

Water and Waste Department 2018 Preliminary Capital Budget

**Presentation to Standing Policy Committee on
Water and Waste, Riverbank Management and
the Environment**

Tuesday, November 28, 2017

Capital Budget by Fund

2018 Budget Submission and 6-Year Forecast

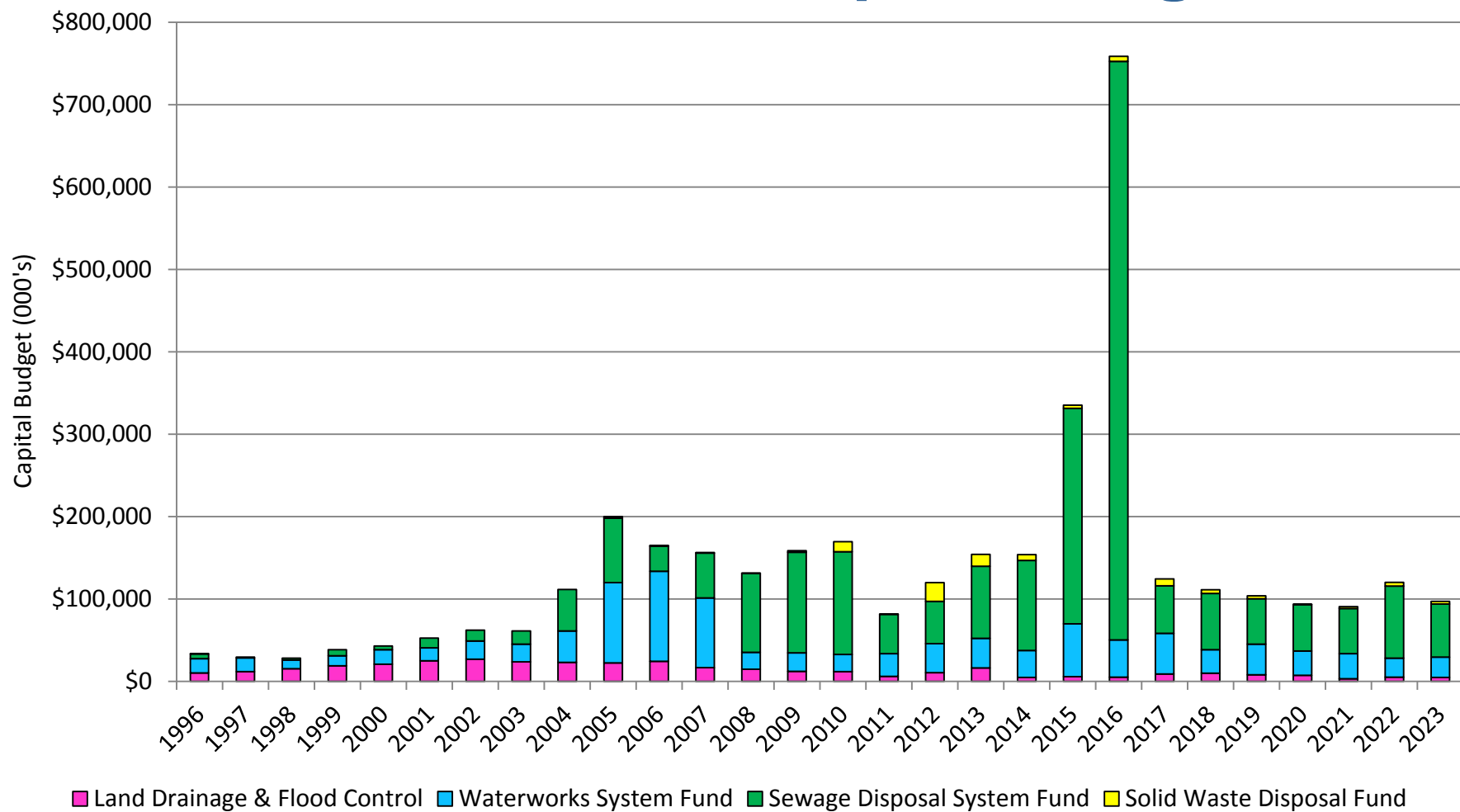
Capital Budget Summary (\$ in thousands)	2018 Budget Submission	2018-2023 6-Year Budget Forecast	Percent of 6-Year Budget Forecast
Land Drainage and Flood Control	9,790	38,050	6%
Waterworks System Fund	28,483	173,069	28%
Sewage Disposal System Fund	68,360	386,739	63%
Solid Waste Disposal Fund	4,510	18,718	3%
Total	111,143	616,576	100%

