



City of Hamilton
GENERAL ISSUES COMMITTEE

Meeting #: Meeting#-xx-xxxx
Date: December 6, 2018
Time: 9:30 a.m.
Location: Council Chambers, Hamilton City Hall
71 Main Street West

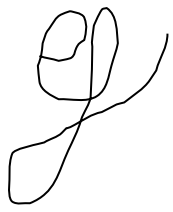
Stephanie Paparella, Legislative Coordinator (905) 546-2424 ext. 3993

	Pages
1. APPROVAL OF AGENDA	
2. DECLARATIONS OF INTEREST	
3. APPROVAL OF MINUTES OF PREVIOUS MEETING	
4. CONSENT ITEMS	
5. PRESENTATIONS	
5.1 Alectra Utilities Water, Wastewater and Storm 2018 Service Activity Report (FCS18086) (City Wide)	3
5.2 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide)	23
<p>Discussion of Appendix "T" to Report FCS18087 in Closed Session would be pursuant to Section 8.1, Sub-section (c) of the City's Procedural By-law 18-270, and Section 239(2), Sub-section (c) of the Ontario <i>Municipal Act, 2001</i>, as amended, as the subject matter pertains to a proposed or pending acquisition or disposition of land for City purposes.</p>	
6. DISCUSSION ITEMS	
7. MOTIONS	
8. NOTICES OF MOTION	

9. ADJOURNMENT



INFORMATION REPORT

TO:	Mayor and Members General Issues Committee
DATE:	December 6, 2018
SUBJECT/REPORT NO:	Alectra Utilities Water, Wastewater and Storm 2018 Service Activity Report (FCS18086) (City Wide)
WARD(S) AFFECTED:	City Wide
SUBMITTED BY:	Cindy Mercanti Director, Customer Service and POA Acting Director, Financial Planning and Policy Corporate Services Department
SIGNATURE:	

Council Direction:

Not applicable.

Information:

Alectra Utilities Corporation (“Alectra Utilities”) has been providing water and wastewater / storm account management and billing services to the City of Hamilton (“City”) since December 2001 with a renewed service agreement executed in June 2014 extending terms to December 31, 2019. The budgeted cost of these services for 2019 is \$5.7 M. Costs are adjusted annually based on the terms of the service agreement, growth in customer accounts and for the City’s 50% share of any postal rate increases that may occur from time to time.

Appendix “A” to Report FCS18086 provides a report of the service activities provided by Alectra Utilities during 2018.

Appendices and Schedules Attached

Appendix “A” – Water and Wastewater / Storm – 2018 Service Activity Report to the City of Hamilton – October 2018

JS/dt

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.



Water and Wastewater / Storm

2018 Service Activity Report to The City of Hamilton

October 2018

Authored by Cathy Livingstone
Manager, Billing
Alectra Utilities Corporation



Overview

Alectra Utilities Corporation ("Alectra Utilities") and its predecessor Horizon Utilities Corporation ("Horizon Utilities") has been providing water and wastewater/storm account management and billing services to the City of Hamilton ("City") since December 2001.

More than a year ago, four like-minded utilities came together to champion positive change for our customers and the communities we serve. As Alectra Utilities, we are focused on creating long-term value for customers by finding efficiencies, reducing costs, and providing superior, reliable service in meeting customer needs

Alectra Utilities' mission is to be the energy ally that our customers expect us to be. We are equipped to help our communities discover the possibilities that energy conservation and new technologies can have on enhancing the quality of life of nearly one million customers in the communities we serve.

Through a contractual relationship that extends to December 31, 2019, Alectra Utilities provides the City with a comprehensive package of services to support all functions related to customer information and billing operations for approximately 152,000 water and wastewater/storm customers. Just over 27,000 customers receive a stand-alone water/wastewater/storm invoice due to the customer premise being located within the City of Hamilton, but not within Alectra Utilities electric service territory.

Alectra Utilities' suite of services:

- Meter reading
- Bill calculation, printing, mailing and electronic bill presentment options (ebilling)
- Customer notifications
- Full customer call support, responses to inquiries and liaison between the customer and the City for escalated concerns
- Oversight and administration of City procedures and programs relating to water and wastewater/storm services such as the Leak Adjustment Policy
- Payment processing
- Account collections including the administration of payment arrangements
- Customer web access to account information including account status and consumption information
- Monthly statistical reporting
- Ad-hoc reporting upon request
- Completion of work orders
- Issuing service orders to Hamilton Water
- Transfers of water and wastewater/storm arrears to property tax roll
- Billing/invoicing/collection/management of Sewer Discharge Permits

In addition to the operational functions provided by Alectra Utilities to the City, Alectra Utilities also strives to bring value-added expertise and partnership through the support and delivery of other initiatives.

In June 2018, Alectra Utilities implemented a water billing policy change approved by City Council whereby all residential accounts are enrolled and billed in the name of the registered property owner. To communicate this significant change to property owners, a notification letter was sent to all landlords, the City placed advertisements in the Spectator, information and FAQ's were added to Alectra Utilities' website, and Call Centre staff were trained to assist customers. Property owners will now have the opportunity to save interest and administrative costs related to tenant arrears being transferred to the tax roll as well as having the ability of identifying potential leaks at their rental property.



In 2017, the Province enacted regulation for the Energy & Water Reporting and Benchmarking (EWRB) initiative that is designed to help building owners and managers improve their building's energy and water efficiency. The regulation outlines what building owners and utilities must do to comply with EWRB. Through this regulation, some privately owned buildings (greater than 50,000 square feet) will be required to report annual energy and water consumption and performance data. The first mandatory reporting deadline was July 1, 2018, and applied to buildings 250,000 square feet in size and larger. Alectra Utilities provided usage information to our customers to comply with the initial new mandatory reporting for large buildings. In 2018, this requirement affects some of the City's customers such as Cadillac Fairview, Walmart, and RioCan.

In September / October 2018, Alectra Utilities assisted the City with implementing the City's revised *Water and Wastewater Consecutive Estimated Accounts Policy*. The Policy now incorporates the option of service disconnection as a last resort, only when all other means provided for by the Policy have failed to encourage customers to provide access to their meter for the purpose of obtaining actual meter reads. As required by the Policy, reasonable notice of the planned service shut-off is to be provided to the owners and occupants of the affected premises with a notification by registered mail. If the issue causing estimates is not resolved, a notification will be posted on the premises in a conspicuous place. Alectra Utilities fulfills the City's requirements by ensuring that registered mail and on-site notifications are provided and Alectra applies the associated charges to customers water bills. Alectra Utilities' Customer Service staff have been provided training regarding the revised Policy.

In October 2018, information regarding the Province's new Home Dialysis Utility Grant was posted to Alectra Utilities' website to increase customer awareness. The Grant offsets the costs for the increased water and electricity usage associated with home hemodialysis treatments.

The City's fifth annual newsletter was provided to residential customers as a bill insert accompanying their fall water bills. The insert highlights the availability of the Service Line Warranties of Canada (SLWC) program, lead pipes, frozen pipes, and provided an update regarding the Woodward Wastewater Upgrades and New Wastewater Wet Well Pumping Station Project.

Meter Reading and Billing

The customer experience is enhanced by the customer's receipt of accurate and timely invoices. Alectra Utilities manages meter read schedules on a daily basis to ensure that water meter reads are available to support monthly water and wastewater/storm billing for all customer types.

Alectra Utilities and the City strive to obtain actual meter readings for billing. Where an actual reading cannot be obtained, the account is billed to an estimated reading based on the account's historical usage. Meter read request cards to alert customers that an actual reading cannot be obtained are left at the property. Estimated reads are clearly identified on the customer's bill. Meter reads may be provided by calling Alectra Utilities Customer Service department, utilizing our automated Interactive Voice Response ("IVR") telephone system, sending a digital picture of their meter read via an email, or completing a form on the Alectra Utilities website. If three consecutive meter reading estimates occur, a separate notification letter and IVR outbound call are provided as additional customer communications. Currently there are less than 900 accounts that have been consecutively estimated more than twice. Resolving estimated accounts and access issues is a daily priority.

Electronic "smart" water meters have been installed in hard-to-reach locations and are read through Alectra Utilities wireless telecommunications. Currently 188 electronically read water meters have been installed to date and an additional 331 water meters have a remote radio head installed for electronic reading.



Alectra Utilities Customer Information System (“CIS”) supports a range of fees and charges required by the City including: metered rates, various non-metered rates and fixed charges based on meter size. Complex billing scenarios such as water haulers, master/satellites, seasonal meters, compound meters and electronic read water meters are all also managed within the CIS. Invoicing of the City’s Wastewater Abatement Program, Private Fire Line user fees, Sewer Discharge Permit fees, back-billings and various Hamilton Water service charges are also applied through the CIS.

Meter Reading and Billing Information

	2018	2017	2016	2015	2014
	Forecasted	Actual	Actual	Actual	Actual
Number of Invoices Issued	1,817,881	1,503,629	963,699	982,208	951,062
Revenue	\$205.9MM	\$199.5MM	\$195.4MM	\$182.3MM	\$169.2MM
Meter Reads	1,673,072	1,453,956	945,125	920,415	912,405
Meter Read Success Rate	95%	96%	95%	94%	95%
New Accounts Created	2,544	1,645	2,235	1,661	1,827
“Estimated Account” Letters	12,825	15,380	10,842	12,112	15,080
Touchpad “not working” Service Orders	2,579	2,735	1,553	1,817	1,766
Service Orders to relocate remote touchpad	620	446	302	243	175
Transition to monthly billing started May/June 2017					

Reporting and controls are in place and monitored as part of our daily operations. For example, reporting is in place to monitor compound meters that are not registering consumption on either high or low flows. The implementation of monthly billing in mid-2017 continues to be well received by City customers.

Customer Management

Alectra Utilities mission is to be the energy ally that our customers can rely on. For our Call Centre, this is further defined by being easy to do business with, solutions oriented, and appreciative of our customers. Our Call Centre is forecasted to answer more than 220,000 telephone inquiries regarding electric and water accounts from Hamilton and St. Catharines customers in 2018 and aims to meet or exceed its target of answering 75% of in-bound calls within 30 seconds. Additional customer transaction requests from Hamilton and St. Catharines are received and responded to annually through self-serve options, electronic channels including email and the Alectra Utilities after-hours voice mailbox.

All interactions with our customers promote electronic payment methods and ebilling solutions as one of our value added services.

Alectra Utilities’ website has a section dedicated to water and wastewater/storm services and customer education including:

- Water and wastewater/storm billing explanations
- Understanding your water bill
- Water and wastewater/storm rates
- How to read a water meter
- Things you need to know before buying a home or going away
- Information regarding the City’s Arrears Policy
- Information about the City’s Water Leak Adjustment Policy



- Information detailing who is responsible for water and wastewater/storm charges
- Information regarding Private Fire Line Charges and Sewer Discharge Permit Charges
- Water and wastewater/storm service user fees
- Frequently asked questions
- Water saving tips

Customers can access Alectra Utilities' My Account which is a secure portal to view their bills, understand historical water consumption and utilize account management features such as the paperless billing option.

