



Environment and Climate Protection Committee

Rate Supported Programs

Draft BUDGET 2018

Balanced, Affordable and Progressive

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Environment and Climate Protection Committee - Rate Supported

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Public Works & Environmental Services Department Water Services 2018 Budget Briefing Note

Description

The Water Services Branch is responsible for the management of operations, maintenance and repairs of the City's central and five (5) communal well-based drinking water systems as well as the City's stormwater collection, wastewater collection and wastewater treatment systems. This includes:

- Comprehensive systems operation and maintenance within regulatory framework
- Environmentally sound management of City-owned facilities and collection systems

Programs/Services Offered

- Operation and maintenance of the City's central distribution system including the Britannia and Lemieux Island water purification plants, 17 drinking water pump stations and the 5 communal well systems: Carp Drinking Water System, Munster Hamlet Drinking Water System, Kings Park Drinking Water System, Vars Drinking Water System, and Shadow Ridge Drinking Water System
- Production and distribution of drinking water including electrical, mechanical, and instrumentation maintenance and repair
- · Leak detection programs
- First Response 24 hour per day response for drinking water and wastewater
- Operation, maintenance (including disinfection) and repair of over 3000 km of watermains and over 47,000 valves
- Provision of fire protection through inspection, maintenance and repair of over 22,000 public fire hydrants

- Maintain the City's accreditation as an Operating Authority for the Drinking Water Quality Management System
- Operational support for capital infrastructure renewal and development projects
- Operation and maintenance (including cleaning, inspection, and repair) of the wastewater collection system, comprised of over 5800 km of sanitary, combined, and storm pipes, 107,000 maintenance holes, 111,000 catch basins, 1600 stormwater outlets
- Operation and maintenance of 84 sanitary sewage and storm water pumping stations, combined sewage regulators/storage facilities, odour control facilities and the R.O. Pickard Environmental Centre
- Sewer use bylaw compliance, monitoring, and enforcement
- SCADA system operation, communication, and maintenance
- Quality assurance, compliance management and reporting

Wastewater Services 2018 Budget Briefing Note

Description

The Wastewater Services Branch, with support from the department's Environmental Business Services and Environmental Engineering Services branches, is responsible for the operational planning, development, management, and environmentally sound operation of the City's wastewater collection and treatment systems. This includes:

- Operational planning for future requirements including system growth
- Environmentally sound management of City-owned facilities and collection systems

Programs/Services Offered

- R.O. Pickard Environmental Centre's operation and maintenance
- Operation and maintenance (including cleaning and inspection) of the wastewater collection system comprised of over 5800 km of sanitary, combined, and storm pipes
- Operation and maintenance of 85 sanitary sewage and storm water pumping stations, and odour control facilities
- Sewer use bylaw compliance, monitoring, and enforcement
- Compliance management of environmental legislation applicable to wastewater
- SCADA system operation and maintenance
- Residential Protective Plumbing and Cross Connection remediation grant programs, and Sewer Lateral replacement program
- Asset and financial resources management
- Biosolids management program, including the agricultural land application program

Public Works & Environmental Services Department Parks, Forestry & Stormwater Water Services 2018 Budget Briefing Note

Description

The Public Works & Environmental Services Department is responsible for overseeing drinking water production and distribution, wastewater collection and treatment, surface water management, solid waste collection, processing and disposal, roads, parks, and forestry maintenance and operations, and parking development and operations.

Public Works & Environmental Services has clear service mandates and clear lines of business accountability including:

- One-stop shop for the city's road, park and forestry operations and maintenance, parking related matters; and environmental services such as drinking water, waste water, surface water and solid waste.
- Ability to respond quickly and share resources
- Common service districts for all field operations
- Clear service standards
- Structured around community needs
- Strong focus on continuous improvement and performance management

Programs/Services Offered

Parks, Forestry and Stormwater

Provides centralized management of the City's parks including 508 sports fields and 282 ball diamonds, 4,421 hectares of parkland in more than 1,247sites and 1984 play structures. Annually, the service area completes an average of 6,000 service requests with 97% being completed within established service levels.

Manages all aspects of the City's 10,000 hectares of urban and rural forests including 346,000 street and park trees. Plants 125,000 trees annually across the City in urban, suburban and rural areas. Manages invasive species, such has the Emerald Ash Borer. Waters and establishes maintenance of new and hard surface planted trees, removes trees and stumps as required.

Responsible for the operational planning, development and management of the City's storm water drainage and treatment systems. This includes 234 storm water management ponds, 113 underground storm treatment/control facilities, the maintenance of approximately 2, 600 km of storm sewers and appurtenances. The service area conducts approximately 106,000 water quality tests annually. Oversees inter-department storm water programs and initiatives.

City of Ottawa Environment and Climate Protection Committee - Rate Supported - Operating Resource Requirement In Thousands (\$000)

	2016	2016 2017		2018		
	Actual	Forecast	Budget	Estimate	\$ Change over 2018 Budget	
Expenditures by Program						
Drinking Water Services	161,318	170,945	172,460	178,940	6,480	
Wastewater Services	155,329	147,720	148,445	154,890	6,445	
Stormwater Services	27,768	45,874	46,267	48,497	2,230	
Gross Expenditure	344,415	364,539	367,172	382,327	15,155	
Recoveries & Allocations	-18,365	-16,787	-17,065	-17,085	-20	
Revenue	-339,749	-340,017	-350,107	-365,242	-15,135	
Net Requirement	-13,699	7,735	0	0	0	
Expenditures by Type						
Salaries, Wages & Benefits	62,464	58,566	57,126	59,078	1,952	
Overtime	1,637	2,025	2,550	2,603	53	
Material & Services	41,508	44,480	49,021	49,872	851	
Transfers/Grants/Financial Charges	171,425	184,704	184,712	196,734	12,022	
Fleet Costs	4,714	4,230	4,801	4,831	30	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	62,667	70,534	68,962	69,209	247	
Gross Expenditures	344,415	364,539	367,172	382,327	15,155	
Recoveries & Allocations	-18,365	-16,787	-17,065	-17,085	-20	
Net Expenditure	326,050	347,752	350,107	365,242	15,135	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	-190	-145	-145	-145	0	
Municipal	0	0	0	0	0	
Own Funds	-5,377	-5,726	-5,726	-5,726	C	
Fees and Services	-334,182	-334,146	-344,236	-359,371	-15,135	
Fines	0	,	,	0	Ó	
Other	0	0	0	0	C	
Total Revenue	-339,749	-340,017	-350,107	-365,242	-15,135	
Net Requirement	-13,699	7,735	0	0	0	
Full Time Equivalents			582.62	582.62	0.00	

