

2021
2026

CAPE ROYALE UTILITY DISTRICT 5 YEAR PLAN 2021-2026

FINAL
LARRY CLARK

CAPE ROYALE UTILITY DISTRICT

2021-2023 The main scope over the next 2 years will be to repair or replace the most important aspects of our infrastructure. Upon completion our assets will be in a state that will be expected to last 10-20 plus years pending proper maintenance.

2023-2024 Will be a financial rebuilding year. There will be little to no large projects for this year. Year 3 will be dedicated to routine operations and maintenance with a focus of developing long term preventative, predictive, & corrective maintenance programs & procedures.

2024-2025 Will begin with a strong financial foothold. After 2 years of repair & replacements of major assets & infrastructure followed by a 3rd year of developing Cape Royale Utility District maintenance program designed solely for our system. we will be prepared for a major distribution system overhaul.

2025-2026 We will consider replacing the WWTP train #1 and continue replacing distribution lines. Noted problem areas will take priority followed by replacing approx. 36,000 ft of AC (asbestos cement) Pipe starting at the mains and working outward. We will be replacing with hdpe (high-density polyethylene) pipe that has a service life of 100+ years.

CAPE ROYALE UTILITY DISTRICT- 5 YEAR PLAN PROJECT LIST

AREA	PROJECT DESCRIPTION	PRIORITY	BUDGET YEAR	ESTIMATED COST	NOTES
DUMPSTER SITE	NO IMPROVEMENTS NECESSARY / MAINTENANCE ACTIVITIES ONLY	LOW	DURATION	N/A	NO IMPROVEMENTS NECESSARY / MAINTENANCE ACTIVITIES ONLY
BRUSH SITE	NO IMPROVEMENTS NECESSARY / MAINTENANCE ACTIVITIES ONLY	LOW	DURATION	N/A	NO IMPROVEMENTS NECESSARY / MAINTENANCE ACTIVITIES ONLY
CAPACITIES	NO NECESSARY INCREASE TO CAPACITIES REQUIRED	LOW	DURATION	N/A	CAPACITIES ARE SUFFICIENT FOR 100% BUILD OUT
STAFFING	CHANGE INSPECTOR POSITION BACK TO FULL TIME	LOW	2022-2023	\$32,000 ANNUAL INCREASE	# OF STAFF SUFFICIENT FOR CURRENT YEAR
INVENTORY	SPARE PUMPS - BOOSTERS AND LS PUMPS	MEDIUM	2022-2024	APPROX. 10K ANNUALLY (2YRS)	CONSOLIDATE PUMP SIZES / KEEP SPARES IN INVENTORY
LIFTSTATION SOUTH ROYALE GREENS	TRANSITION CAN-STYLE L.S. TO TOP-SIDE CONTROLS	HIGH	2021-2022	\$56,000	FOR SAFETY AND EASE OF OPERATION (END THE NEED FOR CONFINED SPACE ENTRY) CURRENT YEAR PROJECT
LIFTSTATION IMPERIAL ESTATES DRY	TRANSITION CAN-STYLE L.S. TO TOP-SIDE CONTROLS	HIGH	2021-2022	\$56,000	FOR SAFETY AND EASE OF OPERATION (END THE NEED FOR CONFINED SPACE ENTRY) CURRENT YEAR PROJECT
LIFTSTATION SOUTH PINE HARBOR	TRANSITION CAN-STYLE L.S. TO TOP-SIDE CONTROLS	MEDIUM	2022-2023	\$70,000	FOR SAFETY AND EASE OF OPERATION (END THE NEED FOR CONFINED SPACE ENTRY)
LIFTSTATION WWTP	RAIL SYSTEM & DROP FLANGE	MEDIUM	2021-2022	\$10,000	ADD RAIL SYSTEMS AND DROP FLANGES FOR TOP SIDE CHAIN CATCH PULLS FOR DERAGGING AND REPAIR
LIFTSTATION IMPERIAL POINT	RAIL SYSTEM & DROP FLANGE	MEDIUM	2021-2022	\$10,000	ADD RAIL SYSTEMS AND DROP FLANGES FOR TOP SIDE CHAIN CATCH PULLS FOR DERAGGING AND REPAIR
LIFTSTATION IMPERIAL ESTATES WET	RAIL SYSTEM & DROP FLANGE	MEDIUM	2021-2022	\$10,000	ADD RAIL SYSTEMS AND DROP FLANGES FOR TOP SIDE CHAIN CATCH PULLS FOR DERAGGING AND REPAIR
LIFTSTATION SOUTH FOREST COVE	RAIL SYSTEM & DROP FLANGE	MEDIUM	2023-2024	\$10,000	ADD RAIL SYSTEMS AND DROP FLANGES FOR TOP SIDE CHAIN CATCH PULLS FOR DERAGGING AND REPAIR
LIFTSTATION NORTH FOREST COVE	RAIL SYSTEM & DROP FLANGE	MEDIUM	2022-2023	\$10,000	ADD RAIL SYSTEMS AND DROP FLANGES FOR TOP SIDE CHAIN CATCH PULLS FOR DERAGGING AND REPAIR

