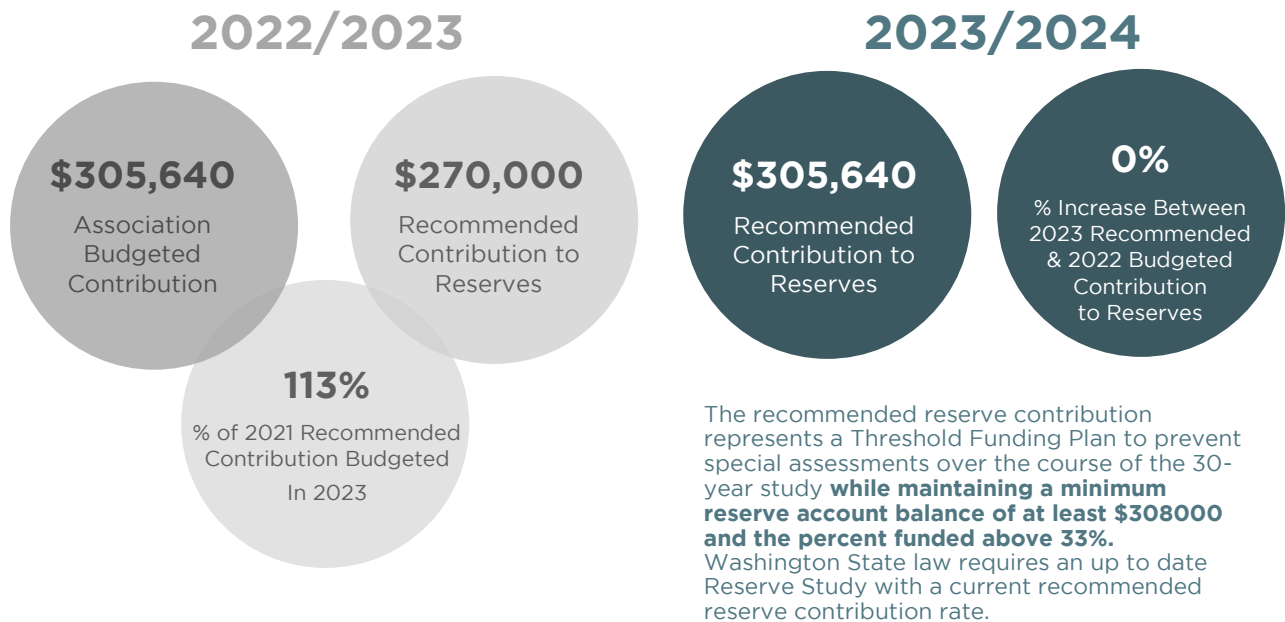
⁵ If the Association would like to continue contributing at the starting contribution rate of \$305,640 (increasing annually for inflation), we would recommend a special assessment by 2025/2026 of approximately \$300,000 to cover the anticipated expenses.



FINANCIAL OVERVIEW FOR 2023/2024

\$498,850	44%	\$250,756
2023/2024 Estimated Starting Balance	2023/2024 Estimated Percent Funded w/the Recommended Funding Plan	2023/2024 Estimated Reserve Expenditures

RESERVE CONTRIBUTION COMPARISON 2022/2023 VS 2023/2024



If the Association would like to continue contributing at the starting contribution rate of \$305,640 (increased annually for inflation), we would recommend a special assessment by 2025/2026 of approximately \$300,000 to cover the anticipated expenses.

ESTIMATED STARTING RESERVE FUND BALANCE FOR 2023/2024

BALANCE CALCULATIONS

The fiscal year for Carlyon Beach HOA is July 1st - June 30th.

\$516,862	Reserve Fund Balance as of July 1, 2022
(\$324,058)	Anticipated Remaining Reserve Expenses In 2022/2023
\$0	Planned Special Assessment In 2022/2023
\$605,640	Remaining Reserve Contributions For 2022/2023
\$406	Projected Interest on the 2022/2023 Reserve Fund Balance
\$498,850	ESTIMATED STARTING BALANCE FOR FISCAL YEAR 2023/2024



SUMMARY OF THE ANTICIPATED REMAINING MAINTENANCE EXPENSES FOR 2022/2023

COMPONENT DESCRIPTION	ESTIMATED COST
2.6.1 Asphalt Road - Major Repairs	\$111,348
2.9.2 Mooring Docks - Replace	\$52,000
4.2.1 Clubhouse - Structural & Exterior Repairs	\$80,000
11.2.4 Vehicles - Contingency	\$30,000
12.1.3 Misc. Building Repair - Contingency	\$6,000
15.1.4 Well Pump 1 - Maintenance	\$20,640
15.1.9 Water System Telemetry - Maintenance	\$24,070
Total Estimated Costs for 2022/2023	\$324,058



ASSOCIATION OVERVIEW

Carlyon Beach HOA is a 689-unit residential community located in Olympia, Washington. Construction of the infrastructure was completed in about 1959.

Common components maintained with funds from reserves include a clubhouse, and maintenance building, in addition to maintenance equipment for a potable water system and a sewage treatment facility. The Association maintains asphalt roads and parking areas, a community park and boat docks.



REVIEW OF GENERAL CONDITIONS

Carlyon Beach Homeowners' Association encompasses approximately 240 acres and regularly maintains the property, facilities and amenities.

The grounds include a waterfront park with a large playground, Wanagan, and site fixtures. The playground and site fixtures were updated in 2021. The Wanagan is currently closed as the Association investigates needed structural repairs. Drainage throughout the site is monitored; a "jolly drain way" was installed in 2021 between Island Drive NW and Mariner Drive NW on either side of Overlook Drive NW. Onsite personnel are headquartered in the Clubhouse & the maintenance facility. The Clubhouse also features rental space for residents' use. Options for structural repairs to the Clubhouse are currently being explored; the exterior and interior of the facility appear to be well maintained.



The kayak racks, boat launch, community garden and dog park are amenities at Carlyon Beach that are maintained with funds from the operating budget and are not reflected in the reserve study.



A community dock & marina are located adjacent to the Clubhouse and waterfront park. The Association has replaced most of the mooring docks in the recent past and anticipates that replacement of the older docks will be completed by the 2023/2024 fiscal year. The log boom was repaired and stabilized in 2021/2022.

The community treats waste water onsite at a treatment facility that was established in 1998/1999 and had major maintenance completed in 2017/2018. The system is regularly monitored by a dedicated waste water specialist.

Drinking (potable) water is provided to the residents via two wells and stored in a water tower that was installed in 2000. The water quality is also closely monitored.

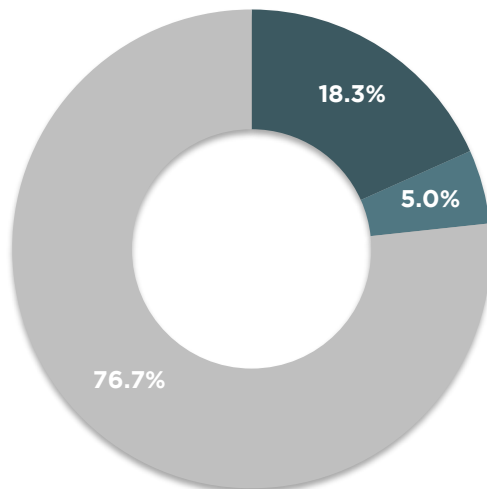


COMPONENT SUMMARY

Each reserve component is evaluated to determine the current condition, the remaining useful life, and the estimated replacement cost. Reserve studies for homeowners' associations are required to include any reserve component that would cost more than one percent of the annual budget of the association, not including the reserve account, for major maintenance, repair, or replacement (RCW 64.38.070). While the law defines the inclusion threshold to be 1% of the operating budget, or \$4,693 (1% of \$469,324), components valued less than the legal threshold may be included to better capture reserve funding for Carlyon Beach HOA.

ANTICIPATED EXPENSES¹ ALLOCATED OVER 30 YEARS FOR CARLYON BEACH HOA

The components listed below provide examples for each category and may or may not pertain specifically to components that Carlyon Beach HOA is responsible for maintaining.



PRIMARY EXPENSES

18.3% LIFE SAFETY: plumbing, drainage, electrical, lighting, & fire suppression

5.0% EXTERIOR ENVELOPE: structural components, siding, roofing, gutters & downspouts, doors, windows, caulking, & exterior finishes

SECONDARY EXPENSES - Discretionary

76.7% SECONDARY including paving, docks, fencing, & security systems

The total anticipated Primary and Secondary expenses over the next 30 years are illustrated to help the community understand the ratio of obligatory and elective maintenance. The ratio for the first five years is provided later in the report to assist with budgeting refinements.

Primary Expenses are maintenance expenses that should not be deferred due to the potential consequences of postponing upkeep of these components.

Secondary Expenses are maintenance expenses that could potentially be deferred since the timing of maintenance is typically discretionary.

¹ Not all components that are the individual unit owners' responsibility are described in the report. Items maintained with funds from the annual operating and/or individual unit owners are not included in the reserve fund analysis.



COMPONENT LIST

The component list is based on information provided by Carlyon Beach HOA. Reserve Consultants LLC does not provide legal interpretations of governing documents. It is the responsibility of Carlyon Beach HOA to ensure that the component list is complete and complies with their governing documents. Many factors may influence the actual costs that an association will experience. The quality of replacement materials of items can significantly impact cost, as well as the timing between replacements. The use of consultants to specify and oversee work may also cause additional expenses.

 Primary Expenses  Secondary (Discretionary) Expenses

COMPONENT DESCRIPTION		MAINT. CYCLE	REMAINING USEFUL LIFE	NEXT MAINT. YEAR	CURRENT REPLACEMENT COST
2.2.1 Jolly Drain Way - Maintenance	Site	10	10	2033	\$6,000
2.3.1 Bioswale - Maintenance	Site	25	13	2036	\$84,150
2.3.2 Bioswale - Inspection	Site	5	2	2025	\$5,260
2.4.1 Bio-Filter Park - Maintenance	Site	1	1	2024	\$22,000
2.6.1 Asphalt Road - Major Repairs	Site	2	0	2023	\$150,000
2.6.2 Gravel Road - Repair	Site	5	1	2024	\$39,140
2.7.1 Chain-Link Fence - Maintenance	Site	5	3	2026	\$10,860
2.9.1 Mooring Docks - Repair	Site	35	34	2057	\$130,000
2.9.2 Mooring Docks - Replace	Site	1	0	2023	\$52,000
2.9.3 Log Boom - Repair	Site	10	1	2024	\$21,040
2.9.4 Marina Floats - Repair	Site	35	34	2057	\$85,160
2.9.5 Marina Metal Pilings - Replace	Site	50	47	2070	\$66,670
2.9.6 Marina Wood Pilings - Replace	Site	50	1	2024	\$23,340
2.9.7 Marina Main Walkway - Replace	Site	50	41	2064	\$163,620
2.9.8 Hazardous Tree Removal	Site	5	3	2026	\$5,260
3.3.1 Bulkhead Retaining Walls - Ph. 1 Repair	Concrete	50	41	2064	\$429,480
3.3.2 Bulkhead Retaining Walls - Ph. 2 Repair	Concrete	50	3	2026	\$382,040
4.2.1 Clubhouse - Structural & Exterior Repairs	Ext Envelope	50	0	2023	\$80,000
4.2.2 Picnic Area "Wanagan"- Structural Repairs	Ext Envelope	50	1	2024	\$21,880
6.2.1 Clubhouse Exterior Surfaces - Repair	Ext Envelope	7	8	2031	\$5,990
7.4.1 Clubhouse Shingle Roof - Replace	Ext Envelope	24	13	2036	\$15,140
7.4.2 Picnic Area "Wanagan" Roof - Replace	Ext Envelope	30	10	2033	\$4,520
7.4.3 Maintenance Bldg. Shingle Roof - Replace	Ext Envelope	30	29	2052	\$9,700
8.5.1 Clubhouse Windows - Replace	Ext Envelope	40	8	2031	\$47,960
9.6.1 Clubhouse Carpet Flooring - Replace	Ext Envelope	10	7	2030	\$10,100
9.8.1 Clubhouse Exterior Surfaces - Paint	Ext Envelope	7	8	2031	\$14,970
9.8.2 Water Tower Exterior - Paint	Ext Envelope	20	2	2025	\$60,000
10.1.1 Carport - Replace	Specialties	20	17	2040	\$9,380
10.1.2 Waterfront Playground - Replace Equipment	Specialties	20	19	2042	\$20,640
10.1.3 Westwind Playground - Replace Equipment	Specialties	20	6	2029	\$10,320



COMPONENT LIST CONTINUED

 Primary Expenses  Secondary (Discretionary) Expenses

COMPONENT DESCRIPTION		MAINT. CYCLE	REMAINING USEFUL LIFE	NEXT MAINT. YEAR	CURRENT REPLACEMENT COST
11.2.1 Riding Mower - Replace	Equipment	10	2	2025	\$7,370
11.2.2 Backhoe - Replace	Equipment	18	5	2028	\$40,500
11.2.3 Hydroexcavator - Replace	Equipment	20	5	2028	\$31,710
11.2.4 Vehicles - Contingency	Equipment	5	0	2023	\$30,000
11.2.5 Main Pump Truck - Replace	Equipment	10	6	2029	\$173,560
11.2.6 Dump Trailer - Replace	Equipment	20	3	2026	\$10,510
11.2.7 Diesel Tank - Replace	Equipment	15	1	2024	\$11,070
11.2.8 Miscellaneous Equipment - Contingency	Equipment	10	7	2030	\$13,510
12.1.1 Clubhouse Interiors - Update	Finishes/Furnishings	10	3	2026	\$10,510
12.1.2 Clubhouse Office Equipment - Replace	Finishes/Furnishings	5	6	2029	\$5,260
12.1.3 Misc. Building Repair - Contingency	Finishes/Furnishings	10	0	2023	\$6,000
15.1.1 Plumbing System - Contingency	Life Safety	3	2	2025	\$10,510
15.1.2 Water Tower - Maintenance	Life Safety	5	1	2024	\$10,000
15.1.3 Water System Computer 1 - Contingency	Life Safety	15	3	2026	\$10,790
15.1.4 Well Pump 1 - Maintenance	Life Safety	12	0	2023	\$20,640
15.1.5 Water System Computer 2 - Contingency	Life Safety	15	3	2026	\$10,790
15.1.6 Well Pump 2 - Maintenance	Life Safety	12	11	2034	\$16,200
15.1.7 Water Meters - Installation	Life Safety	1	1	2024	\$20,640
15.1.8 Water Meters - Maintenance	Life Safety	5	5	2028	\$12,360
15.1.9 Water System Telemetry - Maintenance	Life Safety	20	0	2023	\$24,070
15.5.1 Clubhouse Septic System - Contingency	Life Safety	30	4	2027	\$16,470
15.5.2 Decanter Unit - Contingency	Life Safety	10	4	2027	\$18,930
15.5.3 Aeration Manifold - Contingency	Life Safety	20	4	2027	\$24,250
15.5.4 Aerobic System Controls - Contingency	Life Safety	20	3	2026	\$21,040
15.5.5 Mixer Unit - Contingency	Life Safety	20	4	2027	\$24,250
15.5.6 Small Air Compressor - Maintenance	Life Safety	5	2	2025	\$13,130
15.5.7 Large Air Compressor - Maintenance	Life Safety	5	2	2025	\$19,690
15.5.8 UV Disinfection Controller - Contingency	Life Safety	20	15	2038	\$42,080
15.5.9 Waste Water Treatment Facility - Contingency	Life Safety	20	12	2035	\$94,660
15.5.10 Sampler - Contingency	Life Safety	10	3	2026	\$12,120



COMPONENT LIST CONTINUED



Primary Expenses



Secondary (Discretionary) Expenses

COMPONENT DESCRIPTION		MAINT. CYCLE	REMAINING USEFUL LIFE	NEXT MAINT. YEAR	CURRENT REPLACEMENT COST
15.6.1 Treatment Plant Outfall - Contingency	Life Safety	15	13	2036	\$20,000
17.2.1 Fire Hydrant & PSV - Maintenance	Life Safety	25	10	2033	\$9,790
16.1.1 Electrical System - Contingency	Life Safety	5	2	2025	\$10,510
16.3.1 Maint. Shop Emergency Generator - Contingency	Life Safety	10	2	2025	\$30,630
16.3.2 WWTP Emergency Generator - Contingency	Life Safety	10	1	2024	\$25,000



COMPONENTS EXCLUDED FROM THIS STUDY

Components that individual unit owners are responsible to maintain, repair, and/or replace are not included in the study or funding projections. We recommend that associations establish a clear definition of these components, as well as policies and processes regarding maintenance of these "owner responsibility" items.

OPERATING BUDGET

The following components may qualify for inclusion in the Reserve Study, but are excluded because the Association elects to maintain them with funds from the operating budget:

Asphalt Repairs @ Courts	Paint - Exterior - Park Area Buildings
Asphalt Repairs @ Walkways	Paint - Exterior - Well #2
Air Compressors	Paint - Interior - Community Building
Alarm - Water System	Paint - Interior Maintenance Building
Benches - Wood/Wrought Iron	Paint - Interior - Restrooms
Blinds @ Community Building	Picnic Tables
Boat & Boat Trailer	Power Generator - Well Pump 2
Bulletin Board Building	Pressure Washer
Canoe/Kayak Rack	Pump - Rolachem Rcc503Sc
Ceiling Fans	Pump - Wastewater Facility
Chain Saw	Pump Motor - Miscellaneous
Community Garden	Radio - 2-way
Concrete Mixer	Radio - CB
Container Box	Radio - Hand - Held
Copier & Transcriber	Refrigerator
Culverts	Refrigerator - Community Building
Dog Park	Rehab - Well 1
Equalization Tanks	Rehab - Well 2
Equipment, Office Furniture & Computers	Reserve Study
Flagpole	Restrooms & Fixtures
Flow Meter	Roof - Restroom Building
Furnaces	Roof - Well 2
Gates - Entry	Roof - Treatment Facility
Garage Doors - Maintenance Shed	Security System & Locks - Clubhouse
Guard House	Siding - Treatment Plant
Guard Rails	Trim - Maintenance Building
Gutters & Downspouts - Community Building	Siding & Trim - Miscellaneous buildings on site
Gutters & Downspouts - Park Buildings	Diesel Tank - Water Treatment Facility
Lights - Exterior	Vehicle Stops
Line Locator	Water Heater - Community Building
Meter Calibration - Water Source	Water Heater - Waste Treatment Building

The Restroom Building and Maintenance Shop Building are expected to outlast the 30-year span of the reserve study.

ADJUSTMENTS TO COMPONENT RESERVE RECOMMENDATIONS

This reserve study provides updated information on the components from prior reserve studies. All cost estimates were adjusted to reflect the actual inflation rate for construction work in Washington State, and costs actually experienced by Carlyon Beach HOA or others in the area. To complete the report, we were provided with a record of recent expenditures on reserve components.

We use those figures, where applicable, for updating component cost projections, applying an appropriate inflation factor. Where updated figures from actual work performed are not available, cost projections from the previous reserve study are updated for inflation and rounded to the nearest \$10, using the RS Means 2021 to 2022 inflation figure of 3.18% for construction work.



FIVE YEARS AT A GLANCE (2023/2024 - 2027/2028)

The following reserve funded expenses are expected to occur in the next five years at Carlyon Beach HOA.