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

	2016	201	7	2018	
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget
Expenditures by Program					
Water share of Water Services	56,216	54,335	56,073	57,990	1,917
Technical Innovation & Engineering Support Services	7,852	6,066	6,136	6,302	166
Business & Technical Support Services	1,685	1,339	1,546	1,576	30
Non Departmental	95,565	109,205	108,705	113,072	4,367
Gross Expenditure	161,318	170,945	172,460	178,940	6,480
Recoveries & Allocations	-3,348	-3,220	-3,220	-3,220	0
Revenue	-164,466	-164,445	-169,240	-175,720	-6,480
Net Requirement	-6,496	3,280	0	0	0
Expenditures by Type					
Salaries, Wages & Benefits	35,422	32,136	31,047	32,504	1,457
Overtime	977	1,185	1,685	1,718	33
Material & Services	17,047	17,267	19,547	20,116	569
Transfers/Grants/Financial Charges	79,364	86,627	86,635	90,676	4,041
Fleet Costs	3,214	2,699	3,260	3,280	20
Program Facility Costs	0	0	0	0	0
Other Internal Costs	25,294	31,031	30,286	30,646	360
Gross Expenditures	161,318	170,945	172,460	178,940	6,480
Recoveries & Allocations	-3,348	-3,220	-3,220	-3,220	0
Net Expenditure	157,970	167,725	169,240	175,720	6,480
Revenues By Type					
Federal	0	0	0	0	0
Provincial	0	0	0	0	0
Municipal	0	0	0	0	0
Own Funds	-1,782	-1,995	-1,995	-1,995	0
Fees and Services	-162,684	-162,450	-167,245	-173,725	-6,480
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-164,466	-164,445	-169,240	-175,720	-6,480
Net Requirement	-6,496	3,280	0	0	0
Full Time Equivalents	· ·		333.44	333.44	0.00

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Water Services Connection							-25
Size of Service Pipe							
20 mm on Ductile Iron or Cast Iron	639.00	652.00		N/A	N/A	N/A	
20 mm on PVC	718.00	732.00	ı	N/A	N/A	N/A	
20 mm others - Cost plus 15%, hourly	135.00	138.00		N/A	N/A	N/A	
20 to 50mm on concrete	1,909.00	1,947.00		N/A	N/A	N/A	
25 mm on Ductile Iron or Cast Iron	711.00	725.00	•	N/A	N/A	N/A	
25 mm on PVC	795.00	811.00	•	N/A	N/A	N/A	
25 mm others - Cost plus 15%, hourly	135.00	138.00	-	N/A	N/A	N/A	
40 mm on Ductile Iron or Cast Iron	947.00	966.00		N/A	N/A	N/A	
40 mm on PVC	1,047.00	1,068.00		N/A	N/A	N/A	
40 mm others - Cost plus 15%, hourly	135.00	138.00		N/A	N/A	N/A	
50 mm on Ductile Iron or Cast Iron	1,506.00	1,536.00		N/A	N/A	N/A	
50 mm on PVC	1,604.00	1,636.00		N/A	N/A	N/A	
50 mm others - Cost plus 15%, hourly	135.00	138.00	-	N/A	N/A	N/A	
100 mm	3,954.00	4,033.00	-	N/A	N/A	N/A	
150 mm	4,357.00	4,444.00	•	N/A	N/A	N/A	
200 mm	5,405.00	5,513.00	-	N/A	N/A	N/A	
All fees above for Water Service Connections to be							
replaced with Cost plus 15%, hourly	-	-	141.00	0.0%	0.0%	01-Jan-18	
100 to 200mm on concrete - Cost plus 15%, hourly	135.00	138.00	141.00	2.2%	4.4%	01-Jan-18	
Larger than 200 mm - Cost plus 15%, hourly	135.00	138.00	141.00	2.2%	4.4%	01-Jan-18	
Additional visit (service connection 20 mm-50 mm) -							
Cost plus 15%, hourly (new fee)	-	-	141.00	N/A	N/A	01-Jan-18	
Additional visit (service connection > 50 mm) - Cost							
plus 15%, hourly (new fee)	-	-	203.00	N/A	N/A	01-Jan-18	
Private service connection - Cost plus 15%, hourly							
(new fee)	-	-	141.00	N/A	N/A	01-Jan-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Services							
Thawing of Services							
20 mm and 25 mm (per thaw)	316.00	322.00	-	N/A	0.0%	N/A	
Other than 20mm, 25 mm - Cost plus 15%, hourly Hot Water Thawing of Services on private property	158.00	161.00	-	N/A	0.0%	N/A	
(Hourly rate)	109.00	130.00	_	N/A	0.0%	N/A	
Materials	56.00	57.00	-	N/A	0.0%	N/A	
All fees above for Thawing of Services to be replaced with Cost plus 15%, hourly	-	-	169.00	0.0%		01-Jan-18	
Fire Flow Test Support	246.00	251.00	256.00	2.0%		01-Jan-18	
Service Charges							
Turn off water services for non payment or turn on							
following receipt of payment (per operation)	88.00	90.00	92.00	2.2%		01-Jan-18	
Turn off or on of water services (per operation)	88.00	90.00	92.00	2.2%	4.5%	01-Jan-18	
Permit for Flusher Hydrant Usage	261.00	266.00	271.00	1.9%	3.8%	01-Jan-18	
Blanking of Water Services							
	Cost plus 15% \$3,000.00	•	•				
All sizes	deposit	. ,		N/A	N/A	01-Jan-18	