Summary of Capital Budget

Changes from Forecast

Capital Budget Summary (\$ in thousands)	2018 Forecast Adopted in 2017 Budget	Total Changes	2018 Budget Submission
Land Drainage and Flood Control	6,900	2,890	9,790
Waterworks System Fund	41,182	(12,699)	28,483
Sewage Disposal System Fund	90,198	(21,838)	68,360
Solid Waste Disposal Fund	6,193	(1,683)	4,510
Total	144,473	(33,330)	111,143

1996-2023 WWD Capital Budget



Land Drainage and Flood Control

Capital Projects 2018 to 2023

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Development Agreement Paybacks	2-234	3,100	3,700	6,800
Outfall Rehabilitation	2-235	3,000	13,000	16,000
Land Drainage and Combined Sewers Outfall Gate Structures	2-231	1,800	3,760	5,560
Flood Pumping Station Rehabilitation	2-229	1,000	5,000	6,000
Land Drainage Sewers - Regional / Local Streets	2-230	500	1,400	1,900
Floodplain Management	2-236	215	-	215
Stormwater Retention Basin Revetments	2-232	175	900	1,075
Land Drainage Utility	2-233	-	500	500
Total Land Drainage and Flood Control Budget		9,790	28,260	38,050

Land Drainage Utility Fund

Capital Investment Plan - Financing

Capital Investment Plan 2018-2023 (\$ thousands)	Estimate		Forecast				6-Year
	2018	2019	2020	2021	2022	2023	Total
Transfer from Sewage Disposal System Fund	6,690	5,740	5,950	3,200	5,070	4,600	31,250
Developer Capacity Charges	3,100	2,200	1,500	-	-	-	6,800
Total Land Drainage Utility Fund Budget	9,790	7,940	7,450	3,200	5,070	4,600	38,050

Waterworks System Fund

Supply and Treatment Projects 2018 to 2023 (1 of 2)

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Hurst Pumping Station Building - Structural Repairs	2-190	2,425	-	2,425
Shoal Lake Aqueduct Asset Preservation	2-176	1,198	5,305	6,503
HVAC Upgrades at Pumping Stations	2-192	1,000	4,005	5,005
Aqueduct Condition Assessment and Rehabilitation	2-178	900	2,000	2,900
Pumping Stations and Reservoirs Structural Upgrades	2-180	600	800	1,400
Water Treatment Research and Process Optimization	2-187	560	-	560
Branch 1 Aqueduct at Seine River - Riverbank Stabilization (East Side)	2-186	500	-	500
Deacon Site Flood Protection	2-191	300	-	300
Water Treatment Plant Capacity Validation	2-185	150	-	150
Water Treatment Plant Asset Refurbishment and Replacement	2-195	125	5,225	5,350

Waterworks System Fund

Supply and Treatment Projects 2018 to 2023 (2 of 2)

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Shoal Lake Aqueduct Intake Facility Rehabilitation	2-177	-	7,800	7,800
Chlorination Upgrading at Pumping Stations	2-181	-	3,575	3,575
Tache Booster Pumping Station	2-179	-	2,630	2,630
Water Supervisory Control and Data Acquisition (SCADA) Upgrade	2-182	-	1,539	1,539
Waterworks System Security Upgrades	2-183	-	1,397	1,397
Deacon Booster Pumping Station Suction Header Divider Wall and Valve	2-189	-	1,245	1,245
Ultraviolet Light Disinfection System Upgrade	2-193	-	585	585
Regulatory Assessment of Water System Infrastructure and Supply Sources	2-184	-	575	575
Discharge Meter Upgrades at the In-town Pumping Stations	2-194	-	370	370
Deacon Reservoir Cell Rehabilitation	2-188	-	100	100
Total Waterworks System Fund - Supply & Treatment Budget		7,758	37,151	44,909
Total Waterworks System Fund Budget		28,483	144,586	173,069

Waterworks System Fund

Distribution Projects 2018 to 2023

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Water Main Renewals	2-202	16,500	93,000	109,500
Feeder Main Condition Assessment and Rehabilitation	2-196	1,350	8,375	9,725
Customer Billing and Work Management Systems Upgrades Program	2-198	1,165	1,830	2,995
Web Self Service	2-201	700	1,500	2,200
Utility Asset Management System	2-199	600	500	1,100
CCB-iNovah Integration	2-200	300	130	430
Building Renovations - 1199 Pacific Avenue	2-197	110	2,100	2,210
Total Waterworks System Fund - Distribution Budget		20,725	107,435	128,160
Total Waterworks System Fund Budget		28,483	144,586	173,069

Waterworks System Fund

Capital Investment Plan - Financing

Capital Investment Plan 2018-2023 (\$ thousands)	Estimate	Forecast					6-Year
	2018	2019	2020	2021	2022	2023	Total
Water Main Renewal Reserve	16,500	16,500	18,000	19,000	19,500	20,000	109,500
Retained Earnings	10,083	20,559	11,212	11,275	3,615	4,925	61,669
Transfer From Prior Year Authorization	1,900	-	-	-	-	-	1,900
Total Waterworks System Fund Budget	28,483	37,059	29,212	30,275	23,115	24,925	173,069

