



Draft **BUDGET 2021**

Investing in our community.
Moving Ottawa forward.

Standing Committee on Environmental Protection,
Water and Waste Management – Rate Supported



Tabled November 4, 2020

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Public Works & Environmental Services Department

2021 Service Area Summary - Drinking Water Services

Drinking Water Services is responsible for the production and distribution of safe, high-quality drinking water through the operation and maintenance of the Ottawa's water supply. The central system includes the Britannia and Lemieux Island Water Purification Plants and treated water from both plants is pumped into a vast water distribution network that includes 16 pumping stations, 5 reservoirs, 4 elevated tanks, and 3,800 km of watermain pipes. In addition, the City operates six municipal well systems: Carp Drinking Water System, Kings Park (Richmond) Drinking Water System, Munster Hamlet Drinking Water System, Richmond West (Richmond) Drinking Water System, Shadow Ridge (Greely) Drinking Water System and Vars Drinking Water System.

Programs/Services Offered

- Day to day operations and maintenance for treatment plants, pump stations, reservoirs, tanks, and well systems
- Operation of a dedicated computer-control (SCADA) system to monitor all water operations 24/7
- Compliance with all drinking water regulations, inspections, audits, and operator certification requirements
- Distribution system operation, inspection and maintenance (pipe disinfection, system isolation, connections, repairs) for approximately 3,800 km of watermains and 58,000 valves
- Emergency and scheduled repair of watermain breaks throughout distribution system ~250 break repairs per year
- First Response - 24 hour per day response for residents with drinking water and wastewater concerns
- Provision of fire protection through inspection, maintenance and repair of over 23,000 public fire hydrants
- Maintaining the City's accreditation as an Operating Authority for the Drinking Water Quality Management System
- Process optimization, research, and continual improvements to the water treatment process
- Water quality sampling, testing, monitoring, and reporting of 100,000 tests per year for quality assurance
- Customer service for on-site water quality testing, complaints, water meters, inquiries, etc.
- Technical and operational support for capital infrastructure renewal and development projects
- Participation in water industry activities and organizations (committees, university research, advisory councils, etc.)

City of Ottawa
Public Works & Environmental Services Department
Drinking Water Services - Operating Resource Requirement
In Thousands (\$000)

	2019	2020		2021	\$ Change over 2020 Budget
	Actual	Forecast	Budget	Estimate	
Expenditures by Program					
Water Operations	54,703	54,581	58,595	59,803	1,208
Technical Innovation & Engineering Support Services	6,398	7,334	7,387	7,283	-104
Business & Technical Support Services	1,340	1,418	1,856	1,797	-59
Non Departmental	120,882	123,583	123,583	127,755	4,172
Gross Expenditure	183,323	186,916	191,421	196,638	5,217
Recoveries & Allocations	-2,866	-2,942	-2,942	-2,942	0
Revenue	-180,604	-187,179	-188,479	-193,696	-5,217
Net Requirement	-147	-3,205	0	0	0
Expenditures by Type					
Salaries, Wages & Benefits	30,011	31,643	33,416	34,362	946
Overtime	1,559	1,937	1,937	1,976	39
Material & Services	19,832	18,366	20,603	20,618	15
Transfers/Grants/Financial Charges	97,434	99,799	99,894	102,794	2,900
Fleet Costs	3,053	2,982	3,292	3,337	45
Program Facility Costs	0	0	0	0	0
Other Internal Costs	31,434	32,189	32,279	33,551	1,272
Gross Expenditures	183,323	186,916	191,421	196,638	5,217
Recoveries & Allocations	-2,866	-2,942	-2,942	-2,942	0
Net Expenditure	180,457	183,974	188,479	193,696	5,217
Revenues By Type					
Federal	0	0	0	0	0
Provincial	0	0	0	0	0
Own Funds	-2,195	0	0	0	0
Fees and Services	-178,409	-187,179	-188,479	-193,696	-5,217
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-180,604	-187,179	-188,479	-193,696	-5,217
Net Requirement	-147	-3,205	0	0	0
Full Time Equivalent			316.94	316.94	0.00

City of Ottawa
Public Works & Environmental Services Department
Drinking Water Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Water Services Connection							
All sizes of Service Pipe							
Cost plus 15%, hourly	144.00	147.00	150.00	2.0%	4.2%	01-Jan-21	
Additional visit (service connection 20 mm-50 mm) - Cost plus 15%, hourly (new fee)	144.00	147.00	150.00	2.0%	4.2%	01-Jan-21	
Additional visit (service connection > 50 mm) - Cost plus 15%, hourly (new fee)	207.00	211.00	215.00	1.9%	3.9%	01-Jan-21	
Private service connection - Cost plus 15%, hourly (new fee)	144.00	147.00	150.00	2.0%	4.2%	01-Jan-21	
Services							
All Thawing of Services							
Cost plus 15%, hourly	175.00	179.00	185.00	3.4%	5.7%	01-Jan-21	
Fire Flow Test Support	261.00	266.00	271.00	1.9%	3.8%	01-Jan-21	
Service Charges							
Turn water services off and on for non payment	190.00	196.00	202.00	3.1%	6.3%	01-Jan-21	
Turn off or on of water services (per operation)	95.00	98.00	101.00	3.1%	6.3%	01-Jan-21	
Permit for Flusher Hydrant Usage	276.00	282.00	288.00	2.1%	4.3%	01-Jan-21	
Blanking of Water Services							
All sizes	Cost plus 15% \$3,000.00 deposit	Cost plus 15% \$4,000.00 deposit	Cost plus 15% \$4,000.00 deposit			01-Jan-21	
Inspection Fees (Inspection of activities connected to the water distribution system)							
All new watermains and services that don't require full disinfection	204.00	208.00	212.00	1.9%	3.9%	01-Jan-21	
All new watermains and services up to 50m long that require full disinfection	606.00	618.00	630.00	1.9%	4.0%	01-Jan-21	
All new watermains and services over 50m long that require full disinfection	Cost plus 15%	Cost plus 15%	Cost plus 15%			01-Jan-21	

City of Ottawa
Public Works & Environmental Services Department
Drinking Water Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Meter Service Charges							
Inspection/Re-Inspection for New Water Meters (<= 20 mm meter)	99.00	102.00	106.00	3.9%	7.1%	01-Jan-21	
Meter Maintenance Service Call	170.00	175.00	181.00	3.4%	6.5%	01-Jan-21	
Water Meter Accuracy Test (<= 25 mm meter)	140.00	144.00	149.00	3.5%	6.4%	01-Jan-21	
Water Meter Accuracy Test (> 25 mm meter) (New in 2019)	187.00	193.00	199.00	3.1%	6.4%	01-Jan-21	
Additional visits (<= 25 mm meter)	66.00	68.00	70.00	2.9%	6.1%	01-Jan-21	
Additional visits (large meters greater than 25 mm)	110.00	113.00	117.00	3.5%	6.4%	01-Jan-21	
Additional visits (fire line meters)	206.00	213.00	220.00	3.3%	6.8%	01-Jan-21	
Manual Meter Reading Fee	39.00	40.00	41.00	2.5%	5.1%	01-Jan-21	
New Water Meters							
Size of Meter							
15 mm Pos. Disp.	370.00	381.00	400.00	5.0%	8.1%	01-Jan-21	
15 mm Pos. Disp.(Carlsbad only)	565.00	582.00	602.00	3.4%	6.5%	01-Jan-21	
20 mm Pos. Disp.	415.00	428.00	443.00	3.5%	6.7%	01-Jan-21	
25 mm Pos. Disp.	488.00	503.00	521.00	3.6%	6.8%	01-Jan-21	
40 mm Pos. Disp.	910.00	937.00	970.00	3.5%	6.6%	01-Jan-21	
50 mm Pos. Disp.	1,010.00	1,040.00	1,077.00	3.6%	6.6%	01-Jan-21	
75 mm Magnetic	2,485.00	2,560.00	2,335.00	-8.8%	-6.0%	01-Jan-21	
75 mm Ultrasonic	3,630.00	3,739.00	3,292.00	-12.0%	-9.3%	01-Jan-21	
100 mm Magnetic	3,035.00	3,126.00	2,836.00	-9.3%	-6.6%	01-Jan-21	
100 mm Ultrasonic	4,775.00	4,918.00	3,753.00	-23.7%	-21.4%	01-Jan-21	
150 mm Magnetic	5,000.00	5,150.00	5,230.00	1.6%	4.6%	01-Jan-21	
150 mm Ultrasonic	7,700.00	7,931.00	5,641.00	-28.9%	-26.7%	01-Jan-21	
Fire Line Meter Assembly - Cost plus 15%, hourly	208.00	215.00	223.00	3.7%	7.2%	01-Jan-21	

City of Ottawa
 Public Works & Environmental Services Department
 Drinking Water Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Replacement Water Meters							
Size of Meter							
15 mm Pos. Disp.	271.00	279.00	289.00	3.6%	6.6%	01-Jan-21	
15 mm Pos. Disp.(Carlsbad only)	275.00	284.00	294.00	3.5%	6.9%	01-Jan-21	
20 mm Pos. Disp.	313.00	322.00	333.00	3.4%	6.4%	01-Jan-21	
25 mm Pos. Disp.	385.00	398.00	412.00	3.5%	7.0%	01-Jan-21	
40 mm Pos. Disp.	773.00	796.00	824.00	3.5%	6.6%	01-Jan-21	
50 mm Pos. Disp.	877.00	903.00	935.00	3.5%	6.6%	01-Jan-21	
75 mm Magnetic	2,350.00	2,421.00	2,096.00	-13.4%	-10.8%	01-Jan-21	
75 mm Ultrasonic	3,430.00	3,533.00	3,051.00	-13.6%	-11.0%	01-Jan-21	
100 mm Magnetic	2,905.00	2,992.00	2,595.00	-13.3%	-10.7%	01-Jan-21	
100 mm Ultrasonic	4,580.00	4,717.00	3,512.00	-25.5%	-23.3%	01-Jan-21	
150 mm Magnetic	4,785.00	4,929.00	4,998.00	1.4%	4.5%	01-Jan-21	
150 mm Ultrasonic	7,425.00	7,648.00	5,400.00	-29.4%	-27.3%	01-Jan-21	
Temporary removal and installation of meter	139.00	143.00	150.00	4.9%	7.9%	01-Jan-21	
City water meter reading device (new or damaged) replacement	212.00	219.00	227.00	3.7%	7.1%	01-Jan-21	
City water meter reading device and/or water meter reader wire re-location	168.00	173.00	179.00	3.5%	6.5%	01-Jan-21	
Total for all fees above							-25

City of Ottawa
 Public Works & Environmental Services Department
 Drinking Water Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020		Effective Date	2021 Revenue (\$000)
Non Departmental							-5,192
Distribution of Drinking Water							
Variable Rate - per cubic meter water consumed							
0 - 6 m3	0.81	0.83	0.85	3.1%	5.2%	01-Apr-21	
>6 - 25 m3	1.60	1.65	1.70	3.0%	6.4%	01-Apr-21	
>25 - 180 m3	1.77	1.82	1.87	3.1%	5.9%	01-Apr-21	
>180 m3	1.97	2.03	2.09	3.0%	6.2%	01-Apr-21	
Daily Fixed Fee Rates - per meter size							
15 mm	0.33	0.34	0.35	3.0%	5.1%	01-Apr-21	
20 mm	0.48	0.49	0.50	2.0%	4.1%	01-Apr-21	
25 mm	0.81	0.82	0.84	2.4%	3.7%	01-Apr-21	
40 mm	1.61	1.64	1.67	1.8%	3.9%	01-Apr-21	
50 mm	2.57	2.61	2.66	1.9%	3.6%	01-Apr-21	
75 mm	4.83	4.91	5.01	2.0%	3.7%	01-Apr-21	
100 mm	8.05	8.19	8.35	2.0%	3.8%	01-Apr-21	
150 mm	16.09	16.36	16.69	2.0%	3.7%	01-Apr-21	
200 mm	25.75	26.19	26.71	2.0%	3.7%	01-Apr-21	
250 mm	37.02	37.65	38.40	2.0%	3.7%	01-Apr-21	
300 mm	N/A	70.39	71.80	2.0%	N/A	01-Apr-21	
Compound Meter	1.50	1.54	1.58	2.0%	4.7%	01-Apr-21	

City of Ottawa
 Public Works & Environmental Services Department
 Drinking Water Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Fire Supply Charge							
Annual cost - per meter size							
15 mm meter	47.21	48.15	49.11	2.0%	4.0%	01-Apr-21	
20 mm meter	83.93	85.61	87.32	2.0%	4.0%	01-Apr-21	
25 mm meter	131.15	133.77	136.45	2.0%	4.0%	01-Apr-21	
40 mm meter	335.72	342.44	349.29	2.0%	4.0%	01-Apr-21	
50 mm meter	524.58	535.07	545.77	2.0%	4.0%	01-Apr-21	
75 mm meter	1,180.29	1,203.89	1,227.97	2.0%	4.0%	01-Apr-21	
100 mm meter	2,098.28	2,140.25	2,183.05	2.0%	4.0%	01-Apr-21	
150 mm meter	4,721.14	4,815.57	4,911.88	2.0%	4.0%	01-Apr-21	
200 mm meter	8,393.15	8,561.01	8,732.23	2.0%	4.0%	01-Apr-21	
250 mm meter	13,114.29	13,376.57	13,644.11	2.0%	4.0%	01-Apr-21	
Total Departmental							-5,217

Public Works & Environmental Services Department

2021 Service Area Summary - Wastewater Services

Wastewater Services is responsible for the management, operations, maintenance and repairs of the wastewater collection system and treatment plant. The collection systems include sanitary and storm sewers, pump stations, combined sewer. All of the City's wastewater is treated at the Robert O. Pickard Environmental Centre (ROPEC) to ensure minimal environmental impact upon re-entry to the Ottawa River. This includes a comprehensive systems operation and maintenance within regulatory framework, and an environmentally sound management of City-owned facilities and collection systems. Wastewater Treatment is also responsible for the operation, maintenance and repair of the Supervisory control and data acquisition (SCADA) system and ROPEC.

Programs/Services Offered

- Operation and maintenance (including cleaning, inspection, and repair) of the wastewater collection system, comprised of over 5,953 km of sanitary, combined, and storm pipes, 94,636 maintenance holes, 103,872 catch basins, and 1,777 stormwater outlets
- Operation and maintenance of 91 sanitary sewage and storm water pumping stations, combined sewage regulators/storage facilities (including the Combined Sewage Storage Tunnel), odour control facilities and ROPEC, where all the City's wastewater is treated
- Sewer Use By-law compliance, monitoring, and enforcement, to ensure discharges into the sewer system are within regulatory limits
- Compliance with all wastewater regulations, inspections, audits, and operator certification requirements
- SCADA system operation, communication, and maintenance
- Operational support for capital infrastructure renewal and development projects, including upgrades to ROPEC facility
- Quality assurance, compliance management and reporting
- Process optimization, and continual improvements to the wastewater system and treatment process

City of Ottawa
Public Works and Environmental Services
Wastewater Services - Operating Resource Requirement
In Thousands (\$000)

	2019	2020		2021	\$ Change over 2020 Budget
	Actual	Forecast	Budget	Estimate	
Expenditures by Program					
Wastewater Operations	43,598	45,234	45,477	46,049	572
Biosolids	4,262	4,646	4,546	4,548	2
Technical Innovation & Engineering Support	5,985	6,248	5,970	6,156	186
Business & Technical Support Services	205	206	191	196	5
Non Departmental	108,792	112,713	112,713	117,732	5,019
Gross Expenditure	162,842	169,047	168,897	174,681	5,784
Recoveries & Allocations	-14,156	-12,699	-12,699	-12,699	0
Revenue	-147,278	-154,528	-156,198	-161,982	-5,784
Net Requirement	1,408	1,820	0	0	0
Expenditures by Type					
Salaries, Wages & Benefits	22,988	23,736	23,471	24,216	745
Overtime	997	761	911	931	20
Material & Services	27,281	27,659	27,929	27,929	0
Transfers/Grants/Financial Charges	89,719	93,493	93,493	97,560	4,067
Fleet Costs	1,506	1,511	1,511	1,511	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	20,351	21,887	21,582	22,534	952
Gross Expenditures	162,842	169,047	168,897	174,681	5,784
Recoveries & Allocations	-14,156	-12,699	-12,699	-12,699	0
Net Expenditure	148,686	156,348	156,198	161,982	5,784
Revenues By Type					
Federal	0	0	0	0	0
Provincial	0	0	0	0	0
Own Funds	-4,475	-4,477	-4,477	-4,477	0
Fees and Services	-142,803	-150,051	-151,721	-157,505	-5,784
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-147,278	-154,528	-156,198	-161,982	-5,784
Net Requirement	1,408	1,820	0	0	0
Full Time Equivalent			227.65	227.65	0.00

City of Ottawa
Public Works and Environmental Services
Wastewater Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Sanitary Sewer Systems							-25
Sewer Use Program - Disposal Fees							
Septic Tank Strength Liquid Material (per cubic meter)	16.77	16.77	17.10	2.0%	2.0%	01-Jan-21	
Holding Tank Strength Liquid Material (per cubic metre)	3.60	3.60	3.67	2.0%	2.0%	01-Jan-21	
Liquid Material Generated Outside the City of Ottawa (per cubic metre)	29.22	29.22	29.81	2.0%	2.0%	01-Jan-21	
Sewer Use Program - Permit Fees			-				
Annual Permit Fee	279.00	285.00	291.00	2.1%	4.3%	01-Jan-21	
Annual Permit Revision Fee	157.00	160.00	163.00	1.9%	3.8%	01-Jan-21	
Sewer Use Program - Discharge Fees			-				
Conveyance Fee	1.50	1.58	1.64	4.0%	9.2%	01-Jan-21	
Treatment Fee	0.93	0.98	1.02	4.0%	9.2%	01-Jan-21	
Sewer Use Program - Discharge Fees - Parameters in Sewage							
Biochemical Oxygen Demand (per kg)	1.66	1.66	1.66	0.0%	0.0%	01-Jan-21	
Suspended Solids (per kg)	0.88	0.88	0.88	0.0%	0.0%	01-Jan-21	
Phenolic Compounds (per kg)	1.66	1.66	1.66	0.0%	0.0%	01-Jan-21	
Kjeldahl Nitrogen (per kg)	6.60	6.60	6.60	0.0%	0.0%	01-Jan-21	
Phosphorus (per kg)	2.66	2.66	2.66	0.0%	0.0%	01-Jan-21	
Sewer Use Program - Administrative Fees							
Special Discharge Agreement Fee	1,085.00	1,107.00	1,129.00	2.0%	4.1%	01-Jan-21	
Sanitary Sewer Agreement Fee	773.00	788.00	804.00	2.0%	4.0%	01-Jan-21	
Compliance Program Fee	1,085.00	1,107.00	1,129.00	2.0%	4.1%	01-Jan-21	
Combined Agreement Fee	1,085.00	1,107.00	1,129.00	2.0%	4.1%	01-Jan-21	
Sanitary Discharge Agreement Revision Fee	233.00	238.00	243.00	2.1%	4.3%	01-Jan-21	
Combined Agreement Revision Fee	233.00	238.00	243.00	2.1%	4.3%	01-Jan-21	
Sanitary Sewer Agreement Revision Fee (per revision)	116.00	118.00	120.00	1.7%	3.4%	01-Jan-21	
Compliance Program Revision Fee (per revision)	233.00	238.00	243.00	2.1%	4.3%	01-Jan-21	

City of Ottawa
Public Works and Environmental Services
Wastewater Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Non Departmental							-5,759
Sewer Surcharge for Sanitary and Storm Sewer Systems							
Variable Rate - per cubic meter water consumed							
0 - 6 m3	0.711	0.75	0.78	4.0%	9.1%	01-Apr-21	
>6 - 25 m3	1.420	1.49	1.55	4.0%	9.2%	01-Apr-21	
>25 - 180 m3	1.570	1.65	1.72	4.0%	9.4%	01-Apr-21	
>180 m3	1.760	1.85	1.92	4.0%	9.2%	01-Apr-21	
Daily Fixed Fee Rates - per meter size							
15 mm	0.280	0.29	0.30	3.5%	6.2%	01-Apr-21	
20 mm	0.430	0.44	0.45	2.3%	5.0%	01-Apr-21	
25 mm	0.710	0.73	0.75	2.7%	5.5%	01-Apr-21	
40 mm	1.430	1.47	1.51	2.7%	5.5%	01-Apr-21	
50 mm	2.290	2.35	2.41	2.6%	5.3%	01-Apr-21	
75 mm	4.290	4.40	4.51	2.5%	5.2%	01-Apr-21	
100 mm	7.150	7.34	7.53	2.6%	5.3%	01-Apr-21	
150 mm	14.310	14.68	15.06	2.6%	5.3%	01-Apr-21	
200 mm	22.890	23.49	24.10	2.6%	5.3%	01-Apr-21	
250 mm	32.910	33.77	34.65	2.6%	5.3%	01-Apr-21	
Compound Meter	1.426	1.46	1.49	2.5%	4.7%	01-Apr-21	
Total Departmental							-5,784

Public Works & Environmental Services Department

2021 Service Area Summary - Stormwater Services

Stormwater Services is responsible for the operational planning, development and management of the City's stormwater management facilities, fully accredited and licensed laboratory services and municipal drainage services within a regulatory framework.

Programs/Services Offered

- Operation, maintenance and inspection of all municipal stormwater management facilities including: 133 wet ponds, 100 dry ponds, 83 underground stormwater treatment facilities
- Operation, maintenance and inspection of low impact development stormwater infrastructure (commonly referred to as green infrastructure) that supports environmental conservation and protection of water quality
- Operation and maintenance of the City's rain-gauge monitoring network
- Water quality monitoring within Ottawa's major rivers to assess the environmental effects of regulated municipal infrastructure
- Managing and maintaining laboratory license and accreditation requirements and renewals as required through the Ministry of the Environment, Conservation and Parks and the Accreditation Body (Canadian Association of Laboratory)
- Inspection and maintenance of all existing municipal drains as well approval of all newly constructed or modified drainage works to ensure compliance with the Provincial Drainage Act.
- Administration and investigation of drainage issues related to City-owned drainage easements and private property, outside the Road Right-of-Way (ROW)
- Providing advisory services to residents looking to address problems with drainage around their house in established areas

City of Ottawa
Public Works and Environmental Services
Stormwater Services - Operating Resource Requirement
In Thousands (\$000)

	2019	2020		2021	\$ Change over 2020 Budget
	Actual	Forecast	Budget	Estimate	
Expenditures by Program					
Stormwater Operations	13,089	11,464	11,524	11,739	215
Technical Innovation & Engineering Support	1,124	409	409	409	0
Business & Technical Support Services	230	354	354	354	0
Non Departmental	43,967	46,938	46,938	53,313	6,375
Gross Expenditure	58,410	59,165	59,225	65,815	6,590
Recoveries & Allocations	-1,640	-1,767	-1,767	-1,767	0
Revenue	-50,306	-57,738	-57,458	-64,048	-6,590
Net Requirement	6,464	-340	0	0	0
Expenditures by Type					
Salaries, Wages & Benefits	4,654	4,718	4,778	4,888	110
Overtime	21	59	59	59	0
Material & Services	2,302	2,248	2,248	2,353	105
Transfers/Grants/Financial Charges	28,317	33,188	33,188	39,192	6,004
Fleet Costs	261	230	230	230	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	22,855	18,722	18,722	19,093	371
Gross Expenditures	58,410	59,165	59,225	65,815	6,590
Recoveries & Allocations	-1,640	-1,767	-1,767	-1,767	0
Net Expenditure	56,770	57,398	57,458	64,048	6,590
Revenues By Type					
Federal	0	0	0	0	0
Provincial	-191	-145	-145	-145	0
Own Funds	0	0	0	0	0
Fees and Services	-50,115	-57,593	-57,313	-63,903	-6,590
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-50,306	-57,738	-57,458	-64,048	-6,590
Net Requirement	6,464	-340	0	0	0
Full Time Equivalents			46.02	46.02	0.00