The Customer Care team are knowledgeable about the billing and payment services that Alectra Utilities provides, including particulars regarding water and wastewater/storm account management. The Call Centre responds to queries such as:

- Notification of a change of address
- Requests to discuss payment options
 - Pre-authorized payments
 - Equal payment plans
- Queries about how rates and charges are calculated
- Payment arrangement options
- The City's Water Leak Adjustment Policy and related procedure
- Transfer of water/wastewater/storm arrears to the property tax roll
- Meter reading access issues
- Inquiries about high usage (including the provision of leak identification education) and meter accuracy inquiries

The CIS provides variance reporting to ensure that bills are within a normal tolerance that supports the administration of the High Water Read Notification Program.

Residential customers are contacted by telephone before receiving a higher than normal bill to be advised that their bill has been calculated to be more than 175% greater than their norm (this notification trigger is lowered to 150% during the months of November to April). This timely notification allows customers to identify abnormally high water use, which assists with the identification of leaks and allows for corrective actions.

Timely customer communication supports positive customer relations. City bill inserts are included with invoices to advise customers of rate schedule changes or policy modifications. Additionally, special mail-outs are coordinated for the City as requested.

Customer Management Information

	2018 Forecast	2017 Actual	2016 Actual	2015 Actual	2014 Actual
Incoming Calls	79%	77%	82%	80%	81%



As previously mentioned, our Call Centre aims to meet or exceed its target of answering 75% of in-bound calls within 30 seconds and has successfully met this objective as reflected above. The complexity of customer calls has increased. Our Customer Service Representatives (“CSR’s”) are having fulsome conversations with our customers to understand their inquiry while ensuring the customer is receiving the information they need during the first interaction. Tracking of First Call Resolution metrics remain over 90%.

Payment Options and Collections

Alectra Utilities offers a variety of payment options tailored to each customer’s unique needs. Customer payment options include:

- Automatic pre-authorized payment plans
- Equal monthly payment plans (for pre-authorized payment plan customers)
- Cheque, money order, or bank withdrawal from most financial institutions
- Telephone banking
- Internet banking
- Credit Card Payment (with a Convenience Fee)

The *Municipal Act, 2001*, allows unpaid water and wastewater fees and charges to be placed on the City of Hamilton tax roll for the property to which the public utility was supplied, irrespective of who the consumer or account holder may be or have been.

In accordance with the City's Water / Wastewater Arrears Policy and in order to assist property owners who direct water and wastewater/storm billings to a tenant, Alectra Utilities endeavors to notify property owners of tenant/account holder arrears at 30 calendar days beyond the due date. If the account remains unpaid, the water/wastewater/storm arrears will be added to the property’s tax roll when the account is 60 calendar days beyond the due date. Alectra Utilities manages the process of electronically transferring the outstanding fees and charges related to active and final billed accounts to the property tax roll.

Payment Information Options

	2018 Forecasted	2017 Actual	2016 Actual	2015 Actual	2014 Actual
Water/Wastewater accounts on Pre-Authorized Payment **	40,044 26%	39,215 26%	38,020 26%	51,676 35%	57,860 40%
Water/Wastewater on Equal Payment Plan	8,911	9,049	9,124	8,390	8,107
30 day/60 day Notification Letters sent	58,437	56,006	40,402	36,023	34,482
Number of Accounts Transferred to Tax Roll	13,992	11,681	6,221	5,796	5,747
Arrears Value	\$2,760,170	\$2,266,225	\$1,480,000	\$2,100,000	\$1,440,272

***2016 and 2017 numbers are based on active accounts only. Previous years included closed accounts.*

Administration and Management of City of Hamilton Programs and Special Requests

Arrears Certificates: Upon request from a solicitor, water and wastewater/storm arrears certificates are sent advising of any outstanding charges that remain at the time of closing for real estate transactions. Arrears certificate queries are answered daily; 100% are completed within 10 business days by the Alectra Utilities Customer Service department.

Service Orders: Alectra Utilities processes a variety of service orders from Hamilton Water’s Customer Service and Community Outreach section related to activities such as new meter installations, meter replacements and account transfers.



High Water Read Notification Program: On behalf of the City, Alectra Utilities provides notification to account holders who experience higher than average historical water consumption. This timely notification provides customers the opportunity to identify and repair any leaks or identify usage that would affect the amount of water consumed. The notification, which includes leak detection information, is mailed out to customers if usage increases by 175% over the previous year (150% during November to April).

Water Leak Adjustment Policy: The City of Hamilton’s Water Leak Adjustment Policy provides residential, not-for-profits and institutional customers who utilize City of Hamilton water services with financial assistance under certain circumstances. The Policy provides a one-time opportunity for customers to request adjustments to water/wastewater/storm charges where repair(s) of water leaks within private property occurs, excluding any water leaks in the water service pipe.

Customers may request adjustments to water and wastewater/storm charges by completing a Water Leak Adjustment Request form (available on the Alectra Utilities website) and submitting it to the Alectra Utilities Customer Service department. Any adjustments greater than \$500 require City review and approval.

Billing of Seasonal Accounts: Reads and their related work orders completed by the City are forwarded to Alectra Utilities twice per year and the information is used to reconcile seasonal accounts.

Billing of Sewer Discharge Permits: On a quarterly basis, Alectra Utilities bills sewer discharge permits with the City’s annual budget for these revenues of almost \$7.0 M. Monthly reporting of unpaid accounts is forwarded to the City for tracking purposes.

Program Management Information

	2018 Forecasted	2017 Actual	2016 Actual	2015 Actual	2014 Actual
Water/Wastewater Arrears Certificates	3,298	4,685	4,488	6,172	4,977
Service Orders Completed	13,149	12,389	13,259	8,146	5,231
High Water Notification Letters	12,459	9,844	10,403	18,843	9,102
Leak Adjustment Request Forms Received	55	90	106	150	211
Leak Adjustment Credits applied to accounts	\$40,100	\$55,700	\$49,700	\$55,196	\$72,882

Reporting

Alectra Utilities has robust reporting to manage the water and wastewater/storm billing activities including exception handling. A variety of statistical and summary reports are sent to the City each month to enable analysis and program oversight, including:

- Monthly billing detail report
- Adjustments detail report
- Leak Adjustments summary
- Wastewater Abatement summary
- Non-metered account listing
- Large water user billing report
- Meter read accuracy report
- Rate types and meter size



- Sewer Discharge Permit billing report
- Fire Line Services
- Summary of aging arrears and current account receivables
- Revenue report by rate class
- Trial balance for all account receivable transactions
- Adjustments by type

Looking Ahead to 2019

Alectra Utilities continues to deliver upon its convergence strategy to align its systems, services and customer experience across its service territories. This includes the transition to a new CIS system and ancillary systems planned for Q1 of 2019.

The integration of new systems will result in a number of changes for City customers including:

- New account numbers
- Paper bills will have a fresh look and feel
- Ebills will have additional information including built-in inserts
- Changes to the My Account portal

We have already started to implement our customer change management strategy which will inform and support customers through these changes. Additional communications including bill inserts will be added as we get closer to the time line(s) when these changes will take effect.

Alectra Utilities' Water Service Activity Report

December 6, 2018

Eileen Campbell, Vice President Customer Service

Our story

More than a year ago, four like-minded utilities came together to champion positive change for our customers and the communities we serve.

As Alectra Utilities, we are focused on creating long-term value for customers by finding efficiencies, reducing costs, and providing superior, reliable service in meeting customer needs.

Our mission

Alectra Utilities' mission is to be an energy ally to our customers, delivering value in everything we do. In addition to providing safe and reliable electricity, we also strive to help our communities discover the possibilities that energy conservation and new technologies can have on enhancing the quality of life of the nearly one million customers in the communities we serve.



Our customer experience

Service activity highlights

	2018	2016
# of Invoices	1,800,000	964,000
Arrears Notices	58,000	40,000
# of Arrears Transfers	14,000	6,200
Transfer Dollars	\$2.8M	\$1.5M
High Water Notices	12,500	10,400
Leak Adjustments	\$40K	\$49.7K

Continuous improvement highlights

Residential Tenants Billing Change

Residential properties are now enrolled and billed in the name of the registered property owner

Energy & Water Reporting Benchmarking (EWRB)

Building owners of buildings greater than 250,000 square feet and larger are required to report electricity and water usage

Consecutive Estimated Accounts Policy

Amended Policy provides an option to disconnect water as a last resort to gain meter access to perform maintenance work

Continuous improvement highlights

Customer awareness for the Province's new Home Dialysis Utility Grant was posted on our website

5th Annual Hamilton Water Newsletter was provided as a bill insert to residential customers with their fall bills



What's next?

8



Looking ahead

Customer Information System Integration

- Leading CIS customer care system
- Alignment of services, one customer experience
- Customer impacts
 - New My Account portal
 - New account numbers
 - Fresh look to paper bills and ebills





Feb 09 2018

Account Number
2860300000
 Please reference this number when making a payment.

Statement Date	February 07, 2018
Amount Due	\$195.90
Due Date	February 26, 2018

Bill # 286461812235

A 1.5% monthly late payment interest charge will be applied if payment received after due date E&OE

CENTRAL FAIRBANK LUMBER - HORIZON REGULAR WATER
 1900 STEELES AVE W
 CONCORD ON L4K 1A1

Service Location: 1900 STEELES AVE WEST CONCORD ON L4K 1A1
 Premise #: 2860300204

Service	Meter	From	To	# Days	Previous Reading	Current Reading	Read Type	Multiplier	Usage	Adjustment Factor	Adjusted Usage
Water	0000004460	01/15/2018	02/15/2018	30	862.00	871.00	Actual	1.00	9 M3		

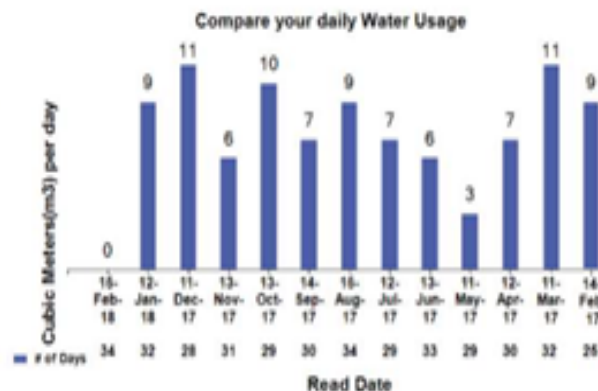
Your Previous Charges

Amount of Last Bill	\$1,134.66
Payment Received January 30, 2018 - Thank you	\$1,134.66 CR
Balance Forward	\$0.00

Your Water/WasteWater Charges: Commercial

Water Meter Size- 100 mm	
Water Fixed Charge 30 Days @ \$2.72	\$81.60
Water Usage Charge 9 m3 @ \$1.49	\$13.41
Wastewater/Storm Fixed Charge 30 Days @ \$2.88	\$86.40
Sewer Usage Charge 9 m3 @ \$1.61	\$14.49

Your Total Water and Wastewater Charges \$195.90



PAYING YOUR BILL ELECTRONICALLY? Please continue to make your payments to PowerStream



Questions?



