

ITEM	PROJECT NAME	Estimate Info				PROJECT DESCRIPTION	PROJECT JUSTIFICATION	PROJECT RATING						FORECASTED EXPENDITURES					
		Length h Feet	Orig Project Estimate	2.0% Est Date	Cost Inflation Adj			LOCATION	Infrastructure	Reg / Public Health / Env	Customer	Business	Rating Total	2018	2019	2020	2021	2022	Deferred
COMBINED PROJECTS (WATER AND WASTEWATER)																			
C-1	IT Plan Implementation		1,000,000	2005	1,000,000	Develop & implement IT solution	Efficiencies and cost savings	A	4	3	4	6	17	\$150,000	\$30,000	\$30,000	\$30,000	\$30,000	\$25,000
C-2	Meter Replacement & Upgrades		\$4,500,000	2005	4,970,000	Replace inaccurate & old meters	To insure meter accuracy and automated reading	A	6	1	5	6	18	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000	\$70,000
C-4	Rate Restructuring 60/40		150,000	2005	150,000	Evaluate rates and cost allocation	Better cost allocation & rate stability	A	2	1	6	6	15						
C-5	Fleet Replacement		700,000	2005	840,000	Replenish fleet	Replace aging and unsafe vehicle stock	A	6	2	3	4	15	\$480,000	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
C-6	Water/sewer GIS/GPS Mapping		\$266,653	2005	270,000	Document system assets	Better asset management with CMMS	A	6	2	3	6	17	\$75,000	\$5,000	\$5,000	\$5,000	\$5,000	\$25,000
WASTEWATER INFRASTRUCTURE PROJECTS																			
WW-4A	WWTP Rehab Phase 4A - Sed. Basins & Scum							A	5	4	3	4	16	\$550,000+ \$1,100,000	\$1,500,000 \$3,000,000	\$1,500,000 \$3,000,000	\$1,650,000 \$3,300,000		\$0
WW-4B	WWTP Rehab Phase 4B - GPS Rehabilitation							A	5	4	3	4	16	\$550,000 \$1,000,000	\$1,500,000 \$3,000,000	\$1,500,000 \$200,000	\$1,650,000		\$0
WW-4C	WWTP Rehab Phase 4C - Polymer & Dewatering Controls							A	5	4	3	4	16	\$900,000 \$1,800,000	\$320,000				\$0
WW-4D	WWTP Rehab Phase 4D - Carbon & Support Gravel							A	5	4	3	4	16		\$1,000,000 \$2,000,000				\$0
WW-4E	WWTP Rehab Phase 4E - Electrical Improvements							A	5	4	3	4	16		\$625,000 \$1,610,000	\$1,000,000			\$0
WW-4F	WWTP Rehab Phase 4F - Chemical Improvements							A	5	4	3	4	16		\$1,800,000 \$3,650,000				\$0
WW-4G	WWTP Rehab Phase 4G - HVAC Improvements							A	5	4	3	4	16		\$562,500 \$1,160,000				\$0
WW-4H	WWTP Rehab Phase 4H - Backwash Blower & Piping							A	5	4	3	4	16	\$170,000 \$300,000					\$0
WW-4I	WWTP Rehab Phase 4I - Piping Improvements							A	5	4	3	4	16		\$275,000 \$640,000				\$0
WW-4J	Outfalls																		\$8,000,000
WW-4X	2017 Discharge Incident/Order Expenses							A	5	4	3	4	16	\$500,000 \$2,000,000	\$1,389,500				
WW-7	WWTP Roof Repairs					Replace & repair large sections of the WWTP roofs	Necessary for facility protection and longevity	A	5	3	3	4	15		\$150,000	\$1,350,000	\$150,000	\$150,000	