2023/2024 (YEAR 1) ANTICIPATED MAINTENANCE

ESTIMATED COST

2.4.1 Bio-Filter Park - Maintenance	\$22,880
2.6.2 Gravel Road - Repair	\$40,706
2.9.2 Mooring Docks - Replace	\$54,080
2.9.3 Log Boom - Repair	\$21,882
2.9.6 Marina Wood Pilings - Replace	\$24,274
4.2.2 Picnic Area "Wanagan"- Structural Repairs	\$22,755
11.2.7 Diesel Tank - Replace	\$11,513
15.1.2 Water Tower - Maintenance	\$5,200
15.1.7 Water Meters - Installation	\$21,466
16.3.2 WWTP Emergency Generator - Contingency	\$26,000

Total Estimated Expenses for 2023/2024 (YEAR 1)

\$250,756

Primary Expenses	\$75,421	30%
Secondary Expenses	\$175,335	70%

2024/2025 (YEAR 2) ANTICIPATED MAINTENANCE

ESTIMATED COST

2.3.2 Bioswale - Inspection	\$5,662
2.4.1 Bio-Filter Park - Maintenance	\$23,681
2.6.1 Asphalt Road - Major Repairs	\$161,460
9.8.2 Water Tower Exterior - Paint	\$64,584
11.2.1 Riding Mower - Replace	\$7,933
15.1.1 Plumbing System - Contingency	\$11,313
15.5.6 Small Air Compressor - Maintenance	\$14,133
15.5.7 Large Air Compressor - Maintenance	\$21,194
16.1.1 Electrical System - Contingency	\$11,313
16.3.1 Maint. Shop Emergency Generator - Contingency	\$32,970
18.2.1 Security Lighting - Replace	\$11,313

Total Estimated Expenses for 2024/2025 (YEAR 2)

\$365,556

Primary Expenses	\$15,557	43%
Secondary Expenses	\$210,049	57%



2025/2026 (YEAR 3) ANTICIPATED MAINTENANCE**ESTIMATED COST**

2.4.1 Bio-Filter Park - Maintenance	\$24,510
2.7.1 Chain-Link Fence - Maintenance	\$12,099
2.9.8 Hazardous Tree Removal	\$5,860
3.3.2 Bulkhead Retaining Walls - Ph. 2 Repair	\$425,621
11.2.6 Dump Trailer - Replace	\$11,709
12.1.1 Clubhouse Interiors - Update	\$11,709
15.1.3 Water System Computer 1 - Contingency	\$12,021
15.1.5 Water System Computer 2 - Contingency	\$12,021
15.5.4 Aerobic System Controls - Contingency	\$23,440
15.5.10 Sampler - Contingency	\$13,503

Total Estimated Expenses for 2025/2026 (YEAR 3)			\$552,493
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Primary Expenses	\$60,985	11%
Secondary Expenses	\$491,508	89%

2026/2027 (YEAR 4) ANTICIPATED MAINTENANCE**ESTIMATED COST**

2.4.1 Bio-Filter Park - Maintenance	\$25,367
2.6.1 Asphalt Road - Major Repairs	\$172,960
15.5.1 Clubhouse Septic System - Contingency	\$18,991
15.5.2 Decanter Unit - Contingency	\$21,828
15.5.3 Aeration Manifold - Contingency	\$27,962
15.5.5 Mixer Unit - Contingency	\$27,962

Total Estimated Expenses for 2026/2027 (YEAR 4)			\$295,070
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Primary Expenses	\$96,743	33%
Secondary Expenses	\$198,327	687%

2027/2028 (YEAR 5) ANTICIPATED MAINTENANCE**ESTIMATED COST**

2.4.1 Bio-Filter Park - Maintenance	\$26,255
11.2.2 Backhoe - Replace	\$48,334
11.2.3 Hydroexcavator - Replace	\$37,843
11.2.4 Vehicles - Contingency	\$35,803
15.1.1 Plumbing System - Contingency	\$12,543
15.1.8 Water Meters - Maintenance	\$14,751

Total Estimated Expenses for 2027/2028 (YEAR 5)			\$175,529
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Primary Expenses	\$27,294	16%
Secondary Expenses	\$148,235	84%



PROJECTED RESERVE ACCOUNT BALANCE

FOR EACH FUNDING PLAN OVER NEXT 5 YEARS

\$305,640 RECOMMENDED (THRESHOLD) FUNDING PLAN					
YEAR	ANNUAL RESERVE CONTRIBUTION	SPECIAL ASSESSMENT	YEAR END RESERVE BALANCE	PERCENT FUNDED	SPECIAL ASSESSMENT RISK LEVEL
1 (2023/2024)	\$305,640	\$0	\$558,997	44%	Moderate Risk
2 (2024/2025)	\$316,337	\$0	\$523,138	44%	Moderate Risk
3 (2025/2026)	\$327,409	\$0	\$308,319	33%	Moderate Risk
4 (2026/2027)	\$338,869	\$0	\$360,373	38%	Moderate Risk
5 (2027/2028)	\$350,729	\$0	\$546,773	50%	Moderate Risk
\$305,640 CURRENT FUNDING PLAN					
YEAR	ANNUAL RESERVE CONTRIBUTION	SPECIAL ASSESSMENT	YEAR END RESERVE BALANCE	PERCENT FUNDED	SPECIAL ASSESSMENT RISK LEVEL
1 (2023/2024)	\$305,640	\$0	\$558,999	44%	Moderate Risk
2 (2024/2025)	\$316,337	\$0	\$523,140	44%	Moderate Risk
3 (2025/2026)	\$327,409	\$0	\$308,322	33%	Moderate Risk
4 (2026/2027)	\$338,869	\$0	\$360,377	38%	Moderate Risk
5 (2027/2028)	\$350,729	\$0	\$546,776	50%	Moderate Risk
\$244,200 BASELINE FUNDING PLAN					
YEAR	ANNUAL RESERVE CONTRIBUTION	SPECIAL ASSESSMENT	YEAR END RESERVE BALANCE	PERCENT FUNDED	SPECIAL ASSESSMENT RISK LEVEL
1 (2023/2024)	\$244,200	\$0	\$501,558	40%	Moderate Risk
2 (2024/2025)	\$252,747	\$0	\$399,878	33%	Moderate Risk
3 (2025/2026)	\$261,593	\$0	\$115,340	12%	Highest Risk
4 (2026/2027)	\$270,749	\$0	\$93,599	10%	Highest Risk
5 (2027/2028)	\$280,225	\$0	\$201,944	18%	Highest Risk
\$276,000 FULL FUNDING PLAN					
YEAR	ANNUAL RESERVE CONTRIBUTION	SPECIAL ASSESSMENT	YEAR END RESERVE BALANCE	PERCENT FUNDED	SPECIAL ASSESSMENT RISK LEVEL
1 (2023/2024)	\$276,000	\$0	\$533,517	42%	Moderate Risk
2 (2024/2025)	\$285,660	\$0	\$465,960	39%	Moderate Risk
3 (2025/2026)	\$295,658	\$0	\$217,566	23%	Highest Risk
4 (2026/2027)	\$306,006	\$0	\$234,078	24%	Highest Risk
5 (2027/2028)	\$316,716	\$0	\$382,882	35%	Moderate Risk

Note: Due to current market trends, the “Moderate Risk” level for Special Assessment has been set at 25% to 69% as of 2022. In previous years it had been set at 25% to 59%.

PERCENT FUNDED

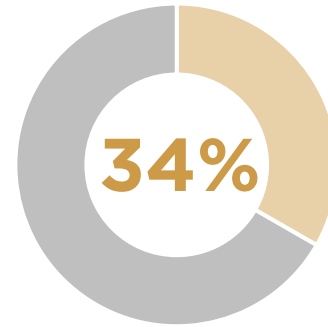
The "percent funded" is a measure of how much the Association should have saved in their reserve account compared to the projected cost for all the components the Association is responsible for and relates to the level of deterioration compared to the cost to repair or replace the component.

We typically recommend a contribution rate to meet a minimum reserve account balance (threshold) goal instead of a 100% funded rate.

We usually recommend that an association consider a threshold equal to the recommended annual reserve contribution because this is the average maintenance expense over the thirty years. However, each association must judge their unique risk tolerance.

The Fully Funded Balance for Carlyon Beach HOA is \$1,519,222. The actual current funding is \$516,862. The Association is approximately 34% funded.

This means that based on a straight-line savings for each reserve component, the Association saved 34% of the accumulated depreciation of the reserve components.



At 34%, Carlyon Beach HOA is considered to be at **moderate risk for a special assessment.**

EXAMPLE OF PERCENT FUNDED FOR ROOF REPLACEMENT

SCENARIO	ANALYSIS
<p>For a roof that lasts 10 years and costs \$100,000 to replace:</p> <ul style="list-style-type: none"> • Save \$10,000 each year, for 10 years • Year 2, the roof has deteriorated 20%. <ul style="list-style-type: none"> ○ If you have \$20,000 saved it is fully funded. ○ If you have \$10,000 saved it is 50% funded. • Year 8, the roof has deteriorated 80%. <ul style="list-style-type: none"> ○ If you have \$80,000 saved it is fully funded. ○ If you have \$20,000 saved it is 25% funded. If you have \$10,000 saved it is 13% funded. 	<p>A. In effect, the percent funded is a measure of how well an association can withstand the risk of unexpected expenses. Such unexpected expenses include: emergency expenses not covered by insurance, expenses that are higher than predicted, and expenses that are required earlier than anticipated.</p> <p>B. A higher percent funded means more money is in the bank which lowers the risk of special assessment if something unexpected occurs. A poorly funded Association has less cash on hand, therefore much higher risk of special assessment for unplanned expenses.</p> <p>C. By analyzing deterioration cycles and cash flow needs, we determine how much money should be steadily contributed, over a 30 year period, to fund the repair and replacement needs of the components included in the study. Budgeting to maintain a minimum balance, or threshold, helps to ensure that a special assessment will not be required if an unexpected expense arises.</p>



FULLY FUNDED BALANCE CALCULATIONS



FULLY FUNDED BALANCE = THE SUM OF $\frac{\text{REPLACEMENT COST} \times \text{EFFECTIVE AGE}}{\text{USEFUL LIFE}}$ FOR ALL RESERVE COMPONENTS

		COMPONENT DESCRIPTION	QTY	UNIT	MAINT. CYCLE (USEFUL LIFE)	REMAINING USEFUL LIFE	EFFECTIVE AGE	CURRENT REPLACEMENT COST	FULLY FUNDED BALANCE
100%	2.2.1	Jolly Drain Way - Maintenance	1	LS	10	10	-	\$6,000	\$0
100%	2.3.1	Bioswale - Maintenance	1	LS	25	13	12	\$84,150	\$40,392
100%	2.3.2	Bioswale - Inspection	1	LS	5	2	3	\$5,260	\$3,156
100%	2.4.1	Bio-Filter Park - Maintenance	1	LS	1	1	-	\$22,000	\$0
100%	2.6.1	Asphalt Road - Major Repairs	575165	SF	2	0	2	\$150,000	\$150,000
25%	2.6.2	Gravel Road - Repair	3228	SY	5	1	4	\$39,140	\$31,312
15%	2.7.1	Chain-Link Fence - Maintenance	2985	LF	5	3	2	\$10,860	\$4,344
100%	2.9.1	Mooring Docks - Repair	7800	SF	35	34	1	\$130,000	\$3,714
100%	2.9.2	Mooring Docks - Replace	7800	SF	1	0	1	\$52,000	\$52,000
100%	2.9.3	Log Boom - Repair	1	LS	10	1	9	\$21,040	\$18,936
100%	2.9.4	Marina Floats - Repair	7800	SF	35	34	1	\$85,160	\$2,433
100%	2.9.5	Marina Metal Pilings - Replace	22	EA	50	47	3	\$66,670	\$4,000
100%	2.9.6	Marina Wood Pilings - Replace	35	EA	50	1	49	\$23,340	\$22,873
100%	2.9.7	Marina Main Walkway - Replace	1120	SF	50	41	9	\$163,620	\$29,452
100%	2.9.8	Hazardous Tree Removal	1	LS	5	3	2	\$5,260	\$2,104
100%	3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	860	LF	50	41	9	\$429,480	\$77,306
100%	3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	765	LF	50	3	47	\$382,040	\$359,118
100%	4.2.1	Clubhouse - Structural & Exterior Repairs	1	LS	50	0	50	\$80,000	\$80,000
100%	4.2.2	Picnic Area "Wanagan"- Structural Repairs	1	LS	50	1	49	\$21,880	\$21,442
5%	6.2.1	Clubhouse Exterior Surfaces - Repair	4210	SF	7	8	-	\$5,990	\$0
100%	7.4.1	Clubhouse Shingle Roof - Replace	23	SQ	24	13	11	\$15,140	\$6,939
100%	7.4.2	Picnic Area "Wanagan" Roof - Replace	11	SQ	30	10	20	\$4,520	\$3,013
100%	7.4.3	Maintenance Bldg. Shingle Roof - Replace	23	SQ	30	29	1	\$9,700	\$323
100%	8.5.1	Clubhouse Windows - Replace	860	SF	40	8	32	\$47,960	\$38,368
100%	9.6.1	Clubhouse Carpet Flooring - Replace	200	SY	10	7	3	\$10,100	\$3,030
100%	9.8.1	Clubhouse Exterior Surfaces - Paint	4210	SF	7	8	-	\$14,970	\$0
100%	9.8.2	Water Tower Exterior - Paint	9650	SF	20	2	18	\$60,000	\$54,000
100%	10.1.1	Carport - Replace	1	LS	20	17	3	\$9,380	\$1,407
100%	10.1.2	Waterfront Playground - Replace Equipment	1	LS	20	19	1	\$20,640	\$1,032
100%	10.1.3	Westwind Playground - Replace Equipment	1	LS	20	6	14	\$10,320	\$7,224



FULLY FUNDED BALANCE CALCULATIONS CONTINUED



FULLY FUNDED BALANCE = THE SUM OF $\frac{\text{REPLACEMENT COST} \times \text{EFFECTIVE AGE}}{\text{USEFUL LIFE}}$ FOR ALL RESERVE COMPONENTS

COMPONENT DESCRIPTION			QTY	UNIT	MAINT. CYCLE (USEFUL LIFE)	REMAINING USEFUL LIFE	EFFECTIVE AGE	CURRENT REPLACEMENT COST	FULLY FUNDED BALANCE
100%	11.2.1	Riding Mower - Replace	1	EA	10	2	8	\$7,370	\$5,896
100%	11.2.2	Backhoe - Replace	1	EA	18	5	13	\$40,500	\$29,250
100%	11.2.3	Hydroexcavator - Replace	1	EA	20	5	15	\$31,710	\$23,783
100%	11.2.4	Vehicles - Contingency	4	EA	5	0	5	\$30,000	\$30,000
100%	11.2.5	Main Pump Truck - Replace	1	EA	10	6	4	\$173,560	\$69,424
100%	11.2.6	Dump Trailer - Replace	1	EA	20	3	17	\$10,510	\$8,934
50%	11.2.7	Diesel Tank - Replace	2	EA	15	1	14	\$11,070	\$10,332
100%	11.2.8	Miscellaneous Equipment - Contingency	1	LS	10	7	3	\$13,510	\$4,053
100%	12.1.1	Clubhouse Interiors - Update	1	LS	10	3	7	\$10,510	\$7,357
100%	12.1.2	Clubhouse Office Equipment - Replace	1	LS	5	6	-	\$5,260	\$0
100%	12.1.3	Misc. Building Repair - Contingency	1	LS	10	0	10	\$6,000	\$6,000
100%	15.1.1	Plumbing System - Contingency	1	LS	3	2	1	\$10,510	\$3,503
100%	15.1.2	Water Tower - Maintenance	1	LS	5	1	4	\$5,000	\$4,000
100%	15.1.3	Water System Computer 1 - Contingency	1	EA	15	3	12	\$10,790	\$8,632
100%	15.1.4	Well Pump 1 - Maintenance	1	EA	12	0	12	\$20,640	\$20,640
100%	15.1.5	Water System Computer 2 - Contingency	1	EA	15	3	12	\$10,790	\$8,632
100%	15.1.6	Well Pump 2 - Maintenance	1	EA	12	11	1	\$16,200	\$1,350
100%	15.1.7	Water Meters - Installation	750	EA	1	1	-	\$20,640	\$0
10%	15.1.8	Water Meters - Maintenance	750	EA	5	5	-	\$12,360	\$0
100%	15.1.9	Water System Telemetry - Maintenance	1	EA	20	0	20	\$24,070	\$24,070
100%	15.5.1	Clubhouse Septic System - Contingency	2	EA	30	4	26	\$16,470	\$14,274
50%	15.5.2	Decanter Unit - Contingency	2	EA	10	4	6	\$18,930	\$11,358
100%	15.5.3	Aeration Manifold - Contingency	2	EA	20	4	16	\$24,250	\$19,400
100%	15.5.4	Aerobic System Controls - Contingency	1	LS	20	3	17	\$21,040	\$17,884
100%	15.5.5	Mixer Unit - Contingency	2	EA	20	4	16	\$24,250	\$19,400
100%	15.5.6	Small Air Compressor - Maintenance	2	EA	5	2	3	\$13,130	\$7,878
100%	15.5.7	Large Air Compressor - Maintenance	2	EA	5	2	3	\$19,690	\$11,814
100%	15.5.8	UV Disinfection Controller - Contingency	1	LS	20	15	5	\$42,080	\$10,520
100%	15.5.9	Waste Water Treatment Facility - Contingency	1	LS	20	12	8	\$94,660	\$37,864
50%	15.5.10	Sampler - Contingency	2	EA	10	3	7	\$12,120	\$8,484



FULLY FUNDED BALANCE CALCULATIONS CONTINUED



FULLY FUNDED BALANCE = THE SUM OF $\frac{\text{REPLACEMENT COST} \times \text{EFFECTIVE AGE}}{\text{USEFUL LIFE}}$ FOR ALL RESERVE COMPONENTS

COMPONENT DESCRIPTION			QTY	UNIT	MAINT. CYCLE (USEFUL LIFE)	REMAINING USEFUL LIFE	EFFECTIVE AGE	CURRENT REPLACEMENT COST	FULLY FUNDED BALANCE
100%	15.6.1	Treatment Plant Outfall - Contingency	1	LS	15	13	2	\$20,000	\$2,667
100%	17.2.1	Fire Hydrant & PSV - Maintenance	1	LS	25	10	15	\$9,790	\$5,874
100%	16.1.1	Electrical System - Contingency	1	LS	5	2	3	\$10,510	\$6,306
100%	16.3.1	Maint. Shop Emergency Generator - Contingency	1	EA	10	2	8	\$30,630	\$24,504
100%	16.3.2	WWTP Emergency Generator - Contingency	1	EA	10	1	9	\$25,000	\$22,500
100%	18.1.1	Surveillance System - Update	1	LS	10	7	3	\$21,040	\$6,312
100%	18.2.1	Security Lighting - Replace	1	LS	10	2	8	\$10,510	\$8,408
FULLY FUNDED BALANCE								Total	\$1,519,222

CURRENT RESERVE BALANCE = \$516,862

PERCENT FULLY FUNDED = 34%



DEFICIT OR SURPLUS IN RESERVE FUNDING

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

The fully funded balance calculates how much money should be saved for future maintenance based on the age of each component and the cost for future maintenance. In other words, the fully funded balance assumes that money will be saved every year for the next maintenance of a component to ensure special assessments are not required to fund future maintenance. The intent of RCW 64.90.550 §2 (l) is to show each unit's "share" of the surplus or deficit in reserve funding.