CITY OF HAMILTON
CORPORATE SERVICES DEPARTMENT
Financial Planning, Administration and Policy Division

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	December 6, 2018
SUBJECT/REPORT NO:	2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Marcel Cerminara (905) 546-2424 Ext. 4371 John Savoia (905) 546-2424 Ext. 7298
SUBMITTED BY:	Brian McMullen Acting General Manager Finance and Corporate Services
SIGNATURE:	

Discussion of Appendix “T” to Report FCS18087 in Closed Session would be pursuant to Section 8.1, Sub-section (c) of the City's Procedural By-law 18-270, and Section 239(2), Sub-section (c) of the Ontario *Municipal Act, 2001*, as amended, as the subject matter pertains to a proposed or pending acquisition or disposition of land for City purposes.

RECOMMENDATIONS

- (a) That the metered water consumption charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2019:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.78
10 +	1.55

- (b) That the metered water consumption charge for commercial, industrial, institutional and multi-residential (bulk meter) properties in the City of Hamilton be imposed at the rate of \$1.55 per cubic metre, effective January 1, 2019;

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 2 of 33**

- (c) That daily water fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2019:

Meter Size	Daily Water Rate
15 mm	\$0.36
16 mm	\$0.36
20 mm	\$0.36
21 mm	\$0.36
25 mm	\$0.90
38 mm	\$1.80
50 mm	\$2.88
75 mm	\$5.76
100 mm	\$9.00
150 mm	\$18.00
200 mm	\$28.80
250 mm	\$41.40
300 mm	\$61.20

- (d) That the wastewater / storm treatment charges for residential properties in the City of Hamilton be imposed at the following rates, effective January 1, 2019:

Monthly Water Consumption (m3)	Rate (\$/m3)
0 – 10	0.84
10 +	1.68

- (e) That the wastewater / storm treatment charge for all commercial, industrial, institutional and multi-residential (bulk meter) properties in the City of Hamilton be imposed at the rate of \$1.68 per cubic metre, effective January 1, 2019;
- (f) That daily wastewater /storm fixed charges for all properties in the City of Hamilton be imposed at the following rates, effective January 1, 2019:

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 3 of 33**

Meter Size	Daily Wastewater / Storm Rate
15 mm	\$0.38
16 mm	\$0.38
20 mm	\$0.38
21 mm	\$0.38
25 mm	\$0.95
38 mm	\$1.90
50 mm	\$3.04
75 mm	\$6.08
100 mm	\$9.50
150 mm	\$19.00
200 mm	\$30.40
250 mm	\$43.70
300 mm	\$64.60

- (g) That the residential non-metered annual water rate be imposed at the flat rate of \$565.75 per annum, effective January 1, 2019;
- (h) That the residential non-metered annual wastewater / storm rate be imposed at the flat rate of \$613.20 per annum, effective January 1, 2019;
- (i) That the residential combined non-metered annual water and wastewater / storm rate be imposed at the flat rate of \$1,178.95 per annum, effective January 1, 2019;
- (j) That the Private Fire Line rates be imposed at the following rates, effective January 1, 2019:

Connection Size		Monthly Rate
mm	inches	
25	1.0	\$3.42
38	1.5	\$7.87
50	2.0	\$13.68
75	3.0	\$30.78
100	4.0	\$54.72
150	6.0	\$123.12
200	8.0	\$218.88
250	10.0	\$218.88
300	12.0	\$218.88

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 4 of 33

- (k) That the 2019 Water, Wastewater and Storm Proposed User Fees and Charges be imposed as per Appendix “G” to Report FCS18087, effective January 1, 2019;
- (l) That charges for raw water supplied to 690 Strathearne Avenue North by the City of Hamilton be imposed at the following rates, effective January 1, 2019:
- (i) metered raw water at the rate of \$0.1163 per cubic metre;
- (ii) daily raw water fixed charges at the following rates:

Meter Size	Daily Rate
200 mm	\$30.40

- (m) That the 2019 Water, Wastewater and Stormwater Rate Supported Operating Budget in the amount of \$222,259,479 be approved as per Appendix “A” to Report FCS18087;
- (n) That the long-term financing plan for the Water, Wastewater and Stormwater programs and related rate increases required to meet sustainable financing, as identified in the 2019-2028 Water, Wastewater and Stormwater Rate Supported Operating Budget forecast (Appendix “A” to Report FCS18087) be approved, in principle;
- (o) That the 2019 Water, Wastewater and Stormwater Rate Supported Capital Budget and Financing Plan in the amount of \$273,141,000 be approved as per Appendices “K”, “N”, “Q” and “S” to Report FCS18087;
- (p) That the 2019-2028 Water, Wastewater and Stormwater Rate Supported Capital Budget forecast and financing plan (Appendix “I” to Report FCS18087) be approved, in principle;
- (q) That the City Solicitor be authorized and directed to prepare, for Council approval, all necessary by-laws respecting the 2019 water and wastewater / storm user fees, charges and rates set out in recommendations (a) through (l) of Report FCS18087;
- (r) That the additional 7.0 Full Time Equivalent Rate Supported Staffing be approved as per Appendix “F” to Report FCS18087;
- (s) That the operating impacts referred to the 2019 Rate budget as outlined in Report PW18089 respecting a property acquisition in Stoney Creek and the supporting Capital Financing plan be approved as per Confidential Appendix “T” to Report FCS18087;

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 5 of 33**

- (t) That the Acting General Manager, Finance and Corporate Services, be authorized to negotiate the terms and placement of a debenture issue(s), and / or private placement debenture issue(s), in either a public or private market and / or bank loan agreement and debenture issue(s) and / or variable interest rate bank loan agreement and debenture issue(s), in an amount not to exceed \$94,390,000 Canadian currency, as attached in Appendices “K”, “N” and “Q” to Report FCS18087, which includes \$23,941,000 in Rate Supported municipal debt and \$70,449,000 in Development Charges Rate Supported municipal debt,
- (u) i) That the Acting General Manager, Finance and Corporate Services, be authorized to engage the services of all required professionals to secure the terms and issuance of the debenture issue(s) described in subsection (t) including, but not limited to, external legal counsel, fiscal agents and Infrastructure Ontario’s Loan Program;
- ii) That the Acting General Manager, Finance and Corporate Services, Mayor and City Clerk are each authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents requiring their respective signatures, to secure the terms and issuance of the debenture issue(s) described in subsections (t), and (u), in a form satisfactory to the City Solicitor;
- (iii) That the Mayor and City Clerk are authorized and directed to enter into and / or execute, on behalf of the City of Hamilton, all agreements and necessary ancillary documents not requiring any specific signing authority, to secure the terms and issuance of the debenture issue(s) described in subsections (t) and (u), in a form satisfactory to the City Solicitor and with content acceptable to the Acting General Manager, Finance and Corporate Services;
- (v) That all necessary By-Law(s) be passed to authorize the debenture issue(s) negotiated, placed and secured in accordance with subsections (t) and (u).

EXECUTIVE SUMMARY

The 2019 Recommended Rate Budget is submitted for Council’s consideration. The 2019 Rate Budget balances the need to invest in environmental infrastructure upgrades and changing trends in demand for water and growth in users relative to “Places to Grow.” Over the period 2019 to 2028, water, wastewater and stormwater capital investment is forecast at \$2.34 B which represents an increase of \$0.42 B from last year’s 10-year forecast. This budget continues to focus on growing our economy, environmental stewardship, financial sustainability and effective inter-governmental relations.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 6 of 33**

The Rate Capital Budget forecasts in Report FCS18087 and its Appendices are based on the best available information from our asset management practices. The municipal asset management framework has been in the development stages for many years. The Ministry of Infrastructure filed Ontario Regulation 588/17 - Asset Management Planning for Municipal Infrastructure under Bill 6, *Infrastructure for Jobs and Prosperity Act* ("Act") on December 27, 2017. Regulation 588/17 went into force on January 1, 2018 and applies to all infrastructure assets directly owned by a municipality or consolidated on the municipality's financial statements. City staff will report to Council on the various stages in the implementation of the Regulation over the coming years.

2019 Operating expenditures in the 2019 Requested Budget of \$95.7 M reflect an increase of \$2.4 M or 2.6% over the 2018 budget.

Capital financing costs, including reserve transfers in the 2019 Requested Budget of \$126.6 M, reflect an increase of \$9 M over the 2018 Budget. With non-rate revenues of \$3 M, rate revenues of \$219.2 M are required to meet operating (program and capital) expenditures.

Table 1 summarizes the budget changes for the 2019 Requested Budget:

Table 1

Summary of the 2019 Operating Budget				
(\$ millions)	2018 Restated Budget	2019 Requested Budget	2019 Requested / 2018 Restated Change	
			\$	%
<u>Expenditures</u>				
Program Expenditures	\$ 93.3	\$ 95.7	\$ 2.4	2.6%
Capital/Debt / Reserve Financing	\$ 117.6	\$ 126.6	\$ 9.0	7.6%
Total Expenditures	\$ 210.9	\$ 222.3	\$ 11.4	5.4%
<u>Revenues</u>				
Rate Revenue	\$ 207.8	\$ 219.3	\$ 11.5	5.5%
Non-Rate Revenue	\$ 3.1	\$ 3.0	(\$ 0.1)	(0.3%)
Total Revenue	\$ 210.9	\$ 222.3	\$ 11.4	5.4%
Average Residential Water / Wastewater / Storm Bill	\$ 690.70	\$ 722.90	\$ 32.20	4.66%

Note: Anomalies due to rounding.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 7 of 33**

Chart 1 highlights that the proposed combined 4.66% rate increase is driven largely by increased capital and to a lesser extent operating expenditures in 2019.

