

Sewer District
Capital Plan 2017 - 2021

North Plant Incinerator 2, Internal Modifications and Refractory Repairs								
Needed internal hearth replacement, hearths 1, 2 and 3 with modifications allowing hearth 1 and 2 to become "zero hearths". These modifications will allow enhanced burning profiles to insure compliance with air regulations.								
Amended Project: Change in Title, Schedule and Cost								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
Appropriations	-	-	0.650	-	-	-	-	0.650
Total County Cost	-	-	0.650	-	-	-	-	0.650
Department of Management and Budget Recommendation: Complete as Scheduled.								

Waste Heat Recovery/On Site Electric Generation								
Install a system that recovers waste heat from the North Plant Multiple Heat Incinerators to generate electricity which will reduce consumption from grid by 33% on an annual basis. Total co-generation is predicted to be 3.2 million kwh's/year with a value of \$370,000. Also the system will use a heat exchange to offload heating load with an annual value of \$92,000. The equipment of choice will be an organic ranking cycle system. Project was commissioned in March 2013								
Amended Project: Change in Schedule								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
Appropriations	0.477	0.542	0.356	-	-	-	-	1.374
NYSERDA/ARRA/GIGP	7.906	-	-	-	-	-	-	7.906
Federal Reimbursement	(5.869)	-	-	-	-	-	-	(5.869)
State Reimbursement	(2.038)	-	-	-	-	-	-	(2.038)
Total County Cost	0.477	0.542	0.356	-	-	-	-	1.374
Department of Management and Budget Recommendation: Complete as Scheduled.								

North Plant Cake Conveyance System								
This project would expand the acceptance of bio-solids from additional regional treatment facilities with the equipment installed enabling acceptance of sludge cake. This comprises part of the business plan for the waste treatment cogeneration project and will increase revenues outside of the rate payers, using existing staffing levels while providing more "fuel" to generate additional electricity.								
Amended Project: Change in Schedule								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
County Debt (Bonds& BANS)	-	-	-	1.800	-	-	-	1.800
Appropriations	-	-	0.050	0.150	-	-	-	0.200
Total County Cost	-	-	0.050	1.950	-	-	-	2.000
Department of Management and Budget Recommendation: Complete as Scheduled.								

North and South Plant Electric Improvements								
Upgrades/replacement of motor control centers at both North and South sites with replacement of the North Plant emergency generator and ancillary wiring and conduit upgrades.								
Amended Project: Change in Schedule and Cost								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
County Debt (Bonds& BANS)	-	0.476	1.818	-	-	-	-	2.294
Appropriations	0.128	1.924	-	-	-	-	-	2.052
Total County Cost	0.128	2.400	1.818	-	-	-	-	4.346
Department of Management and Budget Recommendation: Complete as Scheduled.								

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South Plant Anaerobic Digestion of Bio-solids / Regional Organics to Energy Facility								
Design, construct and operate an anaerobic digester to energy facility at the South Plant to replace existing ultimate disposal method of sewage sludge. The facility will also be a regional source separated organic (SSO) facility. This project will replace aging equipment, generate electricity and provide a regional disposal location for SSO's to remove organic waste from landfills. This project would be a major "green" initiative and beneficially use renewable energy resources. This would also be a public/private partnership facility.								
Amended Project: Change in Schedule and Cost								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
Appropriations	-	0.161		8.000	8.000	-	-	16.161
Private Sector Investment	-	-	1.839	(8.000)	(8.000)	-	-	(14.161)
Total County Cost	-	0.161	1.839	-	-	-	-	2.000
Department of Management and Budget Recommendation: Complete as Scheduled.								

North and South Return and Waste Activated Sludge Pump Replacement Project								
Replacement of 40 year old pumping equipment that is at the end of useful life which includes the return and waste activated pumping systems at both sites. The return and waste activated pump systems are integral to the secondary treatment process units. This project will also include energy efficiency components including energy efficient motors and variable frequency drives.								
Amended Project: Change in Cost								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
County Debt (Bonds& BANS)	-	-	2.200	-	-	-	-	2.200
Appropriations	0.038	0.036	1.006	-	-	-	-	1.081
Total County Cost	0.038	0.036	3.206	-	-	-	-	3.281
Department of Management and Budget Recommendation: Complete as Scheduled.								

Sewer District Capital Plan Summary: All Projects								
New Projects: 0								
Amended Projects: 6								
Existing Projects: 0								
Project Financing (in millions of dollars)								
Year	Pre 2016	2016	2017	2018	2019	2020	2021	Total
County Debt (Bonds& BANS)	-	-	4.018	1.800	-	-	-	5.818
Appropriations	0.643	2.663	2.062	8.150	8.000	-	-	21.518
Private Investment	-	-	1.839	(8.000)	(8.000)	-	-	(14.161)
NYSERDA	7.906	-	-	-	-	-	-	7.906
State Reimbursement	(2.038)	-	-	-	-	-	-	(2.038)
Federal Reimbursement	(5.869)	-	-	-	-	-	-	(5.869)
Total County Cost	0.643	2.663	7.919	1.950	-	-	-	13.176