





Water, Wastewater & Stormwater Management Services



2022 Draft Operating Budget



Budget Committee of the Whole





Water, Wastewater & Stormwater Management Services 2022 Draft Budget

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Water, Wastewater & Stormwater Management Services 2022 Draft Budget

		Pages
1.	2022 Budget Narrative	
	Water & Wastewater Overview	1 2 – 4
	Water& Wastewater Services Supply & Revenue	5
	Transfers to Reserves & Reserve Funds	
	Financial Services Allocations	
	Corporate Allocations	
	Water & Wastewater Administration	
	Water & Wastewater Operations	11 – 13
	Stormwater Management Services	14 – 19



Water & Wastewater Services

Overview

Water & Wastewater services for residents and businesses in Richmond Hill are provided in collaboration with the Region of York. The Region of York acquires water from the City of Toronto and the Region of Peel, and distributes it to the Richmond Hill borders from which the City distributes to each household and business. Wastewater is collected and transferred out of the municipality at which point the Region continues the collection process at the municipal border and transfers the wastewater to the Duffin Creek Water Pollution Control Plant in Pickering where it is treated. The Region charges the City a wholesale rate and the City passes on these costs to the residents and businesses at a combined retail rate.

The 2022 Draft Water & Wastewater Operating Budget reflects the principles of the updated 10-year Water & Wastewater Financial Plan adopted by Council in 2018 as a requirement of the Safe Drinking Water Act, 2002, Ontario Regulation 453/07. The updated plan indicated that:

- a) The City's Water & Wastewater program is financially sustainable while remaining debt free for the 10 year period (& beyond);
- b) There is sufficient funding available in the 10 year plan for all capital projects;
- c) The Water & Wastewater repair & replacement reserve fund balances provide for the 10 year capital repairs forecast (& beyond);
- d) Projected user rates remain reasonable while providing for full cost recovery plus gradual increases to reserve fund contributions; and
- e) The City's Water & Wastewater supply and resources will remain reliable, safe and sustainable.

This presentation summarizes the Water and Wastewater program that is distributed through three departments:

- Planning & Infrastructure Department major repair and reconstruction of infrastructure (part of Capital program).
- **Community Services** maintains & operates almost 1,230 km of watermain and sanitary sewer infrastructure, along with storm sewers and stormwater ponds.
- Corporate & Financial Services billings, collections, maintains water meters and deals with service enquiries through Access Richmond Hill



Water & Wastewater Summary 2022 Budget Highlights

		Preliminary	2021		Variance	
		Actuals at	Approved	2022 Draft	(Favourable) /	%
Budget Category	2020 Actual	Sept 30, 2021	Budget	Budget	Unfavourable	Change
Personnel - Full-Time	\$ 3,543,224	\$ 2,477,928	\$ 3,377,000	\$ 3,440,300	\$ 63,300	
Personnel - Casual	-	-	124,900	124,900	-	
Water - Regional Charges	25,767,345	12,297,153	25,398,600	26,278,400	879,800	
Wastewater - Regional Charges	38,644,154	18,740,992	38,509,800	39,843,000	1,333,200	
Contracts / Services	4,409,357	2,895,356	5,045,300	5,521,300	476,000	
Materials / Supplies	875,429	520,803	903,300	900,300	(3,000)	
Other Expenditures	35,963	24,744	59,600	59,600	-	
Transfers to Other Funds	14,347,700	10,626,503	14,160,500	15,913,000	1,752,500	
Total Expenditures	\$ 87,623,172	\$ 47,583,478	\$ 87,579,000	\$ 92,080,800	\$ 4,501,800	5.1%
Water Supply Revenue	(355,026)	(253,025)	(85,200)	(85,200)	-	
Water & Wastewater Revenue	(86,317,932)	(54,736,282)	(84,692,200)	(87,998,800)	(3,306,600)	
Transfer from Operating Fund	(557,374)	(447,527)	(404,200)	(489,200)	(85,000)	
User Fees	(1,427,135)	(2,249,081)	(1,877,400)	(2,112,400)	(235,000)	
Investment Income	(60,000)	-	(60,000)	(60,000)	-	
Reserves and Reserve Funds	(2,152)	-	(60,000)	(60,000)	-	
Other Internal Sources	(650,000)	(799,800)	(400,000)	(1,275,200)	(875,200)	
Total Revenues	\$ (89,369,619)	\$ (58,485,715)	\$ (87,579,000)	\$ (92,080,800)	\$ (4,501,800)	5.1%
Net Budget	\$ (1,746,447)	\$ (10,902,237)	\$ -	\$ -	\$ -	