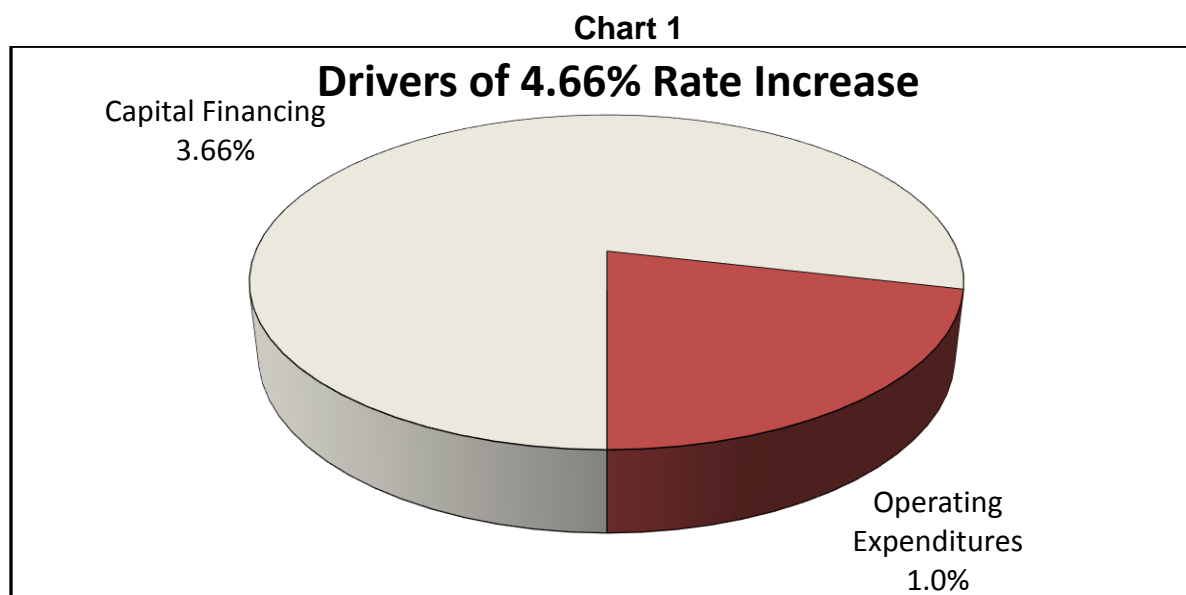


Table 2 identifies the proposed rate increase impact on the average residential customer:

Table 2
**Impact of Recommended 2019 Water and Wastewater /
Storm Rate Increases on a Typical Residential Bill**
(Based on annual water consumption of 200m³)

2018 Residential Bill	\$690.70
2019 Residential Bill	\$722.90
Recommended Change (\$)	\$32.20
Recommended Change (%)	4.66%

The recommended 2019 Rate Supported Financial Strategy endeavours to achieve a balance between capital investment, rate of growth and rate stability. The 2019 Rate Supported Strategy links the change in demand for water with a staged approach to necessary capital investments at the Woodward Wastewater Treatment Plant (WWTP). The current strategy calls for capital funding in 2019 of approximately \$273.1 M (2018\$) and \$2.34 B (2018\$) for the 2019 – 2028 timeframe. The 2019 Strategy includes financing from the federal and provincial governments with respect to the WWTP rehabilitation and upgrades, specifically in support of the Hamilton Harbour Remedial Action Plan.

OUR Vision: To be the best place to raise a child and age successfully.

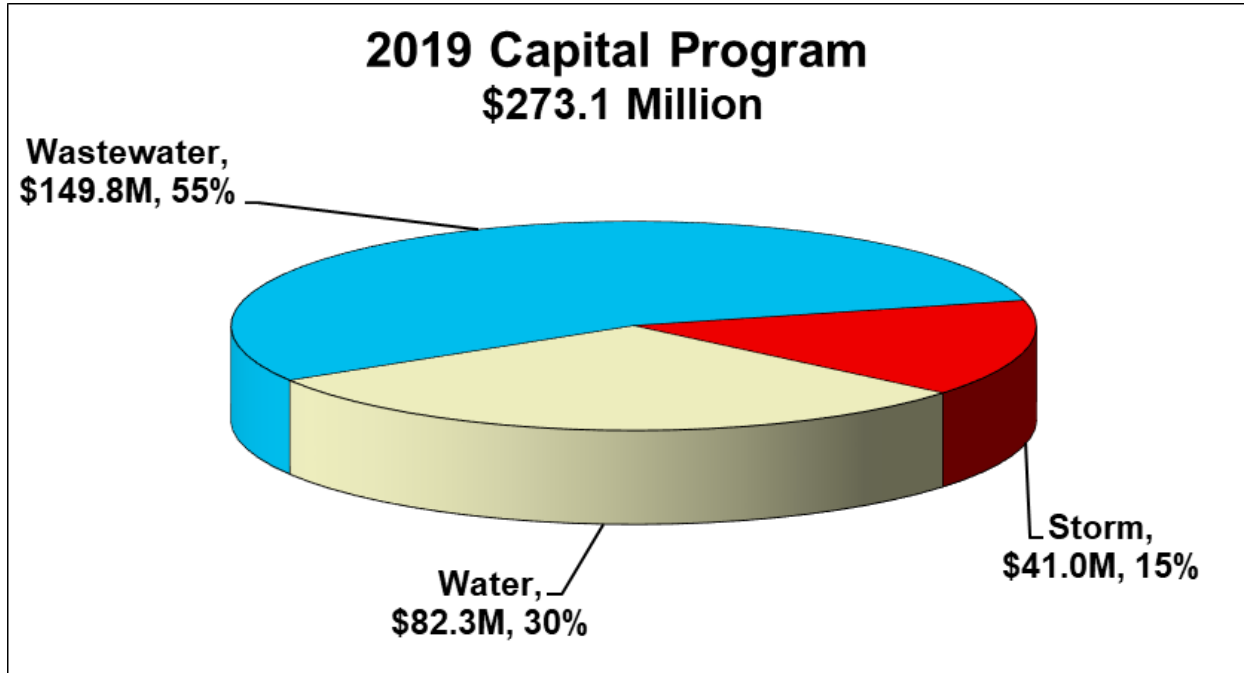
OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 8 of 33

Chart 2 provides a breakdown of the 2019 Rate Capital Program totalling \$273.1 M, by the three major program areas: Water, Wastewater and Storm.

Chart 2



Report FCS18087 identifies significant risks related to a variety of conditions which may impact ratepayers and, in combination, may place significant financial pressures on ratepayers. These risk factors detailed in later sections of Report FCS18087 include increased operating and capital investment requirements. Staff pursued a variety of measures in an effort to control the impact of the above risks in order to maintain a safe and reliable service at a reasonable cost.

Alternatives for Consideration – See Page 29

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: As per Recommendation (I) of Report FCS18087, approval of the 2019 Water, Wastewater and Stormwater Supported Operating Budget will support operating and capital financing expenditures of \$222,259,479 for 2019.

Staffing: The 2019 Rate Supported staffing complement reflects a requested increase of 7.0 in total FTE headcount as reflected in Appendix “F” to Report FCS18087.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 9 of 33**

Legal: Recommendation “Q” of Report FCS18087 relates to By-laws requiring Council approval, respecting the implementation of 2019 water and wastewater user fees and charges set out in the recommendations (a) through (l) of Report FCS18087.

HISTORICAL BACKGROUND

The 2019 Rate Budget continues to support the priority of investing in infrastructure as evidenced by the 2019 to 2028 forecast investment of approximately \$2.34 B in water, wastewater and stormwater capital infrastructure.

Report FCS18087 outlines the various aspects and components that the recommended 2019 Rate Supported strategy incorporates:

- Sustainable Rate Strategy
- Proposed 2019 Water and Wastewater / Storm Rates
- Operating Budget Highlights
- Capital Budget Highlights
- Water Consumption Review and Forecast

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The recommended options support the principle of a user-pay water and wastewater / storm system. The Rate Reserve Policy has guided staff’s recommended use of rate reserves as a funding source in the 2019 - 2028 financing plan.

RELEVANT CONSULTATION

Public Works – Hamilton Water Division provided operating / capital expenditure and non-rate revenue forecasts as reflected in Report FCS18087.

ANALYSIS AND RATIONALE FOR RECOMMENDATIONS

Appendix “A” to Report FCS18087 summarizes the 2019 operating budget expenditures (program and capital) and revenues of \$222.3 M compared to the 2018 projected actual and 2018 restated budget.

2019 Operating expenditures in the 2019 Requested Budget of \$95.7 M reflect an increase of \$2.4 M or 2.6% over the 2018 budget with the following major cost drivers:

- A review of the methodology for recovery of operating expenditures from capital resulted in an increase of \$2.1 M to the operating budget. This change in methodology results in more dollars being spent on capital.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 10 of 33**

- Employee related expenditure increase of \$0.4 M.
- Contractual services net increase of \$0.6 M with the bulk of the increase attributed to the locates contract.
- The Protective Plumbing Program (3P) grants decreased by \$0.75 M to reflect reduced demand.
- Hydro decrease of \$1.1 M.

As outlined in the Executive Summary section of Report FCS18087, the proposed rate impact for the average residential water, wastewater and storm annual bill would be \$32.20 (4.66%).

Water and wastewater service user fees have been reviewed in accordance with the User Service Fee and Charges Policy which requires identification of both the cost of the service and the fees / charges to recover such cost with the intent that full cost recovery is achieved. Many service fees are unchanged with full cost recovery currently being achieved with others undergoing varying fee increases to achieve full cost recovery.

The 2019 recommended water and wastewater / storm rate increases will result in an annual cost impact of approximately \$32 per typical household. The impact of the recommended rate increases on the water and wastewater / storm fixed charges as well as the water consumption and wastewater / storm treatment charges are identified in Table 3.

**Table 3
Impact of Recommended Rate Increases on
Water and Wastewater / Storm Rates**

	2018	2019	Increase
Water Fixed Charge (daily) ¹	\$0.34	\$0.36	\$0.02
Consumption Charge Block 1 (0-10 cubic metres / month)	\$0.75	\$0.78	\$0.03
Consumption Charge Block 2 (>10 cubic metres / month)	\$1.49	\$1.55	\$0.06
Wastewater / Storm Fixed Charge (daily) ¹	\$0.36	\$0.38	\$0.02
Treatment Charge Block 1 (0-10 cubic metres / month)	\$0.81	\$0.84	\$0.03
Treatment Charge Block 2 (>10 cubic metres / month)	\$1.61	\$1.68	\$0.07

¹ Rate is for a 15-21 mm meter which most residential homes have installed.

OUR Vision: To be the best place to raise a child and age successfully.

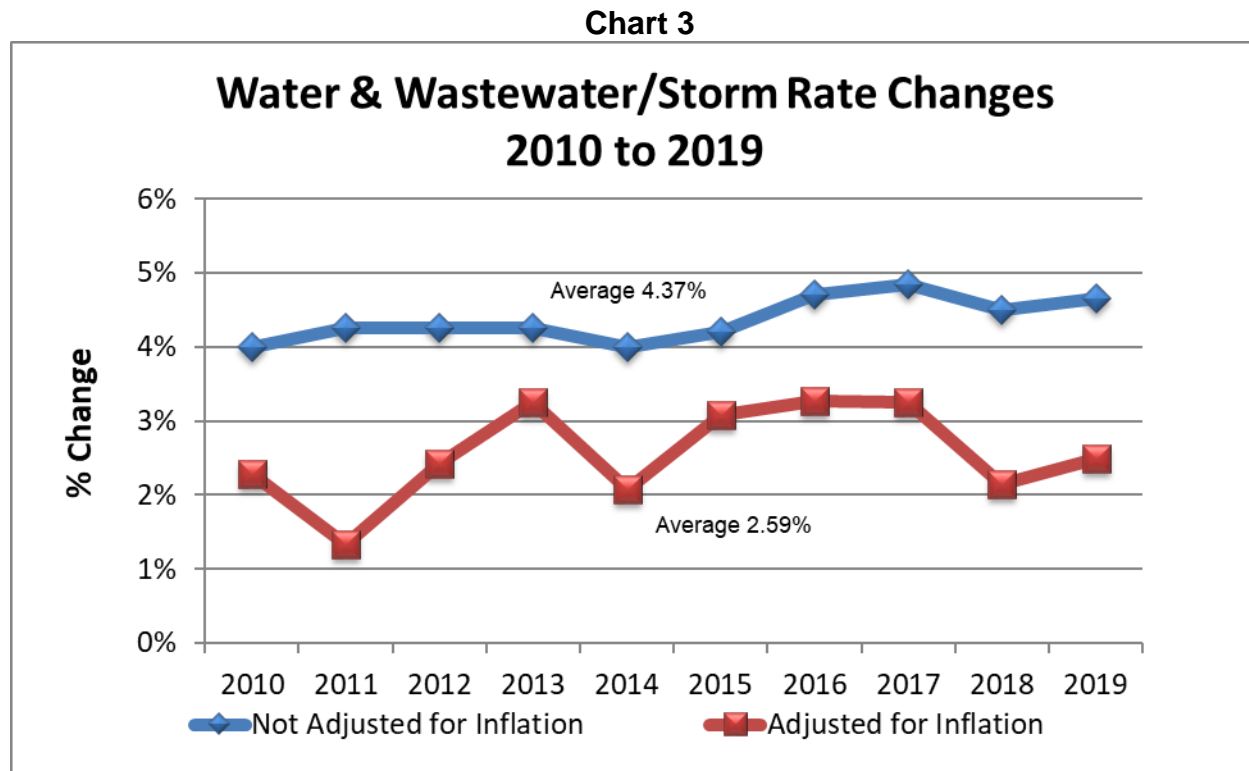
OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 11 of 33**