If the reserve account balance is:

- **equal to** the fully funded balance, Carlyon Beach HOA would be considered as 100% fully funded. There would be neither a surplus nor deficit.
- **less than** the fully funded balance, there is a deficit meaning Carlyon Beach HOA would be thought behind on saving for future maintenance.
- **more than** the fully funded balance, there is a surplus meaning Carlyon Beach HOA would be deemed ahead on saving for future maintenance.

The Recommended Funding Plan is based on Threshold Funding, a reserve contribution rate that is constant (increasing annually with inflation) to provide funds for all anticipated reserve expenses for the life of the study but leaving a minimum level of reserves (the "threshold") at all times. The threshold provides a monetary cushion in the reserve account to help ensure that a special assessment is not required for the duration of the study, even in years when there are significant withdrawals from the reserve account. Primary consideration is given to cash needed to cover expenses and the threshold; the percent funded is typically targeted to be 80%.

SUMMARY

RESERVE ACCOUNT BALANCE AS OF JULY 1, 2022	\$516,862
CURRENT FULLY FUNDED BALANCE	\$1,519,222
RESERVE FUND DEFICIT	(\$1,002,360)
NUMBER OF UNITS	689
AVERAGE DEFICIT PER UNIT	(\$1,455)



RESERVE FUND (DEFICIT) PER UNIT

QTY	LOT DESCRIPTION	ALLOCATED INTEREST	TOTAL ALLOCATED INTEREST	(DEFICIT) PER UNIT	(DEFICIT) PER LOT TYPE
616	single lots	0.1415%	87%	(\$1,418.77)	(\$873,960.96)
35	combined lots	0.2123%	7%	(\$2,128.15)	(\$74,485.31)
38	slide lot	0.1415%	5%	(\$1,418.77)	(\$53,913.18)
GRAND TOTAL					(\$1,002,359.45)



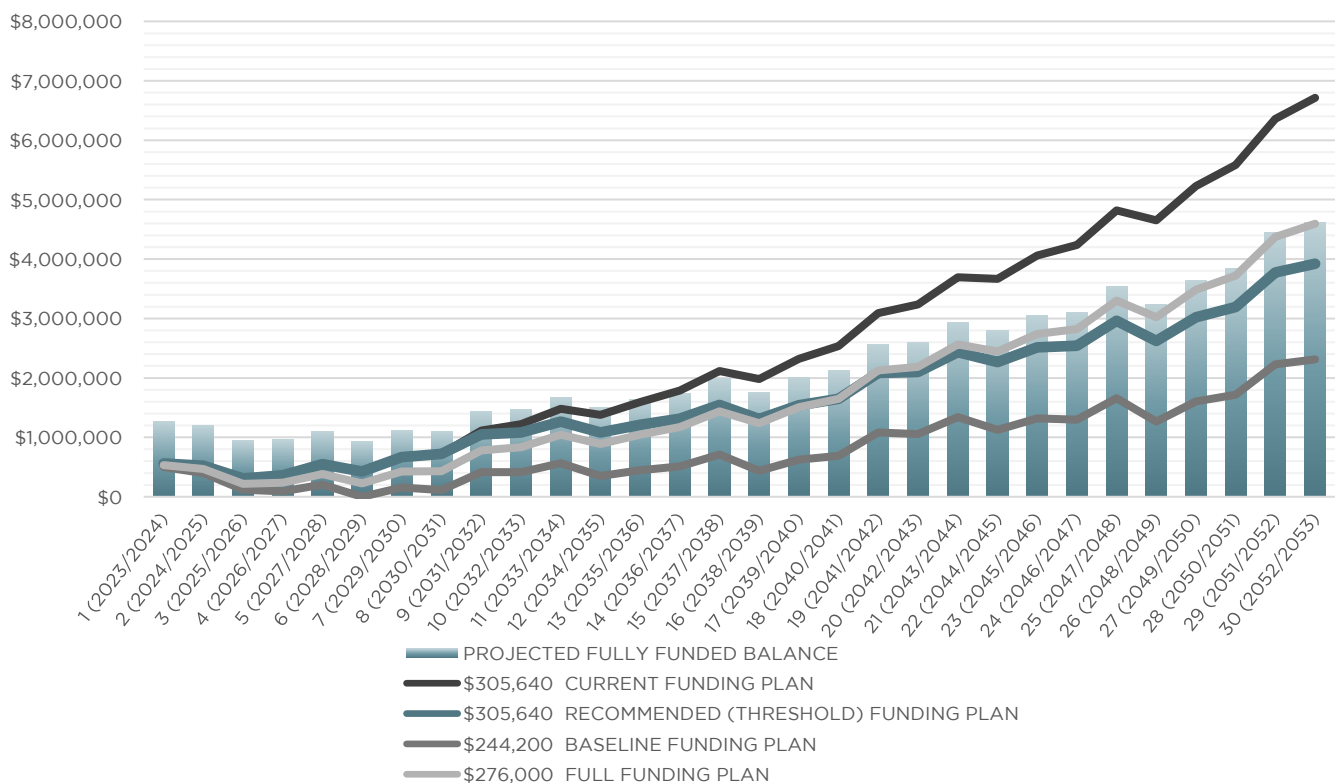
FUNDING PLANS

THRESHOLD FUNDING PLAN \$305,640 - with the recommended adjustment(s) in the reserve contribution	BASELINE FUNDING PLAN \$244,200, not including the anticipated contribution adjustment(s)	FULL FUNDING PLAN \$276,000, not including the anticipated contribution adjustment(s)
RECOMMENDED	OPTIONAL STRATEGY	100% FUNDED BY YEAR 30
initial annual contribution of \$305,640	initial annual contribution of \$244,200	initial annual contribution of \$276,000
meets yearly projected reserve expenses	meets annual reserve expenses with no minimum balance requirement	most flexibility for cost variables and unplanned expenses
maintains minimum reserve balance equal to annual contribution amount	less flexibility with cost variables and unplanned expenses	lowest risk for special assessment

The Threshold Funding Plan is the **RECOMMENDED FUNDING PLAN** for Carlyon Beach HOA, balancing cashflow and anticipated expenses over 30 years while maintaining a minimum reserve account balance of at least \$308,000 and the percent funded above 33%. To help ensure the Association has the appropriate funds for the anticipated expenses over the next 30 years, we recommend that the annual reserve contribution be adjusted to \$335,195 in 2032. Cost projection accuracy decreases into the distant future. Assumptions should be reconsidered and updated with each revision of the study.

COMPARISON OF FULLY FUNDED BALANCE AND FUNDING PLANS

Since the Recommended and Full Funding Plans are similar, only one line is visible on some areas of the chart.





PROJECTED RESERVE ACCOUNT BALANCES FOR FUNDING PLANS OVER 30 YEARS

Per RCW 64.90.550 §2 (j) of the Washington Unified Common Interest Owners Act (WUCIOA), the projected reserve account balance for each of the funding plans over the next 30 years is provided, along with the current funding plan projections. The values in the Recommended Funding Plan include the previously mentioned recommended adjustment(s) in the annual reserve contribution.

FISCAL YEAR END	\$305,640 RECOMMENDED (THRESHOLD) FUNDING PLAN	\$305,640 CURRENT FUNDING PLAN	\$244,200 BASELINE FUNDING PLAN	\$276,000 FULL FUNDING PLAN
1 (2023/2024)	\$558,997	\$558,999	\$501,558	\$533,517
2 (2024/2025)	\$523,138	\$523,140	\$399,878	\$465,960
3 (2025/2026)	\$308,319	\$308,322	\$115,340	\$217,566
4 (2026/2027)	\$360,373	\$360,377	\$93,599	\$234,078
5 (2027/2028)	\$546,773	\$546,776	\$201,944	\$382,882
6 (2028/2029)	\$427,382	\$427,384	\$47	\$223,750
7 (2029/2030)	\$669,305	\$669,307	\$154,818	\$423,691
8 (2030/2031)	\$721,316	\$721,321	\$114,823	\$431,383
9 (2031/2032)	\$1,048,228	\$1,116,349	\$412,773	\$779,644
10 (2032/2033)	\$1,080,305	\$1,220,628	\$414,679	\$834,604
11 (2033/2034)	\$1,264,182	\$1,480,980	\$567,132	\$1,042,973
12 (2034/2035)	\$1,081,112	\$1,378,851	\$351,335	\$886,080
13 (2035/2036)	\$1,211,118	\$1,594,467	\$447,262	\$1,044,028
14 (2036/2037)	\$1,312,738	\$1,786,570	\$513,395	\$1,175,436
15 (2037/2038)	\$1,545,596	\$2,115,005	\$709,305	\$1,440,015
16 (2038/2039)	\$1,308,554	\$1,978,861	\$433,798	\$1,236,717
17 (2039/2040)	\$1,541,440	\$2,318,200	\$626,643	\$1,505,465
18 (2040/2041)	\$1,646,233	\$2,535,247	\$689,758	\$1,648,334
19 (2041/2042)	\$2,082,724	\$3,090,046	\$1,082,869	\$2,125,217
20 (2042/2043)	\$2,102,037	\$3,233,990	\$1,057,039	\$2,187,345
21 (2043/2044)	\$2,431,831	\$3,695,012	\$1,339,855	\$2,562,486
22 (2044/2045)	\$2,264,276	\$3,665,566	\$1,123,418	\$2,442,922
23 (2045/2046)	\$2,512,227	\$4,058,806	\$1,320,508	\$2,741,629
24 (2046/2047)	\$2,539,467	\$4,238,829	\$1,294,835	\$2,822,516
25 (2047/2048)	\$2,960,455	\$4,820,415	\$1,660,779	\$3,300,169
26 (2048/2049)	\$2,621,303	\$4,650,006	\$1,264,367	\$3,020,833
27 (2049/2050)	\$3,020,428	\$5,226,372	\$1,603,934	\$3,483,065
28 (2050/2051)	\$3,193,611	\$5,585,658	\$1,715,175	\$3,722,794
29 (2051/2052)	\$3,774,465	\$6,361,850	\$2,231,610	\$4,373,783
30 (2052/2053)	\$3,921,370	\$6,713,721	\$2,311,523	\$4,594,566

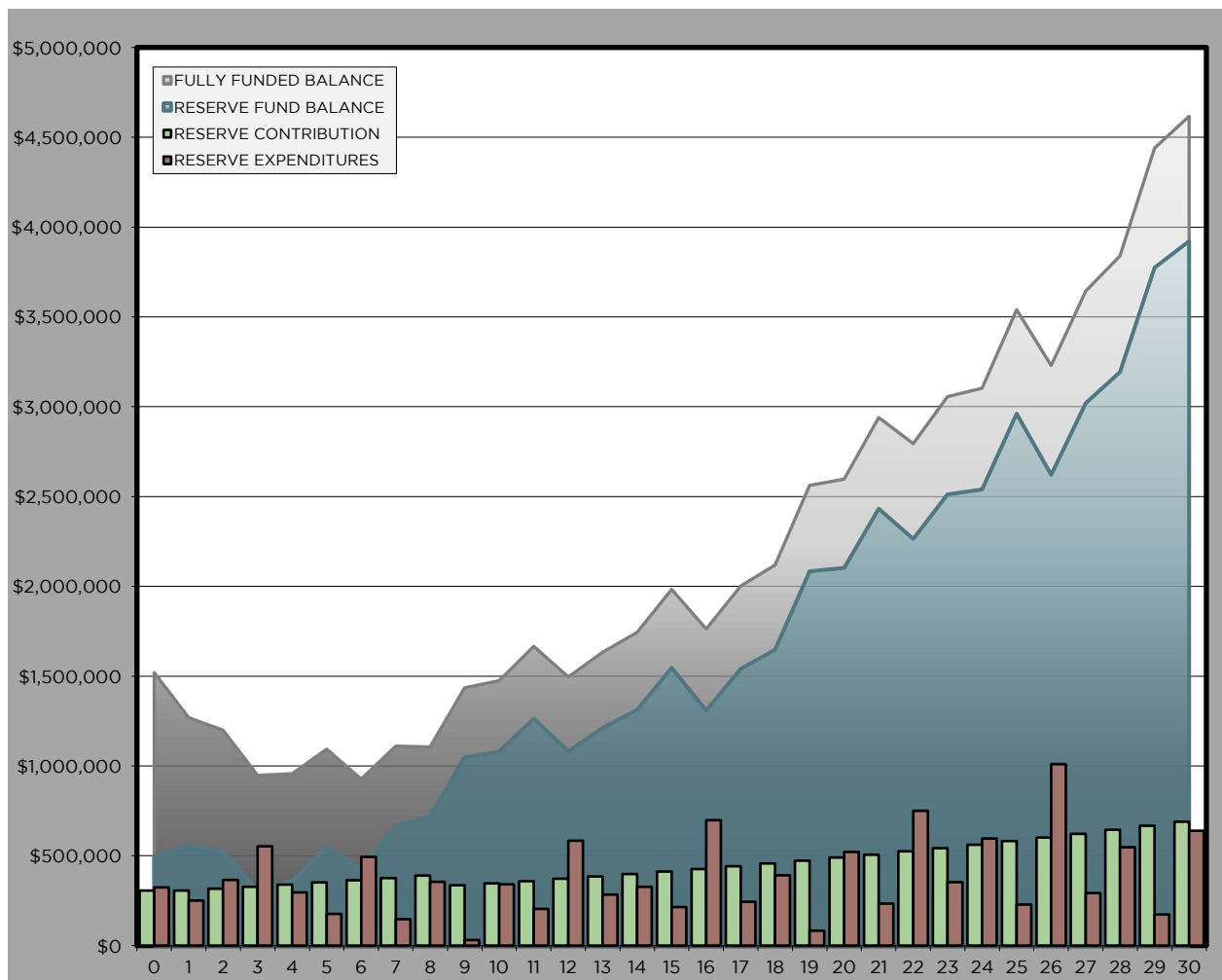


RESERVE STUDY PROJECTIONS USING INFLATED DOLLAR VALUES

The recommended contribution to reserves is primarily based on cashflow over thirty years to ensure a that there will be enough funds in reserves to cover anticipated expenses without the need of a special assessment. Monitoring the Fully Funded Balance helps anticipate future financial liabilities and the community's potential risk for a special assessment. The inflated scenario includes annual increases in the reserve contribution to keep up with inflation.

- **Teal Area Graph:** The fiscal year-end running reserve fund balance is shown as a line graph in teal.
- **Grey Area Graph:** The anticipated fully funded balance is shown as a line graph in grey.
- **Mint Green Bars:** The annual reserve fund contributions are shown as mint green bars.
- **Brick Red Bars:** The anticipated yearly reserve expenditures are shown as brick red bars, depicting the anticipated expenses over the next 30 years.

RECOMMENDED FUNDING PLAN STARTING AT \$305,640 WITH \$335,195 ADJUSTMENT IN 2032





RESERVE 30 YEAR SUMMARY AT THE RECOMMENDED FUNDING PLAN STARTING AT \$305,640

INFLATION & INTEREST ASSUMPTIONS ¹					SPECIAL ASSESSMENT RISK				
	CONTRIBUTION INFLATION	COMPONENT INFLATION	INTEREST						
Years 0-1	0.0%	4.0%	1.0%		Nominal Risk	100% +			
Years 2-10	3.5%	3.5%	2.5%		Low Risk	70% to 99%			
Years 11-30	3.5%	3.5%	2.5%		Moderate Risk	25% to 69%			
					Highest Risk	0% to 24%			

FISCAL YEAR END	FISCAL YEAR BEGINNING RESERVE BALANCE	RECOMMENDED ANNUAL RESERVE CONTRIBUTION ²	AVERAGE CONTRIBUTION PER UNIT PER MONTH ³	PROJECTED RESERVE EXPENDITURES	SPECIAL ASSESSMENT	PROJECTED INTEREST EARNED	FISCAL YEAR END RESERVE BALANCE	PROJECTED FULLY FUNDED BALANCE	PERCENT FUNDED
1 (2023/2024)	\$498,850	\$305,640	\$37	(\$250,756)	\$0	\$5,263	\$558,997	\$1,267,753	44%
2 (2024/2025)	\$558,997	\$316,337	\$38	(\$365,556)	\$0	\$13,360	\$523,138	\$1,198,443	44%
3 (2025/2026)	\$523,138	\$327,409	\$40	(\$552,493)	\$0	\$10,265	\$308,319	\$948,587	33%
4 (2026/2027)	\$308,319	\$338,869	\$41	(\$295,070)	\$0	\$8,255	\$360,373	\$956,533	38%
5 (2027/2028)	\$360,373	\$350,729	\$42	(\$175,529)	\$0	\$11,199	\$546,773	\$1,093,741	50%
6 (2028/2029)	\$546,773	\$363,004	\$44	(\$494,422)	\$0	\$12,027	\$427,382	\$926,631	46%
7 (2029/2030)	\$427,382	\$375,710	\$45	(\$147,326)	\$0	\$13,539	\$669,305	\$1,110,886	60%
8 (2030/2031)	\$669,305	\$388,859	\$47	(\$354,016)	\$0	\$17,168	\$721,316	\$1,105,371	65%
9 (2031/2032)	\$721,316	\$335,195	\$41	(\$30,129)	\$0	\$21,846	\$1,048,228	\$1,434,386	73%
10 (2032/2033)	\$1,048,228	\$346,926	\$42	(\$341,127)	\$0	\$26,278	\$1,080,305	\$1,475,132	73%
11 (2033/2034)	\$1,080,305	\$359,069	\$43	(\$204,136)	\$0	\$28,944	\$1,264,182	\$1,665,905	76%
12 (2034/2035)	\$1,264,182	\$371,636	\$45	(\$583,661)	\$0	\$28,954	\$1,081,112	\$1,495,846	72%
13 (2035/2036)	\$1,081,112	\$384,643	\$47	(\$282,936)	\$0	\$28,299	\$1,211,118	\$1,632,995	74%
14 (2036/2037)	\$1,211,118	\$398,106	\$48	(\$327,645)	\$0	\$31,159	\$1,312,738	\$1,743,105	75%
15 (2037/2038)	\$1,312,738	\$412,040	\$50	(\$214,470)	\$0	\$35,288	\$1,545,596	\$1,983,565	78%
16 (2038/2039)	\$1,545,596	\$426,461	\$52	(\$698,739)	\$0	\$35,236	\$1,308,554	\$1,761,958	74%
17 (2039/2040)	\$1,308,554	\$441,387	\$53	(\$243,686)	\$0	\$35,185	\$1,541,440	\$2,001,919	77%
18 (2040/2041)	\$1,541,440	\$456,836	\$55	(\$391,397)	\$0	\$39,354	\$1,646,233	\$2,117,337	78%
19 (2041/2042)	\$1,646,233	\$472,825	\$57	(\$82,371)	\$0	\$46,037	\$2,082,724	\$2,561,106	81%
20 (2042/2043)	\$2,082,724	\$489,374	\$59	(\$521,724)	\$0	\$51,664	\$2,102,037	\$2,596,876	81%
21 (2043/2044)	\$2,102,037	\$506,502	\$61	(\$232,682)	\$0	\$55,974	\$2,431,831	\$2,939,316	83%
22 (2044/2045)	\$2,431,831	\$524,229	\$63	(\$749,761)	\$0	\$57,977	\$2,264,276	\$2,793,608	81%
23 (2045/2046)	\$2,264,276	\$542,578	\$66	(\$353,596)	\$0	\$58,969	\$2,512,227	\$3,056,507	82%
24 (2046/2047)	\$2,512,227	\$561,568	\$68	(\$596,694)	\$0	\$62,367	\$2,539,467	\$3,103,665	82%
25 (2047/2048)	\$2,539,467	\$581,223	\$70	(\$228,135)	\$0	\$67,900	\$2,960,455	\$3,539,824	84%
26 (2048/2049)	\$2,960,455	\$601,565	\$73	(\$1,009,628)	\$0	\$68,911	\$2,621,303	\$3,229,202	81%
27 (2049/2050)	\$2,621,303	\$622,620	\$75	(\$293,146)	\$0	\$69,651	\$3,020,428	\$3,644,319	83%
28 (2050/2051)	\$3,020,428	\$644,412	\$78	(\$547,945)	\$0	\$76,717	\$3,193,611	\$3,840,002	83%
29 (2051/2052)	\$3,193,611	\$666,966	\$81	(\$172,138)	\$0	\$86,026	\$3,774,465	\$4,439,904	85%
30 (2052/2053)	\$3,774,465	\$690,310	\$83	(\$638,416)	\$0	\$95,010	\$3,921,370	\$4,616,841	85%

¹ The long term nature of this study requires that certain assumptions and predictions be made about future events. Since there can be no guarantee that these future events will occur as assumed, this analysis must be viewed in light of the circumstances under which it was conducted. Reasonable effort has been made to ensure that the conclusions of this report are based on reliable information and sound reasoning.