	2021 Approved		_			Growth/Services	:	2022 Draft	
Budget Category		Budget		Base	L	egislated	Enhancement		Budget
Personnel - Full-Time	\$	3,377,000	\$	58,900	\$	4,400	\$ -	\$	3,440,300
Personnel - Casual		124,900		-		-	-		124,900
Water - Regional Charges		25,398,600		879,800		-	-		26,278,400
Wastewater - Regional Charges		38,509,800		1,333,200		-	-		39,843,000
Contracts / Services		5,045,300		476,000		-	-		5,521,300
Materials / Supplies		903,300		(3,000)		-	-		900,300
Other Expenditures		59,600		-		-	-		59,600
Transfers to Other Funds		14,160,500		1,752,500		-	-		15,913,000
Total Expenditures	\$	87,579,000	\$	4,497,400	\$	4,400	\$ -	\$	92,080,800
Revenues									
Water Supply Revenue	\$	(85,200)	\$	-	\$	-	\$ -	\$	(85,200)
Water & Wastewater Revenue		(84,692,200)		(3,306,600)		-	-		(87,998,800)
Transfer from Operating Fund		(404,200)		(85,000)		-	-		(489,200)
User Fees		(1,877,400)		(235,000)		-	-		(2,112,400)
Investment Income		(60,000)		-		-	-		(60,000)
Reserves and Reserve Funds		(60,000)		-		-	-		(60,000)
Other Internal Sources		(400,000)		(875,200)		-	-		(1,275,200)
Total Revenues	\$	(87,579,000)	\$	(4,501,800)	\$	-	\$ -	\$	(92,080,800)
Net Budget	\$	-	\$	(4,400)	\$	4,400	\$ -	\$	-



Water & Wastewater Summary - continued 2022 Budget Summary

Budget Category	2020 Actual	Preliminary Actuals at Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable
Water & Wastewater Revenues	\$ (86,875,306)	\$ (55,183,809)	\$ (85,096,400)	\$ (88,488,000)	\$ (3,391,600)
Water Services Supply	25,412,319	12,044,128	25,313,400	26,193,200	879,800
Wastewater Services Supply	38,644,154	18,740,992	38,509,800	39,843,000	1,333,200
Net Revenues	(22,818,833)	(24,398,689)	(21,273,200)	(22,451,800)	(1,178,600)
Maintenance & Operations	9,407,327	5,253,066	9,433,000	9,952,700	519,700
Financial Services	1,401,159	952,887	1,500,100	1,504,500	4,400
Corporate Expenditures	2,254,000	1,690,400	2,267,400	2,303,500	36,100
Corporate Revenues	(710,000)	(799,800)	(460,000)	(1,335,200)	(875,200)
Transfer to R&R Reserve Funds	8,719,900	6,399,900	8,532,700	10,026,300	1,493,600
Corporate Allocations	11,665,059	8,243,387	11,840,200	12,499,100	658,900
Net Budget	\$ (1,746,447)	\$ (10,902,237)	\$ -	\$ -	\$ -

This table reflects proposed net budgets. The total Water & Wastewater net expenditure budget for 2022 is over \$92.1 million (5.1% increase from 2021). Approximately 72% of the total expenditure budget is for the acquisition of Water & Wastewater services from the Region (\$66.1 million). The remaining 28% is for City Services (i.e. Maintenance & Operations, Revenue billings, collections, meter repairs, reserve fund contributions, and corporate overhead allocations). Also about 96% of the City's total expenditure is funded from the combined retail rate with the remaining 4% coming from reserves, reserve funds, and other user charges.



Water & Wastewater Summary - continued

Rate History

A 1% Water & Wastewater rate increase generates \$631,100 greater revenues. The 2022 Draft Water & Wastewater Budget proposes a 3.3% combined retail rate increase effective April 1, 2022 consistent with Council approved Water/Wastewater Financial Plan in 2018. The budget includes the following:

- a) A proposed combined wholesale rate increase of 3.3% (effective April 1, 2022) from the Region of York for combined Water & Wastewater services;
- b) Greater transfers to the operating fund to reflect increased workflow activity toward Water & Wastewater issues and functions;
- c) Contribution to Repair & Replacement reserve funds to continue to provide for full replacement funding of Water & Wastewater assets.