City of Ottawa
Public Works and Environmental Services
Stormwater Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Laboratory Services (Tests)							
Alkalinity, PH, Conductivity	10.81	11.03	11.25	2.0%	4.1%	01-Jan-21	
Alkalinity Brinkman (wastewater)	16.27	16.60	16.93	2.0%	4.1%	01-Jan-21	
Biochemical Oxygen Demand	17.79	18.15	18.51	2.0%	4.0%	01-Jan-21	
Carbonaceous Biochemical Demand	17.79	18.15	18.51	2.0%	4.0%	01-Jan-21	
Chloride	12.45	12.70	13.16	3.6%	5.7%	01-Jan-21	
Chemical Oxygen Demand	11.56	11.79	12.03	2.0%	4.1%	01-Jan-21	
Conductivity	10.81	11.03	11.25	2.0%	4.1%	01-Jan-21	
Dissolved Organic Carbon	15.27	15.58	15.89	2.0%	4.1%	01-Jan-21	
E. coli (wastewater)	12.17	12.41	12.66	2.0%	4.0%	01-Jan-21	
Fluoride (SIE)	17.45	17.80	18.16	2.0%	4.1%	01-Jan-21	
Heterotrophic Plate	12.93	13.19	13.45	2.0%	4.0%	01-Jan-21	
Halo Acetic Acid	138.94	141.72	144.55	2.0%	4.0%	01-Jan-21	
ICP-OES Industrial Waste - 28 elements	27.49	28.04	28.60	2.0%	4.0%	01-Jan-21	
ICP-OES Metals Scan - 5 elements	14.24	14.52	14.81	2.0%	4.0%	01-Jan-21	
ICP-OES Metal Scan - 28 elements	23.83	24.31	24.80	2.0%	4.1%	01-Jan-21	
ICP/MS Metal Scan SW/DW - 27 elements	38.42	39.19	39.97	2.0%	4.0%	01-Jan-21	
ICP/MS Lead DW	14.24	14.52	14.81	2.0%	4.0%	01-Jan-21	
Ammonia - Surface/Waste Water	10.81	11.03	11.29	2.4%	4.4%	01-Jan-21	
Ion Chromatography	17.45	17.80	18.16	2.0%	4.1%	01-Jan-21	
Mercury	35.36	36.07	36.79	2.0%	4.0%	01-Jan-21	
Nitrates	12.45	12.70	13.16	3.6%	5.7%	01-Jan-21	
PH	10.81	11.03	11.25	2.0%	4.1%	01-Jan-21	
Reactive Phosphorus	10.81	11.03	11.29	2.4%	4.4%	01-Jan-21	
Soluble Biochemical Oxygen Demand	18.79	19.17	19.55	2.0%	4.0%	01-Jan-21	
Soluble Carbonaceous Biochemical Oxygen Demand	18.79	19.17	19.55	2.0%	4.0%	01-Jan-21	
Soluble Chemical Oxygen Demand	12.56	12.81	13.07	2.0%	4.1%	01-Jan-21	
Specific gravity	22.50	22.95	23.41	2.0%	4.0%	01-Jan-21	
Sulphate	12.45	12.70	13.16	3.6%	5.7%	01-Jan-21	
Soluble Phosphorus	15.72	16.03	16.35	2.0%	4.0%	01-Jan-21	
Soluble Kjeldahl Nitrogen	15.72	16.03	16.35	2.0%	4.0%	01-Jan-21	

City of Ottawa
Public Works and Environmental Services
Stormwater Services - User Fees

	2019 Rate \$	2020 Rate \$	2021 Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Laboratory Services (Tests) cont'd							
Total Coliforms - E-Coli (DC)	11.21	11.43	11.66	2.0%	4.0%	01-Jan-21	
Total Coliforms - E-Coli (PA)	21.10	21.52	21.95	2.0%	4.0%	01-Jan-21	
Total Coliforms - E-Coli (MPN)	22.01	22.45	22.90	2.0%	4.0%	01-Jan-21	
Total Kjeldahl Nitrogen	14.72	15.01	15.35	2.3%	4.3%	01-Jan-21	
Total Phosphorus	14.72	15.01	15.35	2.3%	4.3%	01-Jan-21	
Total Solid - Waste Water	11.38	11.61	11.84	2.0%	4.0%	01-Jan-21	
Total Solid - Solid	11.38	11.61	11.84	2.0%	4.0%	01-Jan-21	
Total Suspended Solid	10.63	10.84	11.06	2.0%	4.0%	01-Jan-21	
Trihalomethane/VOC Full Scan	64.30	65.59	66.90	2.0%	4.0%	01-Jan-21	
Volatile Acids	39.59	40.38	41.19	2.0%	4.0%	01-Jan-21	
Volatile Solids - Waste Water	12.11	12.35	12.60	2.0%	4.0%	01-Jan-21	
Volatile Solids - Solids	12.33	12.58	12.83	2.0%	4.1%	01-Jan-21	
Volatile Suspended Solid (Water)	12.27	12.52	12.77	2.0%	4.1%	01-Jan-21	
Drinking Water Anion (Chloride, fluoride, nitrite and nitrate, sulphate)	17.45	17.80	18.16	2.0%	4.1%	01-Jan-21	
Total Nutrients (Ammonia + Ammonia, Reactive Phosphorus)	11.81	12.05	12.29	2.0%	4.1%	01-Jan-21	
TKN/TP (Total Kjeldahl Nitrogen, Total Phosphorus)	15.72	16.03	16.35	2.0%	4.0%	01-Jan-21	
Increase to rates for various lab tests listed above							-10

City of Ottawa
Public Works and Environmental Services
Stormwater Services - User Fees

	2019 Full Tier Rate \$	2020 Full Tier Rate \$	2021 Full Tier Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
Non Departmental							
Annual Stormwater Service Fees							-6,580
Residential Connected							
Urban Single/Semi	128.31	140.65	154.80	10.1%	20.6%	01-Apr-21	
Rural Single/Semi	128.31	140.65	154.80	10.1%	20.6%	01-Apr-21	
Urban Townhouse/Apt	64.16	70.33	77.40	10.1%	20.6%	01-Apr-21	
Rural Townhouse/Apt	64.16	70.33	77.40	10.1%	20.6%	01-Apr-21	
Residential Non-Connected (2020 100% Phase-In Rate)							
Urban Single/Semi	89.81	98.46	108.36	10.1%	20.7%	01-Apr-21	
Rural Single/Semi	64.16		77.40	10.1%	20.6%	01-Apr-21	
Urban Townhouse/Apt	44.91	49.23	54.18	10.1%	20.6%	01-Apr-21	
Rural Townhouse/Apt	32.08	35.16	38.70	10.1%	20.6%	01-Apr-21	
Industrial, Commercial and Institutional (ICI)							
ICI Connected Urban and Rural							
0 to 300K Assessment	60.12	65.86	72.53	10.1%	20.6%	01-Apr-21	
>300K to 1M Assessment	284.50	311.68	343.25	10.1%	20.7%	01-Apr-21	
>1M to 5M Assessment	1,061.16	1,162.57	1,280.30	10.1%	20.7%	01-Apr-21	
>5M to 20M Assessment	4,652.04	5,096.62	5,612.78	10.1%	20.7%	01-Apr-21	
>20M to 50M Assessment	14,081.01	15,426.69	16,989.02	10.1%	20.7%	01-Apr-21	
>50M to 100M Assessment	33,984.37	37,232.17	41,002.82	10.1%	20.7%	01-Apr-21	
>100M to 150M Assessment	57,005.90	62,453.81	68,778.77	10.1%	20.7%	01-Apr-21	
>150M Assessment	120,718.81	132,255.61	145,649.67	10.1%	20.7%	01-Apr-21	

City of Ottawa
Public Works and Environmental Services
Stormwater Services - User Fees

	2019 Full Tier Rate \$	2020 Full Tier Rate \$	2021 Full Tier Rate \$	% Change Over 2020	% Change Over 2019	Effective Date	2021 Revenue (\$000)
ICI Non-Connected - Urban (2020 100% Phase-In Rate)							
0 to 300K Assessment	60.12	65.86	72.53	10.1%	20.6%	01-Apr-21	
>300K to 1M Assessment	284.50	311.68	343.25	10.1%	20.7%	01-Apr-21	
>1M to 5M Assessment	1,061.16	1,162.57	1,280.30	10.1%	20.7%	01-Apr-21	
>5M to 20M Assessment	4,652.04	5,096.62	5,612.78	10.1%	20.7%	01-Apr-21	
>20M to 50M Assessment	14,081.01	15,426.69	16,989.02	10.1%	20.7%	01-Apr-21	
>50M to 100M Assessment	33,984.37	37,232.17	41,002.82	10.1%	20.7%	01-Apr-21	
>100M to 150M Assessment	57,005.90	62,453.81	68,778.77	10.1%	20.7%	01-Apr-21	
>150M Assessment	120,718.81	132,255.61	145,649.67	10.1%	20.7%	01-Apr-21	
ICI Non-Connected - Rural (2020 100% Phase-In Rate)							
0 to 300K Assessment	42.08	46.10	50.77	10.1%	20.7%	01-Apr-21	
>300K to 1M Assessment	199.15	218.18	240.27	10.1%	20.6%	01-Apr-21	
>1M to 5M Assessment	742.81	813.80	896.21	10.1%	20.7%	01-Apr-21	
>5M to 20M Assessment	3,256.43	3,567.64	3,928.94	10.1%	20.7%	01-Apr-21	
>20M to 50M Assessment	9,856.71	10,798.69	11,892.31	10.1%	20.7%	01-Apr-21	
>50M to 100M Assessment	23,789.06	26,062.52	28,701.98		20.7%	01-Apr-21	
>100M to 150M Assessment	39,904.13	43,717.67	48,145.14	10.1%	20.7%	01-Apr-21	
>150M Assessment	84,503.17	92,578.92	101,954.77	10.1%	20.7%	01-Apr-21	
Total Departmental							-6,590

City Of Ottawa
2021 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Rate
Funding Summary
In Thousands \$(000's)

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Develop. Charges Debt	Rate Supported	Rate Supported Debt	Tax Supported/ Dedicated Debt	Grand Total
Drinking Water Services									
Renewal of City Assets									
900631 Carlington Heights Pumping Stn Expansion	-	-	-	628	-	1,616	-	-	2,244
908076 Large Water Meters Changeout Program	-	-	-	-	-	250	-	-	250
908613 Bank St (Rideau Rd-Mitch Owens)	-	-	-	-	-	900	-	-	900
908614 LRT2 W1 Hwy 174 - Shefford Rd	-	-	-	-	-	350	-	-	350
908633 Enhanced Corrosion Control	-	-	-	-	-	3,118	-	-	3,118
908908 Small Water Meters Changeout Program	-	-	-	-	-	3,125	-	-	3,125
910066 2021 Buildings-Water Services	-	-	-	-	-	50	-	-	50
910117 2021 Water System Improvements	-	-	-	-	-	4,500	3,000	-	7,500
910118 2021 WM Transmission/Distribution Rehab	-	-	-	-	-	3,500	2,000	-	5,500
910119 Stanley Ave. (Sussex - Union St)	-	-	-	-	-	500	-	-	500
910133 Water Storage Tanks & Reservoir 2021	-	-	-	-	-	530	-	-	530
910135 Water Pumping Station Facility Rehab2021	-	-	-	-	-	4,290	-	-	4,290
910136 Water Treatment Rehab 2021	-	-	-	-	-	6,025	-	-	6,025
910137 Protective Lead Service Rplment Prog2021	250	-	-	-	-	1,000	-	-	1,250
910138 Water Sys SCADA & Instrument Rehab 2021	-	-	-	-	-	3,518	-	-	3,518
910139 Cathodic Protection 2021	-	-	-	-	-	1,200	-	-	1,200
910140 Ops Condition Assess-Critical Sys Links	-	-	-	-	-	1,000	-	-	1,000
910141 New Vehicles Drinking Water 2021	-	-	-	-	-	75	-	-	75
Renewal of City Assets Total	250	-	-	628	-	35,547	5,000	-	41,425
Growth									
903295 Brittany Pumping Station	-	-	-	1,594	1,833	1,733	3,000	-	8,160
905992 Manotick Supply Watermain	-	-	-	1,340	-	547	-	-	1,887
907456 Manotick North Island Link	-	-	-	1,698	-	189	-	-	1,887
910050 Manotick Supply Watermain - Phase 2	-	-	-	530	-	490	-	-	1,020
910051 2021 Off Site Reliability Links	-	-	-	148	-	16	-	-	164
910052 2021 Groundwater Studies	-	-	-	43	-	346	-	-	389
910053 2021 Rural Servicing Strategy	-	-	-	108	-	108	-	-	216
910054 2021 Water & Wastewater Studies	-	-	-	216	-	54	-	-	270
Growth Total	-	-	-	5,677	1,833	3,483	3,000	-	13,993
Drinking Water Services Total	250	-	-	6,305	1,833	39,030	8,000	-	55,418

City Of Ottawa
2021 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Rate
Funding Summary
In Thousands \$(000's)

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Develop. Charges Debt	Rate Supported	Rate Supported Debt	Tax Supported/ Dedicated Debt	Grand Total
Integrated Roads, Water & Wastewater									
Renewal of City Assets									
906735 Bank St (Riverside-Ledbury)	-	-	-	-	-	3,667	-	-	3,667
906900 Main Greenfield Echo Concord et al	-	-	-	-	-	3,965	-	-	3,965
906901 CWWF ORAP - Loretta Ave N&S - Laurel St	-	-	-	-	-	1,586	6,000	-	7,586
908138 CWWF Avenue N-O-P-Q-R-S-T-U	-	-	-	-	-	7,769	-	-	7,769
908139 Montreal Rd (N River Rd-St Laurent Blvd)	-	-	-	-	-	2,196	-	-	2,196
908141 ORAP Albert St-Bronson Ave-Slater St	-	-	-	-	-	3,430	-	-	3,430
908570 Byron-Athlone-Highcroft	-	-	-	-	-	3,777	4,700	-	8,477
908572 Fairbairn-Bellwood-Willard-Belmont	-	-	-	-	-	949	-	-	949
908580 CWWF Queensway Terrace North Sewer	-	-	101	-	-	2,936	-	-	3,037
908581 Valley Dr Storm Sewer	-	-	156	-	-	3,729	-	-	3,885
908998 LRT2 R2 Hwy 174 Resurfacing EBL	-	-	-	-	-	36	-	-	36
909394 Arch - Canterbury - Plesser	-	-	-	-	-	7,693	-	-	7,693
909400 Bel-Air Dr, Bedbrooke St et al	-	-	-	-	-	5,441	5,000	-	10,441
909401 Broadview Ave	-	-	-	-	-	706	-	-	706
Renewal of City Assets Total	-	-	257	-	-	47,880	15,700	-	63,837
Integrated Roads, Water & Wastewater Total	-	-	257	-	-	47,880	15,700	-	63,837
Integrated Water & Wastewater									
Renewal of City Assets									
908997 LRT2 SS1 Sewer Upgrades (Byron Ave)	-	-	-	-	-	1,490	-	-	1,490
909492 LRT2 SS2 Richmond Compl Streets	-	-	-	-	-	1,888	-	-	1,888
910078 2021 Sewer Repairs / Improvements	-	-	-	-	-	9,504	-	-	9,504
910079 2021 Sewer Trenchless Rehab	-	-	-	-	-	4,500	-	-	4,500
910080 2021 Sewer CCTV Engineering	-	-	-	-	-	800	-	-	800
Renewal of City Assets Total	-	-	-	-	-	18,182	-	-	18,182
Integrated Water & Wastewater Total	-	-	-	-	-	18,182	-	-	18,182
Stormwater Services									
Renewal of City Assets									
909017 LRT2 C1 Hwy 174 Culverts	-	-	-	-	-	1,010	1,000	-	2,010
909709 2020 Drainage Culverts - CW	-	-	-	-	-	6,120	3,000	-	9,120
910081 2021 Drainage Culverts - CW	-	-	-	-	-	1,382	1,000	-	2,382
910082 2021 Drainage Culverts - Other	-	-	-	-	-	636	-	-	636

City Of Ottawa
2021 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Rate
Funding Summary
In Thousands \$(000's)

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Develop. Charges Debt	Rate Supported	Rate Supported Debt	Tax Supported/ Dedicated Debt	Grand Total
910083 2021 Culverts Scoping Pre/Post Eng.	-	-	-	-	-	700	-	-	700
910086 2021 Storm and Surface Water Rehabilitat	-	-	-	-	-	3,500	-	-	3,500
910204 Stormwater Mgmt: Rehab&Enviro Compliance	-	-	-	-	-	3,500	-	-	3,500
910205 Linear Storm System Improvements 2021	-	-	-	-	-	1,000	2,000	-	3,000
Renewal of City Assets Total	-	-	-	-	-	17,848	7,000	-	24,848
Growth									
909730 2020 Stormwater Master Planning	-	-	-	26	-	25	-	-	51
Growth Total	-	-	-	26	-	25	-	-	51
Regulatory									
910203 Municipal Drain Improvements - 2021	-	-	-	-	-	500	-	-	500
Regulatory Total	-	-	-	-	-	500	-	-	500
Stormwater Services Total	-	-	-	26	-	18,373	7,000	-	25,399
Wastewater Services									
Renewal of City Assets									
909245 Forcemain Condition Assessment & Rehab	-	-	-	-	-	500	-	-	500
909716 Mooney's Bay Trunk Sewer	-	-	-	-	-	1,500	1,500	-	3,000
909724 Pump Stations Capacity Renewal	-	-	-	-	-	1,714	-	-	1,714
909745 Acres Road PS Phase 1 Renewal	-	-	-	-	-	1,900	-	-	1,900
910061 Wastewater Drainage Roofing 2021	-	-	-	-	-	50	-	-	50
910062 Flow Monitoring System Rehab. 2021	-	-	-	-	-	200	-	-	200
910063 SCADA Rehab & Upgrades-Remote Sewer 2021	-	-	-	-	-	1,559	-	-	1,559
910064 Collection System Condition Assess. 2021	-	-	-	-	-	1,160	-	-	1,160
910077 2021 Flood Plain Mapping	-	-	-	-	-	240	-	-	240
910087 2021 ORAP Wet Weather IMP	-	-	-	-	-	2,500	-	-	2,500
910120 Linear Sewage System Improve. Prog. 2021	-	-	-	-	-	1,000	-	-	1,000
910121 Sewer Lateral Repairs 2021	-	-	-	-	-	2,000	2,500	-	4,500
910124 Sewage Pumping Station Rehab Prog 2021	-	-	-	-	-	7,227	10,000	-	17,227
910130 ROPEC - Sewage Treatment Rehab Prog 2021	-	-	-	-	-	6,000	6,222	-	12,222
910131 ROPEC - Concrete Rehab & Repairs 2021	-	-	-	-	-	1,000	-	-	1,000
910132 Wastewater Facilites Upgrade 2021	-	-	-	-	-	500	-	-	500
Renewal of City Assets Total	-	-	-	-	-	29,050	20,222	-	49,272

City Of Ottawa
2021 Draft Capital Budget
Standing Committee on Environmental Protection, Water and Waste Management - Rate
Funding Summary
In Thousands \$(000's)

Project Description	Revenues	Gas Tax	Tax Supported/ Dedicated	Develop. Charges	Develop. Charges Debt	Rate Supported	Rate Supported Debt	Tax Supported/ Dedicated Debt	Grand Total
Growth									
907462 Pump Stations Capacity Increase	-	-	-	3,248	-	-	-	-	3,248
910048 2021 Infrastructure Master Plan (Sewer)	-	-	-	-	-	510	-	-	510
910076 Carp Wastewater PS Upgrade/Overflow	-	-	918	-	-	1,122	-	-	2,040
910123 DCA-O/S KW Trunk Sewers - 130 Huntmar	-	-	-	75	-	-	-	-	75
Growth Total	-	-	918	3,323	-	1,632	-	-	5,873
Wastewater Services Total	-	-	918	3,323	-	30,682	20,222	-	55,145
Grand Total	250	-	1,175	9,654	1,833	154,147	50,922	-	217,981

* Integrated Roads, Water and Wastewater Program includes the Rate portion only for information purposes.

City of Ottawa
Public Works & Environmental Services Department
Drinking Water Services - Operating Resource Requirement Analysis
In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Expenditures by Program									
Water Operations	54,581	58,595	0	1,013	195	0	0	59,803	1,208
Technical Innovation & Engineering									
Support Services	7,334	7,387	0	-104	0	0	0	7,283	-104
Business & Technical Support Services	1,418	1,856	0	-59	0	0	0	1,797	-59
Non Departmental	123,583	123,583	0	4,172	0	0	0	127,755	4,172
Gross Expenditure	186,916	191,421	0	5,022	195	0	0	196,638	5,217
Recoveries & Allocations	-2,942	-2,942	0	0	0	0	0	-2,942	0
Revenue	-187,179	-188,479	0	0	0	0	-5,217	-193,696	-5,217
Net Requirement	-3,205	0	0	5,022	195	0	-5,217	0	0
Expenditures by Type									
Salaries, Wages & Benefits	31,643	33,416	0	766	180	0	0	34,362	946
Overtime	1,937	1,937	0	39	0	0	0	1,976	39
Material & Services	18,366	20,603	0	0	15	0	0	20,618	15
Transfers/Grants/Financial Charges	99,799	99,894	0	2,900	0	0	0	102,794	2,900
Fleet Costs	2,982	3,292	0	45	0	0	0	3,337	45
Program Facility Costs	0	0	0	0	0	0	0	0	0
Other Internal Costs	32,189	32,279	0	1,272	0	0	0	33,551	1,272
Gross Expenditures	186,916	191,421	0	5,022	195	0	0	196,638	5,217
Recoveries & Allocations		-2,942	0	0	0	0	0	-2,942	0
Net Expenditure	183,974	188,479	0	5,022	195	0	0	193,696	5,217
Percent of 2020 Net Expenditure Budget			0.0%	2.7%	0.1%	0.0%	0.0%	2.8%	

City of Ottawa
 Public Works & Environmental Services Department
 Drinking Water Services - Operating Resource Requirement Analysis
 In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Revenues By Type									
Federal	0	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0	0
Own Funds	0	0	0	0	0	0	0	0	0
Fees and Services	-187,179	-188,479	0	0	0	0	-5,217	-193,696	-5,217
Fines	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Revenue	-187,179	-188,479	0	0	0	0	-5,217	-193,696	-5,217
Percent of 2020 Revenue Budget			0.0%	0.0%	0.0%	0.0%	2.8%	2.8%	
Net Requirement	-3,205	0	0	5,022	195	0	-5,217	0	0
Percent of 2020 Net Requirement Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Full Time Equivalents (FTE's)		316.94	0.00	0.00	0.00	0.00	0.00	316.94	0.00
Percent of 2020 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

City of Ottawa
Public Works & Environmental Services Department
Drinking Water Services - Operating Resource Requirement Explanatory Notes
In Thousands (\$000)

2020 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Forecasted surplus mainly due to savings in compensation costs due to vacancies and reduced materials and services as a result efficient hydro usage and deferral of valve inspection contract, slightly offset by expected revenue losses from the ICI sector due to covid-19.	4,505	-1,300	3,205
Total Surplus / (Deficit)	4,505	-1,300	3,205

2021 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2021 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2021 cost of living, increments and benefit adjustments.	805	0	805	0.00
Increase in Fleet costs related to inflation on compensation contracts, parts, fuel, contribution to capital reserve and maintenance.	45	0	45	0.00
Non Departmental				
Increase in debt servicing costs	2,305	0	2,305	0.00
Increase in inter departmental admin and direct charge overhead costs due to cola increases	1,272	0	1,272	0.00
Increase to the contribution to the water capital reserve fund	595	0	595	0.00
Total Maintain Services	5,022	0	5,022	0.00
Growth				
Requirement for permanent base funding for staffing resources to manage system growth in line with the LRFP.	180	0	180	0.00
Fleet costs for new vehicle in Water Production	15	0	15	0.00
Total Growth	195	0	195	0.00
User Fees & Revenues				
See following user fee schedule for details on the specific rates.	0	-5,217	-5,217	0.00
Total User Fees & Revenues	0	-5,217	-5,217	0.00
Total Budget Changes	5,217	-5,217	0	0.00

City of Ottawa
Public Works and Environmental Services
Wastewater Services - Operating Resource Requirement Analysis
In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Expenditures by Program									
Wastewater Operations	45,234	45,477	0	372	200	0	0	46,049	572
Biosolids	4,646	4,546	0	2	0	0	0	4,548	2
Technical Innovation & Engineering Support	6,248	5,970	0	186	0	0	0	6,156	186
Business & Technical Support Services	206	191	0	5	0	0	0	196	5
Non Departmental	112,713	112,713	0	5,019	0	0	0	117,732	5,019
Gross Expenditure	169,047	168,897	0	5,584	200	0	0	174,681	5,784
Recoveries & Allocations	-12,699	-12,699	0	0	0	0	0	-12,699	0
Revenue	-154,528	-156,198	0	0	0	0	-5,784	-161,982	-5,784
Net Requirement	1,820	0	0	5,584	200	0	-5,784	0	0
Expenditures by Type									
Salaries, Wages & Benefits	23,736	23,471	0	545	200	0	0	24,216	745
Overtime	761	911	0	20	0	0	0	931	20
Material & Services	27,659	27,929	0	0	0	0	0	27,929	0
Transfers/Grants/Financial Charges	93,493	93,493	0	4,067	0	0	0	97,560	4,067
Fleet Costs	1,511	1,511	0	0	0	0	0	1,511	0
	0	0	0	0	0	0	0	0	0
Other Internal Costs	21,887	21,582	0	952	0	0	0	22,534	952
Gross Expenditures	169,047	168,897	0	5,584	200	0	0	174,681	5,784
Recoveries & Allocations	-12,699	-12,699	0	0	0	0	0	-12,699	0
Net Expenditure	156,348	156,198	0	5,584	200	0	0	161,982	5,784
Percent of 2020 Net Expenditure Budget			0.0%	3.6%	0.1%	0.0%	0.0%	3.7%	

City of Ottawa
 Public Works and Environmental Services
 Wastewater Services - Operating Resource Requirement Analysis
 In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Revenues By Type									
Federal	0	0	0	0	0	0	0	0	0
Provincial	0	0	0	0	0	0	0	0	0
Own Funds	-4,477	-4,477	0	0	0	0	0	-4,477	0
Fees and Services	-150,051	-151,721	0	0	0	0	-5,784	-157,505	-5,784
Fines	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Revenue	-154,528	-156,198	0	0	0	0	-5,784	-161,982	-5,784
Percent of 2020 Revenue Budget			0.0%	0.0%	0.0%	0.0%	3.7%	3.7%	
Net Requirement	1,820	0	0	5,584	200	0	-5,784	0	0
Percent of 2020 Net Requirement Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Full Time Equivalent (FTE's)		227.65	0.00	0.00	0.00	0.00	0.00	227.65	0.00
Percent of 2020 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