WW-9	WWTP/GPS Miscellaneous					Repairs / replacements not associated with Phased Projects	Necessary for continued operation	A	4	4	3	4	15	\$160,000	\$160,000	\$160,000	\$160,000	\$160,000	\$200,000	
WW-9C	WWTP Sedimentation Basins					Replace mechanical components, concrete repairs	Necessary for continued operation	A	6	5	3	4	18							
WW-11	WWTP UV Disinfection Study					Evaluate changing disinfection process	Operational cost reduction	A	5	5	3	6	19							
WW-9D	WWTP Flood Damage Recovery					Repair/replace flood damaged equipment	Necessary for continued operation	A	6	6	3	5	20							
WW-9E	WWTP Structural/Masonry Repairs					Repair aging and failing structural components	Restore structural integrity	A	5	4	3	3	15			\$80,000	\$374,000	\$100,000		
WW-9F	Flood Hazard Mitigation Grant Projects					Harden utility infrastructure against extreme weather	Prevent rainfall-related impacts and damage	A	5	4	4	4	17	\$156,053 \$208,070 \$52,017	\$2,277,225 \$3,036,290 \$759,065					
WW-9H	WWTP Mercury Reduction Project - SB#5 Effluent Flow Improvements					Treatment plant improvements	Regulatory requirement	A	3	6	4	2	15							
WW-12A	Sanitary Lift Station Electrical Upgrades		300,000	2005	300,000	Provide standby power generation to lift stations	Improve reliability	L	5	4	5	5	19	\$280,000 \$370,000 \$90,000						
WW-12B	WWTP Standby Generator					Replace and upgrade WWTP power generator	Improve reliability	A	5	4	5	5	19	\$300,000 \$400,000 \$100,000						
WW-15	Sewer Replacements & Repairs		3,250,000	2005	3,250,000	Replace / repair sewer lines, MH's, CB's	Lifecycle asset reinvestment	A	6	5	3	3	17	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	\$500,000	
WW-15A	Belden Center Sewer Rehabilitation Work					Lining of Lockport Road Sanitary Sewer	Coordination with Town of Niagara project	N						\$25,000						
WW-17	LaSalle Area Sewer Improvements (SSO)		1,000,000	2005	1,000,000	Sewer repairs to mitigate SSO's	DEC mandated regulatory requirement	L	4	6	5	4	19	\$200,000	\$170,000	\$590,000	\$355,000	\$500,000	\$4,000,000	
WW-18	Combined Sewer Overflow Long Term Control Plan (CSO LTCP) Implementation		4,000,000	2005	4,160,000	Implement sewer improvements to mitigate CSO's	DEC mandated regulatory requirement	N/S	5	6	3	3	17	\$10,000						
WW-19	CSO Outfall Structural Repairs					Repairs to CSO outfalls on lower river	Restore structural integrity	N/S	4	3	2	2	11			\$300,000	\$2,500,000		\$4,000,000	
WW-21	Tunnel Inspection					Inspect large diameter conveyance systems	Plan repairs prior to failures	S	3	3	2	3	11	\$70,000 \$233,000 \$163,000					\$350,000	
WW-23	Gorge Pumping Station Headworks		350,000	2005	350,000	Repair and protect GPS equipment	Necessary for facility protection and longevity	N/S	5	6	2	4	17							
WATER INFRASTRUCTURE PROJECTS																				
W-2	Ontario Ave - 13th to 18th Street		\$250,969	2005	260,000		Very low flow 4" & breaks & service leaks, hydrant spacing issues	N	6	6	4	5	21	\$400,000						\$0

W-4	Military Road Main, between Jacob and Cayuga		\$182,070	2005	180,000	Replace water mains and install new services	Frequent breaks on 4 inch line	L	6	5	4	5	20		\$210,000				\$0	
W-5	97th Street - 98th to NF Blvd						Frequent breaks	L	6	3	6	5	20							
W-6	Bollier Avenue Main, between 82nd and Military	900	\$210,000	2001	250,000		Victory pipe, Frequent breaks	L	6	3	5	4	18	\$250,000 \$650,000 \$400,000						
W-7	Buffalo Avenue Water Valves	28,600	\$1,250,000	2004	1,330,000	Replace damaged valves : Combined with WW-16	Road reconstruction opportunity	L/S	6	4	3	4	17							
W-8	Hennepin Ave Main,- S. 86th to S.89th Street		\$505,000	2005	540,000	Replace water mains and install new services	Dangerous excavation	L	6	6	3	4	19						\$510,000	
W-9	Rivershore Drive Main, - S.86th to 91st Street	1,700	\$220,000	1994	300,000		Frequent breaks, poor excavation conditions	L	6	5	3	4	18						\$280,000	
W-10	10th St., Lockport to North						6 inch pipe with breaks, fire flow	N	6	5	3	2	16	\$600,000					\$0	
W-11	Witkop Ave and 85th St Loop all 8"	2,100	\$575,000	2001	670,000		Victory pipe frequent breaks	L	6	2	4	4	16				\$670,000			
W-12	Laughlin Drive Main, - 82nd to Bollier Ave	1,800	\$380,000	1994	510,000		Victory pipe frequent breaks	L	6	2	4	4	16				\$500,000			
W-13	Willow Ave Main, 11th to 17th St - 8"	2,000	\$410,000	2001	490,000		6 inch pipe with breaks	N	6	2	4	3	15						\$460,000	
W-14	Whitney Avenue, 18th Street to Hyde Park Blvd						Main breaks, service breaks	N	5	4	4	2	15		\$850,000				\$0	
W-15	LaSalle Avenue, Hyde Park Blvd to 11th Street						Main breaks, service breaks	N	5	3	4	2	14						\$1,600,000	
W-16	Ontario Ave - 13th to Main Street						Main & service breaks, fire flow	N	5	5	3	2	15				\$500,000			
W-17	Military Road Main, Jacob to Bollier Avenue						6 inch pipe with breaks	L	4	4	4	2	14				\$150,000			
W-18	Pierce Ave Main, - 18th to Hyde Park with 8"		\$501,939	2005	530,000		Many service breaks (not main)	N	5	2	3	3	13						\$750,000	
W-18A	Buffalo Avenue Point to City Docks						6 inch pipe with breaks	L	4	4	4	2	14	\$450,000					\$0	
W-19	Pierce Ave Main, 11th to 18th Street 8"	4,400	\$875,000	2001	1,050,000		Many service breaks (not main)	N	5	2	3	3	13						\$570,000	
W-20	Loop Niagara Avenue Main, to Parkview Dr	1,300	\$80,000	1994	110,000	Install & loop with new main	Eliminate dead end and blow-off	N	3	3	3	4	13					\$110,000		
W-21	Whitney Avenue, 11th Street to 18th Street					Replace water mains and install new services	Main breaks, service breaks	N	4	4	3	2	13				\$650,000			
W-22	Loop "D" St Main, - Falls St to Gill Creek	400	\$50,000	1994	70,000	Install & loop with new main	Eliminate dead end and blow-off	S	4	2	2	2	10					\$70,000		
W-23	81st Street, Frontier Avenue to Pine Avenue					Replace water mains and install new services	Service leaks	L	3	3	3	1	10					\$850,000		
W-24	McKoon Ave Main, - DeVeaux to James Avenue	2,200	\$500,000	1994	690,000		Occasional breaks	N	3	2	2	2	9				\$670,000			
W-25	Welch Ave Main,, 19th to 24th Street 16"	1,500	\$510,000	2001	610,000		Main breaks, service breaks	S	2	2	2	2	8					\$600,000		
W-26	Automation & Security Upgrades at WTP		\$500,000	2005	530,000	Automate WTP operations and perform necessary	Maintain facility security	A		5	3	5	13					\$500,000		
W-28	Large Valve Replacement		\$572,435	2005	600,000	Replace valves >12"	System reliability	A	6	2	5	4	17	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$100,000	