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Inspection Fees (Inspection of activities							
connected to the water distribution system)							
All new watermains and services that don't require							
full disinfection	192.00	196.00	200.00	2.0%	4.2%	01-Jan-18	
All new watermains and services up to 50m long that							
require full disinfection	571.00	582.00	594.00	2.1%	4.0%	01-Jan-18	
All new watermains and services over 50m long that							
require full disinfection	Cost plus 15%	Cost plus 15%	Cost plus 15%	N/A	N/A	01-Jan-18	
Meter Service Charges		•	•				-15
Inspection for New Water Meters (<= 20 mm meter)	92.00	94.00	96.00	2.1%	4.3%	01-Jan-18	
Meter Maintenance Service Call	157.00	160.00	164.00	2.5%	4.5%	01-Jan-18	
Call for Plumbing Repairs	24.00	25.00	26.00	4.0%	8.3%	01-Jan-18	
Water Meter Accuracy Test (<= 25 mm meter)	128.00	131.00	135.00	3.1%	5.5%	01-Jan-18	
Additional visits (<= 25 mm meter)	61.00	62.00	64.00	3.2%	4.9%	01-Jan-18	
Additional visits (large meters greater than 25 mm)	78.00	80.00	85.00	6.3%	9.0%	01-Jan-18	
Additional visits (fire line meters)	188.00	192.00	200.00	4.2%	6.4%	01-Jan-18	
Manual Meter Reading Fee	20.00	21.00	30.00	42.9%	50.0%	01-Jan-18	
New Water Meters							
Size of Meter							
15 mm Pos. Disp.	346.00	353.00	360.00	2.0%	4.0%	01-Jan-18	
15 mm Pos. Disp.(Carlsbad only)	527.00	538.00	549.00	2.0%	4.2%	01-Jan-18	
20 mm Pos. Disp.	387.00	395.00	403.00	2.0%	4.1%	01-Jan-18	
25 mm Pos. Disp.	455.00	464.00	474.00	2.2%	4.2%	01-Jan-18	
40 mm Pos. Disp.	849.00	866.00	883.00	2.0%	4.0%	01-Jan-18	
50 mm Pos. Disp.	947.00	966.00	985.00	2.0%	4.0%	01-Jan-18	
50 mm Turbine	-	-	1,955.00	N/A	N/A	01-Jan-18	
50 mm Compound	2,705.00	2,759.00	2,814.00	2.0%	4.0%	01-Jan-18	
75 mm Turbine	2,324.00	2,370.00	2,417.00	2.0%	4.0%	01-Jan-18	
75 mm Compound	3,403.00	3,471.00	3,540.00	2.0%	4.0%	01-Jan-18	
100 mm Turbine	2,841.00	2,898.00	2,956.00	2.0%	4.0%	01-Jan-18	
100 mm Compound	4,469.00	4,558.00	4,649.00	2.0%	4.0%	01-Jan-18	
150 mm Turbine	4,847.00	4,944.00	5,043.00	2.0%	4.0%	01-Jan-18	
150 mm Compound	7,612.00	7,764.00	7,919.00	2.0%	4.0%	01-Jan-18	
Fire Line Meter Assembly - Cost plus 15%, hourly	194.00	198.00	202.00	2.0%	4.1%	01-Jan-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Replacement Water Meters							
Size of Meter							
15 mm Pos. Disp.	251.00	256.00	261.00	2.0%	4.0%	01-Jan-18	
15 mm Pos. Disp.(Carlsbad only)	-	-	265.00	N/A	N/A	01-Jan-18	
20 mm Pos. Disp.	292.00	298.00	304.00	2.0%	4.1%	01-Jan-18	
25 mm Pos. Disp.	360.00	367.00	375.00	2.2%	4.2%	01-Jan-18	
40 mm Pos. Disp.	722.00	736.00	751.00	2.0%	4.0%	01-Jan-18	
50 mm Pos. Disp.	821.00	837.00	854.00	2.0%	4.0%	01-Jan-18	
50 mm Turbine	-	-	1,731.00	N/A	N/A	01-Jan-18	
50 mm Compound	2,512.00	2,562.00	2,613.00	2.0%	4.0%	01-Jan-18	
75 mm Turbine	2,198.00	2,242.00	2,287.00	2.0%	4.0%	01-Jan-18	
75 mm Compound	3,209.00	3,273.00	3,338.00	2.0%	4.0%	01-Jan-18	
100 mm Turbine	2,715.00	2,769.00	2,824.00	2.0%	4.0%	01-Jan-18	
100 mm Compound	4,275.00	4,361.00	4,448.00	2.0%	4.0%	01-Jan-18	
150 mm Turbine	4,695.00	4,789.00	4,885.00	2.0%	4.0%	01-Jan-18	
150 mm Compound	7,392.00	7,540.00	7,691.00	2.0%	4.0%	01-Jan-18	
Temporary removal and installation of meter	129.00	132.00	135.00	2.3%	4.7%	01-Jan-18	
City water meter reading device (new or damaged)							
replacement	198.00	202.00	206.00	2.0%	4.0%	01-Jan-18	
City water meter reading device and/or water meter							
reader wire re-location	156.00	159.00	162.00	1.9%	3.8%	01-Jan-18	