² The Recommended Annual Reserve Contribution includes inflation and any applicable recommended adjustments.



PURPOSE OF A RESERVE STUDY

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

evaluated to determine the current condition, the remaining useful life, and the estimated replacement cost. This information is combined into a spreadsheet to determine funding requirements and establish the annual contribution rate needed to minimize the potential for special assessments. All costs and annual reserve fund balances are shown with adjustments for annual inflation and interest earned. Ideally, an even level of contributions is established that maintains a positive balance in the reserve account over the timeline the study examines. Annual updates are key to keeping up with current trends in component pricing, inflation and interest rates, actual timing of maintenance experienced and the community's risk tolerance.

A Reserve Study also calculates a theoretical "Fully Funded Balance". Fully Funded Balance is the sum total of the reserve components' depreciated value using a straight-line depreciation method.

To calculate each component's depreciated value:

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

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

OUR APPROACH TO A RESERVE STUDY

Reserve Consultants LLC employs a "Reasonable Approach" when evaluating reserve components in order to draft a study that is of greatest value to our clients. This means we attempt to predict, based on the costs involved and the client's objectives, what a reasonable person will decide to have done when maintenance, repairs, or replacement become necessary. For example, a reasonable person will not replace a fence when

it only needs to be repainted. The benefit of this is that reserve contributions are minimized to allow for what is most likely to occur. Our studies are not based on a worst-case scenario, but rather on what we expect is most likely to occur. Our approach assumes minor problems will be corrected as they occur before they become major problem.



LEVELS OF RESERVE STUDIES

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

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

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

Level 4: The Community Associations Institute defines a Level 4 reserve study for communities under construction as a Preliminary, Community Not Yet Constructed reserve study.

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

The next required update
for Carlyon Beach HOA is
a **Level 3 study in
2023/2024.**

SOURCES USED IN COMPILING THIS REPORT

Reserve Consultants LLC has provided reserve studies and construction services since 1992 and base component repair and replacement costs on this extensive experience and information provided by the Association. Sources used include:

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

The current replacement cost is an estimate and actual costs may vary. Material selection, timing of the work, and requirements for Architectural services or construction management can impact cost projections. Expenses related to common interest communities are typically higher than other multi-family construction types, often due to the elevated insurance requirements contractors must carry. All estimates assume that a licensed and bonded contractor will be utilized to complete the work due to liability issues. Regional cost factors are applied as appropriate.



GOVERNMENT REQUIREMENTS FOR A RESERVE STUDY

- (a) The content of a Reserve Study for a homeowners' association is regulated by the Washington State government (RCW 64.38.070 §2).
- (b) A reserve component list, including any reserve component that would cost more than one percent of the annual budget of the association, not including the reserve account, for major maintenance, repair, or replacement. If one of these reserve components is not included in the Reserve Study, the study should provide commentary explaining the basis for its exclusion. The study must also include quantities and estimates for useful life of each reserve component, remaining useful life of each reserve component, and current repair and replacement cost for each component;
- (c) The date of the study, and a statement that the study meets the requirements of this section;
- (d) The following level of reserve study performed (i) Level I Full reserve study funding analysis and plan; (ii) Level II Update with visual site inspection; or (iii) Level III Update with no visual site inspection;
- (e) The association's reserve account balance;
- (f) The percentage of the fully funded balance that the reserve account is funded;
- (g) Special assessments already implemented or planned;
- (h) Interest and inflation assumptions;
- (i) Current reserve account contribution rates for a full funding plan and baseline funding plan;
- (j) A recommended reserve account contribution rate; a contribution rate for a full funding plan to achieve one hundred percent fully funded reserves by the end of the thirty-year study period, a baseline funding plan to maintain the reserve (fund) balance above zero throughout the thirty-year study period without special assessments, and a contribution rate recommended by the reserve study professional;
- (k) A projected reserve account balance for thirty years and a funding plan to pay for projected costs from those reserves without reliance on future unplanned special assessments; and
- (l) **A statement on whether the reserve study was prepared with the assistance of a reserve study professional.**

The Washington State government further requires the following disclosure in every Reserve Study (RCW 64. 38.070§3):

'This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.'

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

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



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

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

In addition, the WUCIOA requires the following disclosure in every Reserve Study (RCW 64.90.550 §3):

'This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.'

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

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

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



LIMITATIONS AND ASSUMPTIONS OF A RESERVE STUDY

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

The component list is based on information provided by Carlyon Beach HOA. Reserve Consultants LLC does not provide legal interpretations of governing documents or auditing services on account information provided.

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

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

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

This report should be updated annually with actual repair costs, reserve fund balances, etc. Every three years it should be updated with a site inspection and professional review. Regular updating will allow changes based on actual occurrences and adjustments for the cost of repairs to be incorporated into the annual reserve contributions. This will allow any savings or additional costs to be properly allocated among unit owners.



INFLATION AND INTEREST RATE PROJECTIONS

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

For inflation, we use the construction industry inflation rates published by RS Means, which differ from the consumer inflation index. The average annual construction inflation increase since 1991 is 3.33%. We do not apply inflation to the annual reserve contribution in Year 0. Likewise, we do not apply inflation to the recommended reserve contribution in Year 1 since this is the first year at the recommended contribution rate. Inflation applied to the components on the inflated spreadsheet is compounded annually; the values are listed for each year at the bottom of the inflated spreadsheet.

For interest rates, we analyze the historical data provided by the Board of Governors of the Federal Reserve. The average annual interest rate since 1991 is 2.56. The interest for associations is typically lower than average due to conservative investing options that are usually employed by associations.

CONTRIBUTION & EXPENSE INFLATION AND INTEREST PROJECTIONS

YEARS APPLIED	RESERVE CONTRIBUTION INFLATION	RESERVE EXPENSE INFLATION	INTEREST RATE
Year 0 (2022/2023)	0%	0%	1.0%
Year 1 (2023/2024)	0%	4.0%	1.0%
Year 2 (2024/2025) through Year 10 (2032/2033)	3.5%	3.5%	2.5%
Year 11 (2033/2034) through Year 30 (2052/2053)	3.5%	3.5%	2.5%



RESERVE DISCLOSURE

RCW 64.38.025 states that within thirty days after adoption of any proposed budget for the association, the board of directors shall provide a summary of the budget to all the unit owners and shall set a date for a meeting of the unit owners to consider ratification of the budget not less than fourteen nor more than sixty days after mailing of the summary. As part of the summary of the budget to all owners, the board of directors shall disclose the reserve disclosure as outlined in RCW 64.38.025 §4,

which we refer to as the Reserve Disclosure. Below is a sample of the Reserve Disclosure we will compile when the association is ready to provide a summary of the budget to the unit owners. Please contact RCL one week before the Association plans on sending the budget summary to unit owners and we will issue a completed Reserve Disclosure at no additional charge within one year of issuing the draft of the reserve study report.

FUNDING INFORMATION		
\$104,000	Proposed annual contribution to reserves for the fiscal year ending in 2022 per the budget.	
\$610,000	Projected fiscal year end 2021 reserve balance per the budget.	
\$128,000	Budgeted annual contribution to reserves for the current fiscal year ending in 2021.	

INFORMATION FROM THE MOST RECENT RESERVE STUDY		
62%	Percent fully funded as of the date of the most recent reserve study (2021).	
\$104,000	Recommended annual contribution to reserves for the fiscal year ending in 2022.	
Threshold	Type of funding plan used for recommended annual funding per the most recent reserve study.	
\$609,414	Projected fiscal year end 2021 reserve balance per the most recent reserve study.	
Yes	Based upon the most recent reserve study (2021), will the Association have funds to meet obligations for the next 30 years at the current contribution rate* ?	

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

ANTICIPATED RESERVE FUNDING SHORTFALLS OVER THE NEXT 30 YEARS		
\$128,000 CURRENT FISCAL YEAR RESERVE CONTRIBUTION		
FISCAL YEAR END	PROJECTED FUNDING SHORTFALL	AVERAGE SHORTFALL PER UNIT PER YEAR
	None	
\$104,000 PROPOSED ANNUAL RESERVE CONTRIBUTION		
FISCAL YEAR END	PROJECTED FUNDING SHORTFALL	AVERAGE SHORTFALL PER UNIT PER YEAR
	None	

PROPOSED ADDITIONAL REGULAR OR SPECIAL ASSESSMENT FOR FISCAL YEAR END 2022		
No	Is additional funding (Regular or Special Assessment) planned in the proposed budget?	
N/A	Amount of additional Regular or Special Assessment.	The purpose for the additional funding:
N/A	Average amount per unit per year.	
N/A	Average amount per unit per month.	
N/A	When assessment is due.	

COMPARISON OF FISCAL YEAR END PROJECTIONS FOR NEXT FIVE YEARS								
\$128,000 CURRENT RESERVE CONTRIBUTION			\$104,000 RECOMMENDED RESERVE CONTRIBUTION			\$104,000 PROPOSED RESERVE CONTRIBUTION		
FISCAL YEAR END	RESERVE ACCOUNT BALANCE	PERCENT FULLY FUNDED	FISCAL YEAR END	RESERVE ACCOUNT BALANCE	PERCENT FULLY FUNDED	FISCAL YEAR END	RESERVE ACCOUNT BALANCE	PERCENT FULLY FUNDED
2022	\$717,247	70%	2022	\$693,007	68%	2022	\$693,007	68%
2023	\$864,751	79%	2023	\$815,059	74%	2023	\$815,059	74%
2024	\$1,017,160	86%	2024	\$940,758	80%	2024	\$940,758	80%
2025	\$1,178,771	93%	2025	\$1,074,353	85%	2025	\$1,074,353	85%
2026	\$553,627	98%	2026	\$419,838	74%	2026	\$419,838	74%

CONTRIBUTIONS AND EXPENSES ARE BOTH INFLATED FOR THE 5 YEAR PROJECTION CALCULATIONS.



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

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

Below is a sample of the Reserve Disclosure we will compile when the association is ready to provide a summary of the budget to the unit owners. Please contact RCL one week before the Association plans on sending the budget summary to unit owners and we will issue a completed WUCIOA Reserve Disclosure at no additional charge within one year of issuing the draft of the reserve study report.

FUNDING INFORMATION

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DISCLOSURES

1. Reserve Consultants LLC also provides construction inspection services for condominiums and does design and construction oversight for major repair projects, including roofing, decks and building envelope replacement.
2. No shareholder or employee of Reserve Consultants LLC has any interest in, or obligation to, any construction company, management company, or development entity that creates condominiums; nor is there any involvement with Carlyon Beach HOA which could result in a conflict of interest.
3. Reserve Consultants LLC has been a member of the Community Associations Institute since about 1993, and has worked with a variety of management companies, associations, and other types of clients in Washington State.
4. This report and analysis is based upon observations of the visible and apparent condition of the building and its major components on the date of the inspection. Although care has been taken in the performance of this inspection, Reserve Consultants LLC (and/or its representatives) make no representations regarding latent or concealed defects which may exist, and no warranty or guarantee is expressed or implied. This report is made only in the best exercise of our ability and judgment. Conclusions in this report are based on estimates of the age and normal working life of various items of equipment and appliances. Predictions of life expectancy and the balance of useful life are necessarily based on industry and/or statistical comparisons. It is essential to understand that actual conditions can alter the useful life of any item. The previous use or misuse, irregularity of servicing, faulty manufacture, unfavorable conditions, acts of God, and unforeseen circumstances make it impossible to state precisely when each item would require replacement. The client herein should be aware that certain components within the above referenced property may function consistent with their purpose at the time of inspection, but due to their nature, are subject to deterioration without notice.
5. Unless otherwise noted, all reserve components are assumed to meet the building code requirements in force at the time of construction. Any on-site inspection should not be considered a project audit or quality inspection.
6. Conclusions reached in this report assume responsible ownership and competent management of the property. Information provided by others is believed to be reliable. Information provided by others was not audited; we assume no responsibility for accuracy thereof. Any on-site inspection should not be considered a project audit or quality inspection.
7. The reserve study reflects information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses or background checks of historical record.



EVALUATORS' CREDENTIALS

Denise Dana

Principal

Reserve Consultants LLC

B.S. Education,
M. Architecture

Washington Registered
Architect, #8702

LEED Accredited Professional
Reserve Specialist, #291

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



GLOSSARY OF TERMS

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

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

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

Baseline Funding Plan - A reserve contribution rate that is constant, increasing with inflation, to provide funds for all anticipated reserve expenses so that no special assessments are required for 30 years, but with no excess funds some years.

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

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

These are usually amended slightly by each city or county.

Building Component - see "Reserve Component".

Component Number - A number assigned to each building component that allows grouping of like components. The numbers are based roughly on the Construction Specification Institute system.

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

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

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

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

Contribution Rate - in a Reserve Study as described in RCW 64.38, the amount contributed to the reserve account so that the association will have cash reserves to pay major maintenance, repair, or replacement costs without the need of a special assessment. RCW 64.38.010 (6)

Constant Dollars - costs and contributions are provided in today's dollars, no matter how far in the future they occur. Inflation and interest are not factored in.



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

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

Fully Funded Balance - the current value of the deteriorated portion, not the total replacement value, of all the reserve components. The fully funded balance for each reserve component is calculated by multiplying the current replacement cost of that reserve component by its effective age, then dividing the result by that reserve component's useful life. The sum total of all reserve components' fully funded balances is the association's fully funded balance. RCW 64.38.010 §9 & RCW §64.90.010 §26.

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

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

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

Limited Common Element - a portion of the common elements allocated by the declaration or by operation of RCW 64.90.210 §1(b) or §2 for the exclusive use of one or more, but fewer than all, of the unit owners. RCW §64.90.010 §30.

Unit owners may be responsible for the cost to repair and maintain limited common elements, so those costs may not appear in a Reserve Study.

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

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

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

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

RCW - the Revised Code of Washington. RCW 64.38 is the **Washington Homeowners' Act**, the statute that governs homeowners' associations formed prior to June 30, 2018.

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

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

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

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

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

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



Reserve Component - common elements whose cost of maintenance, repair, or replacement is infrequent, significant, and impractical to include in an annual budget. RCW 64.38.010 §16.

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

Reserve Contribution Rate - The amount of money saved to fund replacement costs for maintenance and repairs of common elements. See "Contribution Rate". Current contributions and Recommended contributions may be different.

Reserve Specialist - A designation for those professionals who have met the standards established by Community Associations Institute (www.caionline.org) for Reserve Study providers.

Reserve Study - A physical assessment of a building and a subsequent report which estimates the anticipated major maintenance, repair, and replacement costs, whose infrequent and significant nature make them impractical to be included in an annual budget, which will need to be repaired or replaced over the next 30 years. It provides estimates of these replacement costs and details expected annual expenditures. It is used to calculate the Reserve Contribution Rate required to maintain a facility in good condition both functionally and cosmetically. The Washington Condominium Act sets out requirements for annual reserve studies.

Reserve Study Professional means an independent person suitably qualified by knowledge, skill, experience, training, or education to prepare a reserve study in accordance with RCW 64.38, RCW 64.38.010 §17, RCW 64.90.545 and RCW 64.90.550. For the purposes of WUCIOA, "independent" means a person who is not an employee, officer, or director, and has no pecuniary interest in the declarant, association, or any other party for whom the reserve study is prepared. RCW §64.90.010 §47.

Roofing Square - A roofing industry term meaning 100 square feet.

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

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

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

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

Useful life means the estimated time, in years, that a reserve component can be expected to serve its intended function. RCW 64.38.010 §20 or the estimated time during which a reserve component is expected to perform its intended function without major maintenance, repair or replacement. RCW §64.90.010 §59.