Trends in Water Rate Charges 2010-2019

Hamilton's overall average annual combined water and wastewater / storm rate increase is 4.37% before adjusting for inflation during the 10-year period from 2010 to 2019. Accounting for inflation results in the overall average, the annual rate increase over the same period would be 2.59%. Chart 3 shows the trend in Hamilton's combined water and wastewater / storm rates for the period 2010 to 2019.



Comparative Rates

In recent years, staff reported that Hamilton's water and wastewater / storm rates have remained competitive, inclusive of the fact that annual rate increases over the past decade have averaged 4.37% before adjusting for inflation.

Over the past decade, Hamilton's ability to maintain competitive water and wastewater / storm rates, given the magnitude of the rate increases approved over this same period, reflects the fact that like Hamilton, other municipalities are addressing many of the same investment requirements as previously identified.

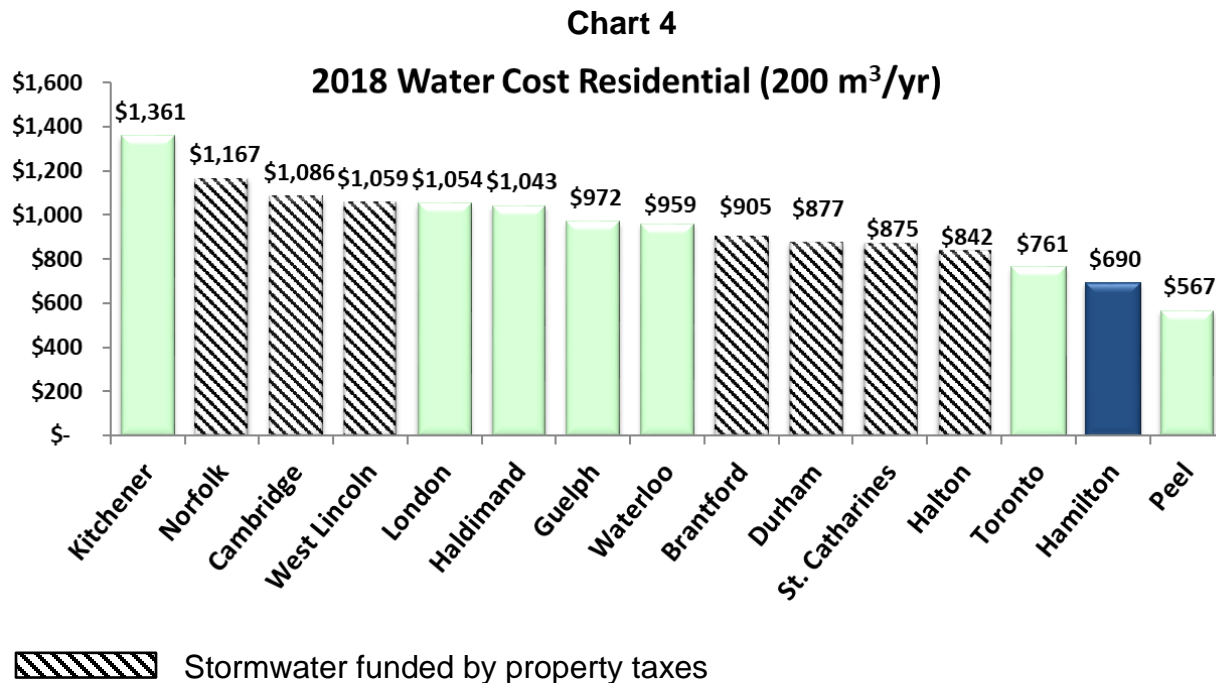
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 12 of 33**

Hamilton's residential annual water and wastewater / storm bill continues to be the second lowest within its local municipal comparator group. Though Hamilton largely funds its stormwater management program through its wastewater / storm fee, it still has been able to maintain competitive rates as reflected in Chart 4.



CONSUMPTION AND RATE-GENERATED REVENUES

Metered Water Consumption

Currently, the City of Hamilton has nearly 152,000 metered water accounts (see Chart 5). Residential users account for 93% of total metered accounts and approximately 48% of total water consumption. While industrial, commercial, institutional and multi-residential accounts only make up 7% of total metered accounts, Industrial Commercial Institutional (ICI) and multi-residential (multi-res) water consumption accounts for 52% of total consumption.

Revenues associated with consumption represents approximately 94% of the total budgeted Rate revenues of \$222.3 M for 2019 (see Chart 6).

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 13 of 33**

Chart 5

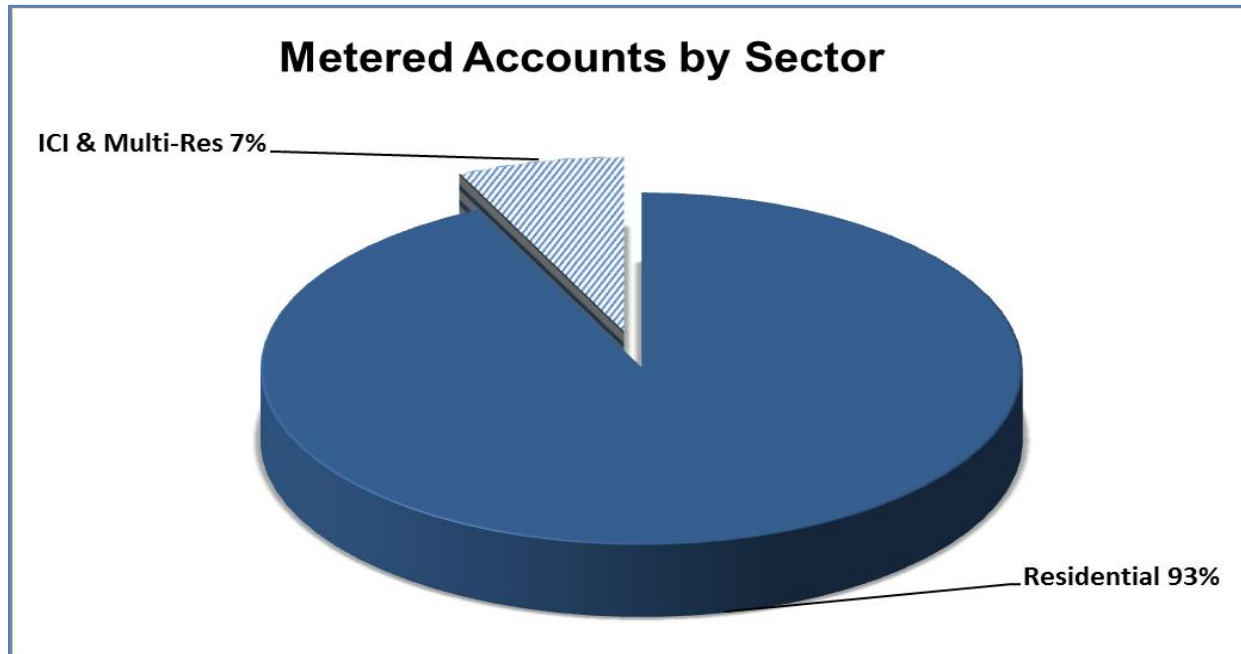
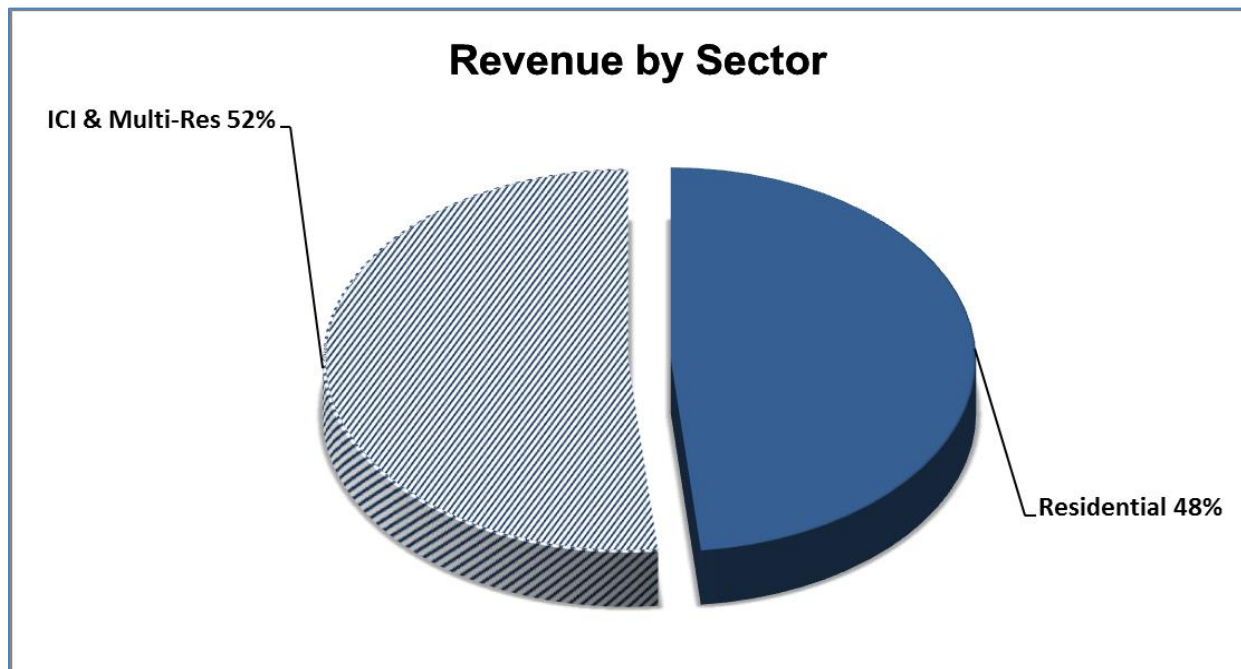