City of Ottawa
Public Works and Environmental Services
Wastewater Services - Operating Resource Requirement Explanatory Notes
In Thousands (\$000)

2020 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)		
	Expense	Revenue	Net
Forecasted deficit mainly due to anticipated reduction in wastewater billing revenues from ICI due to covid-19.	-150	-1,670	-1,820
Total Surplus / (Deficit)	-150	-1,670	-1,820

2021 Pressure Category / Explanation	Increase / (Decrease)			
	Expense	Revenue	Net 2021 Changes	FTE Impact
Maintain Services All programs include an adjustment for potential 2021 cost of living, increments and benefit adjustments.	565	0	565	0.00
Non Departmental				
Increase in debt servicing costs	1,490	0	1,490	0.00
Increase in inter departmental admin and direct charge overhead costs due to cola increases	952	0	952	0.00
Increase to the contribution to the wastewater capital reserve fund	2,577	0	2,577	0.00
Total Maintain Services	5,584	0	5,584	0.00
Growth				
Requirement for permanent base funding for staffing resources to manage system growth in line with the LRFP.	200	0	200	0.00
Total Growth	200	0	200	0.00
User Fees & Revenues See following user fee schedule for details on the specific rates.	0	-5,784	-5,784	0.00
Total User Fees & Revenues	0	-5,784	-5,784	0.00
Total Budget Changes	5,784	-5,784	0	0.00

City of Ottawa
Public Works and Environmental Services
Stormwater Services - Operating Resource Requirement Analysis
In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Expenditures by Program									
Stormwater Operations	11,464	11,524	0	215	0	0	0	11,739	215
Technical Innovation & Engineering Support	409	409	0	0	0	0	0	409	0
Business & Technical Support Services	354	354	0	0	0	0	0	354	0
Non Departmental	46,938	46,938	0	6,375	0	0	0	53,313	6,375
Gross Expenditure	59,165	59,225	0	6,590	0	0	0	65,815	6,590
Recoveries & Allocations	-1,767	-1,767	0	0	0	0	0	-1,767	0
Revenue	-57,738	-57,458	0	0	0	0	-6,590	-64,048	-6,590
Net Requirement	-340	0	0	6,590	0	0	-6,590	0	0
Expenditures by Type									
Salaries, Wages & Benefits	4,718	4,778	0	110	0	0	0	4,888	110
Overtime	59	59	0	0	0	0	0	59	0
Material & Services	2,248	2,248	0	105	0	0	0	2,353	105
Transfers/Grants/Financial Charges	33,188	33,188	0	6,004	0	0	0	39,192	6,004
Fleet Costs	230	230	0		0	0	0	230	0
Program Facility Costs	0	0	0	0	0	0	0	0	0
Other Internal Costs	18,722	18,722	0	371	0	0	0	19,093	371
Gross Expenditures	59,165	59,225	0	6,590	0	0	0	65,815	6,590
Recoveries & Allocations	-1,767	-1,767	0	0	0	0	0	-1,767	0
Net Expenditure	57,398	57,458	0	6,590	0	0	0	64,048	6,590
Percent of 2020 Net Expenditure Budget			0.0%	11.5%	0.0%	0.0%	0.0%	11.5%	

Stormwater Services - Operating Resource Requirement Analysis
In Thousands (\$000)

	2020 Baseline			2021 Adjustments				2021	\$ Change over 2020 Budget
	Forecast	Budget	Adj. to Base Budget	Maintain Services	Growth	COVID-19	User Fees & Revenues	Estimate	
Revenues By Type									
Federal	0	0	0	0	0	0	0	0	0
Provincial	-145	-145	0	0	0	0	0	-145	0
Own Funds	0	0	0	0	0	0	0	0	0
Fees and Services	-57,593	-57,313	0	0	0	0	-6,590	-63,903	-6,590
Fines	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total Revenue	-57,738	-57,458	0	0	0	0	-6,590	-64,048	-6,590
Percent of 2020 Revenue Budget			0.0%	0.0%	0.0%	0.0%	11.5%	11.5%	
Net Requirement	-340	0	0	6,590	0	0	-6,590	0	0
Percent of 2020 Net Requirement Budget			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Full Time Equivalentents (FTE's)		46.02	0.00	0.00	0.00	0.00	0.00	46.02	0.00
Percent of 2020 FTE's			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

City of Ottawa
Public Works and Environmental Services
Stormwater Services - Operating Resource Requirement Explanatory Notes
In Thousands (\$000)

2020 Forecast vs. Budget Variance Explanation	Surplus / (Deficit)			
	Expense	Revenue	Net	
No significant variance to report	60	280	340	
Total Surplus / (Deficit)	60	280	340	
	Increase / (Decrease)			
	Expense	Revenue	Net 2021 Changes	FTE Impact
Maintain Services				
All programs include an adjustment for potential 2021 cost of living, increments and benefit adjustments.	110	0	110	0.00
Inflationary increases on contracted services, maintenance agreements and materials and supplies.	105	0	105	0.00
Non Departmental				
Increase in debt servicing costs	695	0	695	0.00
Increase in inter departmental admin and direct charge overhead costs due to cola increases	371	0	371	0.00
Increase to the contribution to the stormwater capital reserve fund	5,309	0	5,309	0.00
Total Maintain Services	6,590	0	6,590	0.00
User Fees & Revenues				
See following user fee schedule for details on the specific rates.	0	-6,590	-6,590	0.00
Total User Fees & Revenues	0	-6,590	-6,590	0.00
Total Budget Changes	6,590	-6,590	0	0.00

Capital Budget

City of Ottawa
 2021 Draft Capital Budget
 Environment and Climate Protection Committee-Rate
 In Thousands (\$000)

Service Area: Drinking Water Services											
Category	2021 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	41,425	250	0	35,547	628	0	0	5,000	0	0	5,000
Growth	13,993	0	0	3,483	5,677	0	0	3,000	1,833	0	
Regulatory	0	0	0	0	0	0	0	0	0	0	0
Service Enhancements	0	0	0	0	0	0	0	0	0	0	0
Total	55,418	250	0	39,030	6,305	0	0	8,000	1,833	0	9,833

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Program Information		Financial Details					
Water Meter Replacement Program		Class of Estimate: C) Planning					
Dept: Corporate Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>This multi-year program has been established to increase accuracy of water meter recordings by replacing water meters, water meter equipment, and metering softwares which have passed their life expectancy. It also covers the mobility requirements for water meter servicing.</p>		2021 Request	3,375	Projected Yearend Unspent Bal.		0	
		Revenues	0	Debt			
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
		Rate Supported	3,375	Rate Supported Debt			0
		Develop. Charges	0	Develop. Charges Debt			0
		Gas Tax	0	Gas Tax Debt			0
		Forecast	2021	2022	2023	2024	
		Authority	3,375	3,375	2,400	2,400	
		Spending Plan	8,800	11,895	3,620	2,400	
		FTE's	0	0	0	0	
Operating Impact	0	0	0	0			

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
908076	Large Water Meters Changeout Program	Class of Estimate: Planning	250
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2022	
<p>Funding is required for ongoing replacement of commercial high volume water meters which have passed their life expectancy. Large volume water meters have a shorter useful lifecycle, requiring maintenance every two to eight years due to the high volume of water causing wear and tear on mechanical components of the meter. New Meters will reduce maintenance costs, increase accuracy, and provide consistent revenues. New Year of Completion is 2024.</p>			
908908	Small Water Meters Changeout Program	Class of Estimate: Planning	3,125
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>Funding is required to replace a growing number of residential water meters which have passed their life expectancy of 20 years. Aging water meters will under record water consumption, resulting in loss of revenue.</p>			

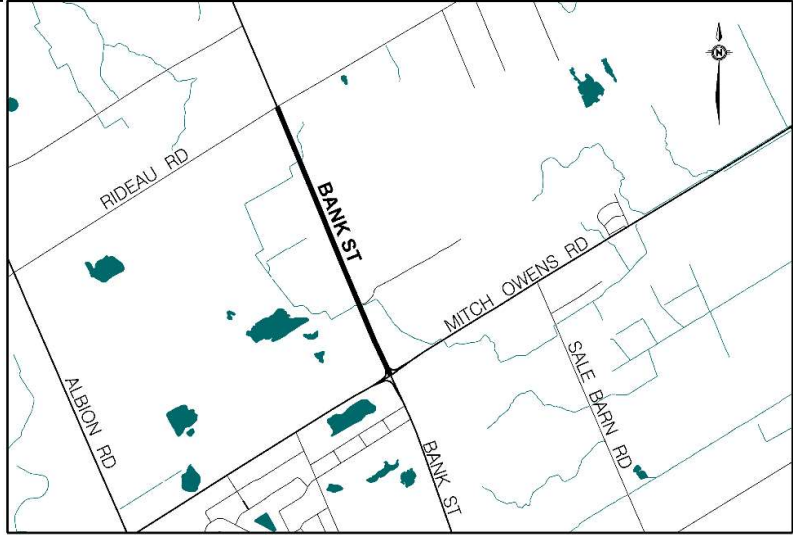
City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Program Information		Financial Details				
Buildings-Water Services		Class of Estimate: C) Planning				
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various			
<p>The Building and Park programs provide for life cycle renewal and replacement works to existing building and park assets. Detailed scope of work for specific projects extends to a wide assortment of work, such as roof replacement, building preservation, building mechanical and electrical systems, parks playgrounds and property elements, hard landscaping, arena and pool equipment and unplanned emergency work.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions. Project cost group summaries are provided following this program summary.</p> <p>Annual programming provides allocations as required for each of the service areas as follows:</p>		2021 Request	50	Projected Yearend Unspent Bal.		0
		Revenues	0	Debt		
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt		0
		Rate Supported	50	Rate Supported Debt		0
		Develop. Charges	0	Develop. Charges Debt		0
		Gas Tax	0	Gas Tax Debt		0
		Forecast	2021	2022	2023	2024
		Authority	50	50	50	50
		Spending Plan	50	50	50	50
		FTE's	0	0	0	0
		Operating Impact	0	0	0	0

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Program Information			Financial Details				
Water System Rehabilitation			Class of Estimate: C) Planning				
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>The Water System Rehabilitation Program addresses the annual rehabilitation requirements for the City's piped water network: to extend the life of the infrastructure, provide continued supply of potable water, prevent failures requiring more extensive reconstruction, and ensure drinking water quality is maintained throughout the water distribution network. The program is focused on:</p> <ul style="list-style-type: none"> • Proactive lifecycle renewal and rehabilitation projects • Level of service initiatives • System improvements and optimization • Miscellaneous upgrades and rehabilitation to support growth demand • Miscellaneous local repairs <p>Program funding requirements to support renewal needs are defined in the Long Range Financial Plan.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p> <p>The funding requests for watermain costs coordinated with roadway, wastewater or stormwater rehabilitation are included within the Integrated Rehabilitation Programs.</p> <p>Detailed information and costs associated with specific stand alone (nonintegrated) components and projects directly follow this program summary page.</p>			2021 Request	14,750	Projected Yearend Unspent Bal.		0
			Revenues	0	Debt		
			Tax Supported/Dedicated	0	Tax Supported/Dedicated Debt		0
			Rate Supported	9,750	Rate Supported Debt		5,000
			Develop. Charges	0	Develop. Charges Debt		0
			Gas Tax	0	Gas Tax Debt		0
			Forecast	2021	2022	2023	2024
			Authority	14,750	17,600	36,751	27,590
			Spending Plan	7,380	13,230	26,600	28,350
			FTE's	0	0	0	0
Operating Impact	0	0	0	0			

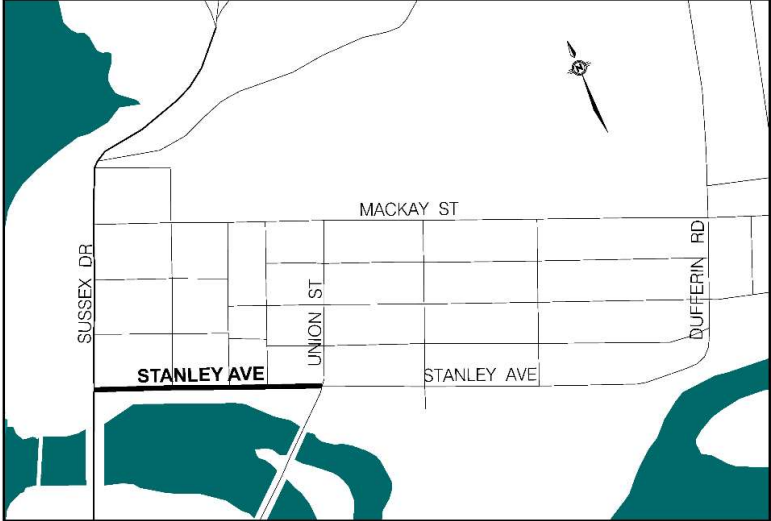
City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Project(s) within a Program Information		Location/Description	\$000's
908613 Bank St (Rideau Rd-Mitch Owens)		Class of Estimate: B) Design	900
Category: Renewal of City Assets	Ward: 20	Year of Completion: 2021	
<p>The watermain in Bank St from Rideau Rd to Mitch Owens Rd requires rehabilitation due to its condition and to improve reliability of the distribution system. The authority request will provide for additional construction funding and other associated project costs.</p> <p>New year of completion is 2023.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
In Thousands (\$000)

Project(s) within a Program Information			\$000's
908614 LRT2 W1 Hwy 174 - Shefford Rd		Class of Estimate: C) Planning	350
Category: Renewal of City Assets	Ward: 11	Year of Completion: 2021	
<p>This project relates to the watermain crossing of Highway 174 at Shefford Rd, part of which will be built in conjunction with LRT2 works.</p> <p>The new year of completion is 2024.</p>			
910117 2021 Water System Improvements		Class of Estimate: C) Planning	7,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>To meet long range watermain replacement goals, this program provides funding for watermain replacement in areas where there are no sewer or roadway needs. Funding is also used to implement measures to reduce system vulnerability to critical service areas. Measures could include, but are not limited to, watermains, valves, pumping stations, pumps, storage, backup power, other infrastructure and appurtenances, as required, to improve system reliability. The funding request may include design, construction and other related project costs.</p>			
910118 2021 WM Transmission/Distribution Rehab		Class of Estimate: C) Planning	5,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>The City of Ottawa's water distribution system consists of over 3,000 km of watermains, of which approximately 270 km are classified as transmission watermains. This program provides funding for improvements identified by the transmission watermain condition assessment program: rehabilitation or replacement of defective pipes or appurtenances as a result of corrosive attack, structural deficiencies, and erosion or soil movement. In addition, this program will allow for construction of various watermain links and appurtenances in the transmission and distribution systems, as well as repairs and cathodic protection to improve system flexibility and reliability.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
 In Thousands (\$000)

Project(s) within a Program Information		Location/Description	\$000's
910119 Stanley Ave. (Sussex - Union St)		Class of Estimate: C) Planning	500
Category: Renewal of City Assets	Ward: 13	Year of Completion: 2023	
<p>The watermain in Stanley Ave from Sussex Dr to Union St requires rehabilitation due to its age and the presence of lead services. The authority request will allow the initiation of the design as well as other associated project costs.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
In Thousands (\$000)

Project Information			Financial Details		
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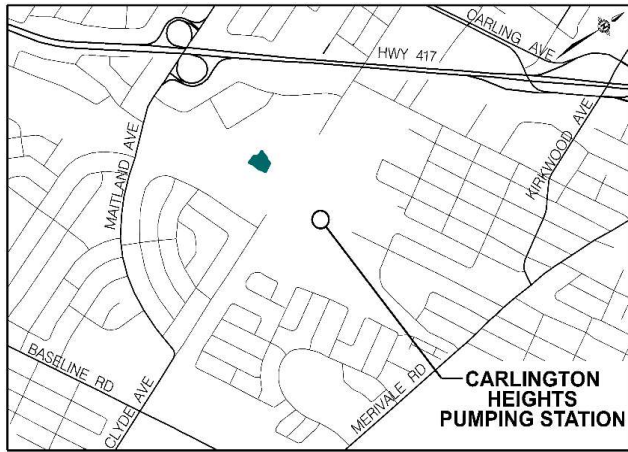
900631 Carlington Heights Pumping Stn Expansion			Class of Estimate: B) Design		
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Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: 16	Year of Completion: 2023		
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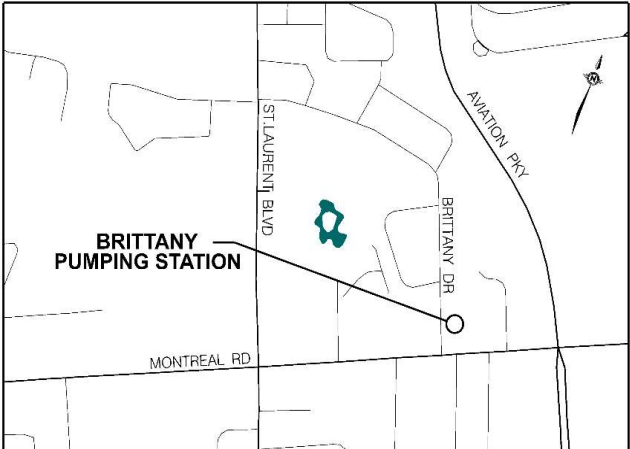
This project involves the construction of a new drinking water pump station at the site of the existing Carlington Heights Pumping Station. The scope of work also includes decommissioning of the existing station, and various on-site watermains. This request is needed to supplement the existing authority for construction of the project, based on the most current estimate. The project is projected to be tendered in 2021.

The contribution to public art is \$26K.

2021 Request	2,244	Projected Yearend Unspent Bal. 12,156		
Revenues	0	Debt		
Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0	
Rate Supported	1,616	Rate Supported Debt	0	
Develop. Charges	628	Develop. Charges Debt	0	
Gas Tax	0	Gas Tax Debt	0	
Forecast	2021	2022	2023	2024
Authority	2,244	0	0	0
Spending Plan	7,200	3,600	3,600	0
FTE's	0	0	0	0
Operating Impact	0	0	290	0



City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
In Thousands (\$000)

Project Information			Financial Details				
903295 Brittany Pumping Station			Class of Estimate: B) Design				
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: 13	Year of Completion: 2021			
<p>Replacement of the Brittany Drive Water Pump Station is needed to support new growth (Canada Lands former CFB Rockcliffe lands redevelopment) and improve the reliability of water supply to the Montreal Road pressure zone. Existing budget authority for construction was returned to source to support COVID-19 related budgeting adjustments in 2020. However, the existing station is in very poor condition and needs to be replaced as soon as possible. The 2021 budget request is for construction which is expected to start in Q3 2021.</p> <p>The contribution to public art is \$56K.</p> <p>New year of completion is 2023.</p>			2021 Request		Projected Yearend Unspent Bal.		
			8,160		7,142		
			Revenues	0	Debt		
			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0	
			Rate Supported	1,733	Rate Supported Debt	3,000	
			Develop. Charges	1,594	Develop. Charges Debt	1,833	
			Gas Tax	0	Gas Tax Debt	0	
			Forecast	2021	2022	2023	2024
			Authority	8,160	0	0	0
			Spending Plan	7,651	3,825	3,825	0
FTE's	0	0	0	0			
Operating Impact	0	0	160	0			
							

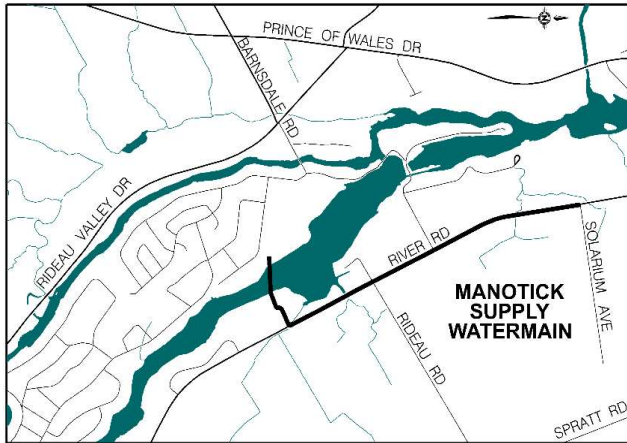
City of Ottawa
2021 Draft Capital Budget
Service Area: Drinking Water Services
In Thousands (\$000)

Project Information			Financial Details		
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905992 Manotick Supply Watermain			Class of Estimate: A) Pre-Tender		
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Dept: Planning, Infrastructure & Economic Development Department	Category: Growth	Ward 21	Year of Completion: 2023		
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<p>This project involves a new watermain from Riverside South to the south end of the Village of Manotick. It is needed to support growth and improve the reliability of supply to Manotick. This budget request is to fund 2021 construction of the first phase of the project, which will also provide some improvements to the reliability of water supply to urban areas south of the Jock River.</p> <p>The public art budget for this project is \$107,000.</p>	2021 Request		1,887		Projected Yearend Unspent Bal.	10,359
	Revenues	0		Debt		
	Tax Supported/ Dedicated	0		Tax Supported/ Dedicated Debt	0	
	Rate Supported	547		Rate Supported Debt	0	
	Develop. Charges	1,340		Develop. Charges Debt	0	
	Gas Tax	0		Gas Tax Debt	0	
	Forecast	2021	2022	2023	2024	
	Authority	1,887	0	0	0	
	Spending Plan	6,123	3,061	3,061	0	
	FTE's	0	0	0	0	
Operating Impact	180	0	0	0		



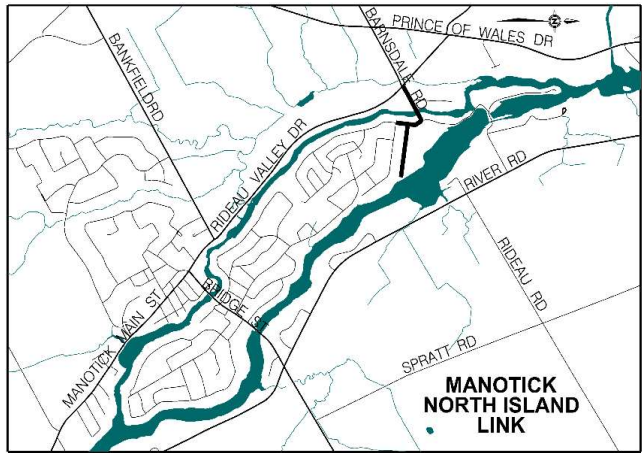
City of Ottawa
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Service Area: Drinking Water Services
In Thousands (\$000)

Project Information			Financial Details		
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907456 Manotick North Island Link			Class of Estimate: A) Pre-Tender		
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Dept: Planning, Infrastructure & Economic Development Department	Category: Growth	Ward 21	Year of Completion: 2021		
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<p>This project provides a key reliability link for water supply in the South Urban Community. The new feedermain will connect the proposed Manotick Supply Watermain with the existing feedermain on Rideau Valley Road. This budget request is to fund 2021 construction.</p> <p>The public art budget for this project is \$54,000.</p> <p>New year of completion is 2023.</p>	2021 Request		1,887		Projected Yearend Unspent Bal.	6,820
	Revenues	0		Debt		
	Tax Supported/Dedicated	0		Tax Supported/Dedicated Debt	0	
	Rate Supported	189		Rate Supported Debt	0	
	Develop. Charges	1,698		Develop. Charges Debt	0	
	Gas Tax	0		Gas Tax Debt	0	
	Forecast	2021	2022	2023	2024	
	Authority	1,887	0	0	0	
	Spending Plan	4,353	2,177	2,177	0	
	FTE's	0	0	0	0	
Operating Impact	80	0	0	0		



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Project Information			Financial Details					
910050 Manotick Supply Watermain - Phase 2			Class of Estimate: C) Planning					
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward 20, 21, 22	Year of Completion: 2023				
<p>This project provides an extension to the Phase 1 project from the north end of Long Island to the southern part of the village. The project will improve the reliability of water supply and provide additional capacity to the village. The watermain also allows the opportunity for local improvements for village residents that currently rely on private services.</p> <p>The public art budget for this project is \$98,900.</p>			2021 Request		1,020	Projected Yearend Unspent Bal.	0	
			Revenues		0	Debt		
			Tax Supported/Dedicated		0	Tax Supported/Dedicated Debt		0
			Rate Supported		490	Rate Supported Debt		0
			Develop. Charges		530	Develop. Charges Debt		0
			Gas Tax		0	Gas Tax Debt		0
			Forecast		2021	2022	2023	2024
			Authority		1,020	17,264	0	0
			Spending Plan		510	12,391	5,383	0
			FTE's		0	0	0	0
Operating Impact		0	0	310	0			

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Project Information			Financial Details							
910051	2021 Off Site Reliability Links		Class of Estimate:		D) Conceptual					
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW		Year of Completion: 2023					
<p>This budget request is to cover minor off-site watermain connections needed to improve the reliability of water supply to development areas.</p>			2021 Request		164		Projected Yearend Unspent Bal.	0		
			Revenues		0		Debt			
			Tax Supported/Dedicated		0		Tax Supported/Dedicated Debt		0	
			Rate Supported		16		Rate Supported Debt		0	
			Develop. Charges		148		Develop. Charges Debt		0	
			Gas Tax		0		Gas Tax Debt		0	
			Forecast		2021	2022	2023	2024		
			Authority		164	167	171	174		
			Spending Plan		164	167	171	174		
			FTE's		0	0	0	0		
			Operating Impact		0	0	0	0		
			910052	2021 Groundwater Studies		Class of Estimate:		Not Applicable		
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW		Year of Completion: 2023					
<p>These funds will be used to further the City's ongoing groundwater characterization efforts. The work to be undertaken will be in line with the City's groundwater management strategy direction set by City Council in May, 2003. The approach includes the preparation of a number of studies with the following goals: to address known problems; to characterize the general resource in order to better support rural growth; to assess, in villages and privately serviced enclaves within the Urban Area, existing well water supplies, private wastewater disposal, public health and environmental matters; and to assess the need for decentralized services.</p>			2021 Request		389		Projected Yearend Unspent Bal.			
			Revenues		0		Debt			
			Tax Supported/Dedicated		0		Tax Supported/Dedicated Debt		0	
			Rate Supported		346		Rate Supported Debt		0	
			Develop. Charges		43		Develop. Charges Debt		0	
			Gas Tax		0		Gas Tax Debt		0	
			Forecast		2021	2022	2023	2024		
			Authority		389	165	169	172		
			Spending Plan		389	165	169	172		
			FTE's		0	0	0	0		
			Operating Impact		0	0	0	0		