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

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

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



APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

				22-Aug-22				
STARTING RESERVE BALANCE				\$498,850	\$558,997	\$523,138	\$308,319	\$360,373
ANNUAL RESERVE CONTRIBUTION				\$305,640	\$316,337	\$327,409	\$338,869	\$350,729
ESTIMATED INTEREST EARNED				\$5,263	\$13,360	\$10,265	\$8,255	\$11,199
SPECIAL ASSESSMENT				\$0	\$0	\$0	\$0	\$0
ACCUMULATED CREDITS				\$809,753	\$888,694	\$860,812	\$655,443	\$722,302
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	1 2023/ 2024	2 2024/ 2025	3 2025/ 2026	4 2026/ 2027	5 2027/ 2028
2.2.1	Jolly Drain Way - Maintenance	10	10					
2.3.1	Bioswale - Maintenance	25	13					
2.3.2	Bioswale - Inspection	5	2		\$5,662			
2.4.1	Bio-Filter Park - Maintenance	1	1	\$22,880	\$23,681	\$24,510	\$25,367	\$26,255
2.6.1	Asphalt Road - Major Repairs	2	0		\$161,460		\$172,960	
2.6.2	Gravel Road - Repair	5	1	\$40,706				
2.7.1	Chain-Link Fence - Maintenance	5	3			\$12,099		
2.9.1	Mooring Docks - Repair	35	34					
2.9.2	Mooring Docks - Replace	1	0	\$54,080				
2.9.3	Log Boom - Repair	10	1	\$21,882				
2.9.4	Marina Floats - Repair	35	34					
2.9.5	Marina Metal Pilings - Replace	50	47					
2.9.6	Marina Wood Pilings - Replace	50	1	\$24,274				
2.9.7	Marina Main Walkway - Replace	50	41					
2.9.8	Hazardous Tree Removal	5	3			\$5,860		
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41					
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3			\$425,621		
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0					
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1	\$22,755				
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8					
7.4.1	Clubhouse Shingle Roof - Replace	24	13					
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10					
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29					
8.5.1	Clubhouse Windows - Replace	40	8					
9.6.1	Clubhouse Carpet Flooring - Replace	10	7					
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8					
9.8.2	Water Tower Exterior - Paint	20	2		\$64,584			
10.1.1	Carport - Replace	20	17					
10.1.2	Waterfront Playground - Replace Equipment	20	19					
10.1.3	Westwind Playground - Replace Equipment	20	6					
11.2.1	Riding Mower - Replace	10	2		\$7,933			
11.2.2	Backhoe - Replace	18	5					\$48,334
11.2.3	Hydroexcavator - Replace	20	5					\$37,843
11.2.4	Vehicles - Contingency	5	0					\$35,803
11.2.5	Main Pump Truck - Replace	10	6					
11.2.6	Dump Trailer - Replace	20	3			\$11,709		
11.2.7	Diesel Tank - Replace	15	1	\$11,513				
11.2.8	Miscellaneous Equipment - Contingency	10	7					
12.1.1	Clubhouse Interiors - Update	10	3			\$11,709		
12.1.2	Clubhouse Office Equipment - Replace	5	6					
12.1.3	Misc. Building Repair - Contingency	10	0					
15.1.1	Plumbing System - Contingency	3	2		\$11,313			\$12,543
15.1.2	Water Tower - Maintenance	5	1	\$5,200				
15.1.3	Water System Computer 1 - Contingency	15	3			\$12,021		
15.1.4	Well Pump 1 - Maintenance	12	0					
15.1.5	Water System Computer 2 - Contingency	15	3			\$12,021		
15.1.6	Well Pump 2 - Maintenance	12	11					
15.1.7	Water Meters - Installation	1	1	\$21,466				
15.1.8	Water Meters - Maintenance	5	5					\$14,751
15.1.9	Water System Telemetry - Maintenance	20	0					
15.5.1	Clubhouse Septic System - Contingency	30	4				\$18,991	
15.5.2	Decanter Unit - Contingency	10	4				\$21,828	
15.5.3	Aeration Manifold - Contingency	20	4				\$27,962	
15.5.4	Aerobic System Controls - Contingency	20	3			\$23,440		
15.5.5	Mixer Unit - Contingency	20	4				\$27,962	
15.5.6	Small Air Compressor - Maintenance	5	2		\$14,133			
15.5.7	Large Air Compressor - Maintenance	5	2		\$21,194			
15.5.8	UV Disinfection Controller - Contingency	20	15					
15.5.9	Waste Water Treatment Facility - Contingency	20	12					
15.5.10	Sampler - Contingency	10	3			\$13,503		
15.6.1	Treatment Plant Outfall - Contingency	15	13					
17.2.1	Fire Hydrant & PSV - Maintenance	25	10					
16.1.1	Electrical System - Contingency	5	2		\$11,313			
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2		\$32,970			
16.3.2	WWTP Emergency Generator - Contingency	10	1	\$26,000				
18.1.1	Surveillance System - Update	10	7					
18.2.1	Security Lighting - Replace	10	2		\$11,313			
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES				\$250,756	\$365,556	\$552,493	\$295,070	\$175,529
ACCUMULATED CREDITS				\$809,753	\$888,694	\$860,812	\$655,443	\$722,302
ACCUMULATED DEBITS				\$250,756	\$365,556	\$552,493	\$295,070	\$175,529
YEAR-END BALANCE				\$558,997	\$523,138	\$308,319	\$360,373	\$546,773
YEARS				1 (2024)	2 (2025)	3 (2026)	4 (2027)	5 (2028)
CONTRIBUTION INFLATION				0%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION				104%	108%	111%	115%	119%
INTEREST RATE MULTIPLIER				1%	3%	3%	3%	3%

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APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

					22-Aug-22				
STARTING RESERVE BALANCE					\$546,773	\$427,382	\$669,305	\$721,316	\$1,048,228
ANNUAL RESERVE CONTRIBUTION					\$363,004	\$375,710	\$388,859	\$335,195	\$346,926
ESTIMATED INTEREST EARNED					\$12,027	\$13,539	\$17,168	\$21,846	\$26,278
SPECIAL ASSESSMENT					\$0	\$0	\$0	\$0	\$0
ACCUMULATED CREDITS					\$921,804	\$816,631	\$1,075,332	\$1,078,357	\$1,421,432
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	6 2028/ 2029	7 2029/ 2030	8 2030/ 2031	9 2031/ 2032	10 2032/ 2033	
2.2.1	Jolly Drain Way - Maintenance	10	10						\$8,504
2.3.1	Bioswale - Maintenance	25	13						
2.3.2	Bioswale - Inspection	5	2		\$6,725				
2.4.1	Bio-Filter Park - Maintenance	1	1	\$27,174	\$28,125	\$29,110	\$30,129	\$31,183	
2.6.1	Asphalt Road - Major Repairs	2	0	\$185,279		\$198,476		\$212,612	
2.6.2	Gravel Road - Repair	5	1	\$48,345					
2.7.1	Chain-Link Fence - Maintenance	5	3			\$14,370			
2.9.1	Mooring Docks - Repair	35	34						
2.9.2	Mooring Docks - Replace	1	0						
2.9.3	Log Boom - Repair	10	1						
2.9.4	Marina Floats - Repair	35	34						
2.9.5	Marina Metal Pilings - Replace	50	47						
2.9.6	Marina Wood Pilings - Replace	50	1						
2.9.7	Marina Main Walkway - Replace	50	41						
2.9.8	Hazardous Tree Removal	5	3			\$6,960			
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41						
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3						
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0						
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1						
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8			\$7,926			
7.4.1	Clubhouse Shingle Roof - Replace	24	13						
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10					\$6,407	
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29						
8.5.1	Clubhouse Windows - Replace	40	8			\$63,459			
9.6.1	Clubhouse Carpet Flooring - Replace	10	7		\$12,912				
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8			\$19,808			
9.8.2	Water Tower Exterior - Paint	20	2						
10.1.1	Carport - Replace	20	17						
10.1.2	Waterfront Playground - Replace Equipment	20	19						
10.1.3	Westwind Playground - Replace Equipment	20	6	\$12,747					
11.2.1	Riding Mower - Replace	10	2						
11.2.2	Backhoe - Replace	18	5						
11.2.3	Hydroexcavator - Replace	20	5						
11.2.4	Vehicles - Contingency	5	0					\$42,522	
11.2.5	Main Pump Truck - Replace	10	6	\$214,380					
11.2.6	Dump Trailer - Replace	20	3						
11.2.7	Diesel Tank - Replace	15	1						
11.2.8	Miscellaneous Equipment - Contingency	10	7		\$17,272				
12.1.1	Clubhouse Interiors - Update	10	3						
12.1.2	Clubhouse Office Equipment - Replace	5	6	\$6,497					
12.1.3	Misc. Building Repair - Contingency	10	0					\$8,504	
15.1.1	Plumbing System - Contingency	3	2			\$13,907			
15.1.2	Water Tower - Maintenance	5	1						
15.1.3	Water System Computer 1 - Contingency	15	3						
15.1.4	Well Pump 1 - Maintenance	12	0						
15.1.5	Water System Computer 2 - Contingency	15	3						
15.1.6	Well Pump 2 - Maintenance	12	11						
15.1.7	Water Meters - Installation	1	1						
15.1.8	Water Meters - Maintenance	5	5					\$17,519	
15.1.9	Water System Telemetry - Maintenance	20	0						
15.5.1	Clubhouse Septic System - Contingency	30	4						
15.5.2	Decanter Unit - Contingency	10	4						
15.5.3	Aeration Manifold - Contingency	20	4						
15.5.4	Aerobic System Controls - Contingency	20	3						
15.5.5	Mixer Unit - Contingency	20	4						
15.5.6	Small Air Compressor - Maintenance	5	2		\$16,786				
15.5.7	Large Air Compressor - Maintenance	5	2		\$25,172				
15.5.8	UV Disinfection Controller - Contingency	20	15						
15.5.9	Waste Water Treatment Facility - Contingency	20	12						
15.5.10	Sampler - Contingency	10	3						
15.6.1	Treatment Plant Outfall - Contingency	15	13						
17.2.1	Fire Hydrant & PSV - Maintenance	25	10					\$13,876	
16.1.1	Electrical System - Contingency	5	2		\$13,436				
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2						
16.3.2	WWTP Emergency Generator - Contingency	10	1						
18.1.1	Surveillance System - Update	10	7		\$26,898				
18.2.1	Security Lighting - Replace	10	2						
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES					\$494,422	\$147,326	\$354,016	\$30,129	\$341,127
ACCUMULATED CREDITS					\$921,804	\$816,631	\$1,075,332	\$1,078,357	\$1,421,432
ACCUMULATED DEBITS					\$494,422	\$147,326	\$354,016	\$30,129	\$341,127
YEAR-END BALANCE					\$427,382	\$669,305	\$721,316	\$1,048,228	\$1,080,305
YEARS	1	2-10	11-30	6 (2029)	7 (2030)	8 (2031)	9 (2032)	10 (2033)	
CONTRIBUTION INFLATION	0.0%	3.5%	3.5%	4%	4%	4%	4%	4%	
COMPONENT COMPOUND INFLATION	4.0%	3.5%	3.5%	124%	128%	132%	137%	142%	
INTEREST RATE MULTIPLIER	1.0%	2.5%	2.5%	3%	3%	3%	3%	3%	

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APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

				22-Aug-22							
STARTING RESERVE BALANCE				\$1,080,305	\$1,264,182	\$1,081,112	\$1,211,118	\$1,312,738			
ANNUAL RESERVE CONTRIBUTION				\$359,069	\$371,636	\$384,643	\$398,106	\$412,040			
ESTIMATED INTEREST EARNED				\$28,944	\$28,954	\$28,299	\$31,159	\$35,288			
SPECIAL ASSESSMENT				\$0	\$0	\$0	\$0	\$0			
ACCUMULATED CREDITS				\$1,468,318	\$1,664,773	\$1,494,054	\$1,640,383	\$1,760,066			
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	11 2033/ 2034	12 2034/ 2035	13 2035/ 2036	14 2036/ 2037	15 2037/ 2038			
2.2.1	Jolly Drain Way - Maintenance	10	10								
2.3.1	Bioswale - Maintenance	25	13			\$132,243					
2.3.2	Bioswale - Inspection	5	2		\$7,987						
2.4.1	Bio-Filter Park - Maintenance	1	1	\$32,274	\$33,404	\$34,573	\$35,783	\$37,036			
2.6.1	Asphalt Road - Major Repairs	2	0		\$227,755		\$243,977				
2.6.2	Gravel Road - Repair	5	1	\$57,419							
2.7.1	Chain-Link Fence - Maintenance	5	3			\$17,067					
2.9.1	Mooring Docks - Repair	35	34								
2.9.2	Mooring Docks - Replace	1	0								
2.9.3	Log Boom - Repair	10	1	\$30,866							
2.9.4	Marina Floats - Repair	35	34								
2.9.5	Marina Metal Pilings - Replace	50	47								
2.9.6	Marina Wood Pilings - Replace	50	1								
2.9.7	Marina Main Walkway - Replace	50	41								
2.9.8	Hazardous Tree Removal	5	3			\$8,266					
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41								
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3								
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0								
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1								
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8					\$10,084			
7.4.1	Clubhouse Shingle Roof - Replace	24	13			\$23,793					
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10								
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29								
8.5.1	Clubhouse Windows - Replace	40	8								
9.6.1	Clubhouse Carpet Flooring - Replace	10	7								
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8					\$25,201			
9.8.2	Water Tower Exterior - Paint	20	2								
10.1.1	Carport - Replace	20	17								
10.1.2	Waterfront Playground - Replace Equipment	20	19								
10.1.3	Westwind Playground - Replace Equipment	20	6								
11.2.1	Riding Mower - Replace	10	2		\$11,190						
11.2.2	Backhoe - Replace	18	5								
11.2.3	Hydroexcavator - Replace	20	5								
11.2.4	Vehicles - Contingency	5	0					\$50,503			
11.2.5	Main Pump Truck - Replace	10	6								
11.2.6	Dump Trailer - Replace	20	3								
11.2.7	Diesel Tank - Replace	15	1								
11.2.8	Miscellaneous Equipment - Contingency	10	7								
12.1.1	Clubhouse Interiors - Update	10	3			\$16,517					
12.1.2	Clubhouse Office Equipment - Replace	5	6	\$7,717							
12.1.3	Misc. Building Repair - Contingency	10	0								
15.1.1	Plumbing System - Contingency	3	2	\$15,418			\$17,095				
15.1.2	Water Tower - Maintenance	5	1								
15.1.3	Water System Computer 1 - Contingency	15	3								
15.1.4	Well Pump 1 - Maintenance	12	0		\$31,339						
15.1.5	Water System Computer 2 - Contingency	15	3								
15.1.6	Well Pump 2 - Maintenance	12	11	\$23,766							
15.1.7	Water Meters - Installation	1	1								
15.1.8	Water Meters - Maintenance	5	5					\$20,807			
15.1.9	Water System Telemetry - Maintenance	20	0								
15.5.1	Clubhouse Septic System - Contingency	30	4								
15.5.2	Decanter Unit - Contingency	10	4				\$30,790				
15.5.3	Aeration Manifold - Contingency	20	4								
15.5.4	Aerobic System Controls - Contingency	20	3								
15.5.5	Mixer Unit - Contingency	20	4								
15.5.6	Small Air Compressor - Maintenance	5	2		\$19,936						
15.5.7	Large Air Compressor - Maintenance	5	2		\$29,897						
15.5.8	UV Disinfection Controller - Contingency	20	15					\$70,839			
15.5.9	Waste Water Treatment Facility - Contingency	20	12		\$143,729						
15.5.10	Sampler - Contingency	10	3			\$19,047					
15.6.1	Treatment Plant Outfall - Contingency	15	13			\$31,430					
17.2.1	Fire Hydrant & PSV - Maintenance	25	10								
16.1.1	Electrical System - Contingency	5	2		\$15,958						
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2		\$46,508						
16.3.2	WWTP Emergency Generator - Contingency	10	1	\$36,676							
18.1.1	Surveillance System - Update	10	7								
18.2.1	Security Lighting - Replace	10	2		\$15,958						
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES				\$204,136	\$583,661	\$282,936	\$327,645	\$214,470			
ACCUMULATED CREDITS				\$1,468,318	\$1,664,773	\$1,494,054	\$1,640,383	\$1,760,066			
ACCUMULATED DEBITS				\$204,136	\$583,661	\$282,936	\$327,645	\$214,470			
YEAR-END BALANCE				\$1,264,182	\$1,081,112	\$1,211,118	\$1,312,738	\$1,545,596			
YEARS				1	2-10	11-30	11 (2034)	12 (2035)	13 (2036)	14 (2037)	15 (2038)
CONTRIBUTION INFLATION				0.0%	3.5%	3.5%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION				4.0%	3.5%	3.5%	147%	152%	157%	163%	168%
INTEREST RATE MULTIPLIER				1.0%	2.5%	2.5%	3%	3%	3%	3%	3%

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APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

				22-Aug-22					
STARTING RESERVE BALANCE				\$1,545,596	\$1,308,554	\$1,541,440	\$1,646,233	\$2,082,724	
ANNUAL RESERVE CONTRIBUTION				\$426,461	\$441,387	\$456,836	\$472,825	\$489,374	
ESTIMATED INTEREST EARNED				\$35,236	\$35,185	\$39,354	\$46,037	\$51,664	
SPECIAL ASSESSMENT				\$0	\$0	\$0	\$0	\$0	
ACCUMULATED CREDITS				\$2,007,293	\$1,785,126	\$2,037,630	\$2,165,095	\$2,623,761	
		MAINT.	NEXT	16	17	18	19	20	
#	COMPONENT NAME	CYCLE	MAINT.	2038/ 2039	2039/ 2040	2040/ 2041	2041/ 2042	2042/ 2043	
2.2.1	Jolly Drain Way - Maintenance	10	10					\$11,996	
2.3.1	Bioswale - Maintenance	25	13						
2.3.2	Bioswale - Inspection	5	2		\$9,486				
2.4.1	Bio-Filter Park - Maintenance	1	1	\$38,332	\$39,674	\$41,062	\$42,499	\$43,987	
2.6.1	Asphalt Road - Major Repairs	2	0	\$261,354		\$279,969		\$299,910	
2.6.2	Gravel Road - Repair	5	1	\$68,196					
2.7.1	Chain-Link Fence - Maintenance	5	3			\$20,270			
2.9.1	Mooring Docks - Repair	35	34						
2.9.2	Mooring Docks - Replace	1	0						
2.9.3	Log Boom - Repair	10	1						
2.9.4	Marina Floats - Repair	35	34						
2.9.5	Marina Metal Pilings - Replace	50	47						
2.9.6	Marina Wood Pilings - Replace	50	1						
2.9.7	Marina Main Walkway - Replace	50	41						
2.9.8	Hazardous Tree Removal	5	3			\$9,818			
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41						
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3						
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0						
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1						
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8						
7.4.1	Clubhouse Shingle Roof - Replace	24	13						
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10						
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29						
8.5.1	Clubhouse Windows - Replace	40	8						
9.6.1	Clubhouse Carpet Flooring - Replace	10	7		\$18,214				
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8						
9.8.2	Water Tower Exterior - Paint	20	2						
10.1.1	Carport - Replace	20	17		\$16,915				
10.1.2	Waterfront Playground - Replace Equipment	20	19				\$39,872		
10.1.3	Westwind Playground - Replace Equipment	20	6						
11.2.1	Riding Mower - Replace	10	2						
11.2.2	Backhoe - Replace	18	5						
11.2.3	Hydroexcavator - Replace	20	5						
11.2.4	Vehicles - Contingency	5	0					\$59,982	
11.2.5	Main Pump Truck - Replace	10	6	\$302,404					
11.2.6	Dump Trailer - Replace	20	3						
11.2.7	Diesel Tank - Replace	15	1	\$19,288					
11.2.8	Miscellaneous Equipment - Contingency	10	7		\$24,363				
12.1.1	Clubhouse Interiors - Update	10	3						
12.1.2	Clubhouse Office Equipment - Replace	5	6	\$9,165					
12.1.3	Misc. Building Repair - Contingency	10	0					\$11,996	
15.1.1	Plumbing System - Contingency	3	2		\$18,953			\$21,014	
15.1.2	Water Tower - Maintenance	5	1						
15.1.3	Water System Computer 1 - Contingency	15	3			\$20,139			
15.1.4	Well Pump 1 - Maintenance	12	0						
15.1.5	Water System Computer 2 - Contingency	15	3			\$20,139			
15.1.6	Well Pump 2 - Maintenance	12	11						
15.1.7	Water Meters - Installation	1	1						
15.1.8	Water Meters - Maintenance	5	5					\$24,713	
15.1.9	Water System Telemetry - Maintenance	20	0					\$48,126	
15.5.1	Clubhouse Septic System - Contingency	30	4						
15.5.2	Decanter Unit - Contingency	10	4						
15.5.3	Aeration Manifold - Contingency	20	4						
15.5.4	Aerobic System Controls - Contingency	20	3						
15.5.5	Mixer Unit - Contingency	20	4						
15.5.6	Small Air Compressor - Maintenance	5	2		\$23,678				
15.5.7	Large Air Compressor - Maintenance	5	2		\$35,508				
15.5.8	UV Disinfection Controller - Contingency	20	15						
15.5.9	Waste Water Treatment Facility - Contingency	20	12						
15.5.10	Sampler - Contingency	10	3						
15.6.1	Treatment Plant Outfall - Contingency	15	13						
17.2.1	Fire Hydrant & PSV - Maintenance	25	10						
16.1.1	Electrical System - Contingency	5	2		\$18,953				
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2						
16.3.2	WWTP Emergency Generator - Contingency	10	1						
18.1.1	Surveillance System - Update	10	7		\$37,942				
18.2.1	Security Lighting - Replace	10	2						
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES				\$698,739	\$243,686	\$391,397	\$82,371	\$521,724	
ACCUMULATED CREDITS				\$2,007,293	\$1,785,126	\$2,037,630	\$2,165,095	\$2,623,761	
ACCUMULATED DEBITS				\$698,739	\$243,686	\$391,397	\$82,371	\$521,724	
YEAR-END BALANCE				\$1,308,554	\$1,541,440	\$1,646,233	\$2,082,724	\$2,102,037	
YEARS		1	2-10	11-30	16 (2039)	17 (2040)	18 (2041)	19 (2042)	20 (2043)
CONTRIBUTION INFLATION		0.0%	3.5%	3.5%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION		4.0%	3.5%	3.5%	174%	180%	187%	193%	200%
INTEREST RATE MULTIPLIER		1.0%	2.5%	2.5%	3%	3%	3%	3%	3%