Chart 6



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 14 of 33

Total Consumption – 2019 Budget \$208.3 M

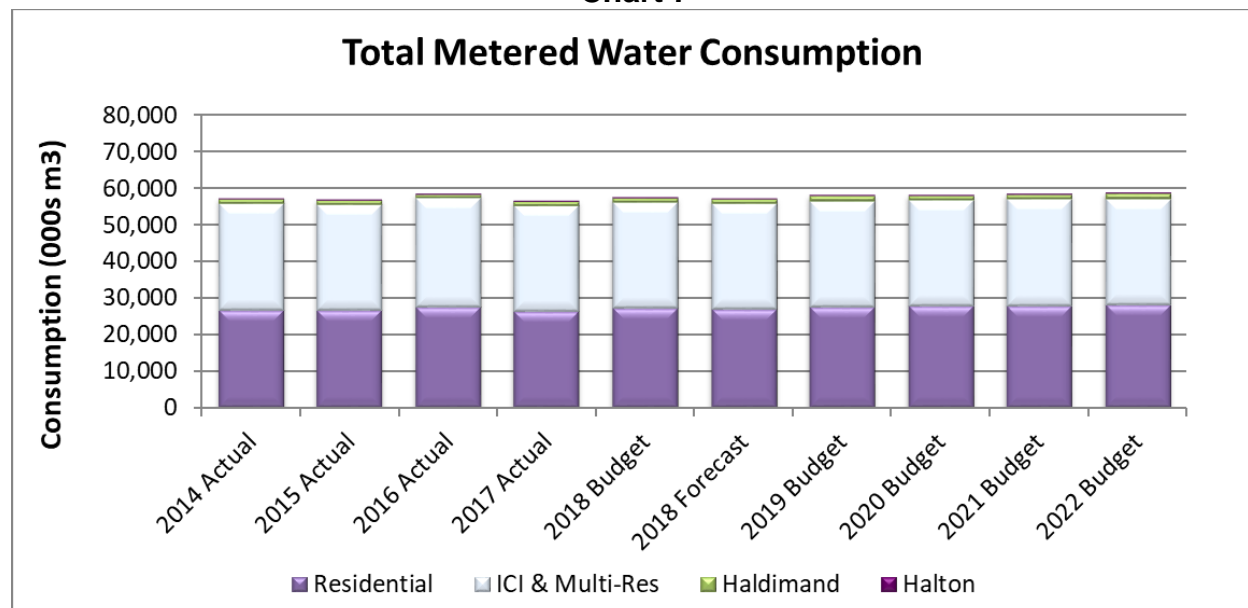
Since 2013, Hamilton's total metered annual water consumption (see Chart 7) has remained at approximately 55-58 million cubic metres. The 2018 forecast is for total consumption to be just under 57 million cubic metres which would be approximately 1% below the budgeted consumption.

Total water consumption over the 10-year forecast period (2019 to 2028) projects continued flat consumption demand. This relatively conservative forecast reflects the following:

- Sharp decline in consumption from 2009-10 Recession has proven to be structural in nature with no recovery in water demand
- Continued uncertainty surrounding growth / decline of consumption
- Conservation impacts:
 - residential toilet consumption = 30% of indoor consumption
 - newer high-efficiency toilets and washers

Staff will continue to monitor consumption across all sectors and take efforts to ensure that the City is maximizing its full potential with respect to metered water and wastewater / storm revenues. Similarly, staff will be monitoring changes in consumption on an ongoing basis identifying trends and related financial impacts through the Budget Variance Reports provided to Council.

Chart 7



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

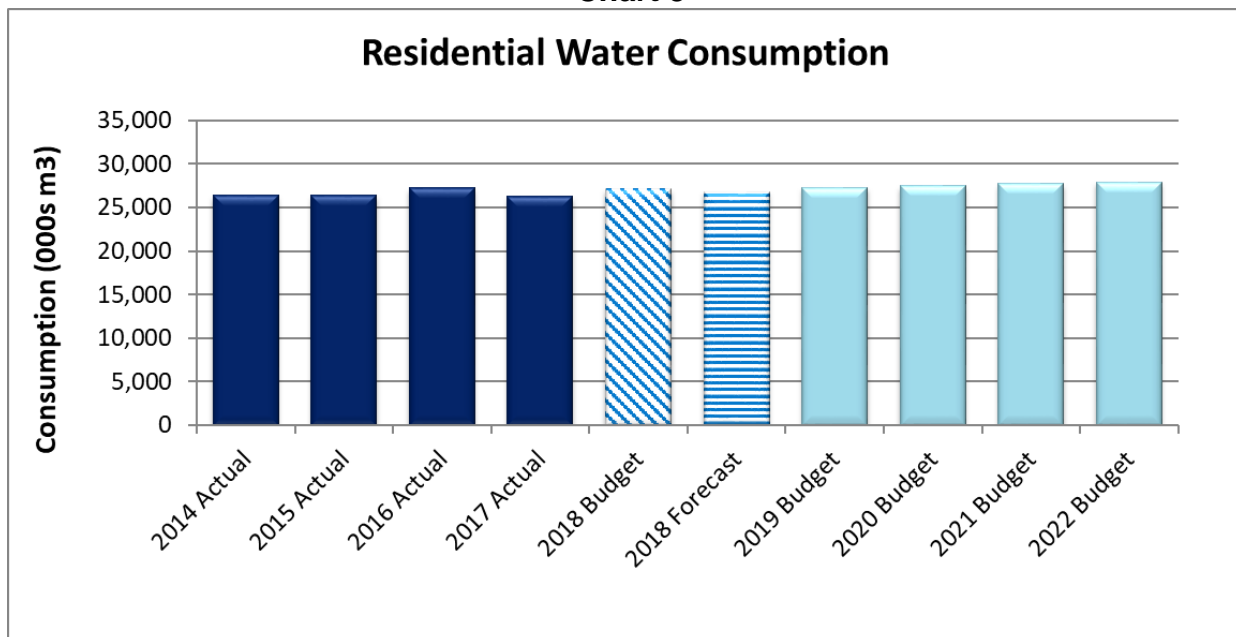
**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 15 of 33**

Residential Consumption - 2019 Budget \$97.9 M

Since 2013, residential consumption (see Chart 8) has remained relatively unchanged reflecting an observation that the growth of new customers' consumption has been more than mitigated by reduced consumption of existing customers' ongoing conservation efforts associated with fixture / appliance obsolescence such as the installation of water efficient toilets and washer machines. For 2019, staff is recommending that the forecast for average residential consumption remain at 200m³ to reflect the past several years of consumption.

It is not clear how much further average residential consumption can decline, but there exists the potential for further declines, principally due to conservation efforts and associated regulations. For example, in 2012, the Ontario Building Code changed requirements related to the installation of high-efficiency toilets (4.8L) and expanding the end uses of rainwater and other non-potable water.

Chart 8



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 16 of 33**

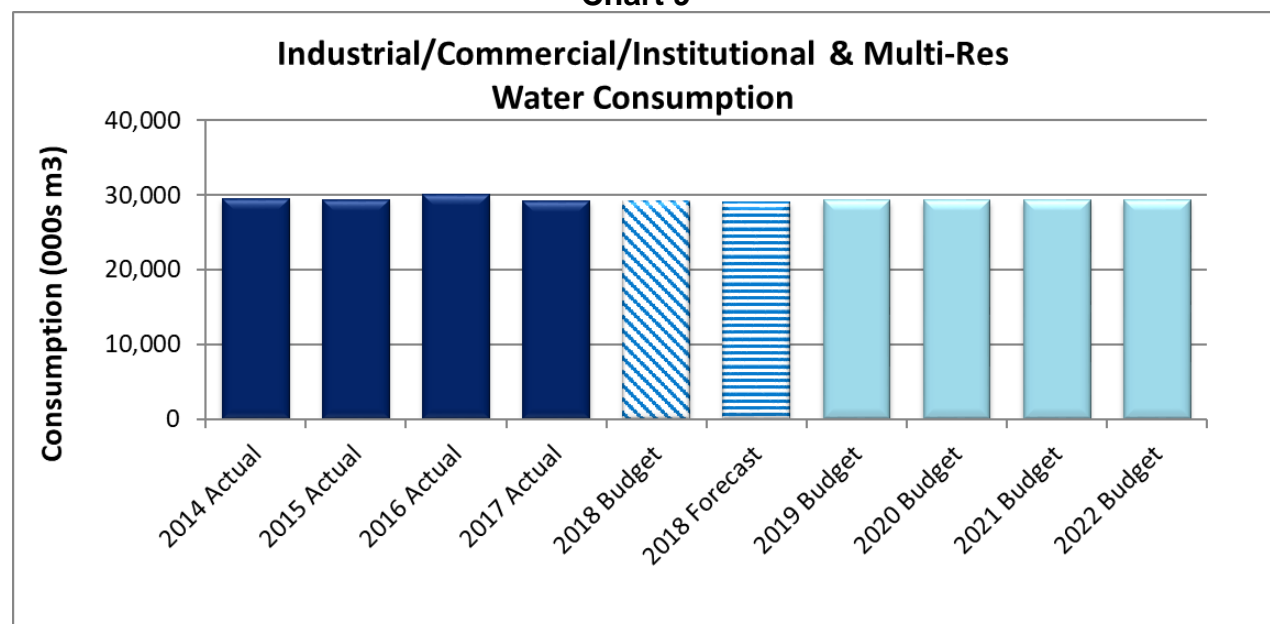
**Industrial / Commercial / Institutional and Multi-Res Consumption – 2019 Budget
\$107.8 M**

The ICI and Multi-Res sector experienced a very significant consumption decline of nearly 10 million cubic metres since the last recession period, however, consumption levels have stabilized since 2013. Despite ongoing growth particularly in the multi-residential sector, there continues to be ongoing conservation efforts that offset any demand growth associated with new customers. Many larger multi-residential customers are implementing water conservation project. For example, CityHousing Hamilton completed, this year, the installation of over 3,000 ultra-high efficiency 3.0L toilets which will yield annual savings of over \$450 K.

In sharp contrast to many neighbouring communities, Hamilton is unique in that significant portion of consumption and, in turn, revenues come from industrial and institutional customers. The top users of the ICI / Multi-res sector representing some 40 customers account for nearly a quarter of total consumption. This reliance on a relatively small number of large water users does pose a risk to revenue stability when these customers undertake water conservation projects or experience business failure. For example, earlier this year, Hamilton Specialty Bar (HSB) ceased operations and its manufacturing site liquidated. As recently as 2016, HSB represented a customer with annual consumption of approximately 300,000 cubic metres and over \$1 M in combined water and wastewater / storm revenues.