Sewage Disposal System Fund

Treatment Projects 2018 to 2023

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Process Control System Master Plan and Upgrade	2-204	9,000	-	9,000
Asset Refurbishment and Replacement Program	2-205	4,000	21,000	25,000
Biosolids - Alternative Disposal Delivery and Management System	2-203	-	26,800	26,800
West End Sewage Treatment Plant (WEWPCC) - Facilities Plan	2-206	-	500	500
Total Sewage Disposal System Fund - Treatment Budget		13,000	48,300	61,300
Total Sewage Disposal System Fund Budget		68,360	318,379	386,739

Sewage Disposal System Fund

Collection Projects 2018 to 2023 (1 of 2)

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Combined Sewer Overflow and Basement Flood Management Strategy	2-210	26,098	131,065	157,163
Sewer Renewals	2-222	18,200	96,000	114,200
Lift Stations Upgrading	2-208	2,750	24,750	27,500
Airport Area West Water and Sewer Servicing	2-213	2,150	-	2,150
Water and Waste Department (WWD) Business Intelligence	2-217	1,560	1,080	2,640
Customer Billing and Work Management Systems Upgrades Program	2-218	1,165	1,830	2,995
Comminutor Chamber Rehabilitation Program	2-212	1,100	2,500	3,600
River Crossings Monitoring and Rehabilitation	2-209	970	4,200	5,170

Sewage Disposal System Fund

Collection Projects 2018 to 2023 (2 of 2)

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Arc Flash Hazard Analysis and Remediation	2-207	767	1,854	2,621
WWD Document Management System	2-220	350	1,150	1,500
Southwest Interceptor River Crossing	2-214	250	4,000	4,250
Environmental Standards Laboratory Facility Plan	2-216	-	500	500
WWD Learning Management System	2-221	-	500	500
IT Asset Management	2-219	-	400	400
Wastewater Services Facilities Plan	2-215	-	250	250
Total Sewage Disposal System Fund - Collection Budget		55,360	270,079	325,439
Total Sewage Disposal System Fund Budget		68,360	318,379	386,739

Sewage Disposal System Fund

Capital Investment Plan - Financing

Capital Investment Plan 2018-2023 (\$ thousands)	Estimate		Forecast				6-Year
	2018	2019	2020	2021	2022	2023	Total
Environmental Projects Reserve	26,098	23,603	26,108	25,612	28,118	27,624	157,163
Retained Earnings	23,045	14,119	12,020	9,705	39,370	16,100	114,359
Sewer System Rehabilitation Reserve	18,200	17,500	18,500	19,500	20,000	20,500	114,200
Transfer From Prior Period Authorization	767	-	-	-	-	-	767
External Funding	250	-	-	-	-	-	250
Total Sewage Disposal System Fund Budget	68,360	55,222	56,628	54,817	87,488	64,224	386,739

Solid Waste Disposal Fund

Landfill Projects 2018 to 2023

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Brady Road Resource Management Facility - Drainage, Roadways and Site Improvements	2-224	2,800	1,400	4,200
Miscellaneous Land Acquisition	2-227	800	-	800
Closed Landfill Site Improvement	2-226	210	1,130	1,340
Brady Road Resource Management Facility - Cell Construction	2-223	-	7,192	7,192
Brady Road Resource Management Facility - Landfill Gas Capture Expansion	2-225	-	4,236	4,236
Total Solid Waste Disposal Fund - Landfill Budget		3,810	13,958	17,768
Total Solid Waste Disposal Fund Budget		4,510	14,208	18,718

Solid Waste Disposal Fund

Recycling and Waste Diversion Projects 2018 to 2023

Capital Projects 2018-2023 (\$ thousands)	Page Ref	2018	5-Year Forecast	6-Year Total
Collection Management System	2-228	700	250	950
Total Solid Waste Disposal Fund - Recycling & Waste Diversion Budget		700	250	950
Total Solid Waste Disposal Fund Budget		4,510	14,208	18,718

Solid Waste Disposal Fund

Capital Investment Plan - Financing

Capital Investment Plan 2018-2023 (\$ thousands)	Estimate			Forecast			6-Year
	2018	2019	2020	2021	2022	2023	Total
External Debt	2,800	-	-	-	-	-	2,800
Retained Earnings	800	3,107	200	2,004	-	3,281	9,392
Waste Diversion Reserve	700	250	-	-	-	-	950
Landfill Rehabilitation Reserve	210	225	220	285	4,436	200	5,576
Total Solid Waste Disposal Fund Budget	4,510	3,582	420	2,289	4,436	3,481	18,718

Questions?