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Non Departmental							
Distribution of Drinking Water Per cubic metre rate of drinking water on water bill (based on approx. 81M m3 of water billed)							
	1.801	1.891	1.953	3.3%	8.4%	01-Jan-18	-6,040
Variable Rate - per cubic meter water consumed (new in 2018)							
0 - 6 m3	-	-	0.78	N/A	N/A	01-Jan-18	
>6 - 25 m3	-	-	1.55	N/A	N/A	01-Jan-18	
>25 - 180 m3	-	-	1.71	N/A	N/A	01-Jan-18	
>180 m3	-	-	1.90	N/A	N/A	01-Jan-18	
Annual Fixed Fee Rates - per meter size (new in							
2018)							
15 mm	-	-	115.08	N/A	N/A	01-Jan-18	
20 mm	-	-	172.62	N/A	N/A	01-Jan-18	
25 mm	-	-	287.70	N/A	N/A	01-Jan-18	
40 mm	-	-	575.40	N/A	N/A	01-Jan-18	
50 mm	-	-	920.64	N/A	N/A	01-Jan-18	
75 mm	-	-	1,726.20	N/A	N/A	01-Jan-18	
100 mm	-	-	2,877.00	N/A	N/A	01-Jan-18	
150 mm	-	-	5,754.00	N/A	N/A	01-Jan-18	
200 mm	-	-	9,206.40	N/A	N/A	01-Jan-18	
250 mm	-	-	13,234.20	N/A	N/A	01-Jan-18	
400 mm	-	-	52,706.64	N/A	N/A	01-Jan-18	
Compound Meter	-	-	528.12	N/A	N/A	01-Jan-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2017 Revenue (\$000)
Fire Supply Charge							-370
Annual cost - per meter size							
15 mm meter	42.38	44.50	46.28	4.0%	9.2%	01-Jan-18	
20 mm meter	75.36	79.12	82.28	4.0%	9.2%	01-Jan-18	
25 mm meter	117.74	123.63	128.58	4.0%	9.2%	01-Jan-18	
40 mm meter	301.41	316.48	329.14	4.0%	9.2%	01-Jan-18	
50 mm meter	470.96	494.51	514.29	4.0%	9.2%	01-Jan-18	
75 mm meter	1,059.65	1,112.64	1,157.15	4.0%	9.2%	01-Jan-18	
100 mm meter	1,883.83	1,978.02	2,057.14	4.0%	9.2%	01-Jan-18	
150 mm meter	4,238.61	4,450.55	4,628.57	4.0%	9.2%	01-Jan-18	
200 mm meter	7,535.33	7,912.09	8,228.57	4.0%	9.2%	01-Jan-18	
250 mm meter	11,773.94	12,362.64	12,857.15	4.0%	9.2%	01-Jan-18	
Total Departmental							-6,450

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

	2016	201	17	2018	\$ Change over 2017 Budget	
	Actual	Forecast	Budget	Estimate		
Expenditures by Program						
Wastewater share of Water Services	43,985	45,884	47,128	47,957	829	
Tehnical Innovation & Engineering Support	4,705	5,316	5,296	5,217	-79	
Business & Technical Support Services	304	324	325	257	-68	
Non Departmental	106,335	96,196	95,696	101,459	5,763	
Gross Expenditure	155,329	147,720	148,445	154,890	6,445	
Recoveries & Allocations	-13,309	-12,098	-12,098	-12,098	0	
Revenue	-174,970	-130,747	-136,347	-142,792	-6,445	
Net Requirement	-32,950	4,875	0	0	0	
Expenditures by Type						
Salaries, Wages & Benefits	22,084	21,705	21,554	21,924	370	
Overtime	642	810	810	830	20	
Material & Services	22,870	25,615	27,226	27,508	282	
Transfers/Grants/Financial Charges	88,703	76,945	76,945	82,811	5,866	
Fleet Costs	1,291	1,301	1,311	1,321	10	
Program Facility Costs	0	0	0	0	0	
Other Internal Costs	19,739	21,344	20,599	20,496	-103	
Gross Expenditures	155,329	147,720	148,445	154,890	6,445	
Recoveries & Allocations	-13,309	-12,098	-12,098	-12,098	0	
Net Expenditure	142,020	135,622	136,347	142,792	6,445	
Revenues By Type						
Federal	0	0	0	0	0	
Provincial	0	0	0	0	0	
Municipal	0	0	0	0	0	
Own Funds	-3,472	-3,731	-3,731	-3,731	0	
Fees and Services	-171,498	-127,016	-132,616	-139,061	-6,445	
Fines	0	0	0	0	0	
Other	0	0	0	0	0	
Total Revenue	-174,970	-130,747	-136,347	-142,792	-6,445	
Net Requirement	-32,950	4,875	0	0	0	
Full Time Equivalents	,	<u> </u>	202.16	202.16	0.00	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Sanitary Sewer Systems							
Sewer Use Program - Disposal Fees							
Septic Tank Strength Liquid Material (per							
cubic meter)	15.80	16.12	16.44	2.0%	4.0%	01-May-18	
Holding Tank Strength Liquid Material (per							
cubic metre)	3.39	3.46	3.53	2.0%	4.0%	01-May-18	
Liquid Material Generated Outside the City of							
Ottawa (per cubic metre)	27.54	28.09	28.65	2.0%	4.0%	01-May-18	
Sewer Use Program - Permit Fees							
Annual Permit Fee	263.16	268.42	273.79	2.0%	4.0%	01-May-18	
Annual Permit Revision Fee	147.90	150.86	153.88	2.0%	4.0%	01-May-18	
Sewer Use Program - Discharge Fees							
Conveyance Fee	1.30	1.36	1.43	5.0%	10.3%	01-May-18	
Treatment Fee	0.81	0.85	0.89	5.0%	10.3%	01-May-18	
Sewer Use Program - Discharge Fees - Par	ameters in Sew	age					
Biochemical Oxygen Demand (per kg)	1.56	1.59	1.63	2.0%	4.0%	01-May-18	
Suspended Solids (per kg)	0.83	0.85	0.86	2.0%	4.0%	01-May-18	
Phenolic Compounds (per kg)	1.56	1.59	1.63	2.0%	4.0%	01-May-18	
Kjeldahl Nitrogen (per kg)	6.22	6.34	6.47	2.0%	4.0%	01-May-18	
Phosphorus (per kg)	2.50	2.55	2.60	2.0%	4.0%	01-May-18	