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APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

				22-Aug-22							
STARTING RESERVE BALANCE				\$2,102,037	\$2,431,831	\$2,264,276	\$2,512,227	\$2,539,467			
ANNUAL RESERVE CONTRIBUTION				\$506,502	\$524,229	\$542,578	\$561,568	\$581,223			
ESTIMATED INTEREST EARNED				\$55,974	\$57,977	\$58,969	\$62,367	\$67,900			
SPECIAL ASSESSMENT				\$0	\$0	\$0	\$0	\$0			
ACCUMULATED CREDITS				\$2,664,513	\$3,014,037	\$2,865,823	\$3,136,161	\$3,188,590			
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	21 2043/ 2044	22 2044/ 2045	23 2045/ 2046	24 2046/ 2047	25 2047/ 2048			
2.2.1	Jolly Drain Way - Maintenance	10	10								
2.3.1	Bioswale - Maintenance	25	13								
2.3.2	Bioswale - Inspection	5	2		\$11,266						
2.4.1	Bio-Filter Park - Maintenance	1	1	\$45,526	\$47,120	\$48,769	\$50,476	\$52,243			
2.6.1	Asphalt Road - Major Repairs	2	0		\$321,271		\$344,154				
2.6.2	Gravel Road - Repair	5	1	\$80,996							
2.7.1	Chain-Link Fence - Maintenance	5	3			\$24,074					
2.9.1	Mooring Docks - Repair	35	34								
2.9.2	Mooring Docks - Replace	1	0								
2.9.3	Log Boom - Repair	10	1	\$43,540							
2.9.4	Marina Floats - Repair	35	34								
2.9.5	Marina Metal Pilings - Replace	50	47								
2.9.6	Marina Wood Pilings - Replace	50	1								
2.9.7	Marina Main Walkway - Replace	50	41								
2.9.8	Hazardous Tree Removal	5	3			\$11,660					
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41								
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3								
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0								
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1								
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8		\$12,829						
7.4.1	Clubhouse Shingle Roof - Replace	24	13								
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10								
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29								
8.5.1	Clubhouse Windows - Replace	40	8								
9.6.1	Clubhouse Carpet Flooring - Replace	10	7								
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8		\$32,063						
9.8.2	Water Tower Exterior - Paint	20	2		\$128,509						
10.1.1	Carport - Replace	20	17								
10.1.2	Waterfront Playground - Replace Equipment	20	19								
10.1.3	Westwind Playground - Replace Equipment	20	6								
11.2.1	Riding Mower - Replace	10	2		\$15,785						
11.2.2	Backhoe - Replace	18	5			\$89,779					
11.2.3	Hydroexcavator - Replace	20	5					\$75,301			
11.2.4	Vehicles - Contingency	5	0					\$71,240			
11.2.5	Main Pump Truck - Replace	10	6								
11.2.6	Dump Trailer - Replace	20	3			\$23,298					
11.2.7	Diesel Tank - Replace	15	1								
11.2.8	Miscellaneous Equipment - Contingency	10	7								
12.1.1	Clubhouse Interiors - Update	10	3			\$23,298					
12.1.2	Clubhouse Office Equipment - Replace	5	6	\$10,885							
12.1.3	Misc. Building Repair - Contingency	10	0								
15.1.1	Plumbing System - Contingency	3	2			\$23,298					
15.1.2	Water Tower - Maintenance	5	1								
15.1.3	Water System Computer 1 - Contingency	15	3								
15.1.4	Well Pump 1 - Maintenance	12	0				\$47,356				
15.1.5	Water System Computer 2 - Contingency	15	3								
15.1.6	Well Pump 2 - Maintenance	12	11			\$35,912					
15.1.7	Water Meters - Installation	1	1								
15.1.8	Water Meters - Maintenance	5	5					\$29,351			
15.1.9	Water System Telemetry - Maintenance	20	0								
15.5.1	Clubhouse Septic System - Contingency	30	4								
15.5.2	Decanter Unit - Contingency	10	4				\$43,432				
15.5.3	Aeration Manifold - Contingency	20	4				\$55,638				
15.5.4	Aerobic System Controls - Contingency	20	3			\$46,641					
15.5.5	Mixer Unit - Contingency	20	4				\$55,638				
15.5.6	Small Air Compressor - Maintenance	5	2		\$28,122						
15.5.7	Large Air Compressor - Maintenance	5	2		\$42,172						
15.5.8	UV Disinfection Controller - Contingency	20	15								
15.5.9	Waste Water Treatment Facility - Contingency	20	12								
15.5.10	Sampler - Contingency	10	3			\$26,867					
15.6.1	Treatment Plant Outfall - Contingency	15	13								
17.2.1	Fire Hydrant & PSV - Maintenance	25	10								
16.1.1	Electrical System - Contingency	5	2		\$22,510						
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2		\$65,604						
16.3.2	WWTP Emergency Generator - Contingency	10	1	\$51,735							
18.1.1	Surveillance System - Update	10	7								
18.2.1	Security Lighting - Replace	10	2		\$22,510						
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES				\$232,682	\$749,761	\$353,596	\$596,694	\$228,135			
ACCUMULATED CREDITS				\$2,664,513	\$3,014,037	\$2,865,823	\$3,136,161	\$3,188,590			
ACCUMULATED DEBITS				\$232,682	\$749,761	\$353,596	\$596,694	\$228,135			
YEAR-END BALANCE				\$2,431,831	\$2,264,276	\$2,512,227	\$2,539,467	\$2,960,455			
YEARS				1	2-10	11-30	21 (2044)	22 (2045)	23 (2046)	24 (2047)	25 (2048)
CONTRIBUTION INFLATION				0.0%	3.5%	3.5%	4%	4%	4%	4%	4%
COMPONENT COMPOUND INFLATION				4.0%	3.5%	3.5%	207%	214%	222%	229%	237%
INTEREST RATE MULTIPLIER				1.0%	2.5%	2.5%	3%	3%	3%	3%	3%

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APPENDIX A

CARLYON BEACH HOA

30-YEAR RESERVE STUDY PROJECTIONS
WITH STARTING RECOMMENDED FUNDING OF \$305,640
AND COMPOUND INFLATION

					22-Aug-22				
STARTING RESERVE BALANCE					\$2,960,455	\$2,621,303	\$3,020,428	\$3,193,611	\$3,774,465
ANNUAL RESERVE CONTRIBUTION					\$601,565	\$622,620	\$644,412	\$666,966	\$690,310
ESTIMATED INTEREST EARNED					\$68,911	\$69,651	\$76,717	\$86,026	\$95,010
SPECIAL ASSESSMENT					\$0	\$0	\$0	\$0	\$0
ACCUMULATED CREDITS					\$3,630,931	\$3,313,574	\$3,741,556	\$3,946,603	\$4,559,786
#	COMPONENT NAME	MAINT. CYCLE	NEXT MAINT.	26 2048/ 2049	27 2049/ 2050	28 2050/ 2051	29 2051/ 2052	30 2052/ 2053	
2.2.1	Jolly Drain Way - Maintenance	10	10						\$16,922
2.3.1	Bioswale - Maintenance	25	13						
2.3.2	Bioswale - Inspection	5	2		\$13,380				
2.4.1	Bio-Filter Park - Maintenance	1	1	\$54,071	\$55,964	\$57,922	\$59,950	\$62,048	
2.6.1	Asphalt Road - Major Repairs	2	0	\$368,666		\$394,924		\$423,053	
2.6.2	Gravel Road - Repair	5	1	\$96,197					
2.7.1	Chain-Link Fence - Maintenance	5	3			\$28,593			
2.9.1	Mooring Docks - Repair	35	34						
2.9.2	Mooring Docks - Replace	1	0						
2.9.3	Log Boom - Repair	10	1						
2.9.4	Marina Floats - Repair	35	34						
2.9.5	Marina Metal Pilings - Replace	50	47						
2.9.6	Marina Wood Pilings - Replace	50	1						
2.9.7	Marina Main Walkway - Replace	50	41						
2.9.8	Hazardous Tree Removal	5	3			\$13,849			
3.3.1	Bulkhead Retaining Walls - Ph. 1 Repair	50	41						
3.3.2	Bulkhead Retaining Walls - Ph. 2 Repair	50	3						
4.2.1	Clubhouse - Structural & Exterior Repairs	50	0						
4.2.2	Picnic Area "Wanagan"- Structural Repairs	50	1						
6.2.1	Clubhouse Exterior Surfaces - Repair	7	8				\$16,323		
7.4.1	Clubhouse Shingle Roof - Replace	24	13						
7.4.2	Picnic Area "Wanagan" Roof - Replace	30	10						
7.4.3	Maintenance Bldg. Shingle Roof - Replace	30	29				\$26,432		
8.5.1	Clubhouse Windows - Replace	40	8						
9.6.1	Clubhouse Carpet Flooring - Replace	10	7		\$25,692				
9.8.1	Clubhouse Exterior Surfaces - Paint	7	8				\$40,793		
9.8.2	Water Tower Exterior - Paint	20	2						
10.1.1	Carport - Replace	20	17						
10.1.2	Waterfront Playground - Replace Equipment	20	19						
10.1.3	Westwind Playground - Replace Equipment	20	6	\$25,364					
11.2.1	Riding Mower - Replace	10	2						
11.2.2	Backhoe - Replace	18	5						
11.2.3	Hydroexcavator - Replace	20	5						
11.2.4	Vehicles - Contingency	5	0					\$84,611	
11.2.5	Main Pump Truck - Replace	10	6	\$426,571					
11.2.6	Dump Trailer - Replace	20	3						
11.2.7	Diesel Tank - Replace	15	1						
11.2.8	Miscellaneous Equipment - Contingency	10	7		\$34,367				
12.1.1	Clubhouse Interiors - Update	10	3						
12.1.2	Clubhouse Office Equipment - Replace	5	6	\$12,928					
12.1.3	Misc. Building Repair - Contingency	10	0						\$16,922
15.1.1	Plumbing System - Contingency	3	2	\$25,831			\$28,640		
15.1.2	Water Tower - Maintenance	5	1						
15.1.3	Water System Computer 1 - Contingency	15	3						
15.1.4	Well Pump 1 - Maintenance	12	0						
15.1.5	Water System Computer 2 - Contingency	15	3						
15.1.6	Well Pump 2 - Maintenance	12	11						
15.1.7	Water Meters - Installation	1	1						
15.1.8	Water Meters - Maintenance	5	5						\$34,860
15.1.9	Water System Telemetry - Maintenance	20	0						
15.5.1	Clubhouse Septic System - Contingency	30	4						
15.5.2	Decanter Unit - Contingency	10	4						
15.5.3	Aeration Manifold - Contingency	20	4						
15.5.4	Aerobic System Controls - Contingency	20	3						
15.5.5	Mixer Unit - Contingency	20	4						
15.5.6	Small Air Compressor - Maintenance	5	2		\$33,400				
15.5.7	Large Air Compressor - Maintenance	5	2		\$50,087				
15.5.8	UV Disinfection Controller - Contingency	20	15						
15.5.9	Waste Water Treatment Facility - Contingency	20	12						
15.5.10	Sampler - Contingency	10	3						
15.6.1	Treatment Plant Outfall - Contingency	15	13			\$52,657			
17.2.1	Fire Hydrant & PSV - Maintenance	25	10						
16.1.1	Electrical System - Contingency	5	2		\$26,735				
16.3.1	Maint. Shop Emergency Generator - Contingency	10	2						
16.3.2	WWTP Emergency Generator - Contingency	10	1						
18.1.1	Surveillance System - Update	10	7		\$53,521				
18.2.1	Security Lighting - Replace	10	2						
TOTAL ANTICIPATED ANNUAL RESERVE EXPENSES					\$1,009,628	\$293,146	\$547,945	\$172,138	\$638,416
ACCUMULATED CREDITS					\$3,630,931	\$3,313,574	\$3,741,556	\$3,946,603	\$4,559,786
ACCUMULATED DEBITS					\$1,009,628	\$293,146	\$547,945	\$172,138	\$638,416
YEAR-END BALANCE					\$2,621,303	\$3,020,428	\$3,193,611	\$3,774,465	\$3,921,370
YEARS	1	2-10	11-30	26 (2049)	27 (2050)	28 (2051)	29 (2052)	30 (2053)	
CONTRIBUTION INFLATION	0.0%	3.5%	3.5%	4%	4%	4%	4%	4%	
COMPONENT COMPOUND INFLATION	4.0%	3.5%	3.5%	246%	254%	263%	272%	282%	
INTEREST RATE MULTIPLIER	1.0%	2.5%	2.5%	3%	3%	3%	3%	3%	

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CARLYON BEACH HOA

COMPONENT SUMMARY

FUTURE MAINTENANCE WITH INFLATED ESTIMATES

22-Aug-22

2.2.1 Jolly Drain Way - Maintenance

Site

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$6,000

Next Maintenance: Year 10 (2033)

Unit Cost: \$6,000.00 / LS

This new component budgets funds to maintain the jolly drain way, which is located between Island Drive NW and Mariner Drive NW on either side of Overlook Drive NW. The jolly drain way ensures that storm water properly drains from the community. The jolly drain way was installed in 2021 and is reportedly working as designed. Funds are budgeted for future maintenance, including cleaning debris and invasive plants.

FUTURE MAINTENANCE	
YEAR	COST
10 (2033)	\$8,504
20 (2043)	\$11,996
30 (2053)	\$16,922

2.3.1 Bioswale - Maintenance

Site

Maintenance Cycle: 25 years

Quantity: 1 Lump Sum

Estimate: \$84,150

Next Maintenance: Year 13 (2036)

Unit Cost: \$84,150.00 / LS

The Association reported in 2022 that the bioswale shows no sign of erosion, but areas of ponding need addressing. The budget provides funds for periodic maintenance of the bioswale on the property to ensure it operates as designed, including cleaning, and clearing of the bioswale and surrounding area. The component number has been updated from 15.6.2 to 2.3.1 to better conform with our numbering system.

FUTURE MAINTENANCE	
YEAR	COST
13 (2036)	\$132,243

2.3.2 Bioswale - Inspection

Site

Maintenance Cycle: 5 years

Quantity: 1 Lump Sum

Estimate: \$5,260

Next Maintenance: Year 2 (2025)

Unit Cost: \$5,260.00 / LS

The budget is intended for regular bioswale inspections. The Association confirmed that the budget and timing are appropriate. The component number has been updated from 15.6.3 to 2.3.2 to better conform with our numbering system.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$5,662
7 (2030)	\$6,725
12 (2035)	\$7,987
17 (2040)	\$9,486
22 (2045)	\$11,266
Repeat Every Years	

2.4.1 Bio-Filter Park - Maintenance

Site

Maintenance Cycle: 1 year

Quantity: 1 Lump Sum

Estimate: \$22,000

Next Maintenance: Year 1 (2024)

Unit Cost: \$22,000.00 / LS

The Association reported in 2022 that the bio-filters next to the Garden at the Waterfront Park need replacing in 2023/2024. We understand that a filter inspection is required 3 years and that the park will cost approximately \$22,000 annually to maintain. In 2021/2022 the stormwater and filters were replaced, with a portion paid from an insurance claim. The component number has been updated from 15.7.1 to 2.4.1 to better conform with our numbering system.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$22,880
2 (2025)	\$23,681
3 (2026)	\$24,510
4 (2027)	\$25,367
5 (2028)	\$26,255
Repeat Every Year	

CARLYON BEACH HOA

COMPONENT SUMMARY

FUTURE MAINTENANCE WITH INFLATED ESTIMATES

22-Aug-22

2.6.1 Asphalt Road - Major Repairs

Site

Maintenance Cycle: 2 years

Quantity: 575,165 Lump Sum

Estimate: \$150,000

Next Maintenance: Year 0 (2023)

Unit Cost: \$150,000.00 / LS

The asphalt roads throughout the property are in good condition overall and are repaired regularly. Asphalt road repaving was started in 2021 and completed in 2022 at a cost of \$131,724 as a part of the annual road repair, which has already been paid out of reserves. The Association reported spending \$111,348 in August of 2022 and anticipates that a budget of \$150,000 every two years will meet their maintenance needs. Past maintenance includes \$60,000 in 2012, \$50,000 in 2013, \$100,000 in 2014, \$90,000 in 2020, and \$115,000 in 2021.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$111,348
2 (2025)	\$161,460
4 (2027)	\$172,960
6 (2029)	\$185,279
8 (2031)	\$198,476
Repeat Every 2 Years	

2.6.2 Gravel Road - Repair

Site

Maintenance Cycle: 5 years

Quantity: 3,228 Square Yards

Estimate: $3,228 \text{ SY} \times 25\% \times \$44.33/\text{SY} = \$35,774 + \text{tax} = \$39,140$

Next Maintenance: Year 1 (2024)

Unit Cost: \$44.33 / SY

Funds are budgeted for filling potholes as needed with 2" minus gravel. At the request of the Association, the gravel road repair is budgeted in 2023. The budget provides funds to repair up to 25% of the roads throughout the community per maintenance cycle.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$40,706
6 (2029)	\$48,345
11 (2034)	\$57,419
16 (2039)	\$68,196
21 (2044)	\$80,996
Repeat Every 5 Years	

2.7.1 Chain-Link Fence - Maintenance

Site

Maintenance Cycle: 5 years

Quantity: 2.985 Linear Feet

Estimate: $2.985 \text{ LF} \times 15\% \times \$22.17/\text{LF} = \$9.927 + \text{tax} = \10.860

Next Maintenance: Year 3 (2026)

Unit Cost: \$22.17 / LF

The chain-link fencing surrounding the waterfront park and marina was in good condition. In 2021 through 2022, the fences at the stormwater ponds were repaired with funds from the operating budget after car damage. The budget allows for maintaining approximately 15% of the fencing each repair cycle.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$12,099
8 (2031)	\$14,370
13 (2036)	\$17,067
18 (2041)	\$20,270
23 (2046)	\$24,074
Repeat Every 5 Years	

2.9.1 Mooring Docks - Repair

Site

Maintenance Cycle: 35 years

Quantity: 7,800 Square Feet

Estimate: $7,800 \text{ SF} \times 100\% \times \$15.23/\text{SF} = \$118,830 + \text{tax} = \$130,000$

Next Maintenance: Year 34 (2057)

Unit Cost: \$15.23 / SF

Most of the mooring docks around the marina have been replaced and are regularly maintained. The Association has requested to budget for full replacement, rather than major maintenance of the mooring docks. They report confirming with their contractor that the docks should have a 35 year life expectancy.

FUTURE MAINTENANCE	
YEAR	COST



APPENDIX B

CARLYON BEACH HOA

COMPONENT SUMMARY

FUTURE MAINTENANCE WITH INFLATED ESTIMATES

22-Aug-22

2.9.2 Mooring Docks - Replace

Site

Maintenance Cycle: 1 year

Quantity: 7,800 Lump Sum

Estimate: \$52,000

Next Maintenance: Year 0 (2023)

Unit Cost: \$52,000.00 / LS

The docks were clean and appeared to be in good repair overall. The replacement of Dock B and the installation of new floats was completed in 2022 at a cost of \$131,085; the marina fund paid for \$54,000 of the expense. It is expected that replacement of the older docks will be completed by the 2023/2024 fiscal year and that future replacement cycles will not be as expensive. The mooring docks were installed in 1974; the main section of the docks were replaced in 2014; approximately \$110,000 was spent in 2018 for dock replacement.

