

**NORTH SHORE WATER COMMISSION
2020 - 2039 APPROVED CAPITAL IMPROVEMENT PLAN**

*(Staffing Level: 1 Manager, 1 Foreman, 1 Technician Mechanic, 4 Relief Op/Tech, Interns and Gardners)
September 12, 2018*

2020 - Capital Improvement Plan **\$1,335,000**

Reservoir Improvements - Major Construction (2020-1)	PCT	COST
Protective Isolation of Reservoirs #3 and #4	4%	\$50,000
Rehabilitate Reservoirs #1 and #2	65%	\$870,000
Overflow Pipe Installation	4%	\$50,000
Contingency	14%	\$190,000
Engineering	9%	\$115,000
Owner Admin / Legal	4%	\$60,000
		\$1,335,000

2021 - Capital Improvement Plan **\$164,000**

Filter Improvements (2021-1)	PCT	COST
Self-performed Labor	13%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	73%	\$70,000
Engineering	0%	\$0
Contingency	4%	\$4,000
		\$96,000

Security Camera Replacements (2021-2)	PCT	COST
Self-performed Labor	6%	\$2,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	83%	\$30,000
Engineering	0%	\$0
Contingency	11%	\$4,000
		\$36,000

IT Improvements (2021-3)	PCT	COST
Self-performed Labor	6%	\$2,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	88%	\$28,000
Engineering	0%	\$0
Contingency	6%	\$2,000
		\$32,000

2022 - Capital Improvement Plan **\$154,000**

Flat Roof Replacement (2022-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

Skylight Replacements (2022-2)	PCT	COST
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Self-performed Labor	0%	\$0
Contracted Services	91%	\$40,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$4,000
		\$44,000

2023 - Capital Improvement Plan **\$230,000**

HVAC Upgrade (2023-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

2024 - Capital Improvement Plan **\$213,000**

Raw Pump #3 Installation and VFD Cabinet (2024-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	83%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	8%	\$10,000
Contingency	8%	\$10,000
		\$120,000

Raw Water Pump #2 and #4 Valve Replacements (2024-2)	PCT	COST
Self-performed Labor	6%	\$6,000
Contracted Services	2%	\$2,000
Direct Purchase of Materials and Equipment	75%	\$70,000
Engineering	11%	\$10,000
Contingency	5%	\$5,000
		\$93,000

2025 - Capital Improvement Plan **\$152,000**

Filter Improvements (2025-1)	PCT	COST
Self-performed Labor	13%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	73%	\$70,000
Engineering	0%	\$0
Contingency	4%	\$4,000
		\$96,000

IT Improvements (2025-2)	PCT	COST
Self-performed Labor	7%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	89%	\$50,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$56,000

2026 - Capital Improvement Plan **\$275,000**

Port Washington Road & Bradley Road Interconnection (2026-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$250,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	5%	\$15,000
Contingency	4%	\$10,000
		\$275,000

2027 - Capital Improvement Plan **\$278,000**

Basin 1 Rehabilitation (2027-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2027-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2028 - Capital Improvement Plan **\$278,000**

Basin 2 Rehabilitation (2028-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2028-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2029 - Capital Improvement Plan **\$278,000**

Basin 3 Rehabilitation (2029-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000

Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2029-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2030 - Capital Improvement Plan **\$278,000**

Basin 4 Rehabilitation (2030-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2030-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2031 - Capital Improvement Plan **\$278,000**

Basin 5 Rehabilitation (2031-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

Filter Improvements (2031-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2032 - Capital Improvement Plan **\$328,000**

SCADA Hardware Replacement (2032-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	89%	\$250,000
Direct Purchase of Materials and Equipment	0%	\$0

Engineering	7%	\$20,000
Contingency	4%	\$10,000
		\$280,000

Filter Improvements (2032-2)	PCT	COST
Self-performed Labor	13%	\$6,000
Contracted Services	10%	\$5,000
Direct Purchase of Materials and Equipment	73%	\$35,000
Engineering	0%	\$0
Contingency	4%	\$2,000
		\$48,000

2033 - Capital Improvement Plan **\$176,000**

SCADA Software Update (2033-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	91%	\$100,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	0%	\$0
Contingency	9%	\$10,000
		\$110,000

IT Improvements (2033-2)	PCT	COST
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	91%	\$60,000
Engineering	0%	\$0
Contingency	3%	\$2,000
		\$66,000

2034 - Capital Improvement Plan **\$196,000**

Remaining Filter Improvements (2034-1)	PCT	COST
Self-performed Labor	13%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	73%	\$70,000
Engineering	0%	\$0
Contingency	4%	\$4,000
		\$96,000

Basin Valve Actuator Replacements (2034-2)	PCT	COST
Self-performed Labor	12%	\$12,000
Contracted Services	10%	\$10,000
Direct Purchase of Materials and Equipment	70%	\$70,000
Engineering	4%	\$4,000
Contingency	4%	\$4,000
		\$100,000

2035 - Capital Improvement Plan **\$340,000**

Replace 2400V Electrical Equipment (2035-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	88%	\$300,000

Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$30,000
Contingency	3%	\$10,000
		\$340,000

2036 - Capital Improvement Plan **\$1,110,000**

UV Equipment Upgrade (2036-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	90%	\$1,000,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$100,000
Contingency	1%	\$10,000
		\$1,110,000

2037 - Capital Improvement Plan **\$230,000**

Plant Dehumidification System Upgrade (2037-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	87%	\$200,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	9%	\$20,000
Contingency	4%	\$10,000
		\$230,000

2038 - Capital Improvement Plan **\$130,000**

IT Improvements (2038-1)	PCT	COST
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	91%	\$60,000
Engineering	0%	\$0
Contingency	3%	\$2,000
		\$66,000

Security Camera Replacements (2038-2)	PCT	COST
Self-performed Labor	6%	\$4,000
Contracted Services	0%	\$0
Direct Purchase of Materials and Equipment	78%	\$50,000
Engineering	0%	\$0
Contingency	16%	\$10,000
		\$64,000

2039 - Capital Improvement Plan **\$145,000**

Generator Replacement at Klode Park (2039-1)	PCT	COST
Self-performed Labor	0%	\$0
Contracted Services	90%	\$130,000
Direct Purchase of Materials and Equipment	0%	\$0
Engineering	7%	\$10,000
Contingency	3%	\$5,000
		\$145,000

TOTAL EXPENDITURES	\$6,568,000
NUMBER OF YEARS	20
AVERAGE ANNUAL EXPENDITURES	\$328,400