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Sewer Use Program - Administrative Fees							
Special Discharge Agreement Fee	1,023.00	1,043.00	1,064.00	2.0%	4.0%	01-May-18	
Sanitary Sewer Agreement Fee	728.00	743.00	758.00	2.0%	4.1%	01-May-18	
Compliance Program Fee	1,023.00	1,043.00	1,064.00	2.0%	4.0%	01-May-18	
Combined Agreement Fee	1,023.00	1,043.00	1,064.00	2.0%	4.0%	01-May-18	
Sanitary Discharge Agreement Revision Fee							
	220.00	224.00	228.00	1.8%	3.6%	01-May-18	
Combined Agreement Revision Fee	220.00	224.00	228.00	1.8%	3.6%	01-May-18	
Sanitary Sewer Agreement Revision Fee (per							
revision)	110.00	112.00	114.00	1.8%	3.6%	01-May-18	
Compliance Program Revision Fee (per							
revision)	220.00	224.00	228.00	1.8%	3.6%	01-May-18	
CPI increase to Permit, Discharge & Admin F	ees						-10
Non Departmental							
Sewer Surcharge for Sanitary and Storm Se	wer Systems						
For each owner or occupant receiving water							
supply service:	117%	117%	120%	2.6%	2.6%	01-Jan-18	-6,410
Variable Rate - per cubic meter water							
consumed (new in 2018)							
0 - 6 m3	-	-	0.680	N/A	N/A	01-Jan-18	
>6 - 25 m3	-	-	1.359	N/A	N/A	01-Jan-18	
>25 - 180 m3	-	-	1.495	N/A	N/A	01-Jan-18	
>180 m3	-	-	1.683	N/A	N/A	01-Jan-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Annual Fixed Fee Rates - per meter size							
(new in 2018)							
15 mm	ı	-	99.48	N/A	N/A	01-Jan-18	
20 mm	ı	I	149.22	N/A	N/A	01-Jan-18	
25 mm	ı	ı	248.70	N/A	N/A	01-Jan-18	
40 mm	ı	ı	497.40	N/A	N/A	01-Jan-18	
50 mm	ı	ı	795.84	N/A	N/A	01-Jan-18	
75 mm	ı	-	1,492.20	N/A	N/A	01-Jan-18	
100 mm	-	-	2,487.00	N/A	N/A	01-Jan-18	
150 mm	-	-	4,974.00	N/A	N/A	01-Jan-18	
200 mm	-	-	7,958.40	N/A	N/A	01-Jan-18	
250 mm	-	-	11,440.20	N/A	N/A	01-Jan-18	
Compound Meter	ı	-	495.77	N/A	N/A	01-Jan-18	
Total Departmental							-6,420

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

In Thousands (\$000)	2016	20	17	2018	
	Actual	Forecast	Budget	Estimate	\$ Change over 2017 Budget
Expenditures by Program					
Stormwater Operations	11,531	10,875	11,268	11,393	125
Tehnical Innovation & Engineering Support	457	409	409	409	0
Business & Technical Support Services	343	354	354	354	0
Non Departmental	15,437	34,236	34,236	36,341	2,105
Gross Expenditure	27,768	45,874	46,267	48,497	2,230
Recoveries & Allocations	-1,708	-1,469	-1,747	-1,767	-20
Revenue	-313	-44,825	-44,520	-46,730	-2,210
Net Requirement	25,747	-420	0	0	0
Expenditures by Type					
Salaries, Wages & Benefits	4,958	4,725	4,525	4,650	125
Overtime	18	30	55	55	0
Material & Services	1,591	1,598	2,248	2,248	0
Transfers/Grants/Financial Charges	3,358	21,132	21,132	23,247	2,115
Fleet Costs	209	230	230	230	0
Program Facility Costs	0	0	0	0	0
Other Internal Costs	17,634	18,159	18,077	18,067	-10
Gross Expenditures	27,768	45,874	46,267	48,497	2,230
Recoveries & Allocations	-1,708	-1,469	-1,747	-1,767	-20
Net Expenditure	26,060	44,405	44,520	46,730	2,210
Revenues By Type					
Federal	0	0	0	0	0
Provincial	-190	-145	-145	-145	0
Municipal	0	0	0	0	0
Own Funds	-123	0	0	0	0
Fees and Services	0	-44,680	-44,375	-46,585	-2,210
Fines	0	0	0	0	0
Other	0	0	0	0	0
Total Revenue	-313	-44,825	-44,520	-46,730	-2,210
Net Requirement	25,747	-420	0	. 0	0
Full Time Equivalents			47.02	47.02	0.00