As reflected in Chart 9, water consumption demand is forecast to remain relatively flat for the ICI / Multi-res sector:

Chart 9



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 17 of 33**

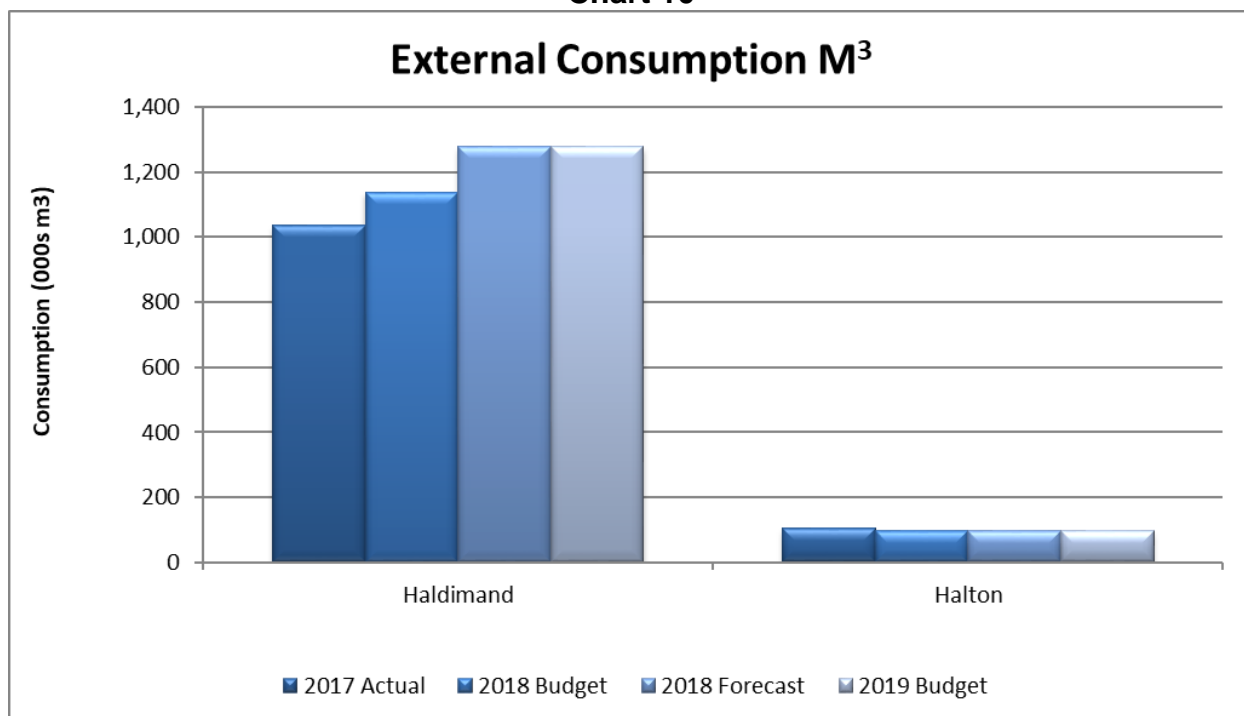
External Consumption – 2019 Budget \$2.6 M

Under long-term arrangements, Hamilton supplies Haldimand County and Halton Region potable water (see Chart 10) but does not provide wastewater / storm services to either community.

A renewed water supply agreement with Haldimand was executed in 2014 for an initial 20-year period with Hamilton supplying water to the communities of Caledonia and Cayuga. There has been some growth over the past two years with new housing developments in Caledonia.

The current water supply agreement for Halton was executed in 2011 for an initial ten-year period with Hamilton supplying water to the Aldershot and Snake Road communities. Staff will be pursuing by November 2019, the renewal term of ten years as contemplated under the existing agreement.

Chart 10



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 18 of 33**

OTHER REVENUE HIGHLIGHTS

Sewer Discharge Permits – 2019 Budget \$7.4 M

Surcharge Discharge Permits allow the City of Hamilton a mechanism to recover costs associated with:

- the costs of conveyance, treatment, and monitoring of sewage that exceeds By-law limits for treatable parameters (Overstrength Discharge)
- the costs of conveyance, treatment, and monitoring of sewage that was not originally purchased by the customer from the City's potable water supply (Sewer Surcharge)

Permits, General Fees and other Recoveries – 2019 Budget \$2.6 M

Service fees that may be charged with the issuance of a permit or alternatively charged on the customer's water bill. Appendix "G" to Report FCS18087 provides details of the user fees charges that are applicable for various water / wastewater related services provided on an individual basis to customers such as new meter installations, water service turn on or off, laboratory services, etc.

Private Fire Lines – 2019 Budget \$1.5 M

The Private Fire Protection Charge applies to customers that have private fire protection systems which rely upon the public water system for their water supply via an unmetered fire water service line.

2019-2028 Rate Capital Budget

Table 4 summarizes the \$2.34 B capital program and the financing requirements for the 2019 – 2028 water, wastewater and storm capital budget. Of this amount, \$1,255 M or 53% is for wastewater, \$906 M or 39% is for water and \$182 M or 8% is for the storm program. A total of \$846 M or 36% of the 10-year capital program is required in the first three years (2019 – 2021). This is predominantly due to the Woodward Wastewater Treatment Plant (WWTP) Upgrade and Biosolids Plant construction.

The capital program also includes \$713 M for growth infrastructure related to Growth Related Integrated Development Strategy (GRIDS) which will be funded from Development Charges, except for \$81 M in Development Charge exemptions which the City is legislatively required to fund from rate revenues if Council chooses to discount its DC's or recover less than 100% of growth-related capital costs. Finance staff have recommended to increase DC exemptions from \$71 M to \$81 M to fully fund exemptions provided by Council, to ensure the City remains in compliance with legislation. Funding of DC exemptions reduces the amount of dollar for dollar funding the City can invest in infrastructure.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 19 of 33**

Table 4

SOURCE OF CAPITAL FINANCING 2019 to 2028 RATE PROGRAM CAPITAL BUDGET \$(000'S)					
	2019	2020	2021	2023 to 2028	2019 to 2028
WATER					
Capital Program	82,280	99,010	80,543	571,649	905,627
<u>Source of Funding</u>					
Subsidy/Other Revenue	610	6,553	1,481	30	8,674
Development Charges	5,657	38,751	20,065	107,592	176,569
Reserves & Other Internal Sources	9,910	640	640	3,200	15,030
Contribution from Operating	51,762	30,761	42,634	437,327	606,485
External Debt	14,341	22,305	15,723	23,500	98,869
Total	82,280	99,010	80,543	571,649	905,627
WASTEWATER					
Capital Program	149,831	185,344	160,420	673,279	1,255,312
<u>Source of Funding</u>					
Subsidy/Other Revenue	42,908	69,604	32,524	-	145,036
Development Charges	33,752	32,351	33,228	325,054	448,562
Reserves & Other Internal Sources	30,334	22,340	12,342	-	65,016
Contribution from Operating	42,837	61,049	54,776	348,225	564,148
External Debt	-	-	27,550	-	32,550
Total	149,831	185,344	160,420	673,279	1,255,312
STORM SEWERS					
Capital Program	41,030	35,900	11,600	82,480	182,440
<u>Source of Funding</u>					
Subsidy/Other Revenue	75	75	75	450	750
Development Charges	31,040	24,960	4,000	24,060	88,060
Reserves & Other Internal Sources	6,710	-	-	-	6,710
Contribution from Operating	3,205	10,865	7,525	57,970	86,920
External Debt	-	-	-	-	-
Total	41,030	35,900	11,600	82,480	182,440
TOTAL RATE PROGRAM					
Capital Program	273,141	320,254	252,563	1,327,408	2,343,379
<u>Source of Funding</u>					
Subsidy/Other Revenue	43,593	76,232	34,080	480	154,460
Development Charges	70,449	96,062	57,293	456,706	713,191
Reserves & Other Internal Sources	46,954	22,980	12,982	3,200	86,756
Contribution from Operating	97,804	102,675	104,935	843,522	1,257,553
External Debt	14,341	22,305	43,273	23,500	131,419
Total	273,141	320,254	252,563	1,327,408	2,343,379

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 20 of 33**

Chart 11 illustrates the \$2.34 B capital program for the 2019 – 2028 water, wastewater and storm capital budget.

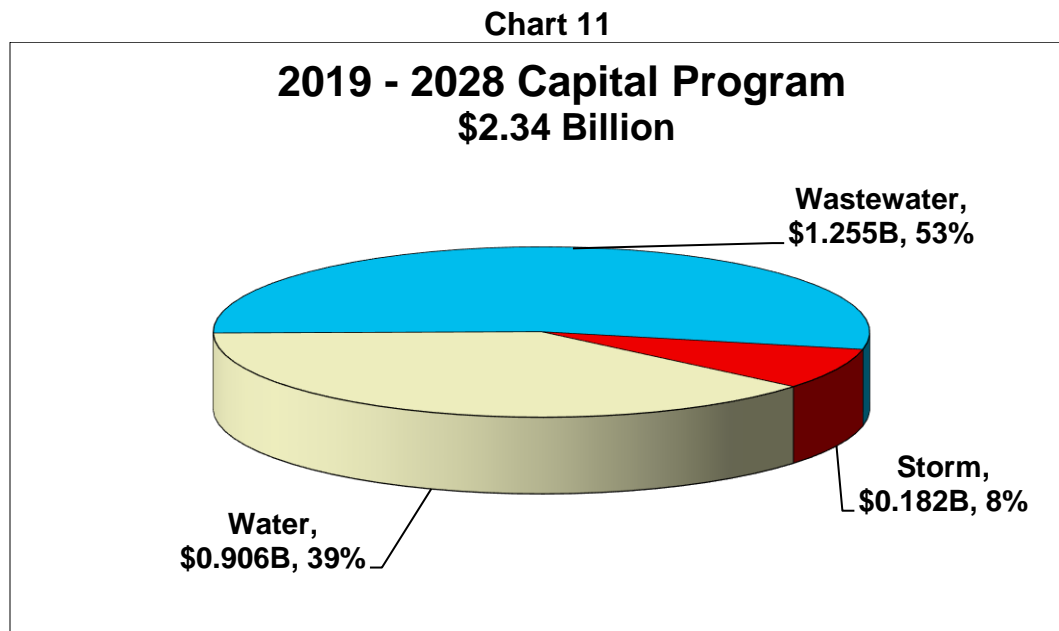


Chart 12 provides the sources of capital financing for the 2019 – 2028 forecast period. The growth-related infrastructure investment included in the 2019 – 2028 forecast to accommodate for growth is \$713 M, of which all but \$90 M will be funded from debt with the associated debt charges recovered from development charges over the next 20 years. It is assumed that DC collections of \$30 M each year in 2019, 2020 and 2021 will be utilized to fund growth capital in those years, reducing the amount of debt required to fund growth capital.

The 2019–2028 Capital Forecast includes \$21.0 M in funding from capital work-in-progress (WIP's). Capital funding from reserves in years 2019 through 2028 totals \$65.8 M, which helps to mitigate debt financing.