The following table shows the historical rates:

		You	k Region Wh	olesale	Rates_		City Retail Rate						
Year	Water	% Inc.	Wastewater	% Inc.	Combined	% Inc.	Water	% Inc.	Wastewater	% Inc.	Combined	% Inc.	
2013	0.8087	7.7%	0.9910	12.0%	1.7997	10.0%	1.3068	5.7%	1.6006	9.9%	2.9074	8.0%	
2014	0.8697	7.5%	1.1099	12.0%	1.9796	10.0%	1.3810	5.7%	1.7590	9.9%	3.1400	8.0%	
2015	0.9345	7.5%	1.2431	12.0%	2.1776	10.0%	1.4823	7.3%	1.9717	12.1%	3.4540	10.0%	
2016	0.9582	2.5%	1.4158	13.9%	2.3740	9.0%	1.5196	2.5%	2.2453	13.9%	3.7649	9.0%	
2017	1.0021	4.6%	1.5855	12.0%	2.5876	9.0%	1.6564	9.0%	2.4474	9.0%	4.1037	9.0%	
2018	1.1051	10.3%	1.7154	8.2%	2.8205	9.0%	1.8295	10.5%	2.5820	5.5%	4.4115	7.5%	
2019	1.2178	10.2%	1.8565	8.2%	3.0743	9.0%	1.9667	7.5%	2.7757	7.5%	4.7424	7.5%	
2020 Budget	1.3274	9.0%	2.0236	9.0%	3.3510	9.0%	2.1140	7.5%	2.9840	7.5%	5.0980	7.5%	
2020 Actual	1.2178	0.0%	1.8565	0.0%	3.0743	0.0%	1.9667	0.0%	2.7757	0.0%	4.7424	0.0%	
2021	1.2178	0.0%	1.8565	0.0%	3.0743	0.0%	1.9667	0.0%	2.7757	0.0%	4.7424	0.0%	
2022	1.2580	3.3%	1.9178	3.3%	3.1758	3.3%	2.0316	3.3%	2.8673	3.3%	4.8989	3.3%	

Note: Rates shown are on a per cubic metre basis.



Water & Wastewater Services

Water & Wastewater Services Supply & Revenue

This budget program captures the wholesale costs of water supplied by the Region of York and the wholesale costs of wastewater collected for treatment by the Region of York. This budget also captures the combined billing revenues for Water and Wastewater services provided by the City at the combined retail rate.

2022 Budget Highlights

Budget Category	2020 Actual	Preliminary Actuals at ept 30, 2021	2021 Approved budget	2022 Draft Budget	•	Variance avourable) / nfavourable	% Change
Water - Regional Charges	\$ 25,767,345	\$ 12,297,153	\$ 25,398,600	\$ 26,278,400	\$	879,800	
Wastewater - Regional Charges	38,644,154	18,740,992	38,509,800	39,843,000		1,333,200	
Total Expenditures	\$ 64,411,499	\$ 31,038,145	\$ 63,908,400	\$ 66,121,400	\$	2,213,000	3.5%
Transfer from Operating Fund	(557,374)	(447,527)	(404,200)	(489,200)		(85,000)	
Water Supply Revenue	(355,026)	(253,025)	(85,200)	(85,200)		(00,000)	
Water & Wastewater Revenue	(86,317,932)	(54,736,282)	(84,692,200)	(87,998,800)		(3,306,600)	
Total Revenues	\$ (87,230,332)	\$ (55,436,834)	\$ (85,181,600)	\$ (88,573,200)	\$	(3,391,600)	4.0%
Net Budget	\$ (22,818,833)	\$ (24,398,689)	\$ (21,273,200)	\$ (22,451,800)	\$	(1,178,600)	5.5%

Expenditure

- The Region of York will be passing on a combined 3.3% wholesale rate increase for provision of water and wastewater treatment services effective April 1, 2022
- The increase in Water and Wastewater Regional Charges reflect January to March 2022 billings from Region of York at the 2021 rate and April to December at the 2022 rate, and are based on forecasted volumes maintained at 2021 levels
- In 2022 the combined Water and Wastewater volumes are forecasted to be 20,840,100 (2021 budget 20,660,300) cubic metres, based on previous years' experience.

Revenues

- The Water Supply Revenue increased as the proposed residential and business combined retail rate is budgeted to increase by 3.3% effective April 1, 2022
- The table below shows historical and projected volumes:

Water Volumes (m3)

Year	Budget	Actual	Variance
2014	21,904,380	20,962,206	(942,174)
2015	20,954,300	21,112,435	158,135
2016	20,954,300	21,558,681	604,381
2017	21,113,340	20,164,709	(948,631)
2018	21,153,222	20,279,343	(873,879)
2019	20,885,505	19,499,844	(1,385,661)
2020	20,000,000	20,815,596	815,596
2021	20,660,300	20,604,200 *	(56,100)
2022	20,840,100		



Water & Wastewater Services

Water & Wastewater - Transfers to Reserves & Reserve Funds

2022 Budget Highlights

Budget Category		2020 Actual		Preliminary Actuals at Sept 30, 2021		1 Approved Budget	;	2022 Draft Budget	Variance (Favourable) / Unfavourable		% Change
Transfer to Water Rate Stabilization Reserve	\$	400,000	\$		\$	-	\$	426,000	\$	426,000	
Transfer to Repair & Replacement Reserve Funds		8,319,900		6,399,900		8,532,700		9,600,300		1,067,600	
Net Budget	\$	8,719,900	\$	6,399,900	\$	8,532,700	\$	10,026,300	\$	1,493,600	17.5%