<u>Taps</u>					
	Connections	Avg Usage			
Residential Single Family	723	4,432			
Commercial Accounts	16	5,112			
Residential Multi Family	5	5,229			
CRUD Facilities	6	48,546			
Total Taps as of June 2021	750				
<u>Wastewater Connections</u>					
Connections	Permanent	Part-time	Monthly Avg Wastewater		
776	378	398	2,437,525		
The Addition of the 212,000- gallon storage tank Has increased the total allowable connections beyond the number of buildable lots.					
<u>Connections Per Pressure Zone</u>					
	Connection Capacity	Current Connections	Current % of Limit		
Plant 1 (low)	1,475	412	27.90%		
Plant 2 (High)	600	306	51.00%		
Total	2,075	718	34.60%		
<u>Estimated Growth</u>					
Meter Count					
Year	New	Perm.	Interm.	Total	Increase
FY 21-22	10	333	428	761	1.34%
FY 22-23	10	335	436	771	1.36%
FY 23-24	10	337	444	781	1.34%
FY 24-25	10	339	452	791	1.06%
FY 25-26	8	340	459	799	1.06%
<u>Total Required Production</u>					
<u>Usage Gallons Sold</u>					
Year	Increase	Month	Year		
FY 21-22	1.36%	3,250,531	39,006,368		
FY 22-23	1.34%	3,294,088	39,529,054		
FY 23-24	1.06%	3,329,005	39,948,062		
FY 24-25	1.04%	3,363,627	40,363,521		
FY 25-26	1.03%	3,398,608	40,783,301		
<u>Estimated Wastewater Treatment Requirements</u>					
<u>Average Treatment Amount</u>					
Year	Increase	Day	Month	Year	
FY 21-22	6.00%	97,225	2,957,263	35,487,155	
FY 22-23	6.00%	103,059	3,134,699	37,616,385	
FY 23-24	6.00%	103,059	3,134,699	37,616,385	
FY 24-25	6.00%	109,242	3,322,781	39,873,368	
FY 25-26	6.00%	115,796	3,522,147	42,265,770	

Financial Conditions and Projections

Maintenance & Operation Tax

Fiscal Year	Taxable Value	Value growth	Tax Rate	97 % Collected	Back Taxes	Total
FY 21-22	227,976,568	3.50%	0.44	973,003	15,500	1,003,096
FY 22-23	235,955,747	3.50%	0.43	984,170	15,000	1,014,609
FY 23-24	244,214,199	3.50%	0.43	1,018,617	15,500	1,050,121
FY 24-25	252,761,696	3.50%	0.43	1,054,268	16,000	1,086,875
FY 25-26	261,608,355	3.50%	0.43	1,116,544	16,500	1,091,167

Water/ Sewer Sales and Fees

Fiscal Year	Meter Count	Growth	Rate Increase	Water Sales	Sewer Fees	Garbage Fees	Other Charges	Total
FY 21-22	758	1.34%	2.50%	297,764	178,478	178,047	31,000	685,289
FY 22-23	766	1.06%	2.50%	305,208	182,939	182,498	31,775	702,420
FY 23-24	774	1.04%	2.50%	312,838	187,513	187,060	32,569	719,980
FY 24-25	782	1.06%	2.50%	320,659	192,201	191,737	33,383	737,980
FY 25-26	790	1.04%	2.50%	328,675	197,006	196,530	34,217	756,428

Total Revenues

Fiscal Year	M&O Tax	Sales & Fees	Interest	Total
FY 21-22	973,003	685,289	1,000	1,659,292
FY 22-23	984,170	702,420	1,000	1,687,590
FY 23-24	1,018,617	719,980	1,500	1,740,097
FY 24-25	1,054,268	737,980	3,000	1,795,248
FY 25-26	1,116,544	756,428	3,000	1,875,972