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Project Information			Financial Details						
910053	2021 Rural Servicing Strategy		Class of Estimate:		Not Applicable				
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW		Year of Completion: 2023				
<p>The Rural Servicing Strategy is made up of a coordinated set of initiatives geared to promoting safe and sustainable water supply and wastewater disposal for rural use. It utilizes the findings of various groundwater studies, as well as other data, and provides technical direction on private and municipal servicing within the rural planning context. The rural area has a variety of servicing arrangements, and these are regularly reviewed for sustainability and future growth. In order to achieve the goals of the Rural Servicing Strategy, policies and guidelines may also require periodic review.</p>			2021 Request		216		Projected Yearend Unspent Bal.	0	
			Revenues		0		Debt		
			Tax Supported/ Dedicated		0		Tax Supported/ Dedicated Debt		0
			Rate Supported		108		Rate Supported Debt		0
			Develop. Charges		108		Develop. Charges Debt		0
			Gas Tax		0		Gas Tax Debt		0
			Forecast		2021	2022	2023	2024	
			Authority		216	220	225	229	
			Spending Plan		216	220	225	229	
			FTE's		0	0	0	0	
Operating Impact		0	0	0	0				
910054	2021 Water & Wastewater Studies		Class of Estimate:		Not Applicable				
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW		Year of Completion: 2023				
<p>This capital account is intended to support various studies related to the planning of growth-driven water and wastewater infrastructure and related aspects of public infrastructure servicing. This includes technical studies and Class Environmental assessments.</p>			2021 Request		270		Projected Yearend Unspent Bal.	0	
			Revenues		0		Debt		
			Tax Supported/ Dedicated		0		Tax Supported/ Dedicated Debt		0
			Rate Supported		54		Rate Supported Debt		0
			Develop. Charges		216		Develop. Charges Debt		0
			Gas Tax		0		Gas Tax Debt		0
			Forecast		2021	2022	2023	2024	
			Authority		270	276	281	287	
			Spending Plan		270	276	281	287	
			FTE's		0	0	0	0	
Operating Impact		0	0	0	0				

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Program Information			Financial Details				
Water Distribution Systems			Class of Estimate: D) Conceptual				
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>The City of Ottawa operates a water distribution system consisting of approximately 3,193 km of piping, 21,493 fire hydrants, over 49,768 valves and 240,752 water service meters. The value of this buried infrastructure is over \$4.0 billion. This program is aimed at addressing annual preventive and corrective maintenance for the City's existing water distribution network in order to provide reliable operation of the network components, to ensure drinking water quality is maintained throughout the water distribution network and to preserve and extend the life of the infrastructure to prevent failures requiring heavier and costlier reconstruction strategies.</p> <p>The program is focused on:</p> <ul style="list-style-type: none"> - Proactive lifecycle renewal and rehabilitation projects; - Level of service initiatives; - System improvements and optimization; - Asset lifecycle upgrades and rehabilitation to support growth demand. <p>Some of the key infrastructure renewal projects for 2021 are:</p> <ul style="list-style-type: none"> - Large Transmission Main condition assessment and risk mitigation projects; - Preventative maintenance and water distribution system improvements; - Lead Service Replacement program. 			2021 Request	3,450	Projected Yearend Unspent Bal.		0
			Revenues	250	Debt		
			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt		0
			Rate Supported	3,200	Rate Supported Debt		0
			Develop. Charges	0	Develop. Charges Debt		0
			Gas Tax	0	Gas Tax Debt		0
			Forecast	2021	2022	2023	2024
			Authority	3,450	4,950	4,950	4,950
			Spending Plan	3,450	4,950		4,950
			FTE's	0	0	0	0
Operating Impact	0	0	0	0			

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Project(s) within a Program Information			\$000's
910137 Protective Lead Service Replacement Program 2021		Class of Estimate: D) Conceptual	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>The City produces and distributes drinking water that is lead-free. However, lead can enter drinking water through exposure to existing lead service lines. As these services exist within public right-of-way and private property, the responsibility for these services is a shared City/property owner responsibility. The City replaces lead services within the public right-of-way as part of the Integrated Watermain Rehabilitation Program. This program provides the funds to cover the costs of the City's portion of Lead Service Replacement (outside of the integrated program). Customers are responsible for the cost of replacement on private property. The program offers residents deferred payment options on the tax bill and a rebate option for customers with only a private lead service. Production and distribution costs for public information bulletins are provided by this account.</p>			
910139 Cathodic Protection 2021		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>The water distribution system consists of over 3,193 km of watermains. The Cathodic Protection program is a proactive program to extend the life of metallic watermains that are showing signs of premature corrosion failure. Anodes are installed onto the pipe network to prolong its useful life by acting as a sacrificial material, thereby protecting watermains from corrosion. Key elements include condition assessment, installation, monitoring and testing of the anodes to measure their effectiveness and predict life cycle expectations.</p>			
910140 Ops Condition Assess-Critical Sys Links - 2021		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>This multi-year project will provide the funding to conduct proactive condition assessment investigations of the water distribution system's key transmission mains. These are the backbone of the water system and are critical to the continued reliability of service to large portions of the urban population. As the condition assessment technology can only occur under certain conditions, this work will require a number of years to complete. This project is one of the three key capital projects which form the transmission main condition assessment program that focus on condition assessment, risk mitigation and transmission main repair and renewals. This program will improve drinking water service reliability.</p>			

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Service Area: Drinking Water Services
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Program Information		Financial Details					
Water Pumping Stations		Class of Estimate: D) Conceptual					
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>The purpose of this program is to establish a funding envelope for the retrofit, rehabilitation or replacement of the pumping station assets as they age.</p> <p>Typical projects include: medium voltage electrical assessments, electrical upgrades, various condition assessments, standby power generator retrofits, flow meter replacements, and specialized Arc flash hazard studies.</p>		2021 Request	4,290	Projected Yearend Unspent Bal.		0	
		Revenues	0	Debt			
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
		Rate Supported	4,290	Rate Supported Debt			0
		Develop. Charges	0	Develop. Charges Debt			0
		Gas Tax	0	Gas Tax Debt			0
		Forecast	2021	2022	2023	2024	
		Authority	4,290	2,150	4,150	2,150	
		Spending Plan	4,290	2,150	4,150	2,150	
		FTE's	0	0	0	0	
Operating Impact	0	0	0	0			

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 In Thousands (\$000)

Project(s) within a Program Information			\$000's
910135 Water Pumping Station Facility Rehab2021		Class of Estimate: C) Planning	4,290
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>To establish a funding envelope for retrofit, rehabilitation or replacement of the infrastructure as it ages. Projects for 2021 include: condition assessment activities, Arc flash hazard review, reliability improvements and chemical system modifications.</p>			

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Program Information		Financial Details				
Water Storage Tanks & Reservoirs		Class of Estimate: D) Conceptual				
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various			
<p>The purpose of this program is to establish a funding envelope required to sustain the continuous and reliable operation of the elevated tank and reservoir facilities which are critical in distributing drinking water to the City's customers.</p> <p>Typical projects include: equipment asset which must be retrofitted, rehabilitated or replaced due to age or condition failure; structural repairs at reservoirs; Health & Safety retrofits and specialized inspections of elevated tanks.</p>		2021 Request	530	Projected Yearend Unspent Bal.		0
		Revenues	0	Debt		
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt		0
		Rate Supported	530	Rate Supported Debt		0
		Develop. Charges	0	Develop. Charges Debt		0
		Gas Tax	0	Gas Tax Debt		0
		Forecast	2021	2022	2023	2024
		Authority	530	1,350	1,350	1,350
		Spending Plan	530	1,350	1,350	1,350
		FTE's	0	0	0	0
		Operating Impact	0	0	0	0

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Service Area: Drinking Water Services
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Project(s) within a Program Information			\$000's
910133 Water Storage Tanks & Reservoir 2021		Class of Estimate: C) Planning	530
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>The purpose of this project is to establish a funding envelope required to sustain the continuous and reliable operation of the elevated tank and reservoir facilities which are critical in distributing drinking water to the City's customers.</p> <p>Typical projects include: equipment asset which must be retrofitted, rehabilitated or replaced due to age or condition failure; structural repairs at reservoirs; Health & Safety retrofits and specialized inspections of elevated tanks.</p>			

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Program Information			Financial Details									
Water Systems General-Renewal			Class of Estimate: D) Conceptual									
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various									
<p>This program is aimed at addressing matters that are common to Drinking Water Services, including Water Distribution, Water Production, Water Quality Assurance. These programs cover operational issues, legislative requirements, system planning, and other strategic directions such as environmental programs.</p>			2021 Request		75		Projected Yearend Unspent Bal.		0			
			Revenues		0		Debt					
			Tax Supported/Dedicated		0		Tax Supported/Dedicated Debt		0			
			Rate Supported		75		Rate Supported Debt		0			
			Develop. Charges		0		Develop. Charges Debt		0			
			Gas Tax		0		Gas Tax Debt		0			
			Forecast		2021		2022		2023		2024	
			Authority		75		490		460		200	
			Spending Plan		75		490		460		200	
			FTE's		0		0		0		0	
Operating Impact		0		0		0		0				

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Project(s) within a Program Information			\$000's
910141 New Vehicles Drinking Water 2021		Class of Estimate: A) Pre-Tender	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2022	
<p>The Water Production East group has a need for a one and ¼ ton Transit van to support the remote maintenance services for wastewater collection remote sites.</p>			

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Service Area: Drinking Water Services
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Program Information		Financial Details				
Water Treatment - Renewal		Class of Estimate: D) Conceptual				
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various			
<p>The program is aimed at addressing annual requirements for the City's two Water Purification Plants that have an estimated replacement value of \$550 million. In order to provide continued uninterrupted safe supply of potable water, to preserve and extend the life of the infrastructure, and to meet provincial and federal regulation requirements it is necessary to invest in the ongoing rehabilitation and renewal of these assets.</p>		2021 Request	12,661	Projected Yearend Unspent Bal.	0	
		Revenues	0	Debt		
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0	
		Rate Supported	12,661	Rate Supported Debt	0	
		Develop. Charges	0	Develop. Charges Debt	0	
		Gas Tax	0	Gas Tax Debt	0	
		Forecast	2021	2022	2023	2024
		Authority	12,661	28,542	16,203	17,209
		Spending Plan	3,944	15,833	22,694	22,400
		FTE's	0	0	0	0
Operating Impact	0	0	0	0		

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Service Area: Drinking Water Services
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Project(s) within a Program Information			\$000's
908633 Enhanced Corrosion Control		Class of Estimate: C) Planning	3,118
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2020	
<p>This project involves the design and construction of new phosphate treatment processes at both water treatment plants in order to further enhance corrosion control of distribution system piping. This is in response to the revised Health Canada guideline for lead in drinking water, and the anticipated adoption of a 5 ppb standard in Ontario. The new treatment strategy is required to comply with the lower standard.</p>			
910136 Water Treatment Rehab 2021		Class of Estimate: C) Planning	6,025
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2027	
<p>The replacement value of the City's two (2) water facilities is estimated to be in excess of \$550 million. This project addresses equipment upgrades; infrastructure life cycle replacement; and process changes resulting from operational, legislative and health and safety initiatives. Work includes: valve and meter replacements, mechanical and electrical rehabilitation, chemical system control/operational improvements. It also covers the costs related to condition assessment within the water purification plants.</p>			
910138 Water Sys SCADA & Instrument Rehab 2021		Class of Estimate: C) Planning	3,518
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>The Supervisory Control and Data Acquisition (SCADA) system is a computerized system that is used by certified Operators to monitor and control the drinking water treatment system. The Operator monitors all critical components of the treatment process and is able to remotely operate equipment within the purification plants, communal well systems, pump stations, reservoirs and storage tanks. The SCADA system is crucial to the operation of the treatment system for monitoring key parameters required under provincial and federal legislation. Components of the existing SCADA system are nearing the end of their lifecycles. Various components of the system require to be either upgraded or replaced to maintain reliability.</p>			

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Service Area: Integrated Water & Wastewater											
Category	2021 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	18,182	0	0	18,182	0	0	0	0	0	0	0
Growth	0	0	0	0	0	0	0	0	0	0	0
Regulatory	0	0	0	0	0	0	0	0	0	0	0
Service Enhancements	0	0	0	0	0	0	0	0	0	0	0
Total	18,182	0		18,182	0	0	0	0	0	0	0

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2021 Draft Capital Budget
Service Area: Integrated Water & Wastewater
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Program Information		Financial Details					
Integrated Water & Wastewater		Class of Estimate: C) Planning					
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>The Integrated Rate Program includes rehabilitation of more than one asset class (sanitary sewers, storm drainage, and water mains) that are coordinated within a single project. The program is aimed at renewing and replacing the infrastructure assets in order to provide continued service and prevent failures.</p> <p>The program is comprised of:</p> <ul style="list-style-type: none"> • Functional and preliminary designs. • Lifecycle renewal: renewal, rehabilitation and replacements for deterioration. • Coordinated renewal: schedule coordination (escalation or deferral) between asset classes and with other asset classes. • Level of service enhancements: flooding improvements and system optimization. • Upgrades and rehabilitation to support growth and miscellaneous localized repairs. <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p> <p>Detailed information and costs associated with specific components and projects are provided following this program summary.</p>		2021 Request	18,182	Projected Yearend Unspent Bal.		0	
		Revenues	0	Debt			
		Tax Supported/Dedicated	0	Tax Supported/Dedicated Debt			0
		Rate Supported	18,182	Rate Supported Debt			0
		Develop. Charges	0	Develop. Charges Debt			0
		Gas Tax	0	Gas Tax Debt			0
		Forecast	2021	2022	2023	2024	
		Authority	18,182	16,800	13,376		
		Spending Plan	9,090	13,860	15,362	15,770	
		FTE's	0	0	0	0	
Operating Impact	0	0	0	0			

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Service Area: Integrated Water & Wastewater
In Thousands (\$000)

Project(s) within a Program Information			\$000's
908997 LRT2 SS1 Sewer Upgrades (Byron Ave)		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2021	
<p>This project will coordinate the rehabilitation of existing infrastructure within the LRT stage-2 limits. The project includes infrastructure renewal and upgrades on Byron Ave as well as sewer outfall replacement within the LRT stage-2 limits. This funding request provides for all project related costs including design, construction and any associated consultation costs.</p> <p>The new year of completion is 2024.</p>			
909492 LRT2 SS2 Richmond Compl Streets		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: 7	Year of Completion: 2023	
<p>This project will coordinate the rehabilitation of existing infrastructure within the LRT stage-2 limits. In conjunction with the construction of Richmond Rd "complete streets", the sewers in Richmond Rd from New Orchard Ave to Cleary Ave will be replaced due to age and condition. The watermains in Richmond Rd from the Sir John A. MacDonald Pkwy to Redwood Ave will be replaced to accommodate the construction of adjacent infrastructure. Localized, condition driven sewer rehabilitation will be included in Woodroffe Ave from Richmond Rd to Byron Ave. Additional storm sewer rehabilitation is required along the southwest transitway between Baseline Rd and Iris St. This funding request provides for all project related costs including design, construction and any associated consultation costs.</p>			
910078 2021 Sewer Repairs / Improvements		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>A number of locations have been identified to resolve sewer infrastructure and surface flooding problems. Work could entail both trenchless and conventional spot repairs, as well as various hydraulic improvements such as, installing catch basins and re-profiling driveways or road grading. The authority provides for the design, construction and all associated costs for various drainage and sewer improvements.</p>			

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Project(s) within a Program Information			\$000's
910079 2021 Sewer Trenchless Rehab		Class of Estimate: C) Planning	4,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>This project provides for relining of sewers, access structures, and spot repairs at various locations. The work will improve: structural integrity, hydraulic performance, reduce basement flooding, extraneous flows, and improve the overall operation of the system.</p>			
910080 2021 Sewer CCTV Engineering		Class of Estimate: Not Applicable	800
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>This project provides funding to ensure the sustained performance of the City's wastewater and stormwater system in support of the capital renewal program. The funding is primarily focused on the Closed Circuit Television (CCTV) inspection of the City's wastewater and stormwater network. The CCTV program is an important tool that inspects the internal conditions of sewers, monitors the performance of pipes, confirms flow conditions and can identify sewer defects.</p>			

City of Ottawa
2021 Draft Capital Budget
Environment and Climate Protection Committee-Rate
In Thousands (\$000)

Service Area: Stormwater Services											
Category	2021 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	24,848	0	0	17,848	0	0	0	7,000	0	0	7,000
Growth	51	0	0	25	26	0	0	0	0	0	0
Total	25,399	0	0	18,373	26	0	0	7,000	0	0	7,000

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Program Information			Financial Details							
Municipal Drains			Class of Estimate: B) Design							
Dept: Public Works & Environmental Services Department	Category: Regulatory	Ward: Multiple	Year of Completion: Various							
<p>The program is required to address modifications, improvements and construction of Municipal Drains in the City of Ottawa. Under Sections 4 and 78 of the Drainage Act, RSO 1990, the municipality, whose duty it is to maintain, and repair drainage works or any part thereof, may with or without a petition, undertake and complete such drainage works. These drainage systems provide legal outlet for a vast majority of the agricultural and rural lands and roads in the City however the impetus for the majority of projects in this program is from land and road development mainly in the rural and suburban areas and as such the timing of the works hinges on the particular development project, which can span several years. In most cases the entire cost of the drainage works, including engineering and construction costs, is paid by the developer and/or benefiting landowners and in all cases the costs are recovered by the City once the drainage works are completed.</p>			2021 Request		500	Projected Yearend Unspent Bal.		0		
			Revenues		0	Debt				
			Tax Supported/ Dedicated		0	Tax Supported/ Dedicated Debt		0		
			Rate Supported		500	Rate Supported Debt		0		
			Develop. Charges		0	Develop. Charges Debt		0		
			Gas Tax		0	Gas Tax Debt		0		
			Forecast		2021	2022	2023	2024		
			Authority		500	500	500	500		
			Spending Plan		500	500	500	500		
			FTE's		0	0	0	0		
Operating Impact		0	0	0	0					

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
910203	Municipal Drain Improvements - 2021	Class of Estimate: B) Design	500
Category: Regulatory	Ward: 21	Year of Completion: 2023	
<p>The Drainage Act provides landowners with a tool to help resolve drainage concerns. Once a request is received from a landowner the Drainage Act process is initiated. The project costs are initially paid by the City and are subsequently recovered through provincial funding and landowner assessment as determined by the Engineers Report and By-law. Funds are required in order to ensure the City is able to respond to drainage petitions in a timely fashion.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Program Information		Financial Details					
Stormwater Management Facilities		Class of Estimate: C) Planning					
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>Stormwater Management facilities serve to protect homes, business and the road network from flooding and also mitigate erosion and water quality impacts from the growing city. Currently, the most visible infrastructure the City owns, operates and maintains in this category encompasses over 250 pond facilities. While most SWM ponds appear very natural and simple, these are complicated engineered facilities that include significant hard elements such as concrete hydraulic structures, large valves and flow control gates. Other assets the City is required to maintain under this category include 100 underground treatment tanks, and 25 specialty treatment systems (including 2 right-of-way Low Impact Development gardens).</p> <p>In order to ensure these facilities provide flood protection and environmental impact mitigation, as required by the MOECC and other environmental regulations, major repair or rehab. of hydraulic structures and flow regulation equipment is required as well as; removal/disposal of accumulated contaminants (oil and sediments); odor control and rehab. of constructed wetlands. Specialized monitoring activities to optimize facility performance are conducted on specific facilities to assist the City in meeting compliance goals.</p> <p>Currently, as new development has progressed the number of SWM ponds the City is responsible for has been increasing at the rate of 5-10 per year. In addition, in recent years Council has adopted capital plans to install Stormwater Management Retrofits for large areas of the City developed before 1990's (i.e. Pinecrest SW, Eastern SW) and the MECP new draft SWM Guidelines which are pending adoption, will also require more diverse Stormwater Management Infrastructure. As such, the demands on City Operations in this portfolio have been increasing at an unprecedented rate.</p>		2021 Request	6,500	Projected Yearend Unspent Bal.		0	
		Revenues	0	Debt			
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
		Rate Supported	4,500	Rate Supported Debt			2,000
		Develop. Charges	0	Develop. Charges Debt			0
		Gas Tax	0	Gas Tax Debt			0
		Forecast	2021	2022	2023	2024	
		Authority	6,500	4,225	4,260	5,500	
		Spending Plan	4,000	4,225	4,260	5,500	
		FTE's	0	0	0	0	
Operating Impact	0	0	0	0			

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
In Thousands (\$000)

Project(s) within a Program Information			\$000's
910204	Stormwater Mgmt: Rehab&Enviro Compliance 2021	Class of Estimate: C) Planning	3,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>The City owns, operates and maintains over 350 stormwater facilities (including underground treatment tanks) for the management of stormwater runoff. This number is increasing at the rate of 5-10 per year. The facilities provide flow attenuation and water quality treatment, ensuring that stream corridors and water quality are not degraded. In order to ensure combined compliance with environmental regulations and MECP. of A. discharge criteria, these facilities require maintenance activities such as the removal and disposal of accumulated sediment, along with major repair or rehabilitation of structures and flow regulation equipment. Specialized monitoring activities to optimize facility performance are conducted on specific facilities to assist the City in meeting the compliance criteria.</p>			
910205	Linear Storm System Improvements 2021	Class of Estimate: C) Planning	3,000
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>To fund work completed by wastewater operations staff to rehabilitate stormwater assets. This could include work on any of the City's 102,000 catch basins, 2920 km of piping, 59,300 manholes, 2030 outfalls or 12 stormwater pumping stations.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Program Information		Financial Details																																																																				
Stormwater Collection Rehabilitation		Class of Estimate: C) Planning																																																																				
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various																																																																			
<p>The Stormwater Collection Rehabilitation Program addresses annual rehabilitation and operational capital requirements for the City's stormwater collection system in order to preserve and extend the life of the infrastructure, reduce flooding occurrences, and prevent failures requiring more extensive reconstruction.</p> <p>The program is focused on:</p> <ul style="list-style-type: none"> • Flood mitigation measures. • Proactive lifecycle renewal and rehabilitation projects. • Level of service initiatives. • System improvements and optimization. • Miscellaneous upgrades and rehabilitation to support growth demand. <p>The funding requests for stormwater costs coordinated with roadway, wastewater or water rehabilitation are included within the Integrated Rehabilitation Programs. Program funding requirements to support renewal needs are defined in the Long Range Financial Plan.</p> <p>Detailed information and costs associated with specific stand-alone (non-integrated) components and projects are provided following this program summary page.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p>		<table border="1"> <thead> <tr> <th>2021 Request</th> <th>3,500</th> <th colspan="3">Projected Yearend Unspent Bal.</th> <th>0</th> </tr> </thead> <tbody> <tr> <td>Revenues</td> <td>0</td> <td colspan="3">Debt</td> <td></td> </tr> <tr> <td>Tax Supported/ Dedicated</td> <td>0</td> <td>Tax Supported/ Dedicated Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <td>Rate Supported</td> <td>3,500</td> <td>Rate Supported Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <td>Develop. Charges</td> <td>0</td> <td>Develop. Charges Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <td>Gas Tax</td> <td>0</td> <td>Gas Tax Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <th>Forecast</th> <th>2021</th> <th>2022</th> <th>2023</th> <th>2024</th> <td></td> </tr> <tr> <td>Authority</td> <td>3,500</td> <td>5,640</td> <td>2,000</td> <td>18,893</td> <td></td> </tr> <tr> <td>Spending Plan</td> <td>1,750</td> <td>3,870</td> <td>3,390</td> <td>8,010</td> <td></td> </tr> <tr> <td>FTE's</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>Operating Impact</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> </tr> </tbody> </table>			2021 Request	3,500	Projected Yearend Unspent Bal.			0	Revenues	0	Debt				Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0	Rate Supported	3,500	Rate Supported Debt			0	Develop. Charges	0	Develop. Charges Debt			0	Gas Tax	0	Gas Tax Debt			0	Forecast	2021	2022	2023	2024		Authority	3,500	5,640	2,000	18,893		Spending Plan	1,750	3,870	3,390	8,010		FTE's	0	0	0	0		Operating Impact	0	0	0	0	
2021 Request	3,500	Projected Yearend Unspent Bal.			0																																																																	
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FTE's	0	0	0	0																																																																		
Operating Impact	0	0	0	0																																																																		

City of Ottawa
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Service Area: Stormwater Services
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
910086	2021 Storm and Surface Water Rehabilitation	Class of Estimate: C) Planning	3,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>This program provides for the rehabilitation of storm and surface water features, including creeks, rivers, ravines, slope stabilization and flood mitigation measures at various locations. The funding is for all project related costs which may include investigation, design, construction and property acquisition.</p>			