Expenditure

- The Transfer to Water & Wastewater Repair and Replacement Reserve Funds is in compliance with the requirements of the Safe Drinking Water Act, which requires 100% funding for life cycle replacement of Water and Wastewater related infrastructure as part of this fund being financially sustainable into the future
- With Asset Management plan identifying additional water related infrastructure requiring replacement, this 2022 budget shows increased contributions to these reserves



Water & Wastewater Services

Water & Wastewater - Financial Services Allocations

2022 Budget Highlights

			P	reliminary						Variance	
				Actuals at	20	21 Approved	2	022 Draft	(Fa	vourable)/	%
Budget Category 2020 Actual		Sept 30, 2021		1 Budget			Budget	Unfavourable		Change	
0	•	445.050	•	= 4.000	•		•		•		
Contracts / Services	\$	115,872	\$	71,228	\$	260,900	\$	269,600	\$	8,700	
Materials / Supplies		242,772		185,764		269,000		269,000		-	
Other Expenditures		20,684		15,018		25,000		25,000		-	
Transfers to Other Funds		1,275,300		956,425		1,275,300		1,337,600		62,300	
Total Expenditures	\$	1,654,628	\$	1,228,435	\$	1,830,200	\$	1,901,200	\$	71,000	3.9%
User Fees		(251,317)		(275,548)		(270,100)		(336,700)		(66,600)	
Reserves and Reserve Funds		(2,152)		-		(60,000)		(60,000)		-	
Total Revenues	\$	(253,469)	\$	(275,548)	\$	(330,100)	\$	(396,700)	\$	(66,600)	20.2%
Net Budget	\$	1,401,159	\$	952,887	\$	1,500,100	\$	1,504,500	\$	4,400	0.3%

Expenditures

- Contracts / Services decreased \$8,700 mainly due to reduced Meter Testing costs due to the
 installation of new meters offset against a new the annual monitoring fee that collect water meter reads
 related to the Advanced Metering Infrastructure (AMI) project and increased costs for Meter Reading
 Services
- Transfer to the Revenue Fund relates to staff in the Corporate & Financial Services Department providing billing, collection, meter management and customer service. The increase is due to inflationary adjustments and converted positions from accounting to revenue services

Revenues

 User Fees increased by \$66,600 mainly due to a new Water Manual Reading Fee imposed for reminder letters on overdue accounts being sent out in fall 2021, increased Ownership Change fees reflective of the rise in residential resale market and increased in Water Collection Charge revenue budget based on historical trend in revenues received for the department in addition, increases from the 2022 Tariff of Fee Update



Water & Wastewater Services

Water & Wastewater - Corporate Allocations

2022 Budget Highlights

		P	reliminary							
	2020	F	ctuals at	20	21 Approved	2	2022 Draft	(Fa	vourable)/	%
Budget Category	Actuals	Se	pt 30, 2021		Budget		Budget	Un	favourable	Change
Personnel - Full-Time		\$	-	\$	13,400	\$	4,400		(9,000)	
Transfers to Other Funds	2,254,000		1,690,400		2,254,000		2,299,100		45,100	
Total Expenditures	\$ 2,254,000	\$	1,690,400	\$	2,267,400	\$	2,303,500	\$	36,100	1.6%
Investment Income	(60,000)		-		(60,000)		(60,000)		-	
Other Internal Sources	(650,000)		(799,800)		(400,000)		(1,275,200)		(875,200)	
Total Revenues	\$ (710,000)	\$	(799,800)	\$	(460,000)	\$	(1,335,200)	\$	(875,200)	190.3%
Net Budget	\$ 1,544,000	\$	890,600	\$	1,807,400	\$	968,300	\$	(839,100)	(46.4%)

Expenditures

- Personnel costs decreased \$9,000 to account for the minimum wage increases and remove the potential corporate impact of collective bargaining negotiations
- Corporate Expenditures, which accounts for the allocation of corporate overhead, is budgeted at \$2,299,100. The allocation relates to provisions for inflationary adjustments, updated general overhead, and occupancy costs for administrative time

Revenues

Transfers from Internal Sources is budgeted at \$1,275,200 relates to a Transfer from Stormwater to
cover costs expended under Water & Wastewater Services on behalf of Stormwater Services. The
increase transfer is a result of the Council approved the implementation of the new Stormwater
Management Rate structure



Water and Wastewater Services

Water and Wastewater Administration

This budget includes staffing and related costs for the administration of Water and Wastewater Services.