Expenses vs Revenue Source

Fiscal Year	Admin	Field	Total
FY 21-22	360,000	720,000	1,080,000
FY 22-23	455,587	628,903	1,084,490
FY 23-24	461,760	637,425	1,099,185
FY 24-25	467,933	645,947	1,113,880
FY 25-26	472,872	652,764	1,125,636

ASSETS PAGE 2021

Asset List	Installed	Original Cost	2021 REPLACE COST	Life Exp	Anticipated Replace
Mobile Equipment					
Pickup Truck 1/2 Ton	2019	\$22,000.00	\$35,000.00	10	2029
Pickup Truck 1/2 Ton	2018	\$22,000.00	\$35,000.00	10	2028
Pickup Truck 3/4 Ton	2015	\$33,000.00	\$46,200.00	10	2025
Pickup Truck 3/4 Ton	2011	\$27,000.00	\$42,000.00	10	2022
Jet Machine and Video Camera	2010	\$50,000.00	\$61,875.00	20	2030
Tractor and Brush Hog	2013	\$22,000.00	\$36,850.00	20	2033
Back-hoe JCB	2017	\$40,000.00	\$63,000.00	15	2032
Mini Excavator	2020	\$36,850.00	\$48,000.00	15	2035
Golf Cart	2016	\$4,000.00	\$4,500.00	10	2021
Polaris ATV	2014	\$3,000.00	\$5,625.00	10	2024
Lawn Mower (commercial Grade)	2017	\$4,500.00	\$5,063.00	6	2023
Dump Trailer	2018	\$6,200.00	\$6,975.00	10	2028
Equipment Trailer	2020	\$5,709.00	\$8,200.00	10	2030
Portable generator	2021	\$16,000.00	\$18,000.00	10	2031
Total		\$292,259.00	\$196,213.00		
Storm Water Drainage					
Culverts		\$500,000.00	\$810,000.00	20	
Drain Boxes		\$250,000.00	\$562,500.00	30	
Total		\$750,000.00	\$1,372,500.00		
Admin Building					
			Remodel		
Building	2021	\$65,000.00	\$112,000.00	30	2051
Air Conditioner	2016	\$6,500.00	\$7,313.00	10	2026
Generator	2013	\$8,800.00	\$10,125.00	10	2023
PARKING LOT	2020	\$23,000.00	\$26,000.00	40	2060
Total		\$103,300.00	\$155,438.00		
Maintenance Shop					
Building	2001	\$53,000.00	\$106,250.00	30	2028
Total		\$53,000.00	\$106,250.00		
Garbage Site					
Concrete Slab	2016	\$14,000.00	\$15,750.00	40	2056
Video Surveillance	2018	\$8,500.00	\$3,375.00	5	2023
Fencing			\$20,813.00	15	2020
Total		\$22,500.00	\$39,938.00		
Brush Site					
Fencing	2016	\$25,000.00	\$28,125.00	20	2036
Mobile Equipment Shed	2018	\$50,000.00	\$56,250.00	30	2048
Concrete Slab	2018	\$29,500.00	\$32,000.00	40	2058
Workers Building	2020	\$10,000.00	\$12,000.00	20	2040
Video Surveillance	2018	\$8,500.00	\$3,375.00	2	2023
Fuel Tank 1,000 gallon	2020	\$2,860.00	\$3,000.00	25	2040
Fuel Tank 500 gallon	2020	\$3,955.00	\$4,000.00	25	2040
Total		\$125,860.00	\$138,750.00		