City of Ottawa
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Program Information		Financial Details					
Structures-Stormwater		Class of Estimate: C) Planning					
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various				
<p>The Structures Stormwater Program provides for condition assessments, preventative maintenance, rehabilitation and reconstruction works undertaken on the City's existing drainage culverts. Program funding requirements to support renewal needs are defined in the Long Range Financial Plan.</p> <p>Detailed information and costs associated with specific components and projects directly follow this program summary page.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p>		2021 Request	14,848	Projected Yearend Unspent Bal.		0	
		Revenues	0	Debt			
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
		Rate Supported	9,848	Rate Supported Debt			5,000
		Develop. Charges	0	Develop. Charges Debt			0
		Gas Tax	0	Gas Tax Debt			0
		Forecast	2021	2022	2023	2024	
		Authority	14,848	15,065	11,698	9,748	
		Spending Plan	10,990	10,640	11,128	11,395	
		FTE's	0	0	0	0	
Operating Impact	0	0	0	0			

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Service Area: Stormwater Services
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Project Information		Location/Description	\$000's
909017	LRT2 C1 Hwy 174 Culverts	Class of Estimate: C) Planning	2,010
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2021	
<p>This program provides authority for replacing culverts on Highway 174, as part of LRT2 works.</p> <p>New year of completion is 2024.</p>			
	LRT2 Bundling - Drainage Culverts		
1	Hwy 174 Culvert 0.40 km E Jeanne D'Arc Blvd	220660	
1	Hwy174 IC 105 RAMP 53 Culvert	A224900	
1	Hwy174 IC 105 RAMP 51 Culvert	A224902	
1	Jeanne D'arc Blvd Culvert	A224908	
1	Orleans Blvd Culvert	A224940	
1	Hwy 174 Culvert	A224950	
1	Hwy 174 Culvert	A224960	

City of Ottawa
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Project Information		Location/Description	\$000's
909709	2020 Drainage Culverts - CW	Class of Estimate: B) Design	9,120
Category: Renewal of City Assets Ward: CW		Year of Completion: 2022	
<p>The City has a significant inventory of drainage culverts ranging from small diameter roadway culverts (typically non-urbanized ditch drainage under roadways and intersections) to larger span drainage structures. This project is for construction work (year 2 funding). Design is underway in 2020.</p>			
Ward	Project	Location	
21	Phelan Rd Culvert on McIntyre Scobie Middle	0.80 km W Rideau Valley Dr N [CR13] - 878490	
5	Thomas Argue Rd Culvert - 540210	0.65 km S of Donald B Munro	
5	Upper Dwyer Hill Rd Culvert - 548450	1.70 km N of Vaughan Side Rd	
9	McClellan Rd Culvert - 118230-1/2	0.50 km W of Greenbank Rd	
19	Russland Rd Patenaude MD Culvert - 898030	1.47 km W of Garlandside Rd	
20	Boundary Rd Culvert on Pana Rd MD - 888790	3.45 km N of Victoria Rd [CR6]	
20	Gregoire Rd Culvert - 888940	0.50 km south of Victoria Rd	
5	Old Second Line Rd Culvert - 640680	0.34 km S of March Rd	
5	Old Second Line Rd Culvert - 640670	0.36 km S of March Rd	
20	Parkway Rd Culvert - 880420	1.00 km E of Stagecoach Rd [CR25]	
20	Gregoire Rd Culvert on Allan-Arcand MD -	0.58 km south of Castor Rd	
19	Kinsella Dr Culvert - 890170	0.50 km S of Old Montreal Rd [CR 34]	
19	Regimbald Rd Culvert - 890410	1.45 km W of Dunning Rd	
5	Richardson Side Rd Culvert - 540370	0.90 km W of Carp Rd	
19	Lafleur Rd Upper Ubald Tasse MD Culvert -	0.78km N of Colonial Rd	
5	Barlow Cres Culvert - 330620	0.28 km N of Heather St	
5	Sierra Woods Dr Twin Culvert - 540950	0.35 km east of Bearhill Rd	
20	Queenscourt Dr Culvert - 880150	0.30 km north of Gough	
20	Parkway Rd Culvert on Fine MD - 880470	0.74 km E of Yorks Corners Rd	
20	William Lindsay Grove Culvert - L221990	0.01 km north of Mitch Owens Rd	
19	Devine Rd Culvert - L892100	0.46 km east of Frank Kenny Dr	
19	Trim Rd Culvert - L891280	0.42 km south of Delson Dr	
10	Lester Rd Culvert - A222703	0.09 km west of Albion Rd	
22	Ryeburn Dr Culvert - L222879	0.01 km west of River Rd	

City of Ottawa
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Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
Category:			
Ward:		Year of Completion:	
2020 Drainage Culvert CW - Continued			
Ward	Project	Location	
19	Devine Rd Culvert - L892110	0.12 km west of Dunning Rd	
19	Kevin Cres Culvert - L895164	0.01 km north of Old Montreal Rd	
20	River Rd Culvert - A881360	0.77 km south of Kilby Lane	
19	Meadow Lane Rd Culvert - L893429	0.01 km east of Meadow Lane Rd	
20	Marco St Culvert - L888898	0.01 km west of Bank St	
20	Scrivens Dr Culvert - L885660	0.01 km west of Bank St	
10	Park Lane Culvert - L224030	0.01 km west of Conroy Ave	
20	Cartwright Rd Culvert - A882982	0.05 km east of Victoria St	
19	Devine Rd Culvert on Chartrand Shaw MD -	0.13 km west of Buckland Rd	
20	Tomkins Farm Cres Culvert on Dancy Also	0.01 km south of Emerald Links Dr - L888830	
19	Cox Country Rd Culvert on Penning MD -	0.46 km south of Wilhaven Dr	
10	Swansea Cres Culvert - L050103	0.3 km north of Stevenage Dr	
20	Gregoire Rd Culvert - A883150	0.41 km north of Springhill Rd	
20	Boundary Rd Culvert on Pana MD - A883210	0.82 km south of Pana Rd	
21	Moodie Dr Culvert - A111750	0.55 km north of Fallowfield Rd	
21	Franktown Rd Culvert - A752180	0.23 km west of Conley Rd	
5	Upper Dwyer Hill Rd Culvert - A541130	0.38 km south of Old Almonte Rd	
7	Rifle Rd Culvert - L115450	0.01 km south of Carling Ave	
5	John Aselford Drwy Culvert - L646790	0.75 km west of Marchurst Rd	
5	Deewood Dr Culvert - L543020	0.01 km south of Panmure Rd	
5	Ridgetop Rd Culvert - L335970	1.17 km north of Dunhaven Dr	
9	Cedarview Rd Culvert - A111950	1.02 km north of West Hunt Club Rd	
21	Green's Rd Culvert - L753450	0.01 km south of Franktown Rd	
21	Dwyer Hill Rd Culvert - A861290	1.33 km north of Flood Rd	

City of Ottawa
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Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
Category:			
Ward:		Year of Completion:	
2020 Drainage Culvert CW - Continued			
Ward	Project	Location	
5	Jacob's Gt Culvert - L543185	0.01 km south of March Rd	
21	Second Line Rd S Culvert - L873230	0.01 km east of Prince of Wales Dr	
3	Greenbank Rd Culvert - L113245	0.15 km south of Jockvale Rd	
5	Stoneridge Rd Culvert - L339670	0.01 km north of Thomas A. Dolan Pkwy	
5	Stoneridge Rd Culvert - L339660	0.01 km north of Thomas A. Dolan Pkwy	
5	Kedey St Culvert - L433775	0.01 km north of McHugo St	
8	David Dr Culvert - L116100	0.01 km west of Bayne Ave	
5	Thomas Argue Rd Culvert - L545960	0.02 km north of Carp View Rd	
21	Roger Stevens Dr Culvert - A862980	3.51 km west of Malakoff Rd	
21	Roger Stevens Dr Culvert - A862580	0.22 km east of McKenna Rd	
3	Cambrian Rd Culvert - L112310	0.01 km east of Borrisokane Rd	
21	Third Line Rd S Culvert - L871550	0.58 km north of Dilworth Rd	
5	Carp View Rd Culvert - L543840	0.01 km west of Thomas Argue Ramp	
5	Thomas Argue Rd Culvert - L545955	0.01 km north of Carp View Rd	
21	Fallowfield Rd Culvert - A112190	0.52 km west of Moodie Dr	
21	Donnelly Dr Culvert - A862480	0.01 km east of Malakoff Rd	

City of Ottawa
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Project Information		Location/Description	\$000's
910081	2021 Drainage Culverts - CW	Class of Estimate: C) Planning	2,382
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>The City has a significant inventory of drainage culverts ranging from small diameter roadway culverts (typically non-urbanized ditch drainage under roadways and intersections) to larger span drainage structures. This project is for design work (year 1 funding).</p>			
Ward	Project	Location	
19	Canaan Rd Culvert on Dejadins-Morris MD -	0.10 km N of Colonial Rd [CR28]	
3	Fallowfield Rd Culvert - 110480	1.10 km E of Moodie Dr	
5	Richardson Side Rd Culvert - 540380	0.20 km W of Carp Rd	
5	Loggers Way Culvert - 438120	0.10 km north of Kinburn Side Rd	
21	Third Line Rd North on Mud Creek (Scobie Br)	0.90 km S of Brophy Dr - 878410	
20	Squire Rd Twin Culvert - 880175-1/2	0.50 km W of Dozois Rd	
20	Yorks Corners Rd Culvert - 880200	0.22km N of Castor Rd [CR4]	
21	Jock Trail Rd Culvert - 758340-1/2	0.30 km W of Green's Rd	
2	Renaud Rd Culvert - 228180	1.80 km W of Navan Rd	
19	Russell Rd Culvert - 228340	0.95 km E of Leitrim Rd	
5	Dunrobin Rd Culvert - 648920	2.10 km N of March Rd	
10	Russell Rd Culvert - 228620	3.30 km E of Walkley Rd	
5	Donald B Munro Dr Culvert - 548500	8.89 km N of Carp Rd	
7	Corkstown Rd Culvert - 118930	3.45 km E of March Rd	
2	Navan Rd Culvert - 228090	0.40 km E of Innes Rd Bypass	
5	John Shaw Rd Culvert - 430210	3.3 km N of Thomas Dolan Pky	
21	Franktown Rd Culvert - 758380	2.25 km E of Munster Side Rd	
20	Springhill Rd Culvert on George Drew MD -	0.46 km west of Dalmac Rd	
21	Barnsdale Rd Culvert - 110250	0.50 km East of Prince of Wales	
5	Upper Dwyer Hill Rd Culvert - 438501	0.78 km N of Grainger Park Rd	
5	Upper Dwyer Hill Rd Culvert - 438511	0.78 km N of Grainger Park Rd	
5	Upper Dwyer Hill Rd Culvert - 548400	0.72 km S of Hamilton Side Rd	
19	Devine Rd Culvert on Harold Walsh MD -	0.33 km west of Rockdale Rd	
3	O'Keefe Court Culvert on O'Keefe MD - 110320	0.36 km west of Foxtail Ave	

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Service Area: Stormwater Services
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Project Information		Location/Description	\$000's
Category:			
Ward:		Year of Completion:	
2021 Drainage Culvert CW - Continued			
Ward	Project	Location	
19	Dunning Rd on Brady MD - 890810	0.50 km north of Russland Rd	
19	Huismans Rd Culvert on John MacDonald MD	0.30 km E of Frank Kenny Rd - 890580	
21	Munster Rd Culvert - L753070	0.01 km north of Jock Trl	
5	Craig's Side Rd Culvert - L544410	0.55 km east of Farmland Rd	
20	8th Line Rd Culvert - A883020	0.41 km north of Pana Rd	
20	9th Line Rd Culvert - L887545	0.67 km north of Victoria St	
2	Renaud Rd Culvert - L224650	2.02 km east of Anderson Rd	
19	French Hill Rd Culvert - L896590	0.01 km west of Dunning Rd	
20	8th Line Rd Culvert - L887203	0.63 km south of Marvelville Rd	
20	8th Line Rd Culvert - L887215	0.98 km south of Marvelville Rd	
19	Russell Rd Culvert - A224260	0.03 km west of Spring St	
10	Russell Rd Culvert - A222960	0.51 km east of Ramseyville Rd	
20	9th Line Rd Culvert - L887495	0.83 km north of Castor Rd	
10	Russell Rd Culvert - A224020	1.15 km east of Ramseyville Rd	
10	Russell Rd Culvert - A222980	0.81 km east of Ramseyville Rd	
10	Russell Rd Culvert - A224000	0.91 km east of Ramseyville Rd	
10	Russell Rd Culvert - A224030	0.27 km west of Anderson Rd	
10	Ramsayville Rd Culvert - A222920	0.07 km south of Russell Rd (N)	
10	Russell Rd Culvert - A224010	1.04 km east of Ramseyville Rd	
20	Bank St Culvert - A881850	0.08 km south of Snake Island Rd	
1	Jeanne D'Arc Blvd N Culvert - L898566	0.28 km east of Trim Rd	
10	Airport Pkwy Culvert - A221413	0.42 km north of Uplands Dr	
10	Ramsayville Rd Culvert - A222900	0.26 km south of Russell Rd (N)	
20	Loyalist St Culvert on Ferguson Br (line C) MD	0.01 km west of White Spruce St - L882500	
20	Owen St Culvert on Ferguson Br (line C) MD	0.01 km east of White Spruce St - L882528	

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Project Information		Location/Description	\$000's
Category:			
Ward:		Year of Completion:	
2021 Drainage Culverts CW - Continued			
Ward	Project	Location	
20	Owen St Culvert on Ferguson Br (line C) MD	0.01 km east of White Spruce St - L882528	
5	Panmure Rd Culvert - A432220	0.01 km west of Stonewalk Way	
5	Loggers Way Culvert - L431660	0.38 km north of Kinburn Side Rd	
21	Joy's Rd Culvert - L755150	0.01 km north of Franktown Rd	
5	Sixth Line Rd Culvert - A641430	0.20 km north of Pinhey's Point Rd	
21	Flewellyn Rd Culvert - L756750	1.01 km east of Munster Rd	
5	Carp Rd Culvert - A431190	0.20 km south of Baird Side Rd	
5	Moran St Culvert - L649150	0.01 km north of Cameron Harvey Dr	
5	Loggers Way Culvert - L431690	1.00 km north of Kinburn Side Rd	
5	Bairds Side Rd Culvert - L432850	0.01 km west of Diamondview Rd	
5	Panmure Rd Culvert - A432020	0.31 km east of Rock Cody Tr	
5	Spruce Ridge Rd Culvert - L543630	0.17 km north of Midvale Dr	
9	West Hunt Club Rd Culvert - A112384	0.02 km north of Laser St	
16	Prince of Wales Dr Culvert - A011002	0.35 km north of Baseline Rd	
13	Hemlock Rd Culvert - A058000	0.09 km east of Lansdowne Rd S	
20	Roger Stevens Dr Culvert - A881105	0.01 km west of River Rd	
5	Dunrobin Rd Culvert - A331030	1.00 km north of Porcupine Trl	
21	Roger Stevens Dr Culvert - A872180	0.86 km west of Fourth Line Rd	
5	Carp Rd Culvert - A541760	0.90 km south of Craig Side Rd	
5	McGee Side Rd Culvert - L542993	0.05 km east of Diamondview Rd	
21	Roger Stevens Dr Culvert on McCordick-Pratt	0.14 km west of McCordick Rd - A864260	
21	Roger Stevens Dr Culvert on Noble-Wallace MD	1.66 km east of Malakoff Rd - A864180	
10	Airport Pkwy Culvert - A221415	0.83 km north of Uplands Dr	
10	Airport Pkwy Culvert - A221417	0.85 km north of Uplands Dr	

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
Category: Ward: Year of Completion:			
2021 Drainage Culverts CW - Continued			
Ward	Project	Location	
	21 Ashton Station Rd Culvert - L751310	1.38 km north of McLinton Rd	
	21 Ashton Station Rd Culvert - L751320	1.40 km north of McLinton Rd	
	21 Ashton Station Rd Culvert - L751325	1.41 km north of McLinton Rd	
	19 Delson Dr Culvert - L894903	0.02 km south of Villeroy Cres	
	10 Belgreen Dr Culvert - L224184	0.01 km west of Russell Rd	
	20 Marionville Rd Culvert - L882095	0.01 km west of 8th Line Rd	
	21 Dilworth Rd Culvert - A872120	0.58 km west of Rideau Valley Dr S	

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
910082	2021 Drainage Culverts - Other	Class of Estimate: C) Planning	636
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>The City has a significant inventory of small diameter roadway drainage culverts (typically non-urbanized ditch drainage under roadways and intersections). This program provides authority to address the most critical needs for this asset group. This project is for work to be delivered by other City departments.</p>			
Ward	Project	Location	
19	Carino Crt Culvert - L898990	0.01 km west of Meadow Lane Rd	
19	Green Pine Crt Culvert - L897465	0.40 km east of Beckett's Creek Rd	
19	Inge Cr Culvert - L891430	0.01 km south of Inge Cres	
1	Foot Path Culvert - P229210	0.35 km west of Bilberry Dr	
19	Langlade Rd Culvert - L897500	0.09 km north of Russell Rd	
19	Watson Rd Culvert - L894720	0.18 km east of Dunning Rd	
19	Green Pine Crt Culvert - L897455	0.01 km east of Beckett's Creek Rd	
20	Princiotta St Culvert - L886520	0.15 km east of Wellwood St	
20	Tracin St Culvert - L887250	0.01 km south of Heatherlyn Cres	
20	Stone School Rd Culvert - L886160	0.19 km west of Bank St	
20	Blackcreek Rd Culvert - L889410	0.80 km north of Parkway Rd	
20	Tintern Dr Culvert - L883800	0.01 km north of Parkway Rd	
20	Doyle Rd Culvert - L884250	0.51 km east of River Rd	
20	Doyle Rd Culvert - L884230	0.49 km east of River Rd	
21	Rideau Narrows Dr Culvert - L876310	0.13 km east of Rideau Valley Dr N	
21	Riverside Cres Culvert - L220030	0.01 km east of Long Island Rd	
20	Cooper Hill Rd Culvert - L886740	0.06 km west of Blackcreek Rd	
21	Beaverwood Rd Culvert - L877045	0.01 km north of Maple Ave	
21	Whitewood Ave Culvert - L877020	0.05 km south of Beaverwood Rd	
21	South Sunset Dr Culvert - L222002	0.01 km east of South River Rd	
21	Malakoff Rd Culvert - L865010	0.35 km south of Donnelly Dr	
21	Greenline Rd Culvert - L871110	0.31 km south of Reeve Craig Rd S	
20	Shauna Cres Culvert - L883786	0.12 km north of Ashley Cardill Lane	
20	Rideau Narrows Dr Culvert - L883220	0.14 km south of Willow Brook Way	

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
Category:			
Ward:		Year of Completion:	
2021 Drainage Culverts - Other - Continued			
Ward	Project	Location	
	20 Rideau Narrows Dr Culvert - L883210	0.30 km west of Willow Brook Way	
	21 Cockburn St Culvert - L755870	0.01 km south of Burke St	
	5 Rocklane Dr Culvert - L646370	0.31 km west of Old Second Line Rd	
	5 Rocklane Dr Culvert - L646380	0.02 km west of Old Second Line Rd	
	21 Munster Rd Culvert - L753050	0.01 km south of Jock Trl	
	5 Hunt Line Rd Culvert - L436150	0.31 km east of Mohrs Rd	
	5 Harwood Dr Culvert - L646490	0.10 km east of Dunrobin Rd	
	5 Beach Hts Culvert - L646262	0.30 km west of Beachvale Lane	
	5 Loggers Way Culvert - L431960	0.28 km south of May Dean Dr	
	6 Woodwind Cres Culvert - L758613	0.04 km east of Fringewood Dr	
	21 Rushmore Rd Culvert - L112410	0.01 km east of Old Richmond Rd	
	5 O'hara Dr Culvert - L649190	0.48 km east of Kerwin Rd	
	5 Murphy Side Rd Culvert - L646590	0.02 km west of Old Second Line Rd	
	5 Grierson Lane Culvert - L646340	0.30 km east of Old Second Line Rd	
	5 Lady Slipper Way Culvert - L543015	0.09 km north of Lupine Lane	
	5 Fifth Line Rd Culvert - L649370	0.30 km south of Thomas A. Dolan Pkwy	
	5 Country Meadow Dr Culvert - L544840	0.01 km east of Bearhill Rd	
	6 Henry Walker Grove Foot Path Culvert -	0.10 km south of Thresher Ave	
	5 Grasshopper Lane Culvert - L332310	0.18 km east of Porcupine Trl	
	5 Whitetail Dr Culvert - L543036	0.14 km north of Lupine Lane	
	6 Ralphpark St Culvert - L755642	0.02 km north of Evelyn St	
	5 Breezy Heights Rd Culvert - L431270	0.87 km north of Panmure Rd	
	5 Breezy Heights Rd Culvert - L431275	1.12 km north of Panmure Rd	
	5 Torwood Dr Culvert - L339400	1.15 km north of Vances Side Rd	

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project Information		Location/Description	\$000's
Category:	Ward:	Year of Completion:	
2021 Drainage Culverts - Other - Continued			
Ward	Project	Location	
5	Torwood Dr Culvert - L339340	0.10 km north of Vances Side Rd	
5	Torwood Dr Culvert - L339350	0.35 km north of Vances Side Rd	
5	Torwood Dr Culvert - L339380	1.03 km north of Vances Side Rd	
5	Diamondview Rd Culvert - L433390	0.71 km south of Baird Side Rd	
21	Faulkner Trl Culvert - L756910	0.71 km south of Flewellyn Rd	
5	Vaughan Side Rd Culvert - L544320	0.11 km west of Bearhill Rd	
5	Vaughan Side Rd Culvert - L544330	0.50 km west of Forest Edge Rd	
20	Dalmac Rd Culvert - L883735	0.07 km north of Springhill Rd	
20	Forest Rd Culvert - L884050	0.60 km east of Stagecoach Rd	
19	Bella Vista Dr Culvert - L898975	0.01 km east of Ted Kelly Rd	
19	Bella Vista Dr Culvert - L898980	0.29 km east of Ted Kelly Rd	
16	Sanford Ave Culvert - L012330	0.01 km east of Lexington St	
16	Wilshire Ave Culvert - L012350	0.01 km east of Lexington St	
16	Wilshire Ave Culvert - L012360	0.01 km west of Morley Blvd	
5	Old Second Line Rd Culvert - L649065	0.45 km north of Murphy Side Rd	
5	Tall Forest Dr Culvert - L544161	0.01 km north of March Rd	
19	Boundary Rd Culvert - L227310	0.84 km north of Russell Rd	
5	Ashton Station Rd Culvert - L751265	0.62 km north of Malloch Lane	

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
910083	2021 Culverts Scoping Pre/Post Eng.	Class of Estimate: C) Planning	700
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>Scoping and design briefs are necessary to adequately define conditions, coordinate requirements, and scope projects prior to initiating design stages. Detailed condition assessment, structure evaluation, drainage studies, species-at-risk screening, and lifecycle based renewal options analysis are key components of this work. The outcomes of this work are the inputs of the design and construction phases of the project delivery processes. Post construction funding is required to address assessments and planned/unexpected adjustments outside the original implementation funding envelopes. Design and construction authority requests will be programmed as part of future capital budgets, once these initiatives are complete and project scope is fully defined.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Stormwater Services
 In Thousands (\$000)

Project Information			Financial Details					
909730	2020 Stormwater Master Planning		Class of Estimate: D) Conceptual					
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW	Year of Completion: 2022				
<p>The requested funds are to support City-wide stormwater master planning work needed to support growth and maintenance of existing service levels.</p>			2021 Request	51	Projected Yearend Unspent Bal.		443	
			Revenues	0	Debt			
			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
			Rate Supported	25	Rate Supported Debt			0
			Develop. Charges	26	Develop. Charges Debt			0
			Gas Tax	0	Gas Tax Debt			0
			Forecast	2021	2022	2023	2024	
			Authority	51	0	0	287	
			Spending Plan	450	44		287	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

City of Ottawa
 2021 Draft Capital Budget
 Environment and Climate Protection Committee-Rate
 In Thousands (\$000)

Service Area: Wastewater Services											
Category	2021 Capital Budget	Revenues	Tax Supported/ Dedicated Reserves	Rate Supported Reserves	Develop. Charges	Gas Tax	Debt				
							Tax/ Dedicated	Rate	Develop. Charges	Gas Tax	Total Debt
Renewal of City Assets	49,272	0	0	29,050	0	0	0	20,222	0	0	20,222
Growth	5,873	0	918	1,632	3,323	0	0	0	0	0	0
Regulatory	0	0	0	0	0	0	0	0	0	0	0
Service Enhancements	0	0	0	0	0	0	0	0	0	0	0
Total	55,145	0	918	30,682	3,323	0	0	20,222	0	0	20,222

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
 In Thousands (\$000)