2022 Budget Highlights

Budget Category	2020 Actual	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Change
WWW - Admin	\$ 1,927,973	\$ 1,461,152	\$ 2,032,100	\$ 2,120,500	\$ 88,400	
Net Budget	\$ 1,927,973	\$ 1,461,152	\$ 2,032,100	\$ 2,120,500	\$ 88,400	4.4%

Budget Category	2020 Actual	eliminary Actuals ot 30, 2021	202	21 Approved Budget	2022 Draft Budget	(Fa	/ariance vourable) / favourable	% Change
Personnel - Full-Time	\$ 1,171,711	\$ 896,559	\$	1,160,300	\$ 1,184,800	\$	24,500	
Personnel - Casual	-	-		16,400	16,400		-	
Contracts / Services	46,872	23,901		138,600	138,600		-	
Materials / Supplies	4,590	6,564		12,000	12,000		-	
Transfers to Other Funds	704,800	534,128		704,800	768,700		63,900	
Total Expenditures	\$ 1,927,973	\$ 1,461,152	\$	2,032,100	\$ 2,120,500	\$	88,400	4.4%
Net Budget	\$ 1,927,973	\$ 1,461,152	\$	2,032,100	\$ 2,120,500	\$	88,400	4.4%

Personnel Full-Time

• The \$24,500 Personnel- full time increase is mainly due to approved cost of living and benefit rates increases as well as grade/step changes for staff

Contract/Services

• The Contracts/Services of \$138,600 are composed of the following:

Budget Category	Approved sudget	2022 Draft Budget	Variance (Favourable) / Unfavourable
Backwater Valve Subsidy	\$ 60,000	\$ 60,000	\$ -
Consulting Contract	12,000	12,000	-
Consulting/Benchmarking Init	27,500	27,500	-
Environmental Compliance C	15,000	15,000	-
Vehicle/Equipment Rental	24,100	24,100	-
	\$ 138,600	\$ 138,600	\$ -



Water and Wastewater Administration -continued

Transfer to Other Funds

 The \$63,900 increase transfer to the revenue fund includes staffing costs allocated to the Information Technology Division and the Administration Division in Public Works Operations. It also includes Fleet chargebacks to Public Works Operations. The increase is based on recommendations from the Water and Wastewater Financial/Rate Study



Water and Wastewater Operations

This program area includes staffing, supplies and contracted services related to the maintenance and operation of approximately 1,230 km of watermain and sanitary sewer infrastructure.

2022 Budget Highlights

Budget Category	2020 Actual	Preliminary Actuals Sept 30, 2021		21 Approved Budget	2022 Draft Budget	(Fa	Variance avourable) / Ifavourable	% Change
WWW Operations	\$ 8,655,172	\$ 5,765,447	\$	9,008,200	\$ 9,607,900	\$	599,700	
Total Expenditures	\$ 8,655,172	\$ 5,765,447	\$	9,008,200	\$ 9,607,900	\$	599,700	6.7%
WWW Operations	(1,175,818)	(1,973,533)		(1,607,300)	(1,775,700)		(168,400)	
Total Revenue	\$ (1,175,818)	\$ (1,973,533)	\$	(1,607,300)	\$ (1,775,700)	\$	(168,400)	10.5%
WWW Operations	\$ 7,479,354	\$ 3,791,914		7,400,900	7,832,200		431,300	
Net Budget	\$ 7,479,354	\$ 3,791,914	\$	7,400,900	\$ 7,832,200	\$	431,300	5.8%

Budget Category	2020 Actual	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Change
Personnel - Full-Time	\$ 2,371,513	\$ 1,581,369	\$ 2,203,300	\$ 2,251,100	\$ 47,800	
Personnel - Casual	-	-	108,500	108,500	-	
Contracts / Services	4,246,613	2,800,227	4,645,800	5,113,100	467,300	
Materials / Supplies	628,067	328,475	622,300	619,300	(3,000)	
Other Expenditures	15,279	9,726	34,600	34,600	-	
Transfers to Other Funds	1,393,700	1,045,650	1,393,700	1,481,300	87,600	
Total Expenditures	\$ 8,655,172	\$ 5,765,447	\$ 9,008,200	\$ 9,607,900	\$ 599,700	6.7%
User Fees	(1,175,818)	(1,973,533)	(1,607,300)	(1,775,700)	(168,400)	
Total Revenue	\$ (1,175,818)	\$ (1,973,533)	\$ (1,607,300)	\$ (1,775,700)		10.5%
Net Budget	\$ 7,479,354	\$ 3,791,914	\$ 7,400,900	\$ 7,832,200	\$ 431,300	5.8%



Water and Wastewater Operations - continued

Personnel Cost

 The Full-Time salaries and benefits budget increased by \$47,800 due to approved cost of living and benefit rates increases as well as grade/step changes for staff

Contract/Services

• The Contracts/Services of \$5,113,100 are composed of the following:

Budget Category	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable
Insurance	660,100	956,000	295,900
Infill Connections	1,100,000	1,271,400	171,400
Ontario 1 Call Locates	20,000	20,000	-
Water	1,136,200	1,136,200	-
Sewer	1,729,500	1,729,500	
	\$ 4,645,800	\$ 5,113,100	\$ 467,300

Contracts/services increased \$467,300 majority from increased Insurance premiums \$295,900
negotiated rates, as current municipal options are limited. Also \$171,400 are for infill connections to
reflect the trend of historical spending for the department

Materials/Supplies

• The Materials/Supplies of \$619,300 are comprised of the following:

Budget Category	-	2021 oproved Budget	2	2022 Draft Budget	Variance (Favourable) / Unfavourable		
Water	\$	294,600	\$	336,600	\$	42,000	
Sewer		196,500		154,500		(42,000)	
Hydro		33,300		30,300		(3,000)	
Training & Tuition		73,200		73,200		-	
Uniforms/ Clothing		21,800		21,800		-	
Other		2,900		2,900		-	
	\$	622,300	\$	619,300	\$	(3,000)	

Material/Supplies decreased \$3,000 due to the realignment of water and sewer material supplies costs
offset with a reduction of hydro costs to reflect historical trend in spending



Water and Wastewater Operations - continued

User Fees

• The user fees are composed of the following:

Budget Category	2021 Approved Budget	2	2022 Draft Budget	Variance (Favourable) Unfavourable		
Water Service On/Off Charges	\$ (70,000)	\$	(70,000)	\$	-	
Water Service Contract - Res.	(723,900)		(723,900)		-	
Sewer Blocked Lateral Fees	(30,000)		(30,000)		-	
WWW Sundries Recovery	(6,000)		(20,000)		(14,000)	
Sewer Service Contract - Res.	(484,200)		(550,000)		(65,800)	
Storm Sewer Serv. Contract - Res	(293,200)		(381,800)		(88,600)	
	\$ (1,607,300)	\$	(1,775,700)	\$	(168,400)	

• The \$168,400 as a result of the projected increase in residential servicing applications and service recoveries to reflect the historical trend in revenues received for the department



Stormwater Management Services

Overview

Depending on the season, stormwater comes from rain and from melting snow. It flows into storm sewers, and in some areas to stormwater management ponds. Ponds hold back stormwater and release it slowly into natural streams and rivers. Richmond Hill currently owns and operates more than 98 Storm Water Facilities, 565 kilometres of storm sewers and 17,280 catch basins, and manages more than 150 kilometres of streams and rivers. This program area includes both internal resources and contracted services to perform preventative and corrective maintenance on 565 kilometres of storm sewer and 115 oil and grit separators. Stormwater is different from wastewater, which flows into sanitary sewers from household drains. By managing stormwater, Richmond Hill reduces erosion and flooding, protecting both the community and municipal infrastructure, like roads, sidewalks and trails.

Richmond Hill's stormwater system requires ongoing maintenance, including periodic repair and replacement. Ponds, storm sewers and catch basins are more likely to perform poorly if they are not maintained properly. Planning for repair and replacement will help to avoid costly and inconvenient situations like washed-out roads and trails, stream erosion or flooding. This is a problem faced not only in Richmond Hill but in other municipalities across Canada.

This section summarizes the Stormwater program that is distributed through three departments:

- Planning & Infrastructure Department major repair and reconstruction of infrastructure (part of Capital program).
- Community Services maintains & operates almost 1230 km of watermain and sanitary sewer infrastructure, along with storm sewers and stormwater ponds.
- Corporate & Financial Services billings, collections, and deals with enquiries through Access Richmond Hill



Stormwater Management Services

Overview - Continued

The Stormwater Management rate provides dedicated funding for stormwater management in Richmond Hill, and is used to plan for long-term upkeep of the stormwater system. Richmond Hill's stormwater system (ponds, storm sewers, catch basins, etc.) requires ongoing maintenance, including periodic repair and replacement. Ponds, storm sewers and catch basins are more likely to perform poorly if they are not maintained properly, and with new stormwater infrastructure steadily assumed through the development process adding financial pressure in the form of operating, maintenance, and lifecycle costs. Planning for repair and replacement will help to avoid costly and inconvenient situations like washed-out roads and trails, stream erosion or flooding.

The Stormwater Management Financial Plan, completed in 2018, identified greater staff efforts towards the stormwater system than was previously noted in 2013 when the service review was first completed in establishing dedicated rates. Further, the current two tier flat rate structure does not equitably account for stormwater runoff and impervious areas created by higher density and non-residential developments. In 2020 Council approved the implementation of a new Stormwater Management Rate Structure by property type and site area to reflect the appropriate allocation of the rate burden between residential and non-residential rate payers based on stormwater contribution. A new funding approach was also approved to increase revenue and contribution to the reserve fund to sustainably recover costs related to the long-term management of City owned stormwater management infrastructure.