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Asset List	Installed	Original Cost	2021 REPLACE COST	Life Exp	Anticipated Replace
Water Plant 1			Well #4		
Pump and Motor	2020	\$40,000.00	\$40,000.00	20	2035
Stem Pipe	2020	\$4,000.00	\$4,000.00	20	2035
Cassing	2020	\$90,000.00	\$90,000.00	50	2070
Well Head and Piping	2020	\$118,800.00	\$118,800.00	50	2070
Meter	2019	\$755.00	\$905.00	10	2029
Controls w/ Generator	2020	\$146,000.00	\$45,000.00	15	2033
Chlorine Injection	2020	\$4,000.00	\$5,500.00	10	2031
Ground Storage Tank (86K)	1969		\$135,000.00	20	2025
Ground Storage Tank (200K)	2012	\$200,000.00	\$225,000.00	20	2032
1 Booster Pumps					
250 GPM	2019		\$5,063.00	15	2034
250 GPM	2019		\$5,063.00	15	2034
500 GPM	2019		\$7,313.00	15	2034
Pressure Tank (10K)	1969		\$112,500.00	25	2025
Distribution Meter	2021	\$755.00	\$905.00	10	2031
Fencing	2012	\$10,000.00	\$11,250.00	25	2037
Control Building	1969		\$42,500.00	50	2029
Pump Building	1969		\$42,500.00	50	2029
Air Compressor	2018	\$350.00	\$675.00	10	2028
Totals		\$614,660.00	\$891,974.00		
Water Plant 2			Well #3		
Pump and Motor	2020	\$26,000.00	\$40,000.00	20	2039
Stem Pipe	2020	\$10,000.00	\$14,063.00	20	2034
Cassing	1989		\$1,350,000.00	50	2039
Well Head and Piping	1989		\$18,000.00	50	2039
Meter	2021	\$755.00	\$905.00	10	2039
Controls	1989		\$22,500.00	40	2029
Generator	2003		\$67,500.00	20	2023
Chlorine Injection	2009		\$4,500.00	20	2029
Ground Storage Tank (120K)	2020		\$180,000.00	20	2040
1 Booster Pumps					
250 GPM	1989		\$5,063.00	35	2024
250 GPM	1989		\$5,063.00	35	2024
500 GPM	1989		\$7,313.00	35	2024
Pressure Tank (5K)	1989	\$30,000.00	\$101,250.00	25	2024
Pressure Tank (5K)	2017	\$90,000.00	\$101,250.00	25	2042
Distribution Meter	2021	\$755.00	\$905.00	10	2039
Fencing	1989		\$11,250.00	25	2024
Control Building	1989		\$42,500.00	50	2039
Totals		\$157,510.00	\$1,972,062.00		
Water Distribution			mikes prices		
A/C Piping (46,000 ft)	1969	\$1,982,600.00	\$2,382,600.00	20	
PVC and C900 Piping (54,000)	1989	\$2,494,800.00	\$1,758,000.00	50	
6" Poly (100,000)			\$4,310,000.00	50	
Valves (255)		\$13,434,375.00	\$1,434,375.00	25	
Hydrants (100)	2020	\$816,000.00	\$816,000.00	25	
Blow-off Valves (72)		\$81,000.00	\$81,000.00	20	
Air Release Valves (24)		\$54,000.00	\$54,000.00	20	
Pressure Reduction Vaults		\$123,750.00	\$123,750.00	20	
Service Meters (715)		\$201,094.00	\$201,094.00	20	
Total			\$11,160,819.00		

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Asset List	Installed	Original Cost	2021 REPLACE COST	Life Exp	Anticipated Replace
Wastewater Treatment Plant					
Small Train					
Clarifier	1969		\$337,500.00	50	2026
Containment Basin	1969		\$843,750.00	50	2026
Large Train					
Clarifier & containment basin	1989		\$1,687,500.00	50	2039
Sand Filters	2007		\$60,000.00	15	2022
Catwalks	2013	\$60,000.00	\$67,500.00	20	2033
Blowers	1989		\$11,250.00	15	2024
Clear well/ mud well	1989		\$101,250.00	50	2039
Recirc pump	2010	\$2,000.00	\$2,250.00	10	2020
Chlorine Room and System	2020	\$10,000.00	\$11,250.00	25	2045
Fencing	2016	\$20,000.00	\$22,500.00	25	2041
Shop	1989		\$69,063.00	30	2024
Outbuildings			\$6,375.00	25	
Total		\$92,000.00	\$3,220,188.00		
Liftstations					
S Pine Harbour	1980		\$95,000.00	30	2030
Clearwater	2021		\$95,000.00	30	2030
Imperial Est (dry)	1980		\$95,000.00	30	2022
Imperial Est (wet)	1980		\$95,000.00	30	2023
Imperial Point	1980		\$95,000.00	30	2025
VDM	2021		\$95,000.00	30	2061
Kings Ridge	2016	\$95,000.00	\$95,000.00	30	2046
Royale Greens	1970		\$95,000.00	30	2022
N Forest Cove	1980		\$95,000.00	30	2025
S Forest Cove	2009	\$75,000.00	\$95,000.00	30	2039
WWTP	1970		\$168,750.00	30	2023
Force Main (10,000 ft)			\$843,750.00	50	
		\$170,000.00	\$1,962,500.00		
Wastewater collection					
Manholes (693)			\$11,694,375.00	50	
Truss Pipe (23,500 ft)			\$2,908,125.00	20	
Concrete Pipe (36,000 ft)			\$4,252,500.00	50	
PVC Pipe (67,700 ft)			\$7,997,063.00	50	
Total		\$0.00	\$26,852,063.00		
Assets Total:			\$46,059,606.00		