FUTURE MAINTENANCE

YEAR	COST
0 (2023)	\$52,000
1 (2024)	\$54,080

2.9.3 Log Boom - Repair

Site

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$21,040

Next Maintenance: Year 1 (2024)

Unit Cost: \$21,040.00 / LS

The log boom at the outer perimeter of the marina appeared to be secure. In 2021/2022, the log boom was repaired and stabilized; the cost was not significant and funds were taken from the operating budget. The Association previously reported replacing the log boom in 2018 at for about \$20,000. At the request of the Association in 2019, we adjusted the budgeted amount to \$20,000 and shortened the maintenance cycle to 10 years.

FUTURE MAINTENANCE

YEAR	COST
1 (2024)	\$21,882
11 (2034)	\$30,866
21 (2044)	\$43,540

2.9.4 Marina Floats - Repair

Site

Maintenance Cycle: 35 years

Quantity: 7,800 Square Feet

Estimate: 7,800 SF X 100% X \$9.98/SF = \$77,844 + tax = \$85,160

Next Maintenance: Year 34 (2057)

Unit Cost: \$9.98 / SF

During the most recent site visit, we were not able to directly observe the marina floats, but no issues were reported. The Association has requested to budget for full replacement, rather than major maintenance of the marina float. They report confirming with their contractor that the floats should have a 35 year life expectancy.

FUTURE MAINTENANCE

YEAR	COST
------	------

2.9.5 Marina Metal Pilings - Replace

Site

Maintenance Cycle: 50 years

Quantity: 22 Each

Estimate: 22 EA X 100% X \$2,770.00/EA = \$60,940 + tax = \$66,670

Next Maintenance: Year 47 (2070)

Unit Cost: \$2,770.00 / EA

No concerns with the marina metal pilings were reported. Past records indicate that a number of steel pilings were installed in 2018 when one of the mooring docks was refurbished. Although the expected useful life of steel pilings exceeds the period of this reserve study, we include a budget to financially prepare the Association for their replacement. The budget provides funds for replacing 22 steel pilings.

FUTURE MAINTENANCE

YEAR	COST
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CARLYON BEACH HOA

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22-Aug-22

2.9.6 Marina Wood Pilings - Replace

Site

Maintenance Cycle: 50 years

Next Maintenance: Year 1 (2024)

Quantity: 35 Each

Unit Cost: \$609.60 / EA

Estimate: 35 EA X 100% X \$609.60/EA = \$21,336 + tax = \$23,340

Carlyon Beach has approximately 30 to 40 wood pilings. The Association is anticipating repairs and replacement of the wood pilings in the 2023/2024 fiscal year but there are no set plans. Most likely the pilings will be replaced with steel pilings, which will require a permit. Once the wood pilings have been replaced with steel, this component can be removed from the reserve study.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$24,274

2.9.7 Marina Main Walkway - Replace

Site

Maintenance Cycle: 50 years

Next Maintenance: Year 41 (2064)

Quantity: 1,120 Square Feet

Unit Cost: \$133.54 / SF

Estimate: 1,120 SF X 100% X \$133.54/SF = \$149,565 + tax = \$163,620

At the 2022 site visit, it was noted that the marina's main walkway was in serviceable condition. We recommend that the paint on the hand rails be touched up to protect the metal from the elements. The budget allocates funds to replace the polypropylene walkway and metal railing with cable infill when it has reached the approximate end of its useful life.

FUTURE MAINTENANCE	
YEAR	COST

2.9.8 Hazardous Tree Removal

Site

Maintenance Cycle: 5 years

Next Maintenance: Year 3 (2026)

Quantity: 1 Lump Sum

Unit Cost: \$5,260.00 / LS

Estimate: \$5,260

As of 2022, there are no hazardous trees identified for removal throughout the community. Past maintenance was completed during the 2020 fiscal year. Funds are intended to be drawn from this component as required to cover hazardous tree removal.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$5,860
8 (2031)	\$6,960
13 (2036)	\$8,266
18 (2041)	\$9,818
23 (2046)	\$11,660
Repeat Every 5 Years	

3.3.1 Bulkhead Retaining Walls - Ph. 1 Repair

Concrete

Maintenance Cycle: 50 years

Next Maintenance: Year 41 (2064)

Quantity: 860 Linear Feet

Unit Cost: \$456.49 / LF

Estimate: 860 LF X 100% X \$456.49/LF = \$392,581 + tax = \$429,480

It was noted during the 2022 site visit that the section of the bulkhead that was repaired in 2014 appears to be weathering well. Funds are budgeted for major repairs on a fifty-year cycle.

FUTURE MAINTENANCE	
YEAR	COST



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3.3.2 Bulkhead Retaining Walls - Ph. 2 Repair

Concrete

Maintenance Cycle: 50 years

Next Maintenance: Year 3 (2026)

Quantity: 765 Linear Feet

Unit Cost: \$456.49 / LF

Estimate: 765 LF X 100% X \$456.49/LF = \$349,215 + tax = \$382,040

The second phase of major repairs to the bulkhead are funded with this component; this component addresses the bulkhead that was not repaired in 2014. This section of the bulkhead reportedly has no immediate concerns. The Association confirmed that plans to address repairs by 2026 are still on target.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$425,621

4.2.1 Clubhouse - Structural & Exterior Repairs

Ext Envelope

Maintenance Cycle: 50 years

Next Maintenance: Year 0 (2023)

Quantity: 1 Lump Sum

Unit Cost: \$80,000.00 / LS

Estimate: \$80,000

The Clubhouse will require structural and exterior repairs in the 2022/2023 fiscal year. The extent of the repairs is not currently known, nor is the budget. This component is a placeholder and is expected to be a one-time cost to complete the necessary repairs. Future maintenance is budgeted in separate components for siding repairs and painting.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$80,000

4.2.2 Picnic Area "Wanagan"- Structural Repairs

Ext Envelope

Maintenance Cycle: 50 years

Next Maintenance: Year 1 (2024)

Quantity: 1 Lump Sum

Unit Cost: \$20,000.00 / LS

Estimate: 1 LS X 100% X \$20,000.00/LS = \$20,000 + tax = \$21,880

The "Wanagan" in the waterfront picnic area is a central feature with a long history in the community. The supporting structure is exhibiting significant signs of fatigue and has been blocked off until it can be determined if the structure can be reinforced or will need to be completely rebuilt. This component is a placeholder to provide funds for design fees and repairs. If the structure needs to be reconstructed the budget will likely need to be increased.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$22,755

6.2.1 Clubhouse Exterior Surfaces - Repair

Ext Envelope

Maintenance Cycle: 7 years

Next Maintenance: Year 8 (2031)

Quantity: 4,210 Square Feet

Unit Cost: \$26.00 / SF

Estimate: 4,210 SF X 5% X \$26.00/SF = \$5,473 + tax = \$5,990

As previously noted, the Clubhouse requires exterior and structural repairs in the 2022/2023 fiscal year. This component budgets funds for future repairs to the exterior of the Clubhouse after the anticipated repairs in 2022/2023 have been completed. Repairs are budgeted in conjunction with paint cycles when damage is most likely to be discovered. The budget provides funds to repair up to 5% of the siding and trim each repair cycle. Past records indicate that maintenance was completed in 2021 for a cost of \$20,000.

FUTURE MAINTENANCE	
YEAR	COST
8 (2031)	\$7,926
15 (2038)	\$10,084
22 (2045)	\$12,829
29 (2052)	\$16,323

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7.4.1 Clubhouse Shingle Roof - Replace

Ext Envelope

Maintenance Cycle: 24 years

Next Maintenance: Year 13 (2036)

Quantity: 23 Roofing Squares

Unit Cost: \$609.65 / SQ

Estimate: 23 SQ X 100% X \$609.65/SQ = \$13,839 + tax = \$15,140

The asphalt composition shingle roof that was observable on the Clubhouse appeared to be weathering as expected. The exact age of the Clubhouse roof has not been verified; the next maintenance year may need to be adjusted, depending on the number of issues that present as the roof approaches the next budgeted replacement. We recommend regular visual roof inspections to determine the condition of the roof and periodic repairs to help extend its useful life.

FUTURE MAINTENANCE	
YEAR	COST
13 (2036)	\$23,793

7.4.2 Picnic Area "Wanagan" Roof - Replace

Ext Envelope

Maintenance Cycle: 30 years

Next Maintenance: Year 10 (2033)

Quantity: 11 Roofing Squares

Unit Cost: \$378.91 / SQ

Estimate: 11 SQ X 100% X \$378.91/SQ = \$4,130 + tax = \$4,520

The budget provides funds to replace the entire roof of the Wanagan located at the waterfront playground next to the Clubhouse. The Wanagan roof appeared to be in serviceable condition, but the structure was in poor condition. The Association plans on doing one-time structural repairs (not re-roofing) to the Wanagan in 2023. The age of the roof at the picnic area "Wanagan" is unknown. The cost of the roof replacement has been reduced to be more in line with the cost of the Maintenance Building replacement in 2021.

FUTURE MAINTENANCE	
YEAR	COST
10 (2033)	\$6,407

7.4.3 Maintenance Bldg. Shingle Roof - Replace

Ext Envelope

Maintenance Cycle: 30 years

Next Maintenance: Year 29 (2052)

Quantity: 23 Roofing Squares

Unit Cost: \$378.91 / SQ

Estimate: 23 SQ X 100% X \$378.91/SQ = \$8,867 + tax = \$9,700

The asphalt composition shingle roof of the Maintenance building was replaced in 2021 at a cost of \$9,343. The roof of the maintenance building was reported in 2019 to have no issues.

FUTURE MAINTENANCE	
YEAR	COST
29 (2052)	\$26,432

8.5.1 Clubhouse Windows - Replace

Ext Envelope

Maintenance Cycle: 40 years

Next Maintenance: Year 8 (2031)

Quantity: 860 Square Feet

Unit Cost: \$50.98 / SF

Estimate: 860 SF X 100% X \$50.98/SF = \$43,843 + tax = \$47,960

In 2022, there were no issues reported with the Clubhouse windows and the windows continue to appear to be performing well. The budget saves for replacing the windows when they have reached the approximate end of useful life. The next maintenance year has been aligned with the clubhouse exterior surfaces repair and painting components so that the siding around the windows can be removed and replaced for installation.

FUTURE MAINTENANCE	
YEAR	COST
8 (2031)	\$63,459

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9.6.1 Clubhouse Carpet Flooring - Replace

Ext Envelope

Maintenance Cycle: 10 years

Next Maintenance: Year 7 (2030)

Quantity: 200 Square Yards

Unit Cost: \$46.16 / SY

Estimate: 200 SY X 100% X \$46.16/SY = \$9,232 + tax = \$10,100

It was noted in 2022 that the carpet located on the upper floor of the Clubhouse was wearing well. The Association requested to move the next maintenance out to 2030 since the carpet is performing well and there are no plans to replace the carpet in the near future. This is a discretionary expense that may be adjusted in timing and budget to meet the aesthetic needs of the Association.

FUTURE MAINTENANCE	
YEAR	COST
7 (2030)	\$12,912
17 (2040)	\$18,214
27 (2050)	\$25,692

9.8.1 Clubhouse Exterior Surfaces - Paint

Ext Envelope

Maintenance Cycle: 7 years

Next Maintenance: Year 8 (2031)

Quantity: 4,210 Square Feet

Unit Cost: \$3.25 / SF

Estimate: 4,210 SF X 100% X \$3.25/SF = \$13,683 + tax = \$14,970

The Clubhouse requires exterior and structural repairs in the 2022/2023 fiscal year. This component budgets funds for future exterior painting after the anticipated repairs in 2022/2023 have been completed. The Clubhouse exterior was last painted around 2015. We recommend painting the wood components regularly to protect them from the elements, which is especially important along the coastline.

FUTURE MAINTENANCE	
YEAR	COST
8 (2031)	\$19,808
15 (2038)	\$25,201
22 (2045)	\$32,063
29 (2052)	\$40,793

9.8.2 Water Tower Exterior - Paint

Ext Envelope

Maintenance Cycle: 20 years

Next Maintenance: Year 2 (2025)

Quantity: 9,650 Square Feet

Unit Cost: \$5.68 / SF

Estimate: 9,650 SF X 100% X \$5.68/SF = \$54,845 + tax = \$60,000

This component budgets funds to paint the exterior of the water tower located at the southeast corner of the property. The Association noted plans to touch up the paint at the base of the tower in 2023 with funds from the operating budget. At the request of the Association, the water tower painting project has been moved from 2023 to 2025 at an estimated cost of \$60,000. The budget funds for regular painting to help protect the tower from corrosion and improve the useful life span of the tower.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$64,584
22 (2045)	\$128,509

10.1.1 Carport - Replace

Specialties

Maintenance Cycle: 20 years

Next Maintenance: Year 17 (2040)

Quantity: 1 Lump Sum

Unit Cost: \$9,380.00 / LS

Estimate: \$9,380

The budget maintains funds to replace the maintenance shop carport when repairs are no longer feasible. The carport was found to be in good condition; a new carport for maintenance vehicles was installed in 2018 at a cost of about \$8,000.

FUTURE MAINTENANCE	
YEAR	COST
17 (2040)	\$16,915



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10.1.2 Waterfront Playground - Replace Equipment

Specialties

Maintenance Cycle: 20 years

Quantity: 1 Lump Sum

Estimate: \$20,640

Next Maintenance: Year 19 (2042)

Unit Cost: \$20,640.00 / LS

This component budgets funds to repair and replace the equipment, picnic tables and benches located in the waterfront playground located next to the Clubhouse. It was reported that the equipment was replaced in 2021 at a cost of \$20,000 and all appeared to be in good condition at the time of the site visit.

FUTURE MAINTENANCE	
YEAR	COST
19 (2042)	\$39,872

10.1.3 Westwind Playground - Replace Equipment

Specialties

Maintenance Cycle: 20 years

Quantity: 1 Lump Sum

Estimate: \$10,320

Next Maintenance: Year 6 (2029)

Unit Cost: \$10,320.00 / LS

A small play area is located at the corner of Westwind Drive and Crestridge Drive NW. At the 2022 site visit, it was noted that the equipment is clean and in good repair. The budget provides funds to repair and replace the playground equipment as needed to keep the area safe. The Association indicated that there are no current plans to replace the equipment at this park. The next maintenance has been moved out 5 years based on the observed condition.

FUTURE MAINTENANCE	
YEAR	COST
6 (2029)	\$12,747
26 (2049)	\$25,364

11.2.1 Riding Mower - Replace

Equipment

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$7,370

Next Maintenance: Year 2 (2025)

Unit Cost: \$7,370.00 / LS

The Association currently has a used Bolens riding mower that was purchased in 2014 at a cost of about \$6,500. We understand that the mower is frequently used and is approaching the end of its useful life. The budget funds replacement of the riding mower with a comparable new riding mower.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$7,933
12 (2035)	\$11,190
22 (2045)	\$15,785

11.2.2 Backhoe - Replace

Equipment

Maintenance Cycle: 18 years

Quantity: 1 Each

Estimate: 1 EA X 100% X \$37,020.11/EA = \$37,020 + tax = \$40,500

Next Maintenance: Year 5 (2028)

Unit Cost: \$37,020.11 / EA

It was reported that the backhoe was recently repaired with funds from the operating budget at a cost of \$6,700 and is currently running well. The Association will continue to maintain the backhoe and has requested that replacement be moved out to 2027/2028. The budget allows for a purchase of a used backhoe as a replacement.

FUTURE MAINTENANCE	
YEAR	COST
5 (2028)	\$48,334
23 (2046)	\$89,779



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11.2.3 Hydroexcavator - Replace

Equipment

Maintenance Cycle: 20 years

Next Maintenance: Year 5 (2028)

Quantity: 1 Each

Unit Cost: \$28,985.37 / EA

Estimate: 1 EA X 100% X \$28,985.37/EA = \$28,985 + tax = \$31,710

We observed the hydroexcavator in the maintenance shop and understand that it is in good working order. The budget provides funds to replace one hydroexcavator when the Association is ready for a replacement; at the request of the Association, the hydroexcavator replacement has been moved to 2027/2028. Past records show that the hydro excavator was purchased in 2007 at a cost of approximately \$23,500.

FUTURE MAINTENANCE	
YEAR	COST
5 (2028)	\$37,843
25 (2048)	\$75,301

11.2.4 Vehicles - Contingency

Equipment

Maintenance Cycle: 5 years

Next Maintenance: Year 0 (2023)

Quantity: 4 Lump Sum

Unit Cost: \$30,000.00 / LS

Estimate: \$30,000

It was noted during the 2022 site visit that the property's vehicles are in good condition. The Association plans on purchasing a used truck in 2022, for an estimated cost of \$5,000 that will be expensed from the operating budget. The Association plans to budget approximately \$30,000 for a new vehicle in 2022/2023. The budget reflects funds for upgrading one vehicle of the four vehicles with a used vehicle every five years.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$30,000
5 (2028)	\$35,803
10 (2033)	\$42,522
15 (2038)	\$50,503
20 (2043)	\$59,982
Repeat Every 5 Years	

11.2.5 Main Pump Truck - Replace

Equipment

Maintenance Cycle: 10 years

Next Maintenance: Year 6 (2029)

Quantity: 1 Lump Sum

Unit Cost: \$173,560.00 / LS

Estimate: \$173,560

The pump truck is utilized to pump liquid waste from resident's waste water systems for processing in the on site waste water facility. The Association owns two pump trucks, one new and one old; the older truck is kept as a backup in case the newer truck cannot be used for any reason. At the Association's direction the budget funds for replacing one truck (the "main" truck). The main pump truck was last replaced in 2018 and was reportedly in good working order.

FUTURE MAINTENANCE	
YEAR	COST
6 (2029)	\$214,380
16 (2039)	\$302,404
26 (2049)	\$426,571

11.2.6 Dump Trailer - Replace

Equipment

Maintenance Cycle: 20 years

Next Maintenance: Year 3 (2026)

Quantity: 1 Each

Unit Cost: \$9,606.95 / EA

Estimate: 1 EA X 100% X \$9,606.95/EA = \$9,607 + tax = \$10,510

The dump trailer was observed outside the Maintenance Shop and was reportedly working well with no issues. The budget provides funds to replace the 2005 model dump trailer when the Association requires a replacement.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$11,709
23 (2046)	\$23,298

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11.2.7 Diesel Tank - Replace

Equipment

Maintenance Cycle: 15 years

Next Maintenance: Year 1 (2024)

Quantity: 2 Each

Unit Cost: \$10,118.83 / EA

Estimate: 2 EA X 50% X \$10,118.83/EA = \$10,119 + tax = \$11,070

The Association owns two diesel tanks, a 150 gallon tank located at the treatment plant and another located at the Maintenance Shop. The Association reported that the diesel tank located at the waste water treatment plant will likely be replaced in 2023. The funds are budgeted to replace one diesel tank per cycle; the useful life of the tanks can vary, depending on location and maintenance.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$11,513
16 (2039)	\$19,288

11.2.8 Miscellaneous Equipment - Contingency

Equipment

Maintenance Cycle: 10 years

Next Maintenance: Year 7 (2030)

Quantity: 1 Lump Sum

Unit Cost: \$12,349.18 / LS

Estimate: 1 LS X 100% X \$12,349.18/LS = \$12,349 + tax = \$13,510

This component provides a contingency fund for the maintenance and replacement of miscellaneous equipment used at Carlyon Beach. The funds should be used as needed to equipment in good working order or replace equipment that is no longer serviceable.