Program Information		Financial Details																																																																					
Wastewater Collection Pumping Station		Class of Estimate: D) Conceptual																																																																					
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various																																																																				
<p>The City of Ottawa owns and operates 92 Wastewater Collection remote and treatment facilities in support of the wastewater management program.</p> <p>The Collection Pumping Station Program covers all the wastewater pumping stations and associated forcemains in the city. The objective of this program is to manage the lifecycle replacement and capitalized maintenance costs of this asset. Projects under this program will maintain or extend the life of the pumping processes and equipment.</p> <p>The funding program also includes rehabilitation projects which include health and safety improvements for the RCAF, RCMP, Leonard Laporte, Cumberland 2, 3, 4 and Hemlock remote wastewater pumping stations.</p> <p>The Walkley screen is being replaced and the remote station programmable logic controllers (PLCs) replacement project will continue throughout 2021.</p>		<table border="1"> <thead> <tr> <th>2021 Request</th> <th>17,427</th> <th colspan="3">Projected Yearend Unspent Bal.</th> <th>0</th> </tr> </thead> <tbody> <tr> <td>Revenues</td> <td>0</td> <td colspan="3">Debt</td> <td></td> </tr> <tr> <td>Tax Supported/ Dedicated</td> <td>0</td> <td>Tax Supported/ Dedicated Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <td>Rate Supported</td> <td>7,427</td> <td>Rate Supported Debt</td> <td colspan="2"></td> <td>10,000</td> </tr> <tr> <td>Develop. Charges</td> <td>0</td> <td>Develop. Charges Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <td>Gas Tax</td> <td>0</td> <td>Gas Tax Debt</td> <td colspan="2"></td> <td>0</td> </tr> <tr> <th>Forecast</th> <th>2021</th> <th>2022</th> <th>2023</th> <th colspan="2">2024</th> </tr> <tr> <td>Authority</td> <td>17,427</td> <td>10,985</td> <td>11,285</td> <td colspan="2">11,285</td> </tr> <tr> <td>Spending Plan</td> <td>5,323</td> <td>12,993</td> <td>12,573</td> <td colspan="2">11,285</td> </tr> <tr> <td>FTE's</td> <td>0</td> <td>0</td> <td>0</td> <td colspan="2">0</td> </tr> <tr> <td>Operating Impact</td> <td>0</td> <td>0</td> <td>0</td> <td colspan="2">0</td> </tr> </tbody> </table>				2021 Request	17,427	Projected Yearend Unspent Bal.			0	Revenues	0	Debt				Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0	Rate Supported	7,427	Rate Supported Debt			10,000	Develop. Charges	0	Develop. Charges Debt			0	Gas Tax	0	Gas Tax Debt			0	Forecast	2021	2022	2023	2024		Authority	17,427	10,985	11,285	11,285		Spending Plan	5,323	12,993	12,573	11,285		FTE's	0	0	0	0		Operating Impact	0	0	0	0	
2021 Request	17,427	Projected Yearend Unspent Bal.			0																																																																		
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Forecast	2021	2022	2023	2024																																																																			
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FTE's	0	0	0	0																																																																			
Operating Impact	0	0	0	0																																																																			

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
 In Thousands (\$000)

Project(s) within a Program Information			\$000's
909245	Forcemain Condition Assessment & Rehab	Class of Estimate: C) Planning	500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>This project focuses on forcemain condition assessment works and necessary rehabilitation of the wastewater remote pumping stations.</p>			
910124	Sewage Pumping Station Rehab Prog 2021	Class of Estimate: C) Planning	17,227
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2027	
<p>The City of Ottawa owns and operates 92 Wastewater Collection remote and Treatment facilities, in support of the wastewater management program. This project provides the funding for the operational studies, condition assessment and life-cycle rehabilitation and replacement of critical components such as mechanical, electrical stand-by power and facility odour & corrosion control equipment in order to ensure operational efficiency, continued reliability and environmental protection.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
 In Thousands (\$000)

Program Information			Financial Details						
Wastewater General			Class of Estimate: D) Conceptual						
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various						
<p>The wastewater general program consists of sub-programs and projects that support the entire wastewater collection and treatment programs.</p>			2021 Request		50	Projected Yearend Unspent Bal.		0	
			Revenues		0	Debt			
			Tax Supported/ Dedicated		0	Tax Supported/ Dedicated Debt		0	
			Rate Supported		50	Rate Supported Debt		0	
			Develop. Charges		0	Develop. Charges Debt		0	
			Gas Tax		0	Gas Tax Debt		0	
			Forecast		2021	2022	2023	2024	
			Authority		50	180	180	180	
			Spending Plan		50	180	180	180	
			FTE's		0	0	0	0	
Operating Impact		0	0	0	0				

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
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Project(s) within a Program Information			\$000's
910061 Wastewater Drainage Roofing 2021		Class of Estimate: C) Planning	50
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>The City of Ottawa owns and operates 92 Wastewater Collection remote and treatment facilities in support of the wastewater management program. Roof replacements at the end of their life span typically on a 20 to 25 year cycle, form part of the planned maintenance of these wastewater treatment facilities and pumping stations. The up-keep and replacement of these roofs is paramount in ensuring that the work environment of these facilities is kept safe, warm and dry.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
 In Thousands (\$000)

Program Information		Financial Details		
Wastewater & Stormwater Collection		Class of Estimate: D) Conceptual		
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various	
<p>The 2021 wastewater capital program includes funding for linear sewer rehabilitations and improvements, and collection system condition assessments.</p> <p>The program also includes sewer lateral repairs, ongoing monitoring projects as well as SCADA system rehabilitation for remote facilities.</p>		2021 Request	7,269	Projected Yearend Unspent Bal. 0
		Revenues	0	Debt
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt 0
		Rate Supported	4,769	Rate Supported Debt 2,500
		Develop. Charges	0	Develop. Charges Debt 0
		Gas Tax	0	Gas Tax Debt 0
		Forecast	2021	2022
		Authority	7,269	9,840
		Spending Plan	8,419	10,860
		FTE's	0	0
		Operating Impact	0	0
			2023	2024
			7,110	7,110
			7,110	7,110
			0	0
			0	0

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
In Thousands (\$000)

Project(s) within a Program Information			\$000's
910062 Flow Monitoring System Rehab. 2021		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>This project focuses on the ongoing upgrades to the flow monitoring system currently in place within the wastewater collection system.</p>			
910063 SCADA Rehab & Upgrades-Remote Sewer 2021		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>This project focuses on the rehabilitation and upgrade of the Supervisory Control and Data Acquisition (SCADA) system which is a computerized system that is used by Certified Operators to monitor and control the wastewater system. The project focuses on cybersecurity, control documentation, condition assessment and replacement and upgrading of existing key components of the SCADA system controlling remote facility and collection system operations. The Operator monitors all critical components of the collection processes and is able to remotely operate equipment within the pump stations and regulators. Various components of the system either require to be upgraded or replaced to maintain reliability.</p>			
910064 Collection System Condition Assess. 2021		Class of Estimate: C) Planning	
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>This project intends to systematically inspect and assess the condition of large sewer trunks and collectors. The output of this program will be used to develop capital renewal and/or rehabilitation programs.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
In Thousands (\$000)

Project(s) within a Program Information			\$000's
910120	Linear Sewage System Improve. Prog. 2021	Class of Estimate: C) Planning	1,000
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2025	
<p>On-going repair and rehabilitation of the City sewer system is required to maintain its integrity and its hydraulic capacity, as well as to protect the City's extensive investment in infrastructure. This work consists of a variety of generally smaller projects involving the trunk sewers and related appurtenances. (manholes, drop shaft, ladders and landings, etc.)</p>			
910121	Sewer Lateral Repairs 2021	Class of Estimate: C) Planning	4,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>The sewer collection systems includes 237,500 service connections, i.e. the sewer pipe between a building and the sewer main. When a house experiences a sewer backup due to a sewer lateral failure, every effort is made to minimize property damage by unblocking the lateral and putting it back in service. This annual program enables the City to investigate the cause of the failure and properly rehabilitate or replace sewer laterals.</p>			

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
 In Thousands (\$000)

Program Information			Financial Details					
Wastewater Treatment-Renewal			Class of Estimate: D) Conceptual					
Dept: Public Works & Environmental Services Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various					
<p>The Robert O. Pickard Environmental Center (ROPEC) treats all of the City's wastewater and has a replacement value of over \$1.2 billion. The objective of this program is to manage the lifecycle replacement and capitalized maintenance costs of this asset. Projects under this program will maintain or extend the life of the plant processes and equipment.</p> <p>2021 Major Spending Projects:</p> <ul style="list-style-type: none"> - Sewage Treatment Rehabilitation Program - Raw Sewage Pumping Station Rehabilitation 			2021 Request	13,722	Projected Yearend Unspent Bal.		0	
			Revenues	0	Debt			
			Tax Supported/Dedicated	0	Tax Supported/Dedicated Debt		0	
			Rate Supported	7,500	Rate Supported Debt		6,222	
			Develop. Charges	0	Develop. Charges Debt		0	
			Gas Tax	0	Gas Tax Debt		0	
			Forecast	2021	2022	2023	2024	
			Authority	13,722	18,700	21,600	27,600	
			Spending Plan	3,944	14,233	17,894	20,800	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
In Thousands (\$000)

Project(s) within a Program Information			\$000's
910130	ROPEC - Sewage Treatment Rehab Prog 2021	Class of Estimate: C) Planning	12,222
Category: Renewal of City Assets	Ward: 11	Year of Completion: 2027	
<p>Ongoing capital investment is required to ensure efficient process operation, maintain asset functionality through equipment overhauls, adapt to changing regulations and take advantage of new technologies. Typical projects include process optimization studies, asset rehabilitation and upgrades to plant processes and systems.</p>			
910131	ROPEC - Concrete Rehab & Repairs 2021	Class of Estimate: C) Planning	1,000
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2024	
<p>The ROPEC concrete life cycle monitoring and maintenance program has been established as an annual program which will systematically assess the condition of concrete structures in various locations and process areas within the ROPEC treatment facility. These assessments and subsequent repair works will be closely planned and coordinated with regular and ongoing maintenance activities.</p>			
910132	Wastewater Facilities Upgrade 2021	Class of Estimate: C) Planning	500
Category: Renewal of City Assets	Ward: 18	Year of Completion: 2024	
<p>Wastewater Services operates and maintains all buildings and structures on the ROPEC site. This project is for the rehabilitation and upgrade of non-process related structures, and HVAC and Life safety equipment.</p>			

City of Ottawa
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Service Area: Wastewater Services
 In Thousands (\$000)

Program Information		Financial Details																																																							
Sanitary Sewer Rehabilitation		Class of Estimate: C) Planning																																																							
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various																																																						
<p>The Sanitary Sewer Rehabilitation Program addresses annual rehabilitation requirements for the City's wastewater collection system to extend the life of the infrastructure, provide continued service, mitigate property flooding and prevent failures requiring more extensive reconstruction.</p> <p>The program is focused on:</p> <ul style="list-style-type: none"> • Proactive lifecycle renewal and rehabilitation projects. • Level of service initiatives. • System improvements and optimization. • Miscellaneous upgrades and rehabilitation to support growth demand. <p>The funding requests for wastewater costs coordinated with roadway, stormwater or watermain rehabilitation are included within the Integrated Rehabilitation Programs.</p> <p>Program funding requirements to support renewal needs are defined in the Long Range Financial Plan.</p> <p>Detailed information and costs associated with specific stand-alone (nonintegrated) components and projects are provided following this program summary page.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p>		<table border="1"> <tr> <td>2021 Request</td> <td>3,000</td> <td colspan="2">Projected Yearend Unspent Bal.</td> <td>0</td> </tr> <tr> <td>Revenues</td> <td>0</td> <td colspan="3">Debt</td> </tr> <tr> <td>Tax Supported/ Dedicated</td> <td>0</td> <td>Tax Supported/ Dedicated Debt</td> <td colspan="2">0</td> </tr> <tr> <td>Rate Supported</td> <td>1,500</td> <td>Rate Supported Debt</td> <td colspan="2">1,500</td> </tr> <tr> <td>Develop. Charges</td> <td>0</td> <td>Develop. Charges Debt</td> <td colspan="2">0</td> </tr> <tr> <td>Gas Tax</td> <td>0</td> <td>Gas Tax Debt</td> <td colspan="2">0</td> </tr> <tr> <td>Forecast</td> <td>2021</td> <td>2022</td> <td>2023</td> <td>2024</td> </tr> <tr> <td>Authority</td> <td>3,000</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Spending Plan</td> <td>1,500</td> <td>900</td> <td>600</td> <td>0</td> </tr> <tr> <td>FTE's</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td>Operating Impact</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </table>	2021 Request	3,000	Projected Yearend Unspent Bal.		0	Revenues	0	Debt			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0		Rate Supported	1,500	Rate Supported Debt	1,500		Develop. Charges	0	Develop. Charges Debt	0		Gas Tax	0	Gas Tax Debt	0		Forecast	2021	2022	2023	2024	Authority	3,000	0	0	0	Spending Plan	1,500	900	600	0	FTE's	0	0	0	0	Operating Impact	0	0	0	0
2021 Request	3,000	Projected Yearend Unspent Bal.		0																																																					
Revenues	0	Debt																																																							
Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0																																																						
Rate Supported	1,500	Rate Supported Debt	1,500																																																						
Develop. Charges	0	Develop. Charges Debt	0																																																						
Gas Tax	0	Gas Tax Debt	0																																																						
Forecast	2021	2022	2023	2024																																																					
Authority	3,000	0	0	0																																																					
Spending Plan	1,500	900	600	0																																																					
FTE's	0	0	0	0																																																					
Operating Impact	0	0	0	0																																																					

City of Ottawa
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Project(s) within a Program Information		Location/Description	\$000's
909716 Mooney's Bay Trunk Sewer		Class of Estimate: B) Design	3,000
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2022	
<p>This funding request provides for the rehabilitation of a section of the Mooney's Bay Sanitary Sewer Collector. A section of 1050mm sewer that crosses the O-Train corridor 150m south of Albert St requires replacement due to poor condition.</p> <p>This funding request provides for all project related costs including but not limited to construction and any required property acquisition.</p>		<p>The map shows a street grid with several streets labeled: ALBERT ST, CITY CENTRE AVE, BAYVIEW STATION RD, WELLINGTON ST, BAYSWATER AVE, SOMERSET ST, and HINTONBURG PL. A thick black line indicates the sewer line project, which runs north-south and crosses the O-Train corridor (indicated by a dashed line) south of Albert St.</p>	

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Program Information		Financial Details				
Wet Weather Program		Class of Estimate: C) Planning				
Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: Multiple	Year of Completion: Various			
<p>The Wet Weather Program is a comprehensive Wet Weather Infrastructure Management Plan (WW-IMP) to develop a coordinated approach to wet weather flow management within the urban area. The WW-IMP will develop programs that will focus on managing the capacity of the sewer systems, reduce the risk of property flooding, and reduce impacts related to combined sewer overflows. It will also look at key program supports, such as design guidelines and climate change adaptation. This program supports the overall implementation objectives of the Ottawa River Action Plan and the Infrastructure Master Plan.</p> <p>Detailed information and costs associated with specific non-integrated components and projects are provided following this program summary page.</p> <p>Forecasts are based on bulk allocations that will be detailed in future budget submissions.</p>		2021 Request	2,500	Projected Yearend Unspent Bal.		0
		Revenues	0	Debt		
		Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt		0
		Rate Supported	2,500	Rate Supported Debt		0
		Develop. Charges	0	Develop. Charges Debt		0
		Gas Tax	0	Gas Tax Debt		0
		Forecast	2021	2022	2023	2024
		Authority	2,500	2,500	2,500	3,000
		Spending Plan	1,250	2,000	2,500	2,750
		FTE's	0	0	0	0
		Operating Impact	0	0	0	0

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Project(s) within a Program Information			\$000's
910087	2021 ORAP Wet Weather IMP	Class of Estimate: C) Planning	2,500
Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023	
<p>This project is required for the development of programs and project implementation needed to support the objectives of the Wet Weather Infrastructure Management Plan (WW-IMP). Once developed, these programs will define and prioritize the specific actions to be implemented, which will increase the capacity of the sewer systems; reduce the risk of property flooding; and reduce impacts related to combined sewer overflows. This project also includes the installation of Inlet Control Devices (ICDs) into catch basins throughout various areas in the City. The intent is to reduce sewer surcharge during major rainfall events, and to diminish the incidences of basement flooding as a result of sewer surcharge.</p>			

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Project Information			Financial Details					
909724 Pump Stations Capacity Renewal			Class of Estimate: C) Planning					
Dept:	Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: 2,4,19,21	Year of Completion: 2027				
<p>These funds will be used to cover renewal needs (benefit to existing) at five sanitary sewage pump stations that are also being upgraded for capacity to support growth. The growth portion of the works is covered by a separate account which is funded by development charges.</p>			2021 Request	1,714	Projected Yearend Unspent Bal.		725	
			Revenues	0	Debt			
			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt			0
			Rate Supported	1,714	Rate Supported Debt			0
			Develop. Charges	0	Develop. Charges Debt			0
			Gas Tax	0	Gas Tax Debt			0
			Forecast	2021	2022	2023	2024	
			Authority	1,714	1,470	1,023	523	
			Spending Plan	1,585	1,250	1,294	860	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

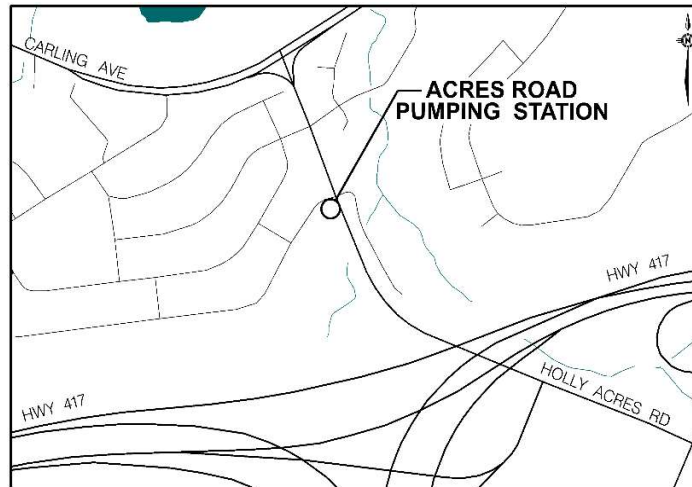
City of Ottawa
2021 Draft Capital Budget
Service Area: Wastewater Services
In Thousands (\$000)

Project Information			Financial Details		
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909745 Acres Road PS Phase 1 Renewal			Class of Estimate: B) Design		
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Dept: Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward 7	Year of Completion: 2023		
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<p>The need to upgrade the existing capacity of the Acres Road wastewater PS was identified in the Infrastructure Master Plan to accommodate growth in the West Urban Community. The functional design study for Acres Road pumping station completed in 2019 recommended four phases to bring the station to its ultimate rated capacity of 4,600 L/s. Phase 1 work consists of header repair and pump replacement. Currently the Phase 1 project is in the detailed design stage with tender and construction expected in 2021. This budget request is for Phase 1 construction.</p>	2021 Request		1,900		Projected Yearend Unspent Bal.	0
	Revenues	0		Debt		
	Tax Supported/ Dedicated	0		Tax Supported/ Dedicated Debt	0	
	Rate Supported	1,900		Rate Supported Debt	0	
	Develop. Charges	0		Develop. Charges Debt	0	
	Gas Tax	0		Gas Tax Debt	0	
	Forecast	2021	2022	2023	2024	
	Authority	1,900	0	0	0	
	Spending Plan	950	570	380	0	
	FTE's	0	0	0	0	
Operating Impact	350	0	0	0		



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Service Area: Stormwater Services
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Project Information			Financial Details					
910077	2021 Flood Plain Mapping		Class of Estimate:		Not Applicable			
Dept:	Planning, Infrastructure & Economic Development Department	Category: Renewal of City Assets	Ward: CW	Year of Completion: 2023				
<p>The City has a multi-year agreement to update its flood plain mapping with the three Conservation Authorities: Rideau Valley, South Nation and Mississippi. The assessment uses contemporary methods in hydrologic and hydraulic analysis, historical records of stream flow and/or water level, and the most up-to-date topographical data to produce new or updated estimates of the 1:100 year flood lines for specific watercourses. This budget request is needed to comply with the planned cost-sharing as described in the contribution agreement and to finance other flood plain mapping work.</p> <p>The year of Completion of the current mapping agreement is 2022. It is anticipated that new or updated flood plain mapping studies will be required for any urban boundary expansion approved in the new Official Plan.</p> <p>This budget request also includes costs for investigations to support and inform regulation mapping, which are not covered in the contribution agreement.</p>			2021 Request	240	Projected Yearend Unspent Bal.		0	
			Revenues	0	Debt			
			Tax Supported/ Dedicated	0	Tax Supported/ Dedicated Debt	0		
			Rate Supported	240	Rate Supported Debt	0		
			Develop. Charges	0	Develop. Charges Debt	0		
			Gas Tax	0	Gas Tax Debt	0		
			Forecast	2021	2022	2023	2024	
			Authority	240	200	217	217	
			Spending Plan	120	170	220	220	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

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Project Information			Financial Details							
907462 Pump Stations Capacity Increase			Class of Estimate: C) Planning							
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: 2,4,19,21	Year of Completion: 2028						
<p>This project was identified in the Infrastructure Master Plan and is needed to provide sufficient wastewater pumping capacity to meet the needs of development at various locations across the City. This project includes capacity upgrade for 5 Pump Stations: Briar Ridge PS, Tenth Line PS, Leitrim PS, Forest Valley PS, and Manotick PS. The project will increase the 5 Pump Stations capacity from the existing installed capacity, to the full rated capacity in accordance with the original station designs. The work at these 5 stations will be phased over time. This budget request will cover the remaining design work and the first phase of construction.</p>			2021 Request		3,248		Projected Yearend Unspent Bal.	973		
			Revenues		0		Debt			
			Tax Supported/Dedicated		0		Tax Supported/Dedicated Debt		0	
			Rate Supported		0		Rate Supported Debt			0
			Develop. Charges		3,248		Develop. Charges Debt		0	
			Gas Tax		0		Gas Tax Debt			0
			Forecast		2021	2022	2023	2024		
			Authority		3,248	2,839	2,016	1,050		
			Spending Plan		1,624	2,394	2,509	1,698		
			FTE's		0	0	0	0		
Operating Impact		250	0	0	0					
910048 2021 Infrastructure Master Plan (Sewer)			Class of Estimate: D) Conceptual							
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: CW	Year of Completion: 2023						
<p>This budget request is to cover wastewater sewer system analysis and planning work mainly for areas outside the NCC Greenbelt to support growth related wastewater project planning.</p>			2021 Request		510		Projected Yearend Unspent Bal.	0		
			Revenues		0		Debt			
			Tax Supported/Dedicated		0		Tax Supported/Dedicated Debt		0	
			Rate Supported		510		Rate Supported Debt			0
			Develop. Charges		0		Develop. Charges Debt		0	
			Gas Tax		0		Gas Tax Debt			0
			Forecast		2021	2022	2023	2024		
			Authority		510	0	0	0		
			Spending Plan			0	0	0		
			FTE's		0	0	0	0		
Operating Impact		0	0	0	0					

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Service Area: Wastewater Services
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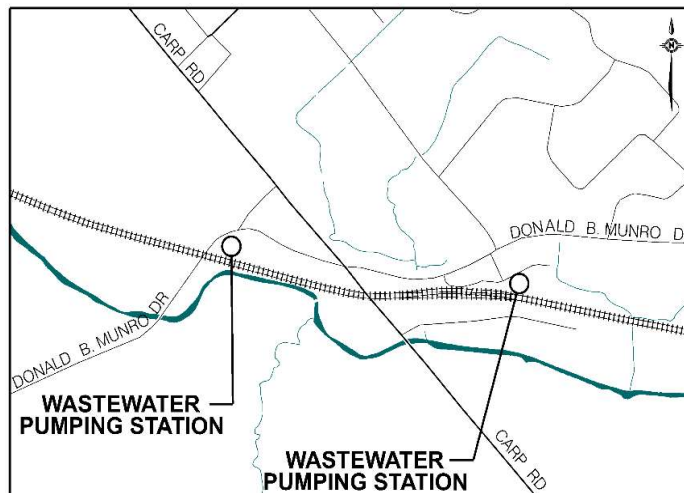
Project Information			Financial Details	
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910076 Carp Wastewater PS Upgrade/Overflow **Class of Estimate: C) Planning**

Dept: Planning, Infrastructure & Economic Development Department Category: Growth Ward: 4,5 Year of Completion: 2023

The Village of Carp Wastewater Pumping Stations were designed and constructed in 1992 -1994, prior to the development of the current City of Ottawa Sewer Design Guidelines. The stations do not have emergency overflows, which are necessary to protect homes from basement flooding during extreme wet weather conditions or major system failures. This 2021 budget request is to fund the main pumping station overflow and interim improvements to the station to provide sufficient capacity for short-term growth in the village.