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

Stormwater Services - User Fees							
	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Laboratory Services (Tests)							-5
Alkalinity, PH, Conductivity	10.18	10.39	10.60	2.0%	4.0%	01-Mar-18	
Alkalinity Brinkman (wastewater)	15.33	15.64	15.95	2.0%	4.0%	01-Mar-18	
Biochemical Oxygen Demand	16.76	17.10	17.44	2.0%	4.0%	01-Mar-18	
Carbonaceous Biochemical Demand	16.76	17.10	17.44	2.0%	4.0%	01-Mar-18	
Chloride	11.44	11.67	11.90	2.0%	4.0%	01-Mar-18	
Chemical Oxygen Demand	10.90	11.11	11.34	2.0%	4.0%	01-Mar-18	
Conductivity	10.18	10.39	10.60	2.0%	4.0%	01-Mar-18	
Dissolved Organic Carbon	14.39	14.68	14.97	2.0%	4.0%	01-Mar-18	
E. coli (wastewater)	11.47	11.70	11.93	2.0%	4.0%	01-Mar-18	
Fluoride (SIE)	16.44	16.77	17.11	2.0%	4.0%	01-Mar-18	
Heterotrophic Plate	12.18	12.43	12.68	2.0%	4.0%	01-Mar-18	
Halo Acetic Acid	130.93	133.55	136.22	2.0%	4.0%	01-Mar-18	
ICP-OES Industrial Waste - 28 elements	25.90	26.42	26.95	2.0%	4.0%	01-Mar-18	
ICP-OES Metals Scan - 5 elements	13.42	13.69	13.97	2.0%	4.0%	01-Mar-18	
ICP-OES Metal Scan - 28 elements	22.45	22.90	23.36	2.0%	4.0%	01-Mar-18	
ICP/MS Metal Scan SW/DW - 27 elements	-	36.93	37.67	2.0%	N/A	01-Mar-18	
ICP/MS Lead DW	13.42	13.69	13.96	2.0%	4.0%	01-Mar-18	
Ammonia - Surface/Waste Water	10.13	10.33	10.54	2.0%	4.0%	01-Mar-18	
Ion Chromatography	16.44	16.77	17.11	2.0%	4.0%	01-Mar-18	
Mercury	33.32	33.99	34.67	2.0%	4.0%	01-Mar-18	
Nitrates	16.44	16.77	17.11	2.0%	4.0%	01-Mar-18	
PH	10.18	10.39	10.60	2.0%	4.0%	01-Mar-18	
Reactive Phosphorus	10.13	10.33	10.54	2.0%	4.0%	01-Mar-18	
Soluble Biochemical Oxygan Demand	17.89	18.25	18.61	2.0%	4.0%	01-Mar-18	
Soluble Carbonaceous Biochemical Oxygan Demand	17.89	18.25	18.61	2.0%	4.0%	01-Mar-18	
Soluble Chemical Oxygen Demand	10.90	11.11	11.34	2.0%	4.0%	01-Mar-18	
Specific gravity	21.21	21.63	22.06	2.0%	4.0%	01-Mar-18	
Sulphate	11.44	11.67	11.90	2.0%	4.0%	01-Mar-18	
Soluble Phosphorus	14.96	15.26	15.57	2.0%	4.0%	01-Mar-18	
Soluble Kjeldahl Nitrogen	14.96	15.26	15.57	2.0%	4.0%	01-Mar-18	

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

	2016 Rate \$	2017 Rate \$	2018 Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Laboratory Services (Tests) cont'd							
Total Coliforms - E-Coli (DC)	10.56	10.78	10.99	2.0%	4.0%	01-Mar-18	
Total Coliforms - E-Coli (PA)	19.89	20.29	20.69	2.0%	4.0%	01-Mar-18	
Total Coliforms - E-Coli (MPN)	20.74	21.15	21.58	2.0%	4.0%	01-Mar-18	
Total Kjeldahl Nitrogen	13.81	14.09	14.37	2.0%	4.0%	01-Mar-18	
Total Phosphorus	13.81	14.09	14.37	2.0%	4.0%	01-Mar-18	
Total Solid - Waste Water	10.72	10.94	11.16	2.0%	4.0%	01-Mar-18	
Total Solid - Solid	10.72	10.94	11.16	2.0%	4.0%	01-Mar-18	
Total Suspended Solid	10.01	10.21	10.42	2.0%	4.0%	01-Mar-18	
Trihalomethane/VOC Full Scan	60.59	61.80	63.04	2.0%	4.0%	01-Mar-18	
Volatile Acids	37.31	38.05	38.81	2.0%	4.0%	01-Mar-18	
Volatile Solids - Waste Water	11.41	11.64	11.87	2.0%	4.0%	01-Mar-18	
Volatile Solids - Solids	11.62	11.85	12.09	2.0%	4.0%	01-Mar-18	
Volatile Suspended Solid (Water)	11.56	11.79	12.03	2.0%	4.0%	01-Mar-18	
Drinking Water Anion (Chloride, fluoride, nitrite and							
nitrate, sulphate)	16.44	16.77	17.11	2.0%	4.0%	01-Mar-18	
Standard Chemistry (Alkalinity, Conductivity, pH)	10.18	10.39	10.60	2.0%	4.0%	01-Mar-18	
Total Nutrients (Ammonia + Ammonia, Reactive							
Phosphorus)	11.13	11.35	11.58	2.0%	4.0%	01-Mar-18	
TKN/TP (Total Kjeldahl Nitrogen, Total Phosphorus)	14.81	15.11	15.41	2.0%	4.0%	01-Mar-18	
ICP/MS DW/SW Scan	36.93	37.67	38.42	2.0%	4.0%	01-Mar-18	
Increase to rates for various lab tests listed above							

	2018 Phase-In Rate \$	2017 Full Tier Rate \$	2018 Full Tier Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
Non Departmental							
Annual Stormwater Service Fees							-2,205
Residential Connected (new in 2018)							
Urban Single/Semi	-	-	116.85	N/A	N/A	01-Jan-18	
Rural Single/Semi	-	-	116.85	N/A	N/A	01-Jan-18	
Urban Townhouse/Apt	-	-	58.42	N/A	N/A	01-Jan-18	
Rural Townhouse/Apt	-	-	58.42	N/A	N/A	01-Jan-18	
Residential Non-Connected (2018 50% Phase-In							
Rate)							
Urban Single/Semi	40.90	77.90	81.79	5.0%	N/A	01-Jan-18	
Rural Single/Semi	29.21	55.64	58.42	5.0%	N/A	01-Jan-18	
Urban Townhouse/Apt	20.45	38.95	40.90	5.0%	N/A	01-Jan-18	
Rural Townhouse/Apt	14.61	27.82	29.21	5.0%	N/A	01-Jan-18	
Industrial, Commercial and Institutional (ICI)							
ICI Connected Urban and Rural (new in 2018)							
0 to 300K Assessment	-	-	54.75	N/A	N/A	01-Jan-18	
>300K to 1M Assessment	-	-	259.10	N/A	N/A	01-Jan-18	
>1M to 5M Assessment	-	-	966.44	N/A	N/A	01-Jan-18	
>5M to 20M Assessment	-	-	4,236.83	N/A	N/A	01-Jan-18	
>20M to 50M Assessment	-	-	12,824.25	N/A	N/A	01-Jan-18	
>50M to 100M Assessment	-	-	30,951.19	N/A	N/A	01-Jan-18	
>100M to 150M Assessment	-	-	51,918.01	N/A	N/A	01-Jan-18	
>150M Assessment	-	-	109,944.41	N/A	N/A	01-Jan-18	