The municipality must ensure the stormwater system is operating in accordance with various acts, regulations and approvals provided by federal, provincial and local authorities including the Ontario Ministry of Environment and Toronto and Region Conservation Authority

2022 Budget Highlights

Budget Category	20	020 Actuals	Preliminary Actuals at ept 30, 2021	20	21 Approved Budget	2	2022 Draft Budget	•	Variance avourable) / nfavourable	% Change
Contracts / Services	\$	600,146	\$ 188,022	\$	765,200	\$	765,200	\$	-	
Materials / Supplies		49,104	2,742		102,400		102,400		-	
Transfers to Other Funds		3,732,667	2,655,594		3,538,400		6,252,100		2,713,700	
Total Expenditures	\$	4,381,917	\$ 2,846,358	\$	4,406,000	\$	7,119,700	\$	2,713,700	61.6%
User Fees		(4,243,733)	(2,534,115)		(4,181,000)		(6,894,700)		(2,713,700)	
Reserves and Reserve Funds		(177,400)	-		(225,000)		(225,000)		-	
Total Revenues	\$	(4,421,133)	\$ (2,534,115)	\$	(4,406,000)	\$	(7,119,700)	\$	(2,713,700)	61.6%
Net Budget	\$	(39,216)	\$ 312,243	\$	-	\$	-	\$	-	



Stormwater Management Services - continued

Rate History

The Stormwater Management rate was initially adopted by Council in 2013. The basis of the rate was presented in the Stormwater Management Financing Feasibility Study (SRCFS.13.007). This study was updated in 2018 and it was determined that stormwater services required greater staffing efforts and increased capital and infrastructure needs. It has also become evident that the current two-tier flat rate structure (residential and non-residential) does not adequately account for urban stormwater runoff created by higher density and non-residential (e.g. commercial, industrial) developments. Impervious surfaces such as roads, parking lots, rooftops and sidewalks are constructed during land development, and these surfaces reduce the amount of runoff that soaks into the soil resulting in more runoff to control. With increased higher density (larger number of multi-residential condominiums) being built in the City, resulting in more impervious areas and lower revenue per household compared to a single family home, a more equitable and sustainable rate structure is required to reflect the equitable allocation of the rate burden between residential and nonresidential rate payers. In 2020, Council approved the new rate structure recommended by staff, distributing the total revenue requirement to recover stormwater related costs by using the total area of the City (excluding exempt land such as schools and places of worships) and applying the impervious area by property type to derive a stormwater rate per square foot. The individual property annual stormwater charge is then calculated by the rate per square foot and the site area of the respective property. Staff will be implementing this new, more equitable rate structure for billing effective April 2022.

The following table shows the historical annualized rates and the proposed 2022 rates based on the new rate structure:

Two Tier Rate		Residential		Non-Re			
	Anr	nual Rate		Ann		Blended	
Year	(billed	d quarterly)	% Inc.	(billed	bi-monthly)	% Inc.	% Inc.
2020	\$	73.95	0.0%	\$	214.83	0.0%	0.0%
2021	\$	73.95	0.0%	\$	214.83	0.0%	0.0%

Proposed New rate structure

	Council Approv	ed Structure						
Property Type	2021 Restated	2022 Rates	% Inc.					
	Rate per	1,000 sq ftannur	n					
Residential	\$6.35	9.54	50.2%	Property Type	Estir	mated 2021		Estimated 2022
Commercial/Industrial	\$12.07	\$21.02	74.2%	Cingle Detected Decidential	¢	70.05	¢	70.05
Multi Residential	\$12.07	\$21.02	74.2%	Single Detached Residential	\$	73.95	Þ	73.95
Agricultural Land/Farm	\$1.27	\$3.20	152.0%	Residential Condo Unit	\$	1.43	\$	12.11
Golf Courses	\$1.91	\$4.25	122.5%		*		τ.	
Vacant Land	\$1.27	\$3.20	152.0%	Regional Shopping Mall	\$	214.83	\$	41,939



Stormwater Management

The Stormwater Management Rate is a charge that applies to developed and undeveloped land as stormwater runs off both types of land. For residents and businesses on City water, the stormwater rate is applied directly to the water bill. Residents and businesses who are not on City water will receive an annual bill for the Stormwater Management Rate. The funds provide a dedicated sustainable funding source for long-term upkeep of the stormwater system in Richmond Hill.