FUTURE MAINTENANCE	
YEAR	COST
7 (2030)	\$17,272
17 (2040)	\$24,363
27 (2050)	\$34,367

12.1.1 Clubhouse Interiors - Update

Finishes/Furnishings

Maintenance Cycle: 10 years

Next Maintenance: Year 3 (2026)

Quantity: 1 Lump Sum

Unit Cost: \$10,510.00 / LS

Estimate: \$10,510

The Clubhouse interior was clean and in good repair. This component saves for interior updates to the clubhouse, including restrooms, furniture, office equipment, cabinets, counters and appliances. Carpeting is budgeted separate in component 9.6.1 and office equipment is budgeted in component 12.1.2. The budget amount and timing for Clubhouse interior improvements is discretionary and should be adjusted to meet the aesthetic needs of the Association. The Association confirmed that a budget in 2024/2025 is appropriate for now and will be reevaluated with each reserve study update.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$11,709
13 (2036)	\$16,517
23 (2046)	\$23,298

12.1.2 Clubhouse Office Equipment - Replace

Finishes/Furnishings

Maintenance Cycle: 5 years

Next Maintenance: Year 6 (2029)

Quantity: 1 Lump Sum

Unit Cost: \$5,260.00 / LS

Estimate: \$5,260

This component provides a budget to replace office equipment including furniture, computers and copiers (if valued over \$5,000) every 5 years, but can be drawn from as needed to meet needs. No immediate needs were reported in 2022 and the Association requested that the next maintenance be reset to the 2028/2029 fiscal year.

FUTURE MAINTENANCE	
YEAR	COST
6 (2029)	\$6,497
11 (2034)	\$7,717
16 (2039)	\$9,165
21 (2044)	\$10,885
26 (2049)	\$12,928
Repeat Every 5 Years	

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12.1.3 Misc. Building Repair - Contingency

Finishes/Furnishings

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$6,000

Next Maintenance: Year 0 (2023)

Unit Cost: \$6,000.00 / LS

The miscellaneous building repair contingency budgets funds for maintenance expenses of all the structures in the community. It is intended that the funds are used as needed for upkeep. During the 2021/2022 fiscal year building repairs to Well Pump house #1 included adding six feet to the pump house building, installing a new source meter, strainer, and pipe stands, and modifying the current manifold footprint for approximately \$3,500. Additional work is anticipated in the 2022/2023 fiscal year for an estimated cost of \$2,000.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$6,000
10 (2033)	\$8,504
20 (2043)	\$11,996
30 (2053)	\$16,922

15.1.1 Plumbing System - Contingency

Life Safety

Maintenance Cycle: 3 years

Quantity: 1 Lump Sum

Estimate: \$10,510

Next Maintenance: Year 2 (2025)

Unit Cost: \$10,510.00 / LS

The plumbing system contingency provides an allowance for periodic maintenance to the common supply and drain plumbing lines and associated inspection costs. Past repairs include \$14,000 spent in 2021 to clear out a line near Pump 1, \$23,000 in 2020 for a sewer outfall inspection and repair, and inspection that are reportedly completed every few years for a cost a little below \$5,000.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$11,313
5 (2028)	\$12,543
8 (2031)	\$13,907
11 (2034)	\$15,418
14 (2037)	\$17,095
Repeat Every 3 Years	

15.1.2 Water Tower - Maintenance

Life Safety

Maintenance Cycle: 5 years

Quantity: 1 Lump Sum

Estimate: \$10,000

Next Maintenance: Year 1 (2024)

Unit Cost: \$10,000.00 / LS

The water tower is located at the southeast corner of the property and was installed around 2000. The reserves provide funds for inspecting, cleaning and repairing the water tower ladder, door, etc. In 2022, the sand was vacuumed off of the bottom of the interior of the water tower for a cost of \$5,026. The Association reported that this may become an annual maintenance until Well pump #1 is completely fixed. The next maintenance is planned for 2023/2024 at a cost of \$5,000; after this maintenance cycle the budget should return to a \$10,000 budget every 5 years.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$5,200

15.1.3 Water System Computer 1 - Contingency

Life Safety

Maintenance Cycle: 15 years

Quantity: 1 Each

Estimate: 1 EA X 100% X \$9,862.89/EA = \$9,863 + tax = \$10,790

Next Maintenance: Year 3 (2026)

Unit Cost: \$9,862.89 / EA

The water system computer for Pump 1 was reportedly working fine as of the 2022 site visit. The budget provides a contingency fund to replace the computer system at the estimated end of typical useful life.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$12,021
18 (2041)	\$20,139

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15.1.4 Well Pump 1 - Maintenance

Life Safety

Maintenance Cycle: 12 years

Next Maintenance: Year 0 (2023)

Quantity: 1 Each

Unit Cost: \$18,866.54 / EA

Estimate: 1 EA X 100% X \$18,866.54/EA = \$18,867 + tax = \$20,640

Repairs to Well Pump #1 were started in 2021 at a cost of \$7,394. At the time of the reserve study, the project is still in progress and estimates are being gathered, though the exact solution is unknown. Past records show that a new pump was installed in 2010.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$20,640
12 (2035)	\$31,339
24 (2047)	\$47,356

15.1.5 Water System Computer 2 - Contingency

Life Safety

Maintenance Cycle: 15 years

Next Maintenance: Year 3 (2026)

Quantity: 1 Each

Unit Cost: \$9,862.89 / EA

Estimate: 1 EA X 100% X \$9,862.89/EA = \$9,863 + tax = \$10,790

It was reported during the 2022 site visit that the water system computer for Pump 2 is working fine. The budget provides a contingency fund to replace the computer system at the estimated end of its typical useful life.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$12,021
18 (2041)	\$20,139

15.1.6 Well Pump 2 - Maintenance

Life Safety

Maintenance Cycle: 12 years

Next Maintenance: Year 11 (2034)

Quantity: 1 Each

Unit Cost: \$14,808.04 / EA

Estimate: 1 EA X 100% X \$14,808.04/EA = \$14,808 + tax = \$16,200

This component budgets funds to maintain Well Pump 2, located at the corner of Westwind Drive and Crestridge Drive NW. In the 2021/2022 fiscal year Well Pump 2 was serviced and repaired, including programming, at a cost of \$17,145. Due to the extensive maintenance, the Association requested that the maintenance cycle be reset. We understand that the pump was last replaced in 2007.

FUTURE MAINTENANCE	
YEAR	COST
11 (2034)	\$23,766
23 (2046)	\$35,912

15.1.7 Water Meters - Installation

Life Safety

Maintenance Cycle: 1 year

Next Maintenance: Year 1 (2024)

Quantity: 750 Lump Sum

Unit Cost: \$20,640.00 / LS

Estimate: \$20,640

This component was established to replace approximately 10% of the total water meters throughout the community per year. In 2021/2022 water meters were replaced using funds from the operating budget. It is anticipated that the 20 remaining meters left to be replaced, at a cost of approximately \$20,000, will be addressed in the 2022/2023 fiscal year. Once the replacement is complete this component can be deleted as maintenance is covered in the following component.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$21,466



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15.1.8 Water Meters - Maintenance

Life Safety

Maintenance Cycle: 5 years

Next Maintenance: Year 5 (2028)

Quantity: 750 Each

Unit Cost: \$150.64 / EA

Estimate: 750 EA X 10% X \$150.64/EA = \$11,298 + tax = \$12,360

This component budgets funds for maintaining up to 10% of the total water meters throughout the community 5 years after the new water meters have been installed.

FUTURE MAINTENANCE	
YEAR	COST
5 (2028)	\$14,751
10 (2033)	\$17,519
15 (2038)	\$20,807
20 (2043)	\$24,713
25 (2048)	\$29,351
Repeat Every 5 Years	

15.1.9 Water System Telemetry - Maintenance

Life Safety

Maintenance Cycle: 20 years

Next Maintenance: Year 0 (2023)

Quantity: 1 Each

Unit Cost: \$22,000.00 / EA

Estimate: 1 EA X 100% X \$22,000.00/EA = \$22,000 + tax = \$24,070

The telemetry system ensures that the proper amount of water is maintained in the water tower at all times. The budget provides funds to replace the equipment at the estimated end of typical useful life. At the request of the Association, the next maintenance has been moved to the 2022/2023 fiscal year as a new satellite link system is planned to be installed. Once this has been completed the component can be reset a full maintenance cycle.

FUTURE MAINTENANCE	
YEAR	COST
0 (2023)	\$24,070
20 (2043)	\$48,126

15.5.1 Clubhouse Septic System - Contingency

Life Safety

Maintenance Cycle: 30 years

Next Maintenance: Year 4 (2027)

Quantity: 2 Each

Unit Cost: \$7,527.42 / EA

Estimate: 2 EA X 100% X \$7,527.42/EA = \$15,055 + tax = \$16,470

At the time of the study in 2022 there were no issues noted with the Clubhouse septic system. The budget provides funds to address maintenance of the septic tank system for the Clubhouse.

FUTURE MAINTENANCE	
YEAR	COST
4 (2027)	\$18,991

15.5.2 Decanter Unit - Contingency

Life Safety

Maintenance Cycle: 10 years

Next Maintenance: Year 4 (2027)

Quantity: 2 Lump Sum

Unit Cost: \$18,930.00 / LS

Estimate: \$18,930

The waste water treatment facility has two decanter units. The budget provides funds to replace one decanter unit adjacent to the CBHA water tower per cycle. The cycle is set at 50% every 10 years, so that each unit is replaced about every 20 years. Past records indicate that one unit was replaced in 2018. The Association noted that there may be a need in the near future for an additional decanter unit; funds may be used to establish a new decanter unit if needed.

FUTURE MAINTENANCE	
YEAR	COST
4 (2027)	\$21,828
14 (2037)	\$30,790
24 (2047)	\$43,432

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15.5.3 Aeration Manifold - Contingency

Life Safety

Maintenance Cycle: 20 years

Quantity: 2 Each

Estimate: 2 EA X 100% X \$11,083.18/EA = \$22,166 + tax = \$24,250

Next Maintenance: Year 4 (2027)

Unit Cost: \$11,083.18 / EA

The aeration manifold in the CBHA waste water facility is an integral part of the waste water treatment. A contingency is budgeted to provide funds for maintenance as required to keep the unit functional at all times. No issues were reported at the time of the site visit.

FUTURE MAINTENANCE	
YEAR	COST
4 (2027)	\$27,962
24 (2047)	\$55,638

15.5.4 Aerobic System Controls - Contingency

Life Safety

Maintenance Cycle: 20 years

Quantity: 1 Lump Sum

Estimate: \$21,040

Next Maintenance: Year 3 (2026)

Unit Cost: \$21,040.00 / LS

The Association reported tha the aerobic system controls were in good working order and requested that the next maintenance budget be moved to 2025/2026. Funds are budgeted as a contingency to help ensure full functionality of the aerobic system.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$23,440
23 (2046)	\$46,641

15.5.5 Mixer Unit - Contingency

Life Safety

Maintenance Cycle: 20 years

Quantity: 2 Each

Estimate: 2 EA X 100% X \$11,083.18/EA = \$22,166 + tax = \$24,250

Next Maintenance: Year 4 (2027)

Unit Cost: \$11,083.18 / EA

It was reported the mixer unit located at the CBHA waste water treatment plant is operating well and the next maintenance can be moved out to 2026/2027. Maintenance is budgeted with a lump sum contingency and funds are expected to be used as needed to keep the unit in good working order.

FUTURE MAINTENANCE	
YEAR	COST
4 (2027)	\$27,962
24 (2047)	\$55,638

15.5.6 Small Air Compressor - Maintenance

Life Safety

Maintenance Cycle: 5 years

Quantity: 2 Each

Estimate: 2 EA X 100% X \$6,000.00/EA = \$12,000 + tax = \$13,130

Next Maintenance: Year 2 (2025)

Unit Cost: \$6,000.00 / EA

The two small air compressors that are part of the SBR tanks located at the CBHA waste water treatment plant were reportedly in good condition. The Association noted that replacement should be budgeted at \$6,000 each and that the useful life is 5 years. The budget has been updated to fund replacement of both compressors each maintenance cycle.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$14,133
7 (2030)	\$16,786
12 (2035)	\$19,936
17 (2040)	\$23,678
22 (2045)	\$28,122
Repeat Every 5 Years	



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15.5.7 Large Air Compressor - Maintenance

Life Safety

Maintenance Cycle: 5 years

Next Maintenance: Year 2 (2025)

Quantity: 2 Each

Unit Cost: \$9,000.00 / EA

Estimate: 2 EA X 100% X \$9,000.00/EA = \$18,000 + tax = \$19,690

The two large air compressors that work in conjunction with the mixer unit at the CBHA waste water treatment plant were reportedly working well. The Association indicated that replacement should be budgeted at \$9,000 each and that the useful life is 5 years. The budget has been updated to fund replacement of both compressors each maintenance cycle.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$21,194
7 (2030)	\$25,172
12 (2035)	\$29,897
17 (2040)	\$35,508
22 (2045)	\$42,172
Repeat Every 5 Years	

15.5.8 UV Disinfection Controller - Contingency

Life Safety

Maintenance Cycle: 20 years

Next Maintenance: Year 15 (2038)

Quantity: 1 Lump Sum

Unit Cost: \$42,080.00 / LS

Estimate: \$42,080

We understand that there were no outstanding issues with the UV disinfection controller located at the CBHA waste water treatment plant at the time of the 2022 site visit. The UV disinfection controller was replaced in about 2017; funds are budgeted for future replacement.

FUTURE MAINTENANCE	
YEAR	COST
15 (2038)	\$70,839

15.5.9 Waste Water Treatment Facility - Contingency

Life Safety

Maintenance Cycle: 20 years

Next Maintenance: Year 12 (2035)

Quantity: 1 Lump Sum

Unit Cost: \$94,660.00 / LS

Estimate: \$94,660

The waste water treatment facility contingency allows for periodic major maintenance of the facility. The facility was constructed in 1998/1999; major maintenance was completed in 2017/2018. In 2022 one holding tank was cleaned at a cost of \$4,628 as part of the waste water treatment plant periodic maintenance.

FUTURE MAINTENANCE	
YEAR	COST
12 (2035)	\$143,729

15.5.10 Sampler - Contingency

Life Safety

Maintenance Cycle: 10 years

Next Maintenance: Year 3 (2026)

Quantity: 2 Each

Unit Cost: \$11,078.61 / EA

Estimate: 2 EA X 50% X \$11,078.61/EA = \$11,079 + tax = \$12,120

There are two expansion sampler units located at the CBHA waste water treatment plant. One unit was replaced in 2018; it is not clear when the second unit was last replaced. The budget is set so one unit is replaced every 10 years, estimating each unit to have a useful life of about 20 years. At the request of the Association, "Expansion" has been removed from the component title in 2022.

FUTURE MAINTENANCE	
YEAR	COST
3 (2026)	\$13,503
13 (2036)	\$19,047
23 (2046)	\$26,867



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15.6.1 Treatment Plant Outfall - Contingency

Life Safety

Maintenance Cycle: 15 years

Quantity: 1 Lump Sum

Estimate: \$20,000

Next Maintenance: Year 13 (2036)

Unit Cost: \$20,000.00 / LS

The treatment plant outfall is the area between the CBHA waste water treatment facility and the ocean. The budget provides funds to maintain the area for proper drainage, as well as any associated equipment. At the time of the 2022 site visit, no issues were reported. The Association reportedly spent \$20,000 in 2020 for inspection and repair. The maintenance cycle has been reset and the budget updated to match the experienced cost.

FUTURE MAINTENANCE	
YEAR	COST
13 (2036)	\$31,430
28 (2051)	\$52,657

17.2.1 Fire Hydrant & PSV - Maintenance

Life Safety

Maintenance Cycle: 25 years

Quantity: 1 Lump Sum

Estimate: \$9,790

Next Maintenance: Year 10 (2033)

Unit Cost: \$9,789.76 / LS

This component was established to maintain the pressure safety valve on the fire hydrant located at the Clubhouse. It was reported that the fire department shut off the water to this fire hydrant due to concerns that the water pressure would collapse the water lines to the fire hydrant. Once more information is known, the maintenance cycle and budget should be adjusted. Funds may be used to update the lines leading to the fire hydrant and for maintaining the PSV. The component number has been updated from 15.8.1 to 17.2.1 to better conform to our numbering system.

FUTURE MAINTENANCE	
YEAR	COST
10 (2033)	\$13,876

16.1.1 Electrical System - Contingency

Life Safety

Maintenance Cycle: 5 years

Quantity: 1 Lump Sum

Estimate: \$10,510

Next Maintenance: Year 2 (2025)

Unit Cost: \$10,510.00 / LS

The Association reported no issues with the common components of the electrical system throughout the community in 2022. Most of the electrical system is located at the Clubhouse, Maintenance Shop and waste water treatment facility. A new electrical panel was installed at the Clubhouse in 2011.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$11,313
7 (2030)	\$13,436
12 (2035)	\$15,958
17 (2040)	\$18,953
22 (2045)	\$22,510
Repeat Every 5 Years	

16.3.1 Maint. Shop Emergency Generator - Contingency

Maintenance Cycle: 10 years

Quantity: 1 Each

Estimate: 1 EA X 100% X \$28,000.00/EA = \$28,000 + tax = \$30,630

Next Maintenance: Year 2 (2025)

Unit Cost: \$28,000.00 / EA

At the request of the Association, the next maintenance generator repair at the Maintenance Shop has been moved from 2022/2023 to 2024/2025 as there are currently no issues. The budget provides funds to repair the generator as needed to keep it functional at all times. Records indicate that the unit last had significant repairs completed in 2018.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$32,970
12 (2035)	\$46,508
22 (2045)	\$65,604

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16.3.2 WWTP Emergency Generator - Contingency

Life Safety

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$25,000

Next Maintenance: Year 1 (2024)

Unit Cost: \$25,000.00 / LS

It was reported that the generator located at the CBHA waste water treatment plant was repaired in the 2021/2022 fiscal year. The Association indicated that the generator will likely be replaced in the 2024/2025 fiscal year at an estimated cost of \$25,000.

FUTURE MAINTENANCE	
YEAR	COST
1 (2024)	\$26,000
11 (2034)	\$36,676
21 (2044)	\$51,735

18.1.1 Surveillance System - Update

Security

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$21,040

Next Maintenance: Year 7 (2030)

Unit Cost: \$21,040.00 / LS

The budget allows for periodic updates to the surveillance system throughout the community. As of 2022, the surveillance system includes a DVR and 16 cameras. The Association plans on spending \$5,000 from the operating budget in 2022 on repairing the surveillance system. When Windows 11 is mandatory, the Association will need to upgrade the system. The Association reported replacing surveillance cameras around the Marina and Maintenance Shop in 2018.

FUTURE MAINTENANCE	
YEAR	COST
7 (2030)	\$26,898
17 (2040)	\$37,942
27 (2050)	\$53,521

18.2.1 Security Lighting - Replace

Security

Maintenance Cycle: 10 years

Quantity: 1 Lump Sum

Estimate: \$10,510

Next Maintenance: Year 2 (2025)

Unit Cost: \$10,510.00 / LS

This component budgets funds to replace the security lighting found throughout the community as required. In 2022, no new updates were reported. We understand that the Association added security lighting around the marina and park area in 2021. The component number has been updated from 17.1.1 to 18.2.1 to better conform to our numbering system.

FUTURE MAINTENANCE	
YEAR	COST
2 (2025)	\$11,313
12 (2035)	\$15,958
22 (2045)	\$22,510