	2018 Phase-In Rate \$	2017 Full Tier Rate \$	2018 Full Tier Rate \$	% Change Over 2017	% Change Over 2016	Effective Date	2018 Revenue (\$000)
ICI Non-Connected - Urban (2018 50% Phase-In							
Rate)							
0 to 300K Assessment	27.37	52.14	54.75	5.0%	N/A	01-Jan-18	
>300K to 1M Assessment	129.55	246.76	259.10	5.0%	N/A	01-Jan-18	
>1M to 5M Assessment	483.22	920.42	966.44	5.0%	N/A	01-Jan-18	
>5M to 20M Assessment	2,118.42	4,035.08	4,236.83	5.0%	N/A	01-Jan-18	
>20M to 50M Assessment	6,412.12	12,213.57	12,824.25	5.0%	N/A	01-Jan-18	
>50M to 100M Assessment	15,475.60	29,477.33	30,951.19	5.0%	N/A	01-Jan-18	
>100M to 150M Assessment	25,959.00	49,445.72	51,918.01	5.0%	N/A	01-Jan-18	
>150M Assessment	54,972.21	104,708.97	109,944.41	5.0%	N/A	01-Jan-18	
ICI Non-Connected - Rural (2018 50% Phase-In							
Rate)							
0 to 300K Assessment	19.16	36.50	38.32	5.0%	N/A	01-Jan-18	
>300K to 1M Assessment	90.69	172.73	181.37	5.0%	N/A	01-Jan-18	
>1M to 5M Assessment	338.26	644.30	676.51	5.0%	N/A	01-Jan-18	
>5M to 20M Assessment	1,482.89	2,824.56	2,965.78	5.0%	N/A	01-Jan-18	
>20M to 50M Assessment	4,488.49	8,549.50	8,976.97	5.0%	N/A	01-Jan-18	
>50M to 100M Assessment	10,832.92	20,634.13	21,665.84	5.0%	N/A	01-Jan-18	
>100M to 150M Assessment	18,171.30	34,612.01	36,342.61	5.0%	N/A	01-Jan-18	
>150M Assessment	38,480.54	73,296.28	76,961.09	5.0%	N/A	01-Jan-18	
Total Departmental							-2,210

City Of Ottawa 2018 Draft Capital Budget Environment & Climate Protection Committee Capital Funding Summary

Project Description	Revenues	Capital Reserve Fund	Development Charges	Debt Funding	Grand Total
Drinking Water Services					
Renewal of City Assets					
906087 2018 Watermain Improvements	-	1,000	-	1,000	2,000
907654 Ops Condition Assess-Critical Sys Links	-	2,175	-	-	2,175
907655 Communal Well System Rehab 2018	-	10,413	-	-	10,413
908076 Large Water Meters Changeout Program	-	1,000	-	-	1,000
908614 LRT2 W1 Hwy 174 - Shefford Rd	-	47	-	50	97
908616 Redenda Cres (Higgins)	-	750	-	-	750
908617 Sherbourne Rd (Knightsbridge-Dovercourt)	-	550	-	-	550
908908 Small Water Meters Changeout Program	-	325	-	-	325
908931 2018 Buildings-Water Services	-	1,000	-	-	1,000
908978 2018 Transmission/Distribution WM Rehab	-	1,990	-	100	2,090
908981 Lemieux island Pipe Bridge SN 017160	-	920	-	100	1,020
908996 Meter Service Mobility	-	700	-	-	700
909035 Water Sys SCADA & Instrument Rehab 2018	-	970	-	-	970
909036 Water Treatment Rehab 2018	-	8,014	-	1,436	9,450
909037 Water Pumping Station Facility Rehab2018	-	900	-	100	1,000
909039 Proactive Lead Service Replace Prog 2018	260	140	-	-	400
909040 New Vehicles Drinking Water - 2018	-	65	-	-	65
Renewal of City Assets Total	260	30,959	-	2,786	34,005
Growth					
900632 Strandherd Road Watermain	-	163	1,462	-	1,625
908257 O/S Kanata West Transmission Mains	-	30	277	-	307
909071 2018 Off Site Reliability Links	-	15	138	-	153
909132 2018 Rural Servicing Strategy	-	102	103	-	205
909133 2018 Water & Wastewater EA Studies	-	51	204	-	255
909134 2018 Infrastructure Master Plan (Water)	-	134	16	-	150
909135 2018 Groundwater Studies	-	136	17	-	153
Growth Total	-	631	2,217	-	2,848
Drinking Water Services Total	260	31,590	2,217	2,786	36,853
Integrated Roads, Water & Wastewater					
Renewal of City Assets					

City Of Ottawa 2018 Draft Capital Budget Environment & Climate Protection Committee Capital Funding Summary