2021 Request	2,040	Projected Yearend Unspent Bal.			0
Revenues	0	Debt			
Tax Supported/ Dedicated	918	Tax Supported/ Dedicated Debt			0
Rate Supported	1,122	Rate Supported Debt			0
Develop. Charges	0	Develop. Charges Debt			0
Gas Tax	0	Gas Tax Debt			0
Forecast	2021	2022	2023	2024	
Authority	2,040	0	0	0	
Spending Plan	1,020	612	408	0	
FTE's	0	0	0	0	
Operating Impact	80	0	0	0	



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Project Information			Financial Details					
910123	DCA-O/S KW Trunk Sewers - 130 Huntmar		Class of Estimate:		C) Planning			
Dept:	Planning, Infrastructure & Economic Development Department	Category: Growth	Ward: 6	Year of Completion: 2024				
Funds will support the oversizing component of the Kanata West Trunk Sewer for planned developments at 130 Huntmar Drive and 195 Huntmar Drive. The proposed sewer is identified in the Kanata West Master Servicing Study and the Development Charges Background Study as item 2.2.4.			2021 Request	75	Projected Yearend Unspent Bal.		0	
			Revenues	0	Debt			
			Tax Supported/Dedicated	0	Tax Supported/Dedicated Debt	0		
			Rate Supported	0	Rate Supported Debt	0		
			Develop. Charges	75	Develop. Charges Debt	0		
			Gas Tax	0	Gas Tax Debt	0		
			Forecast	2021	2022	2023	2024	
			Authority	75	0	0	0	
			Spending Plan	75	0	0	0	
			FTE's	0	0	0	0	
Operating Impact	0	0	0	0				

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Project Description	2021	2022	2023	2024	Total
Drinking Water Services					
Renewal of City Assets					
900631 Carlington Heights Pumping Stn Expansion	2,244	-	-	-	2,244
906665 Lemieux WPP Intake Ice Mgmt	-	11,444	-	-	11,444
908076 Large Water Meters Changeout Program	250	1,000	1,000	1,000	3,250
908613 Bank St (Rideau Rd-Mitch Owens)	900	-	-	-	900
908614 LRT2 W1 Hwy 174 - Shefford Rd	350	-	-	-	350
908633 Enhanced Corrosion Control	3,118	-	-	-	3,118
908908 Small Water Meters Changeout Program	3,125	2,375	1,400	1,400	8,300
908909 Advanced Metering Infra. (AMI) Changeout	-	2,075	3,000	3,025	8,100
908981 Lemieux island Pipe Bridge SN 017160	-	-	-	14,070	14,070
908995 Advanced Metering Infra. (AMI) Software	-	-	-	750	750
909735 Carling Ave (Moodie-Shirleys Bay)	-	-	17,000	-	17,000
909795 Water Distribution Sys Improvements 2020	-	1,000	1,000	1,000	3,000
909796 Water Facilities Roofing 2020	-	240	210	200	650
909799 Communal Well System Rehab 2020	-	2,500	9,200	2,500	14,200
909804 Critical Links Risk Mitigation Meas 2020	-	500	500	500	1,500
910066 2021 Buildings-Water Services	50	50	50	50	200
910117 2021 Water System Improvements	7,500	10,000	12,751	9,120	39,371
910118 2021 WM Transmission/Distribution Rehab	5,500	6,500	7,000	4,400	23,400
910119 Stanley Ave. (Sussex - Union St)	500	1,100	-	-	1,600
910133 Water Storage Tanks & Reservoir 2021	530	1,350	1,350	1,350	4,580
910135 Water Pumping Station Facility Rehab2021	4,290	2,150	4,150	2,150	12,740
910136 Water Treatment Rehab 2021	6,025	13,580	12,685	13,685	45,975
910137 Protective Lead Service Rplment Prog2021	1,250	1,250	1,250	1,250	5,000
910138 Water Sys SCADA & Instrument Rehab 2021	3,518	3,518	3,518	3,524	14,078
910139 Cathodic Protection 2021	1,200	1,200	1,200	1,200	4,800
910140 Ops Condition Assess-Critical Sys Links	1,000	1,000	1,000	1,000	4,000
910141 New Vehicles Drinking Water 2021	75	250	250	250	825
Renewal of City Assets Total	41,425	63,082	78,514	62,424	245,445
Growth					
901144 Glen Cairn Reservoir Expansion	-	341	3,659	11,298	15,298
903295 Brittany Pumping Station	8,160	-	-	-	8,160
904916 DCA-Kanata West Feedermain	-	-	318	216	534
904918 Limebank Feedermain	-	-	4,164	-	4,164
904972 Glen Cairn PS Upgrade	-	-	898	2,747	3,645

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Project Description	2021	2022	2023	2024	Total
904982 Zone 2W West march Rd 406 to 6	-	3,120	-	-	3,120
905992 Manotick Supply Watermain	1,887	-	-	-	1,887
907008 Treatment Plant Process Expansion	-	-	5,000	47,000	52,000
907099 Carp Reservoir Cell	-	-	494	2,633	3,127
907100 Carp Well Capacity Increase	-	-	370	-	370
907101 River Ridge 3C Elevated Tank	-	-	3,311	11,905	15,216
907453 Britannia WPP Capacity Upgrade	-	624	-	-	624
907456 Manotick North Island Link	1,887	-	-	-	1,887
910050 Manotick Supply Watermain - Phase 2	1,020	17,264	-	-	18,284
910051 2021 Off Site Reliability Links	164	167	171	174	676
910052 2021 Groundwater Studies	389	165	169	172	895
910053 2021 Rural Servicing Strategy	216	220	225	229	890
910054 2021 Water & Wastewater Studies	270	276	281	287	1,114
Growth Total	13,993	22,177	19,060	76,661	131,891

Drinking Water Services Total	55,418	85,259	97,574	139,085	377,336
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Integrated Roads, Water & Wastewater					
Renewal of City Assets					
906735 Bank St (Riverside-Ledbury)	3,667	24,540	-	-	28,207
906900 Main Greenfield Echo Concord et al	3,965	3,965	3,965	3,965	15,860
906901 CWWF ORAP - Loretta Ave N&S - Laurel St	7,586	-	-	-	7,586
908137 CWWF Deerpark-Hilliard-Fisher et al.	-	-	3,093	-	3,093
908138 CWWF Avenue N-O-P-Q-R-S-T-U	7,769	-	-	-	7,769
908139 Montreal Rd (N River Rd-St Laurent Blvd)	2,196	1,183	-	-	3,379
908140 City Centre Ave & Elm St	-	-	3,984	-	3,984
908141 ORAP Albert St-Bronson Ave-Slater St	3,430	11,050	-	-	14,480
908567 Alta Vista Dr	-	3,110	-	12,439	15,549
908570 Byron-Athlone-Highcroft	8,477	-	-	-	8,477
908572 Fairbairn-Bellwood-Willard-Belmont	949	-	-	-	949
908574 Grove Ave & Grosvenor	-	-	6,731	-	6,731
908580 CWWF Queensway Terrace North Sewer	3,037	3,037	3,037	3,037	12,148
908581 Valley Dr Storm Sewer	3,885	3,885	3,885	3,885	15,540
908646 Integrated Construction - Bulk Prjs	-	-	-	41,000	41,000
908998 LRT2 R2 Hwy 174 Resurfacing EBL	36	-	-	-	36
909012 Bronson Ave (Arlington-Rideau Canal)	-	-	-	19,112	19,112
909021 Woodroffe Ave (Anthony - Byron)	-	797	-	1,859	2,656

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Project Description	2021	2022	2023	2024	Total
909394 Arch - Canterbury - Plesser	7,693	-	-	-	7,693
909400 Bel-Air Dr, Bedbrooke St et al	10,441	-	-	-	10,441
909401 Broadview Ave	706	-	-	-	706
909402 Caroline Ave - Huron Ave N	-	5,932	-	-	5,932
909406 Integrated Design - Bulk Prjs	-	17,970	21,000	22,420	61,390
909407 Longpre - Marquette- Michel Cir	-	-	7,150	-	7,150
909408 Monk - Oakland -Wilton	-	-	3,442	-	3,442
909409 Winona Ave & Wilmont Ave	-	2,167	-	-	2,167
909485 Carling Ave - Churchill Ave - Kirkwood	-	-	7,196	-	7,196
Renewal of City Assets Total	63,837	77,636	63,483	107,717	312,673
Integrated Roads, Water & Wastewater Total	63,837	77,636	63,483	107,717	312,673
Integrated Water & Wastewater					
Renewal of City Assets					
908997 LRT2 SS1 Sewer Upgrades (Byron Ave)	1,490	-	-	-	1,490
909492 LRT2 SS2 Richmond Compl Streets	1,888	-	-	-	1,888
909694 Hydraulic Structures	-	1,000	200	1,000	2,200
910078 2021 Sewer Repairs / Improvements	9,504	10,000	8,376	10,000	37,880
910079 2021 Sewer Trenchless Rehab	4,500	5,000	4,000	5,000	18,500
910080 2021 Sewer CCTV Engineering	800	800	800	800	3,200
Renewal of City Assets Total	18,182	16,800	13,376	16,800	65,158
Integrated Water & Wastewater Total	18,182	16,800	13,376	16,800	65,158
Stormwater Services					
Renewal of City Assets					
908618 CWWF Convent Glen North Storm Sewer	-	-	-	6,333	6,333
909017 LRT2 C1 Hwy 174 Culverts	2,010	-	-	-	2,010
909356 2020 Stormwater Management Retrofit	-	1,500	3,174	5,290	9,964
909709 2020 Drainage Culverts - CW	9,120	-	-	-	9,120
909748 Mud Creek Stream Renewal	-	2,230	-	-	2,230
910081 2021 Drainage Culverts - CW	2,382	12,363	9,312	7,049	31,106
910082 2021 Drainage Culverts - Other	636	502	636	499	2,273
910083 2021 Culverts Scoping Pre/Post Eng.	700	700	750	800	2,950
910084 2021 Drainage Culverts - Site-Specific	-	1,500	1,000	1,400	3,900
910085 Valley Dr Storm Sewer Phase 2	-	2,640	-	10,560	13,200

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Project Description	2021	2022	2023	2024	Total
910086 2021 Storm and Surface Water Rehabilitat	3,500	3,000	2,000	2,000	10,500
910204 Stormwater Mgmt: Rehab&Enviro Compliance	3,500	725	760	2,000	6,985
910205 Linear Storm System Improvements 2021	3,000	3,500	3,500	3,500	13,500
Renewal of City Assets Total	24,848	28,660	21,132	39,431	114,071

Growth					
907900 DCA-Mud Creek Erosion Monito E3 Glou EUC	-	3,796	-	-	3,796
908252 Stormwater Mgmt Retrofit Master Plan	-	276	318	325	919
909730 2020 Stormwater Master Planning	51	-	-	287	338
Growth Total	51	4,072	318	612	5,053

Regulatory					
910203 Municipal Drain Improvements - 2021	500	500	500	500	2,000
Regulatory Total	500	500	500	500	2,000

Service Enhancements					
909815 ORAP-Water Enviro Strgy (WES) PH2 2020	-	500	500	1,000	2,000
Service Enhancements Total	-	500	500	1,000	2,000

Stormwater Services Total	25,399	33,732	22,450	41,543	123,124
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Wastewater Services					
Renewal of City Assets					
907382 ROPEC Aeration Blower Expansion	-	8,000	-	-	8,000
908250 Infrastructure Planning Information Mgmt	-	450	500	500	1,450
908451 Lab Equipment Purchase/Replacement 2018	-	350	350	350	1,050
908455 CLS ROPEC Process Facil-Enviro Sys Upgrd	-	-	6,000	-	6,000
909032 ROPEC - SCADA Rehab. & Upgrades 2018	-	2,100	1,000	1,000	4,100
909245 Forcemain Condition Assessment & Rehab	500	500	500	500	2,000
909716 Mooney's Bay Trunk Sewer	3,000	-	-	-	3,000
909724 Pump Stations Capacity Renewal	1,714	1,470	1,023	523	4,730
909745 Acres Road PS Phase 1 Renewal	1,900	-	-	-	1,900
909746 Acres Road PS Phase 2 Renewal	-	899	-	7,935	8,834
909810 New Vehicles Waste Water - 2020	-	100	100	100	300
910061 Wastewater Drainage Roofing 2021	50	80	80	80	290
910062 Flow Monitoring System Rehab. 2021	200	200	200	200	800
910063 SCADA Rehab & Upgrades-Remote Sewer 2021	1,559	4,000	250	250	6,059

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Project Description	2021	2022	2023	2024	Total
910064 Collection System Condition Assess. 2021	1,160	1,160	1,160	1,160	4,640
910077 2021 Flood Plain Mapping	240	200	217	217	874
910087 2021 ORAP Wet Weather IMP	2,500	2,500	2,500	3,000	10,500
910120 Linear Sewage System Improve. Prog. 2021	1,000	1,000	1,000	1,000	4,000
910121 Sewer Lateral Repairs 2021	4,500	4,500	4,500	4,500	18,000
910124 Sewage Pumping Station Rehab Prog 2021	17,227	10,785	10,785	10,785	49,582
910130 ROPEC - Sewage Treatment Rehab Prog 2021	12,222	14,750	18,750	18,750	64,472
910131 ROPEC - Concrete Rehab & Repairs 2021	1,000	1,000	1,000	1,000	4,000
910132 Wastewater Facilites Upgrade 2021	500	500	500	500	2,000
910202 ROPEC Process Facilities - Environment	-	-	-	6,000	6,000
Renewal of City Assets Total	49,272	54,544	50,415	58,350	212,581
Growth					
907462 Pump Stations Capacity Increase	3,248	2,839	2,016	1,050	9,153
907463 Stittsville PS Gravity Connect	-	242	1,628	-	1,870
908555 Richmond PS & Forcemain ExpPh3	-	1,100	10,552	-	11,652
908626 Signature Ridge PS Expansion -	-	-	651	5,381	6,032
909728 Acres Road PS Upgrade Phase 2 Growth	-	935	-	8,586	9,521
910048 2021 Infrastructure Master Plan (Sewer)	510	-	-	-	510
910076 Carp Wastewater PS Upgrade/Overflow	2,040	-	-	-	2,040
910123 DCA-O/S KW Trunk Sewers - 130 Huntmar	75	-	-	-	75
Growth Total	5,873	5,116	14,847	15,017	40,853
Regulatory					
909029 Protective Plumbing Program 2018	-	1,000	1,000	1,000	3,000
Regulatory Total	-	1,000	1,000	1,000	3,000
Service Enhancements					
909312 Water Env Protec Short Term Initiat 2019	-	150	150	150	450
Service Enhancements Total	-	150	150	150	450
Wastewater Services Total	55,145	60,810	66,412	74,517	256,884
Grand Total	217,981	274,237	263,295	379,662	1,135,175

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Project Description	Authority	Expenditures as of August 31, 2020	August 31, 2020 Unspent Cash Balance	Total Contractual Obligations	Unspent Balance including Contractuals
Drinking Water Services					
900631 Carlington Heights Pumping Stn Expansion	13,918	1,762	12,156	1,628	10,527
900632 Strandherd Road Watermain	7,831	2,230	5,601	3,047	2,554
901144 Glen Cairn Reservoir Expansion	-	-	-	-	-
902206 Ottawa South Pumping Station Upgrade	15,540	1,778	13,762	420	13,342
903295 Brittany Pumping Station	7,616	474	7,142	216	6,926
903298 DCA -Shadow Ridge Exploratory/Well	99	96	3	-	3
904916 DCA-Kanata West Feedermain	3,092	156	2,936	42	2,894
904918 Limebank Feedermain	3,374	-	3,374	-	3,374
904975 Barrhaven PS Conversion to 3C	4,873	4,429	444	20	424
904981 3C/2W Pressure Zone Separation	5,822	4,362	1,460	236	1,225
904982 Zone 2W West march Rd 406 to 6	600	-	600	-	600
905429 DCA-Mer Bleue Rd Reliability Links	1,232	677	555	-	555
905681 Water System SCADA & Instrument Rehabilitation	2,410	2,350	60	43	17
905992 Manotick Supply Watermain	11,155	796	10,359	10,202	156
906087 2018 Watermain Improvements	3,900	3,571	329	121	209
906197 Water System Facilities Upgrades 2011	1,745	1,675	70	41	29
906353 Water Facilities Roofing 2016	138	142	(4)	-	(4)
906358 Transmission Mains Condition Assessment	1,600	1,405	195	197	(1)
906539 Large Transmission Mains Risk Mitigation	497	364	134	131	3
906662 CWWF Village/Carp Water Quality Treatment	8,880	5,238	3,642	13	3,629
906664 Hurdman Bridge PS Renewal	16,491	1,543	14,948	2,226	12,722
906665 Lemieux WPP Intake Ice Mgmt	16,800	610	16,190	208	15,981
906795 Condition Assess - Critical System Links	5,000	4,215	785	712	73
906798 Water Distribution Sys Improvements	6,993	6,178	815	3	812
906800 Water Treatment Rehabilitation 2013-2016	4,371	4,165	206	83	123
906801 Communal Well System Rehab 2013-2016	566	545	21	-	21
906836 Critical Sys Links Mitigation Measures	2,090	2,080	10	-	10
907007 TSSA Registration and Compliance Upgrade	1,092	828	264	101	163
907008 Treatment Plant Process Expansion	6,016	4,296	1,720	959	760
907099 Carp Reservoir Cell	-	-	-	-	-
907101 River Ridge 3C Elevated Tank	514	4	510	-	510

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Project Description	Authority	Expenditures as of August 31, 2020	August 31, 2020 Unspent Cash Balance	Total Contractual Obligations	Unspent Balance including Contractuals
907455 Hurdman Bridge/Billings BridgePS Upgra	1,700	-	1,700	-	1,700
907456 Manotick North Island Link	7,469	649	6,820	6,380	440
907467 SUC Greenbank	4,930	-	4,930	-	4,930
907473 Communal Well Sys Condition Assess Pro	271	251	20	-	20
907476 WPP Chemical Systems Modifications	2,050	1,531	519	282	237
907477 TSSA Diesel Compliance Upgrades at WF	300	37	263	20	243
907568 EAM Maximo Data Optimization	1,004	385	619	-	619
907605 Carlington Heights Reservoir Remediatio	400	-	400	-	400
907607 Drinking Water Vibration Analysis	200	173	27	-	27
907640 Water Storage Tanks & Reservoir	575	476	99	99	(0)
907643 Water System SCADA & Instrument Reha	1,010	1,022	(12)	8	(20)
907648 Proactive Lead Service Replacement Pro	896	751	145	145	(0)
907654 Ops Condition Assess-Critical Sys Links	2,175	565	1,610	1,023	586
907655 Communal Well System Rehab 2018	526	444	82	47	35
907656 Communal Well System Rehab 2017	285	305	(20)	1	(21)
907672 Remote Station WAFL Assessment/Desig	220	15	205	-	205
907734 Britannia G4	509	497	11	11	0
907795 Business Technology Opportunities	3,600	343	3,257	-	3,257
908071 Water Efficiency 2016	137	43	95	-	95
908073 Water Pumping Station Facility Rehab20	225	202	23	42	(19)
908076 Large Water Meters Changeout Program	3,050	1,055	1,995	1	1,994
908077 Ops Condition Assess-Critical Sys Links	234	229	5	-	5
908078 Proactive Lead Service Replace Prog 201	921	591	331	209	121
908080 Water Distribution Sys Improvements 20	1,000	586	414	124	290
908082 Communal Well System Rehab 2018	950	-	950	145	805
908257 O/S Kanata West Transmission Mains	907	-	907	-	907
908326 Britannia Chem System Mods - DWS	25	1	24	-	24
908372 Ammonia Rm Ventilation Lemieux-Britan	250	8	242	-	242
908376 Montreal Road PS Lifecycle Replacement	4,200	3,515	685	340	346
908379 Britannia WPP Expansion Joint Rehab	200	-	200	-	200
908432 Water Sys SCADA & Instrument Rehab 2	202	118	84	34	50
908433 Water Treatment Rehab 2017	385	376	9	8	0

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908479 Carp Diesel Pump Upgrades	1,255	1,033	222	155	67
908511 2017 Watermain Improvements	1,836	1,054	782	746	37
908613 Bank St (Rideau Rd-Mitch Owens)	8,070	399	7,671	40	7,632
908614 LRT2 W1 Hwy 174 - Shefford Rd	1,150	-	1,150	-	1,150
908615 Leitrim Rd (Bank-550m East)	1,700	-	1,700	-	1,700
908622 2017 Rural Servicing Strategy	200	85	115	104	11
908623 2017 Water & Wastewater EA Studies	250	79	171	20	151
908633 Enhanced Corrosion Control	3,000	-	3,000	250	2,750
908745 CWWF [Design] Lemieux Island WPP Int	2,400	2,055	345	304	41
908749 FEA2016-Kanata West Feedermain	5,788	5,529	259	-	259
908801 Britannia Medium Voltage Maintenance	1,120	848	272	-	272
908818 Britannia HLPS HVAC Upgrade Design Bu	628	540	88	87	1
908825 Lemieux Sludge Line Repairs	151	148	3	3	0
908866 DWS Concrete Repairs	150	81	69	56	13
908908 Small Water Meters Changeout Program	12,475	-	12,475	18,250	(5,775)
908911 Britannia Compressed Air Improvements	30	20	10	-	10
908931 2018 Buildings-Water Services	1,000	694	306	16	289
908978 2018 Transmission/Distribution WM Reh	1,090	284	806	448	358
908980 2019 Watermain Improvements	3,845	3,497	348	291	57
908981 Lemieux island Pipe Bridge SN 017160	3,640	856	2,784	10	2,774
908996 Meter Service Mobility	700	5	695	67	628
909003 DWS Ladder Trolley & Rail System Upgra	600	81	519	199	320
909036 Water Treatment Rehab 2018	817	811	6	-	6
909039 Proactive Lead Service Replace Prog 201	400	141	259	99	160
909071 2018 Off Site Reliability Links	306	-	306	-	306
909132 2018 Rural Servicing Strategy	205	14	191	50	142
909133 2018 Water & Wastewater EA Studies	255	-	255	-	255
909134 2018 Infrastructure Master Plan (Water)	501	80	421	58	363
909189 Britannia Highlift Flowmeters	1,359	72	1,287	880	407
909191 DWS SCADA secondary network replacer	725	630	95	67	27
909198 Shadow Ridge - 2 Deep Wells	251	-	251	-	251
909208 Lemieux & Britannia G2 Generator Const	12,125	661	11,464	1,288	10,176

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909220 Stittsville Tank Remediation	768	762	6	5	1
909265 Britannia Window/Roof Repairs	1,250	33	1,217	75	1,142
909352 2019 Groundwater Studies	1,319	399	920	467	453
909353 2019 Rural Servicing Strategy	250	3	247	3	245
909354 2019 Water & Wastewater EA Studies	260	-	260	-	260
909371 2019 Buildings-Water Services	575	341	234	26	209
909392 2019 WM Transmission/Distribution Rehab	3,944	3,238	706	213	493
909410 Water Storage Tanks & Reservoir 2019	1,010	-	1,010	-	1,010
909412 Water Treatment Rehab 2019	527	515	12	117	(105)
909415 Water Facilities Roofing 2019	223	201	22	20	2
909416 Water Pumping Station Facility Rehab20	2,640	-	2,640	-	2,640
909560 Britannia LLP & HLP Motors and Drives	2,500	-	2,500	-	2,500
909572 Britannia Roofs Rehab	1,083	852	231	62	169
909573 DWS SCADA Network Upgrade	785	-	785	-	785
909574 DWS SCADA HMI Upgrade	585	0	585	-	585
909576 Lemieux Settled Water Ducts & Outfall R	1,000	25	975	249	727
909595 WPP Arc Flash Hazard Studies	300	108	192	19	173
909596 Lemieux Waste Management Building Rc	100	-	100	107	(7)
909598 Kings Park Well 1 Electrical Service Upg	170	8	162	12	150
909648 Lemieux Protective Relays Upgrades	250	-	250	-	250
909671 2020 Infrastructure Master Plan (Water)	510	-	510	-	510
909672 2020 Off Site Reliability Links	160	-	160	-	160
909673 2020 Groundwater Studies	380	-	380	-	380
909674 2020 Rural Servicing Strategy	260	-	260	-	260
909682 2020 Buildings - Water Services	150	-	150	20	130
909713 Water System Improvements	6,000	3	5,997	46	5,951
909714 2020 WM Transmission/Distribution Rehab	4,087	212	3,875	1,775	2,101
909725 2020 Water & Wastewater Studies	260	-	260	-	260
909735 Carling Ave (Moodie-Shirleys Bay)	3,000	-	3,000	-	3,000
909795 Water Distribution Sys Improvements 20	1,325	-	1,325	-	1,325
909796 Water Facilities Roofing 2020	250	-	250	-	250
909797 Water Storage Tanks & Reservoir 2020	630	-	630	-	630

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Project Description	Authority	Expenditures as of August 31, 2020	August 31, 2020 Unspent Cash Balance	Total Contractual Obligations	Unspent Balance including Contractuals
909798 Water Pumping Station Facility Rehab20	3,000	-	3,000	-	3,000
909799 Communal Well System Rehab 2020	1,150	-	1,150	49	1,101
909800 Water Treatment Rehab 2020	7,085	11	7,074	489	6,585
909801 Water Sys SCADA & Instrument Rehab 2	1,572	2	1,570	35	1,535
909802 Protective Lead Serv Replace Prog 2020	1,250	29	1,221	338	883
909803 Cathodic Protection 2020	1,200	432	768	153	616
909804 Critical Links Risk Mitigation Meas 2020	500	-	500	-	500
909850 Britannia WTP Chem Mixing Chber Bypass	150	10	140	-	140
909900 Walkley Screen Replacement	170	-	170	-	170
909901 WPP Electrical Preparedness Improvement	180	19	161	24	138
909905 Britannia Flood Initiatives & SW Mngmt	100	4	96	-	96
909963 Britannia Lab Virtualization	126	-	126	66	60
909968 Water Purification Plants Comprehensive	250	-	250	315	(65)
909993 2020 Drinking Water Asset Management	250	-	250	141	109
910006 Shadow Ridge Wells Rehab	250	-	250	198	52
Drinking Water Services Total	316,867	97,038	219,829	58,081	161,748
Integrated Roads, Water & Wast					
908140 City Centre Ave & Elm St	1,030	-	1,030	-	1,030
Integrated Roads, Water & Wast Total	1,030	-	1,030	-	1,030
Integrated Water & Wastewater					
906899 Sewer Access & Outfalls	25,707	10,239	15,468	3,808	11,660
907468 EAM Maximo Sustainment	3,294	3,244	50	7	44
907501 SAP Integration & Mobility Deployment	6,105	5,463	642	150	492
908424 Environmental Time Series Database	1,490	21	1,469	-	1,469
908484 2017 Sewer & Water Repairs/Improvement	2,920	2,115	805	170	635
908486 2017 Trenchless Rehab - Sanitary & Storm	2,610	1,674	936	318	618
908576 Larkin-Larose-Lepage	6,620	644	5,976	5,701	275
908580 CWWF Queensway Terrace North Sewer	1,375	669	706	387	319
908581 Valley Dr Storm Sewer	19,882	11,755	8,127	1,942	6,185
908722 CWWF 2017 Buried Infrastruct-Bld & Par	1,250	1,186	64	45	19