2022 Budget Highlights

			Preliminary Actuals at 202			21 Approved	2	2022 Draft		Variance avourable) /	%	
Budget Category	20	20 Actuals	Se	ept 30, 2021		Budget		Budget	•	nfavourable	Change	
Contribution to Operating Fund	\$	1,823,800	\$	1,367,950	\$	1,823,800	\$	2,109,600	\$	285,800		
Transfers to Water Quality Reserve Fund		1,503,700		986,250		1,314,600		2,867,300		1,552,700		
Transfer to Water & Wastewater Fund		400,000		299,800		400,000		1,275,200		875,200		
Write-off Storm Water Fee Res		4,428		1,594		-		-		-		
Write-off Storm Water Fee Non-Res		739		-		-		-		-		
Total Expenditures	\$	3,732,667	\$	2,655,594	\$	3,538,400	\$	6,252,100	\$	2,713,700	76.7%	
User Fees		(4,243,733)		(2,534,115)		(4,181,000)		(6,894,700)		(2,713,700)		
Total Revenues	\$	(4,243,733)	\$	(2,534,115)	\$	(4,181,000)	\$	(6,894,700)	\$	(2,713,700)	64.9%	
Net Budget	\$	(511,066)	\$	121,479	\$	(642,600)	\$	(642,600)	\$		0.0%	

Expenditures

- Contribution to Operating Fund represents stormwater operating costs incurred through the tax rate budget
- Transfers to the Water Quality Protection Reserve Fund is the net amount available to allocate to the
 Reserve Fund after factoring in stormwater related revenues and expenditures. There is an increase of
 \$1,552,200 to the transfer to reflect the increase in revenues generated from the Stormwater
 Management Fee to support the necessary expenditures and fund for the future and extend the life of
 the reserve fund
- Transfer of \$1,275,200 to the Water & Wastewater Fund represents stormwater operating costs incurred via Water & Wastewater Services

Revenues

 For 2022, stormwater revenues increased by \$2,713,700 to provide funding for stormwater related infrastructure and to strive towards a fully sustainable stormwater management funding model



Stormwater Management Services

Stormwater Operations

This program area includes staffing, supplies and contracted services required to support the maintenance and operation of 565 km of storm sewer, 115 oil and grit separators and 98 stormwater management facilities

2022 Budget Highlights

Budget Category	20	20 Actual	reliminary Actuals pt 30, 2021	20	21 Approved Budget	2022 Draft Budget	Variance (Favourable)/ Unfavourable	% Change
Stormwater Management	\$	649,250	\$ 190,764	\$	867,600	\$ 867,600	\$ -	
Total Expenditures	\$	649,250	\$ 190,764	\$	867,600	\$ 867,600	\$ -	0.0%
Stormwater Management		(177,400)	(45)		(225,000)	(225,000)	-	
Total Revenue	\$	(177,400)	\$ (45)	\$	(225,000)	\$ (225,000)	\$ -	0.0%
Stormwater Management	\$	471,850	\$ 190,719	\$	642,600	\$ 642,600	\$ -	
Net Budget	\$	471,850	\$ 190,719	\$	642,600	\$ 642,600	\$ -	0.0%

Budget Category	20	20 Actual	Preliminary Actuals ept 30, 2021	20	21 Approved Budget	2022 Draft Budget	Variance (Favourable)/ Unfavourable	% Change
Contracts / Services	\$	600,146	\$ 188,022	\$	765,200	\$ 765,200	\$ -	
Materials / Supplies		49,104	2,742		102,400	102,400	-	
Total Expenditures	\$	649,250	\$ 190,764	\$	867,600	\$ 867,600	\$ -	0.0%
Reserves and Reserve Funds		(177,400)	-		(225,000)	(225,000)	-	
Total Revenue	\$	(177,400)	\$ -	\$	(225,000)	\$ (225,000)	\$ -	0.0%
Net Budget	\$	471,850	\$ 190,764	\$	642,600	\$ 642,600	\$ -	0.0%

Contract/Services

• The Contracts/Services of \$765,200 are composed of the following:

Budget Category	2021 Approved Budget		2022 Draft Budget		Variance (Favourable)/ Unfavourable	
Consulting Benchmarking						
Initiative	\$	10,000	\$	10,000	\$	-
Stormsewer		290,000		290,000		-
Stormwater - OGS		24,200		24,200		-
Stormwater ponds		47,500		47,500		-
Drainage		393,500		393,500		-
	\$	765,200	\$	765,200	\$	-



Stormwater Operations -continued

Materials/Supplies

• The Material/Supplies of \$102,400 are composed of the following:

Budget Category	2021 Approved Budget				Variance (Favourable)/ Unfavourable	
Drainage	\$	57,400	\$	57,400	\$	-
Stormsewer	\$	45,000 102,400	\$	45,000 102,400	\$	-

Reserve & Reserve Funds

• The \$225,000 Storm Sewer Preventative Maintenance Program is fully funded from the Water Quality Protection Reserve Fund.