The decine (\$4000 c)		Capital Reserve	Development	_	
Project Description	Revenues	Fund	Charges	Debt Funding	Grand Total
906056 Albert St / Scott St	-	323	7	300	630
906875 Aylmer - Fulton - Carlyle - Rosedale	-	4,520	-	3,500	8,020
906882 Elgin (Lisgar - Isabella)	-	8,967	333	12,600	21,900
906884 Glengarry-Onslow-Beckwith-Belgrade	-	3,250	-	5,400	8,650
908370 Project Information Management Systems	-	140	-	100	240
908567 Alta Vista - Summit	-	20	-	20	40
908571 Catherine St (Bronson-Elgin)	-	120	-	50	170
908575 Isabella-Chamberlain	-	30	-	10	40
908916 2018 Surveys & Mapping	-	205	-	-	205
908940 2018 Infrastructure Assess & Data Collec	-	2,200	-	-	2,200
908941 2018 Scoping Pre/Post Engineering	-	505	-	-	505
908949 2018 Road Resurfacing - CW	-	1,700	-	1,000	2,700
908998 LRT2 R2 Hwy 174 Resurfacing EBL	-	15	-	-	15
Renewal of City Assets Total	-	21,995	340	22,980	45,315
Growth					
909050 Fleet Growth - ROWHUD	-	65	-	-	65
Growth Total	-	65	-	-	65
Strategic Initiatives					
908918 2018 Public Realm Interventions	-	140	-	-	140
Strategic Initiatives Total	-	140	-	-	140
Integrated Roads, Water & Wastewater Total	-	22,200	340	22,980	45,520
Integrated Water & Wastewater					
Renewal of City Assets					
908581 Valley Dr Storm Sewer	-	10,900	-	6,100	17,000
908942 2018 Sewer & Water Repairs/Improvements	-	3,000	-	2,000	5,000
908943 2018 Sewer Access & Outfalls	-	2,500	-	-	2,500
908944 2018 Trenchless Rehab - Sanitary & Storm	-	4,006	-	-	4,006

City Of Ottawa 2018 Draft Capital Budget Environment & Climate Protection Committee Capital Funding Summary

Project Description	Revenues	Capital Reserve Fund	Development Charges	Debt Funding	Grand Total
908997 LRT2 SS1 Sewer Upgrades	-	35	-	100	135
Renewal of City Assets Total	-	20,441	-	8,200	28,641
Integrated Water & Wastewater Total	-	20,441	-	8,200	28,641
Stormwater Services					
Renewal of City Assets					
908252 Stormwater Mgmt Retrofit Master Plan	-	450	-	-	450
908619 Graham Creek Storm Sewer	-	14,000	-	1,000	15,000
908972 2018 Scoping Pre/Post Drn Culverts	-	1,200	-	-	1,200
908973 2018 Drainage Culverts (<=1m)	-	1,500	-	5,000	6,500
908974 2018 Drainage Culverts (1m-3m)	-	1,500	-	5,000	6,500
908975 2018 Drainage Culverts pre Resurfacing	-	3,000	-	-	3,000
908976 2018 Drainage Culverts - Site-Specific	-	300	-	500	800
908982 2018 Joint CA/City Renewal Activiti	-	200	-	-	200
909017 LRT2 C1 Hwy 174 Culverts	-	97	-	100	197
909027 Stormwater Mgmt: Rehab&Enviro Compliance	-	2,442	-	-	2,442
909131 2018 Stormwater Management Retrofit	-	1,500	500	-	2,000
Renewal of City Assets Total	-	26,189	500	11,600	38,289
Growth					
909152 SNDC - Chapman Mills SW Pond	-	-	827	-	827
Growth Total	-	-	827	-	827
Regulatory					
909028 Municipal Drain Improvements - 2018	825	-	-	-	825
Regulatory Total	825	-	-	-	825
Strategic Initiatives					
906632 Flood Plain Mapping	-	295	-	-	295
909026 ORAP-Water Environment Strategy (WES)PH2	-	1,000	-	-	1,000
Strategic Initiatives Total	-	1,295	-	-	1,295
Stormwater Services Total	825	27,484	1,327	11,600	41,236
Wastewater Services					

City Of Ottawa 2018 Draft Capital Budget Environment & Climate Protection Committee Capital Funding Summary

Project Description	Revenues	Capital Reserve Fund	Development Charges	Debt Funding	Grand Total
Renewal of City Assets					
905421 DCA-O/S Orleans S Business Park SanSewer	-	-	193	-	193
906100 2018 Sanitary Sewer Improvements	-	130	-	800	930
906647 ROPEC Primary Clarifier Rehab Phase 2	-	100	-	12,500	12,600
907383 ROPEC Digester Flare Expansion	-	162	262	100	524
908029 South End Remote Facil. Corrosion/Odour	-	400	-	-	400
908250 Infrastructure Planning Information Mgmt	-	445	-	-	445
908368 WWC PS Gas Monitoring Rehab & Upgrade	-	500	-	-	500
908449 Sewer Lateral Repairs 2018	-	100	-	3,900	4,000
908451 Lab Equipment Purchase/Replacement 2018	-	300	-	-	300
908455 ROPEC Process Facil - Enviro Sys Upgrade	-	100	-	400	500
908731 CWWF Flood Protection - Bridlewood North	-	1,500	-	-	1,500
908983 2018 ORAP Wet Weather IMP - Flow Reducti	-	435	65	-	500
909030 SCADA Rehab & Upgrades-Remote Sewer 2018	-	1,500	-	-	1,500
909031 Sewage Pumping Station Rehab Prog 2018	-	11,000	-	-	11,000
909032 ROPEC - SCADA Rehab. & Upgrades 2018	-	2,100	-	-	2,100
909033 ROPEC - Sewage Treatment Rehab Prog 2018	-	1,750	-	5,000	6,750
Renewal of City Assets Total	-	20,522	520	22,700	43,742
Growth					
904755 2018 Infrastructure Master Plan (Sewer)	-	263	262	-	525
904985 North Kanata Sewer Ph 2	-	100	-	3,100	3,200
907809 Richmond PS & Forcemain Expansion Phase1	-	250	750	-	1,000
909072 Leitrim Sanitary Pump Station Expansion	-	-	90	-	90
Growth Total	-	613	1,102	3,100	4,815
Strategic Initiatives					
908090 Water Env Protec Short Term Initiatives	-	150	-	-	150
909029 Protective Plumbing Program 2018	-	600	-	-	600
Strategic Initiatives Total	-	750	-	-	750
Wastewater Services Total	-	21,885	1,622	25,800	49,307
Grand Total	1,085	123,600	5,506	71,366	201,557

Integrated Roads, Water and Wastewater Program does not include the Roads portion of the project.