W-29	Leak Detection / Distribution Modeling		\$200,000	2005	220,000	Identify and control system losses	Resolve water quality & pressure issues; better asset	A	4	2	5	6	17						\$200,000
W-30	Hydrant Replacement		\$314,147	2005	310,000	Replace old and inoperable	Fire protection reliability	A	5	4	4	3	16	\$191,950	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000
W-31	Water Miscellaneous Improvements		\$1,200,000	2005	1,200,000	Water system repairs	Maintain infrastructure	A	5	3	3	3	14	\$191,950	\$120,000	\$120,000	\$120,000	\$120,000	\$100,000
W-32	WTP Vent Line Replacement					Replace corroding process vent piping	Maintain treatment plant integrity	A	4	2	2	3	11	\$53,000					\$100,000
W-33	Abandon 20" Victory Pipe WM					Abandon unnecessary and failing watermain	Victory pipe, potential for breaks	L	5	2	5	5	17	\$170,000					\$0
W-34	WTP Laboratory Instrumentation					New instruments for sample analysis	Regulation-driven water testing	A	3	5	2	5	15						\$0
W-35	Beech Avenue Tank Replacement					Replace existing water storage tank	Distribution system operation & reliability	N	5	3	2	4	14		\$3,000,000	\$3,000,000			\$0
W-36	77th Street from Lasalle Parkway to Niagara Falls Boulevard					Replace water mains and install new services											\$875,000		\$0
W-37	Michigan Avenue from Lockport Street to 10th Street					Replace water mains and install new services											\$150,000		\$0
Total														\$11,587,970	\$25,030,790	\$12,185,000	\$9,869,000		\$24,130,000

\$4,085,017 \$10,246,565 \$4,615,000 \$3,374,000 \$1,595,000

Fund Sources	2018	2019	2020	2021	2022	Sum 2017 > 2021
Annual Coverage Transfer	\$4,100,000	\$12,752,617	\$2,984,065	\$3,165,000	\$1,574,000	\$24,575,682
Coverage Set-Aside						\$0
NYPA-FST Settlement	\$1,946,900	\$0	\$0	\$0		\$1,946,900
Bonded	\$0	\$3,000,000	\$6,020,000	\$3,995,000		\$13,015,000
Grants	\$976,053	\$2,277,225	\$0	\$0		\$3,253,278
Phase 1 NYS WWTP Funding	\$2,120,000	\$7,262,500	\$3,150,000			\$8,000,000
Interfund Transfer	\$1,500,000	\$1,389,500	\$0	\$0		\$2,889,500
NYSEFC SRF Loan	\$0	\$0	\$0	\$2,500,000		\$2,500,000
Totals :	\$10,642,953	\$26,681,842	\$12,154,065	\$9,660,000		\$59,138,860