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908942 2018 Sewer & Water Repairs/Improvements	5,000	3,883	1,117	430	687
908944 2018 Trenchless Rehab - Sanitary & Storm	4,006	3,723	283	146	137
908997 LRT2 SS1 Sewer Upgrades (Byron Ave)	1,160	-	1,160	-	1,160
909279 Watermain: Albert-Slater (Bay to Elgin)	100	-	100	-	100
909403 Chapman Blvd (Dorval-Othello)	600	-	600	-	600
909481 2019 Sewer CCTV Engineering	1,000	48	952	-	952
909492 LRT2 SS2 Richmond Compl Streets	6,000	-	6,000	-	6,000
909599 2019 Spring Freshet Emergency	1,603	1,506	97	58	39
909694 Hydraulic Structures	1,000	-	1,000	-	1,000
909695 2020 Sewer Repairs / Improvements	10,777	54	10,723	831	9,892
909696 2020 Sewer Trenchless Rehab	1,500	-	1,500	-	1,500
909697 2020 Sewer CCTV Engineering	-	1	(1)	-	(1)
Integrated Water & Wastewater Total	103,999	46,224	57,775	13,993	43,782
Stormwater Services					
900812 DCA-Cardinal Creek-Stormwater Facility	24,856	22,543	2,313	-	2,313
900814 DCA-EUC SW Pond 1	7,810	7,254	556	16	540
902137 Stormwater Mgmt: Rehab&Enviro Compl	2,520	626	1,894	695	1,198
903230 DCA-SWM Ponds E 1&2 Shirley's Brook	3,250	2,482	768	-	768
903250 DCA-Storm Water Pond - Monahan Drain	8,147	7,074	1,074	736	337
903324 Kennedy Burnett SW Pond	16,310	828	15,482	11,635	3,847
903328 DCA-Area W-2 Shirleys Brook W SWM Pond	1,284	780	503	482	22
903940 Carp River Restoration	6,361	5,631	730	-	730
904470 LI-Britannia Villge-OttRivr FloodProtect	1,945	1,875	70	76	(6)
905004 ORAP-Ottawa River Quality Model	422	304	118	-	118
905757 Monahan Constructed Wetland Rehab.	5,750	5,683	67	82	(14)
905792 Manotick Special Des Area SW Monitorin	74	-	74	-	74
906194 Municipal Drain Improvements	258	136	122	5	116
906632 Flood Plain Mapping	1,809	1,765	44	20	24
907395 Municipal Drain Improvements - 2016	189	158	31	24	7
907483 2014 Infrastruct Master Plan(Stormwater	402	307	95	79	16
907485 2019 Stormwater Master Planning	250	63	187	186	1

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907486 Van Gaal Municipal Drain	157	121	36	32	4
907528 DCA-Riverside South SW Treatment Cha	421	244	177	-	177
907529 DCA-Leitrim SW Pond 2	18,607	-	18,607	-	18,607
907535 DCA-Leitrim Pond 2 Trunk Storm Sewer	4,389	0	4,388	-	4,388
907536 DCA-Riverside South SW Pond 3	18,797	-	18,797	-	18,797
907537 DCA-Riverside S. Pond3 Trunk Storm Se	10,051	-	10,051	-	10,051
907538 DCA-Riverside South - Tributary No. 3	1,165	-	1,165	-	1,165
907539 DCA-Riverside South - Tributary No. 4	499	-	499	-	499
907540 DCA-Riverside South - Tributary No. 7A	403	-	403	-	403
907541 DCA-Riverside South - Tributary No. 7B	876	-	876	-	876
907542 DCA-Riverside South - Tributary No. 10	1,489	-	1,489	-	1,489
907543 DCA-Riverside South - Fish Habitat	2,809	-	2,809	-	2,809
907558 DCA-N5 Ultimate SW Pond	14,229	10,689	3,540	3,416	125
907560 DCA-EUC SW Pond 1 Trunk Sewers	11,045	-	11,045	11,045	-
907561 DCA-EUC SW Pond 3 Trunk Sewers	1,700	554	1,146	1,146	0
907562 DCA-Leitrim SW Pond 1 Trunk Sewers	9,055	8,141	914	-	914
907563 DCA-Riverside South SW Pond2 Trunk Se	5,306	381	4,925	4,925	0
907570 Hazeldean Municipal Drain	51	11	41	-	41
907602 DCA-Glou. EUC SWM Pond 1 Modification	6,864	-	6,864	-	6,864
907603 DCA-Glou. EUC SWM Pond 1 Fish Habita	1,132	1,036	96	96	(0)
907680 Stream Restoration Projects - 2016	183	165	18	2	16
907718 Kizell Municipal Drain	1,816	268	1,548	119	1,429
907720 Cranberry Creek Municipal Drain	2,385	330	2,055	162	1,893
907805 DCA-Riverside South Pond 5	10,354	583	9,771	1	9,769
907900 DCA-Mud Creek Erosion Monito E3 Glou	250	-	250	-	250
907952 DCA-Monahan Drain Strmwter FacilityRef	2,400	912	1,488	1,301	186
908084 ORAP-Water Environment Strategy (WES	2,011	1,137	874	583	291
908087 John Taylor Municipal Drain	61	35	26	24	1
908101 Stormwater Mgmt: Rehab &Enviro Comp	440	407	33	4	29
908185 2016 Inlet Control Devices - CW	400	161	239	255	(16)
908252 Stormwater Mgmt Retrofit Master Plan	2,180	139	2,041	106	1,935
908360 Eastboro Municipal Drain	177	138	39	48	(10)

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908361 Seabrook Municipal Drain	63	67	(4)	23	(27)
908385 Utman Park Stormwater Facility	463	0	463	-	463
908386 Taylor Creek Erosion Works Phase 2	279	-	279	-	279
908426 Hawkins Municipal Drain	68	17	52	52	0
908427 Thomas Baxter Municipal Drain	72	12	59	59	0
908440 ORAP-Water Environment Strategy (WES)	1,000	330	670	39	631
908618 CWWF Convent Glen North Storm Sewer	1,425	905	520	90	430
908619 Graham Creek Storm Sewer	16,756	906	15,850	223	15,627
908723 CWWF 2017 Drainage Culvert Renewal	13,250	12,131	1,119	-	1,119
908724 CWWF 2017 Drainage Culvert Renew-De	1,500	1,309	191	-	191
908733 CWWF SW Retrofit - Hemmingwood Way	118	99	19	-	19
908737 CWWF Graham Creek Slope Stabilization	250	200	50	-	50
908816 Flowing Creek Municipal Drain	37	19	18	-	18
908817 McKinnons Creek Municipal Drain	159	77	81	20	62
908852 Bilberry Creek - Slope Stabilization	5,800	5,510	290	196	94
908972 2018 Scoping Pre/Post Drn Culverts	1,060	965	95	34	61
908973 2018 Drainage Culverts (<=1m)	5,037	3,891	1,146	115	1,031
908974 2018 Drainage Culverts (1m-3m)	7,575	6,194	1,381	215	1,166
908975 2018 Drainage Culverts pre Resurfacing	3,425	2,283	1,142	139	1,003
908976 2018 Drainage Culverts - Site-Specific	1,040	828	212	-	212
908982 2018 Joint CA/City Renewal Activiti	-	-	-	-	-
909001 Hobbs Municipal Drain	160	81	79	10	69
909002 Tompkins Diversion Municipal Drain	75	17	58	38	20
909017 LRT2 C1 Hwy 174 Culverts	6,226	-	6,226	-	6,226
909027 Stormwater Mgmt: Rehab&Enviro Comp	2,442	1,759	683	83	600
909131 2018 Stormwater Management Retrofit	12,060	460	11,600	1,675	9,926
909150 2019 Stormwater Improvements	200	130	70	54	15
909152 SNDC - Chapman Mills SW Pond	827	-	827	-	827
909153 Wilson-Cowan Municipal Drain	81	1	80	81	(1)
909170 Kilroe Municipal Drain	75	7	68	66	2
909171 Thomas Gamble Municipal Drain	75	52	23	32	(8)
909172 Tasse-Regimbald Municipal Drain	75	11	64	52	12

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909173 O'Keefe (Sec 78) Municipal Drain	100	10	90	28	62
909184 Regimbald Municipal Drain	180	77	102	2	100
909195 Simpson Municipal Drain	155	78	77	1	76
909196 Wilson-Johnston Municipal Drain	235	59	176	20	156
909216 Cassidy 2018 Municipal Drain	227	148	79	79	0
909305 Buckles Municipal Drain	80	33	47	61	(15)
909351 Municipal Drain Improvements - 2019	294	-	294	-	294
909355 2019 Flood Plain Mapping	175	57	118	108	10
909356 2020 Stormwater Management Retrofit	-	-	-	-	-
909383 2019 Culverts Scoping Pre/Post Eng.	510	414	96	38	58
909384 2019 Drainage Culverts - Site-Specific	700	257	443	89	354
909385 2019 Drainage Culverts - CW	21,629	10,477	11,152	5,393	5,759
909540 DCA- Riverside South Pond 5 Storm Sew	6,501	-	6,501	-	6,501
909626 KNL Municipal Drain	100	-	100	-	100
909707 2020 Culverts Scoping Pre/Post Eng.	600	-	600	-	600
909708 2020 Drainage Culverts - Site-Specific	2,500	-	2,500	156	2,344
909709 2020 Drainage Culverts - CW	3,000	68	2,932	656	2,276
909710 2020 Drainage Culverts - Other	500	377	123	5	117
909715 Beltown Stormwater Improvements	750	-	750	-	750
909730 2020 Stormwater Master Planning	510	67	443	228	215
909743 Municipal Drain Improvements - 2020	500	-	500	-	500
909744 Stormwater Mgmt. Rhab&Enviro Compl.	550	-	550	2,427	(1,877)
909748 Mud Creek Stream Renewal	370	-	370	-	370
909749 2020 Flood Plain Mapping	310	-	310	239	71
909750 Storm and Surface Water Rehabilitation	1,500	3	1,497	157	1,340
909815 ORAP-Water Enviro Strgy (WES) PH2 20	1,000	-	1,000	-	1,000
909816 Linear Storm System Improvements	500	-	500	112	388
909898 Biltmore Extension Municipal Drain	80	13	67	53	14

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909899 South Cyrville Municipal Drain	80	-	80	-	80
909942 Britannia Village Ottawa River Flood Pro	500	-	500	-	500
909960 Johnston Municipal Drain	103	-	103	102	1
909961 Dillon-Wallace Municipal Drain	112	-	112	111	1
Stormwater Services Total	339,359	133,361	205,998	50,666	155,332
Transit Services					
909390 Transit Structures - Drainage	50	10	40	2	38
Transit Services Total	50	10	40	2	38
Wastewater Services					
903252 DCA-Sanitary Sewer Oversizing Program	1,816	605	1,211	39	1,173
903345 Kanata West Pump Station & Forcemain	53,966	53,753	213	66	146
903437 ROPEC West Boiler Plant Replacement	570	356	214	0	214
904752 DCA-Barhaven S. O/S(South of Jock River)	1,100	496	604	-	604
904755 2018 Infrastructure Master Plan (Sewer)	1,159	559	600	192	408
904939 ORAP-Wet Weather IMP - Flow Reduction	8,005	7,360	645	162	483
904985 North Kanata Sewer Ph 2	23,082	16,439	6,643	4,691	1,952
904986 Tri-Township/March Ridge Replacement	19,222	39	19,183	1,207	17,976
904988 March PS Conversion	13,249	705	12,544	252	12,291
905421 DCA-O/S Orleans S Business Park SanSe	843	-	843	-	843
905423 DCA-O/S - Riverside S Community Sanita	1,439	0	1,439	-	1,439
905424 DCA-O/S -BarrhavenS Oversize NJock Ri	600	1	599	-	599
905425 DCA-O/S - Kanata Town Centre Trunk Se	349	-	349	-	349
905705 ORAP-Combined Sewage Overflow Stora	210,544	181,057	29,487	24,811	4,676
905745 Compassionate Grant Program	200	51	149	-	149
905964 DCA-O/S Jackson Trails Sewer	252	-	252	-	252
905990 DCA-O/S Kanata Lakes North	59	-	59	-	59
906022 DCA-O/S KW Collector Sewers	4,338	3,885	453	214	239
906099 Trunk Sewer Reliability	3,500	1,951	1,549	140	1,409
906100 2018 Sanitary Sewer Improvements	930	758	172	9	163
906645 ROPEC - Primary Clarifier Upgrades	13,100	10,380	2,720	-	2,720

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906647 ROPEC Primary Clarifier Rehab Phase 2	19,730	1,361	18,369	0	18,369
906648 ROPEC - Digester Gas Utilization	57,223	1,463	55,760	1,645	54,115
906650 ROPEC - Process Facility - Environ. Sys	9,676	9,336	340	98	242
906671 Collection Sys. Condition Assesment Prog	2,020	2,007	13	13	0
906842 TSSA Registration & Compliance Upgrad	1,721	1,752	(31)	289	(320)
907060 ROPEC Secondary Clarifier Upgrades	8,296	3,124	5,172	19	5,154
907061 ROPEC Concrete Rehab & Repairs	801	744	57	55	2
907107 Acres Road PS Upgrade Phase 1 Growth	1,009	275	734	232	502
907114 Stittsville/Fernbank Intercept-Diversion	18,000	13,586	4,414	2,289	2,126
907382 ROPEC Aeration Blower Expansion	1,265	24	1,241	-	1,241
907383 ROPEC Digester Flare Expansion	748	-	748	-	748
907392 Raw Sewage Pumping Station Upgrade	9,206	8,813	393	54	339
907393 ROPEC Condition Assesment Program	500	190	310	34	276
907462 Pump Stations Capacity Increase	992	19	973	294	680
907596 Hazeldean Pumping Station HVAC Rehab	2,875	1,884	991	845	147
907616 Decommission Cathcart Regulator	200	148	52	38	14
907617 Critical Manholes- Electrical / Mechanic	480	269	211	15	196
907620 Keefer Odour Control Fac.Modification	4,400	4,065	335	19	316
907624 Wastewater Effluent Water Grid Rehab	2,750	1,536	1,214	-	1,214
907676 Protective Plumbing Program 2015	1,041	997	44	72	(28)
907678 Linear Sewage System Improve Prog 20	285	283	3	-	3
907679 Sewer Lateral Repairs 2015	7,058	6,659	399	340	59
907683 Lab Equipment Purchase/Replacement 2	600	452	148	132	16
907684 ROPEC-Sewage Treatment Rehab Prog 2	5,838	5,475	363	402	(39)
907685 ROPEC-Concrete Rehab & Repairs 2015	176	157	19	405	(386)
907688 Collection System Condition Assesment	996	800	196	199	(3)
907689 Flow Monitoring Rehab Program	2,674	405	2,269	1,159	1,110
907716 ROPEC Rehab of Digester	16,115	5,251	10,864	360	10,504
907807 N5 Sanitary Pumping Station Overflow	949	-	949	-	949
907809 Richmond PS & Forcemain Expansion Ph	4,503	2,662	1,841	382	1,459
907840 FEA2018 Shea Road Pump Station	3,566	3,188	378	-	378
907897 DCA-Cardinal Creek East Sanitary Ovsiz	75	-	75	-	75

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907932 Richmond Forcemain Construction	5,381	5,122	259	259	0
907941 Remote Operations - Station Modification	1,065	584	481	408	73
908029 Remote Facility Corrosion/Odour	-	-	-	-	-
908089 Protective Plumbing Program 2016	1,000	91	909	52	857
908091 Collection System Condition Assess. 2016	981	26	955	568	387
908093 Linear Sewage System Improve. Prog. 2016	1,244	1,103	141	-	141
908094 SCADA Rehab & Upgrades - Remote Sewer	1,000	-	1,000	-	1,000
908095 Sewer Lateral Repairs 2016	4,533	4,051	482	378	104
908096 Tartan PS Reliability Improvements	2,250	875	1,375	611	764
908099 ROPEC - Sewage Treatment Rehab Prog	1,137	1,095	42	29	14
908107 ROPEC Process Facil - Enviro Sys Upgrade	3,787	1,576	2,211	-	2,211
908181 2019 Wastewater Improvements	900	151	749	114	635
908183 Tri-Township Collector	1,500	992	508	438	70
908184 2016 ORAP-Wet Weather IMP - Flow Red	1,500	1,263	237	145	92
908247 Richmond Forcemain Expansion	7,066	463	6,603	1,705	4,898
908250 Infrastructure Planning Information Mgr	1,230	328	902	10	892
908330 RS-PS HVAC Boilers & SCADA Upgrade C	9,609	9,327	282	334	(52)
908368 WWC PS Gas Monitoring Rehab & Upgra	6,300	658	5,642	4,528	1,114
908390 Manotick Servicing DCA Credit	6,857	925	5,932	5,932	0
908425 ROPEC Screen & Degrit Repairs-Construct	3,355	3,323	32	0	32
908429 ROPEC Digester 5 & 6 Mixing Pump Upg	1,000	271	729	101	629
908445 Wastewater Drainage Roofing 2019	180	-	180	-	180
908446 Collection System Condition Assess.	745	200	546	55	490
908449 Sewer Lateral Repairs 2018	3,153	2,650	503	535	(32)
908450 Sewage Pumping Station Rehab Prog 20	2,466	674	1,792	1,787	5
908451 Lab Equipment Purchase/Replacement 2	300	-	300	-	300
908453 ROPEC - Sewage Treatment Rehab Prog	2,313	2,298	15	42	(27)
908514 2017 ORAP Wet Weather IMP - Flow Red	1,870	1,239	631	190	441
908521 ROPEC Electrical Master Plan	690	470	220	96	124
908558 O/S N5 Trunk Sewer Oversizing	60	-	60	-	60
908658 Chemical System Upgrades - Remote WW	2,510	2,429	81	54	27
908660 Sewer Use Prog-Short Term Initiatives	200	97	103	21	82

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908730 CWWF Flood Protection - Bilberry/Chatel	2,600	2,332	268	223	45
908732 CWWF Flood Protection - Craig Henry	3,200	3,197	3	22	(20)
908741 CWWF ROPEC Lighting Upgrades	1,337	1,329	8	8	0
908742 CWWF [Construct] ROPEC Thicken & De	28,310	23,404	4,906	737	4,169
908767 FEA2018-Richmond Sanitary Trunk Sewer	2,838	2,279	559	559	0
908785 Cyrville Rd. Pumping Station Upgrades	350	338	12	11	1
908834 WWS SCADA LAN/WAN Standards Rehab	1,801	547	1,254	208	1,046
908836 Pumping Station Capitalized Maintenance	1,188	1,091	97	72	24
908843 Delorme PS & FM Upgrades	8,425	5,679	2,746	1,863	882
908845 ROPEC Digester 5 Condition Assessmnt & R	275	137	138	102	35
908874 ROPEC Fire Damper Rehab	765	313	452	-	452
908892 ROPEC Activated Sludge Screws Overhaul	2,450	1,263	1,187	1,225	(37)
908902 Shadow Ridge Station Upgrades	1,042	152	890	11	879
908904 Decommission West End Pump Stns & Ma	2,493	2,400	93	129	(36)
908983 2018 ORAP Wet Weather IMP - Flow Red	500	93	407	400	7
909029 Protective Plumbing Program 2018	600	1	599	-	599
909031 Sewage Pumping Station Rehab Prog 20	245	217	28	24	3
909032 ROPEC - SCADA Rehab. & Upgrades 201	1,400	-	1,400	-	1,400
909033 ROPEC - Sewage Treatment Rehab Prog	1,812	1,741	71	47	24
909034 ROPEC HVAC Phase 3	400	-	400	-	400
909072 Leitrim Sanitary Pump Station Expansion	423	-	423	-	423
909128 ROPEC Digester 5&6 Expansion Joint Re	479	459	20	20	(0)
909136 CW Flood Risk Profile	259	220	40	-	40
909149 Acres & Hazeldean Odour Control	400	400		2	(1)
909158 ROPEC RSPS Motor & Drive Rehab.	2,061	341	1,720	844	876
909176 Jackson Trail Pump Station Upgrades	720	-	720	-	720
909183 Remote Station PLC Upgrades	250	191	59	76	(17)
909187 ROPEC Screen & Degrit Conveyor Replac	250	89	161	147	14
909199 Johnwoods Bypass Sanitary Sewer	199	142	57	-	57
909200 Crystal Beach Pump Station Duct Bank	390	290	100	11	89
909203 Tech Services Bldg Chiller Piping Repl.	759	74	685	388	298
909217 Pumping Stn HVAC & Isolation Valve Ref	2,707	139	2,568	1,828	740

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909218 ROPEC Master Schedule-Revay	149	39	111	111	(0)
909219 Munster 2 Reliability Improvements	1,661	1,489	172	44	128
909225 Primary Clarifiers Odour Control System	1,750	81	1,669	145	1,524
909226 Flow Through Station Rehabs	875	345	530	121	409
909245 Forcemain Condition Assessment & Reha	1,750	372	1,378	106	1,272
909251 ROPEC RAS/WAS Ferrous System Replac	914	167	747	133	614
909258 ROPEC RSPS Interior Wall Condition Ass	350	16	334	34	299
909270 ROPEC Sub#1 Transformers Replacem	131	71	61	70	(9)
909273 Harvard PS Detailed Design & Contract A	500	393	107	65	42
909276 ROPEC diesel generators maint. contract	250	92	158	91	67
909295 Screen and Degrit Hydraulic Study	200	74	126	126	1
909312 Water Env Protec Short Term Initiat 201	150	-	150	-	150
909323 WWC Medium Voltage Maintenance	1,486	980	506	244	262
909330 Sewer Lateral Repairs 2019	1,000	147	853	802	51
909331 Sewage Pumping Station Rehab Prog 20	4,099	735	3,364	3,446	(82)
909334 ROPEC - Sewage Treatment Rehab Prog	668	559	109	94	16
909341 ROPEC PolymerPipe ConditionAssess-rep	465	189	276	228	48
909342 ROPEC Sodium Bisulphate Piping Conda	181	97	84	67	18
909357 South Nepean Collector Ph3	11,343	5	11,338	8,796	2,542
909375 2019 Sewer Access & Outfalls	2,000	255	1,745	177	1,568
909376 2019 Sewer Repairs / Improvements	9,821	1,396	8,425	6,334	2,091
909377 2019 Sewer Trenchless Rehab	4,400	28	4,372	1,978	2,394
909393 2019 ORAP Wet Weather IMP	1,057	629	428	244	184
909491 ROPEC Disinfection Bldg Rehab	1,492	222	1,270	704	565
909516 LiDAR Topography Update - CW	457	-	457	455	2
909542 DCA-O/S Half Moon Bay N San Sewer	404	-	404	-	404
909567 Dogwood Pump Station Rehab	855	113	742	729	13
909568 Hemlock Pumping Station Rehab	550	155	395	256	139
909585 Leonard Laporte & St.Joseph PS rehab	1,240	207	1,033	418	615
909594 ROPEC Glycol Loop Extension	700	23	677	-	677
909602 Cumberland 2-3-4 PS Rehab	250	113	137	19	118
909617 ROPEC Medium Voltage Mtce Phase2	809	105	704	452	252

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909623 Cambridge St - Sewer Replacement	2,629	1,132	1,497	899	598
909716 Mooney's Bay Trunk Sewer	5,500	-	5,500	-	5,500
909717 2020 ORAP Wet Weather IMP	4,000	28	3,972	546	3,426
909724 Pump Stations Capacity Renewal	725	-	725	117	608
909805 Linear Sewage System Improve. Prog. 2	500	-	500	110	390
909806 Sewer Lateral Repairs 2020	4,000	159	3,841	1,441	2,400
909807 Sewage Pumping Station Rehab Prog 20	7,785	-	7,785	-	7,785
909808 ROPEC - Sewage Treatment Rehab Prog	16,420	69	16,351	157	16,193
909809 ROPEC - Concrete Rehab & Repairs 2020	750	0	750	53	696
909810 New Vehicles Waste Water - 2020	59	-	59	-	59
909902 Windsor Park PS Rehab	250	-	250	-	250
909938 RSPS to S&D Conduit Flume Channel	150	-	150	-	150
909969 ROPEC Master Plan	550	-	550	-	550
909972 RCAF and RCMP PS Rehabilitation	450	-	450	211	239
909992 Richmond Pump Station	2,714	-	2,714	-	2,714
909994 2020 Wastewater Asset Management Pla	250	-	250	138	112
909997 Acres & Hazeldean PS's Odour Contr	2,900	-	2,900	3,793	(893)
Wastewater Services Total	792,790	456,944	335,846	102,472	233,374
Grand Total	1,554,095	733,576	820,519	225,215	595,304