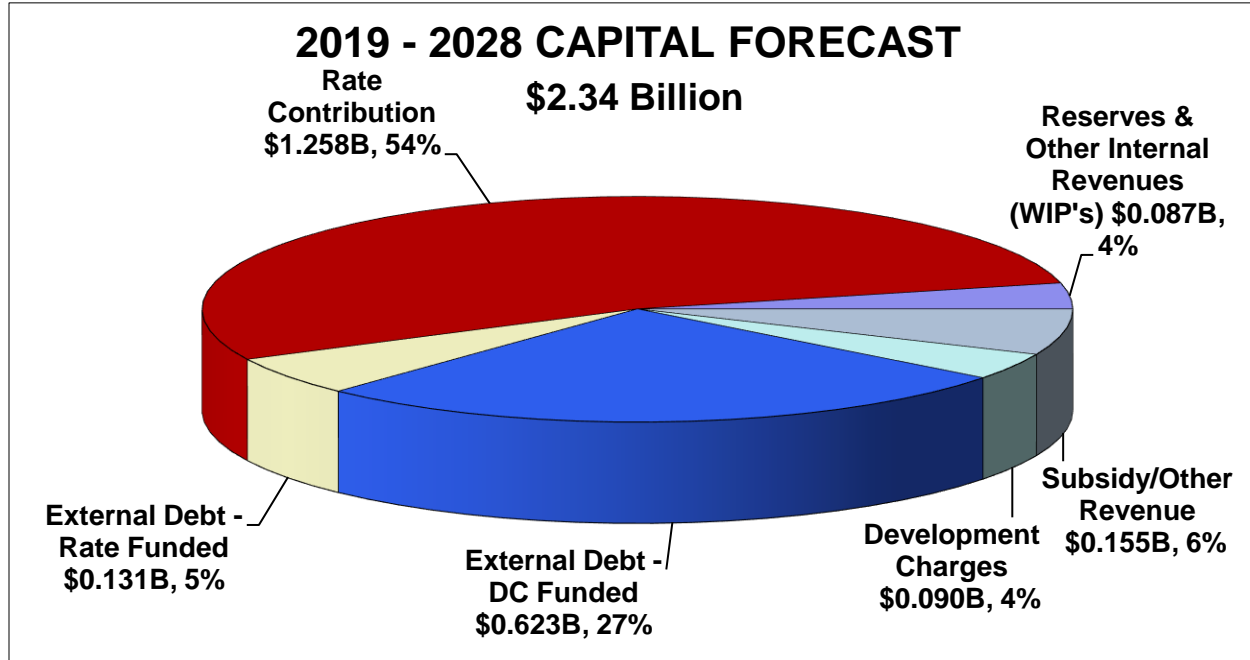
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 21 of 33**

Chart 12



Rate Reserves

Chart 13 provides the projected reserve balances for the Water, Wastewater and Storm programs. The 2019 Budget Forecast reflects utilizing \$22.32 M in reserve funds to fund the WWTP project, \$0.64 M for the Water Program and \$3 M for the Storm Program. It should be noted, the reserve forecast below does not include the Provincial Wastewater Improvement Subsidy reserve (\$100 M Provincial subsidy which is dedicated funding for the WWTP Clean Harbour project) or the Meter Replacement Reserve.

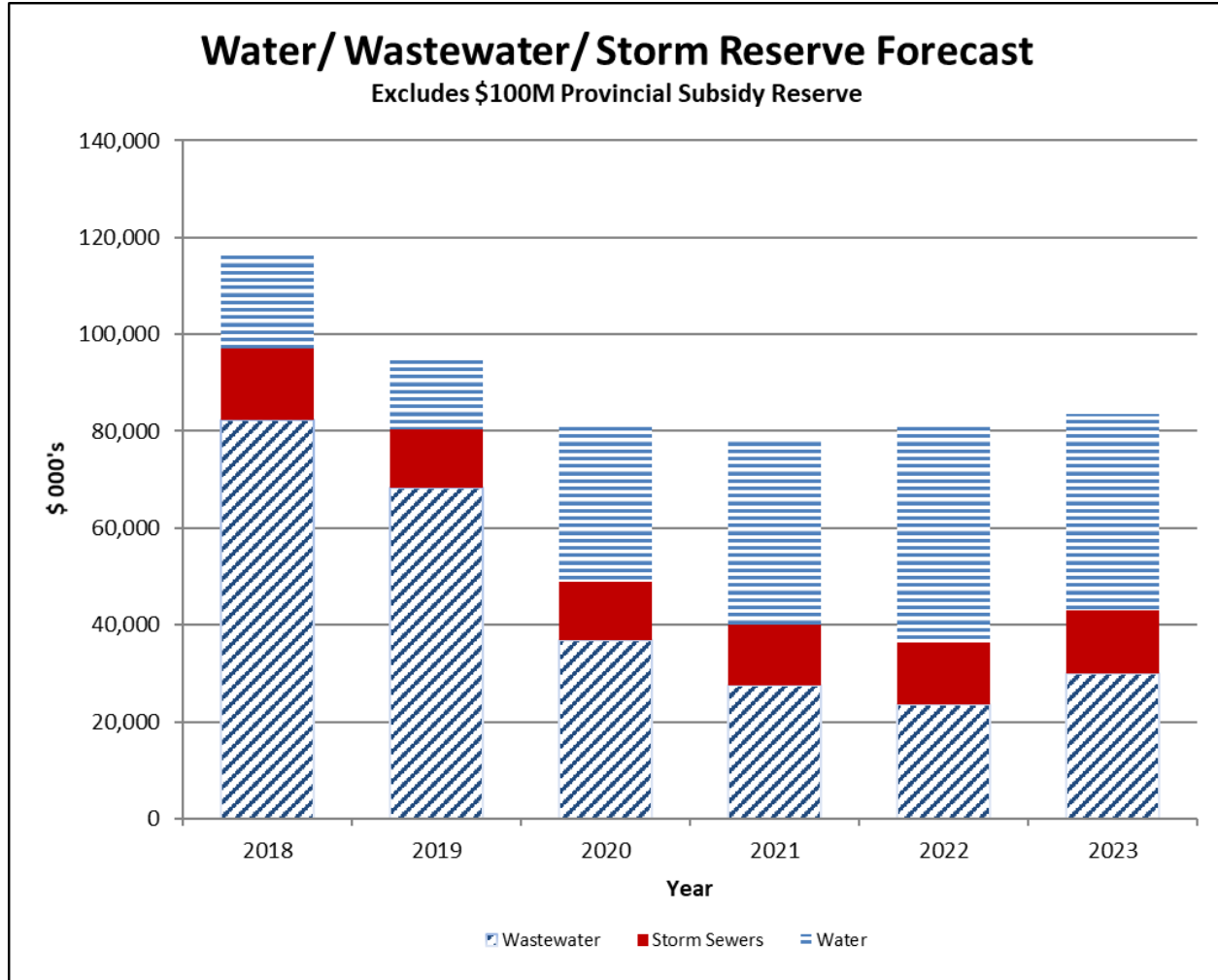
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 22 of 33

Chart 13



Reserves are essential to assist the City in mitigating unanticipated events such as consumption fluctuations, unforeseen increase in capital costs and potentially to provide rate stability or to decrease future debt needs. The current reserve forecast indicates the combined reserve balance will decrease from \$116 M at the end of 2018, to \$78 M in 2021 and then increase over the years to \$98 M in 2028. The decrease in reserves coincides with construction of the Clean Harbour Project at the WWTP plant, of which the City is funding over \$45 M from the Wastewater Reserve. The Wastewater and Storm Reserves are within the target balances relative to the Rate Reserve Policy approved by Council in June 2016. A strategy has been identified to replenish the Water Reserve as this reserve is currently below the defined lower reserve target balance. This is largely due to the reliance on this reserve to fund Water program related net capital expenditures.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 23 of 33**

Wastewater Treatment Upgrade and Expansion Project

The implementation plan for the Upgrade and Expansion of the WWTP is consistent with the 2018 Rate Budget, in that the plant improvements are forecast using a phased approach. Phase One is for effluent quality improvements and Phase Two is for expansion of the treatment plant to accommodate growth. The full \$296 M of the total growth component related to Phase Two is in the 2019-2028 Financing Plan. Construction for Phase Two related to expansion is proposed to start in 2026 and complete in 2028.

The total budget for the Wastewater Treatment Plant upgrade and expansion has increased by \$56.7 M in the 2019 budget forecast compared to the 2018 budget forecast, as reflected in Table 5. The total project budget increase was made up by a \$2.2 M reduction in the cost of the clean Harbour Project and a \$58.9 M increase in the cost of the expansion project. The budget increase is attributable to revised cost estimates for the plant expansion as part of the 2019 DC Background study. The previous cost estimate included in the 2018 budget was based on cost forecasts done in 2012. The new forecast has been adjusted for inflation. Table 5 provides a comparison of the budgeted costs in the 2018 and 2019 Rate Budgets for the Wastewater Treatment Plant upgrade and expansion.

The WWTP expansion project has been accelerated by a year when compared to the 2018 forecast. It is now scheduled to begin construction in 2026, with 100% of the cost funded by development charge debt. As previously mentioned, the levels of debt supported by development charges represent a significant risk if future growth does not materialize as planned. Staff will continue to monitor growth forecasts and DC Revenues over the next four years (2019 – 2022) and adjust the plant expansion project and associated financing plan to align with growth requirements. Staff in both Finance and Public Works will closely monitor the need for plant expansion, as well as the forecasted DC Revenue streams needed to pay for such an expansion, to mitigate the risk to the rate payer.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 24 of 33**

Table 5

Woodward Wastewater Treatment Plant Project - Gross Capital Forecasts													
(\$ Millions)													
	Total	pre											post
		2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2028
2019 Budget													
Phase 1 - Clean Harbour	406.5	152.3	64.5	89.2	97.1	3.4	-	-	-	-	-	-	-
Phase 2 - Expansion	296.4	-	1.5	1.8	1.8	2.5	2.5	3.1	3.1	94.3	92.9	92.9	-
Total WWTP	702.9	152.3	66.0	91.0	98.9	5.9	2.5	3.1	3.1	94.3	92.9	92.9	-
2018 Budget													
Phase 1 - Clean Harbour	408.7	152.3	112.1	116.4	27.9	-	-	-	-	-	-	-	-
Phase 2 - Expansion	237.5	-	-	-	-	-	-	5.0	5.0	5.0	77.5	72.5	72.5
Total WWTP	646.2	152.3	112.1	116.4	27.9	-	-	5.0	5.0	5.0	77.5	72.5	72.5
Increase (Decrease)													
Phase 1 - Clean Harbour	(2.2)	-	(47.6)	(27.2)	69.2	3.4	-	-	-	-	-	-	-
Phase 2 - Expansion	58.9	-	1.5	1.8	1.8	2.5	2.5	(1.9)	(1.9)	89.3	15.4	20.4	(72.5)
Total WWTP	56.7	-	(46.1)	(25.4)	71.0	5.9	2.5	(1.9)	(1.9)	89.3	15.4	20.4	(72.5)

Provincial / Federal Subsidy Programs

In 2010, the City received \$100 M of Provincial infrastructure funding related to the Wastewater Treatment Plant (WWTP) water quality improvement project and in 2013 a \$100 M commitment for Federal funding for the WWTP project from the Green Infrastructure Fund (GIF) on a claim reimbursement basis.

The 2019–2028 Rate Capital Financing Plan incorporates both the Federal and Provincial Subsidies to fund the Clean Harbour project. Of the \$200 M of the Provincial and Federal funding, \$69.664 M has been committed as a funding source in previous years' budgets, leaving \$130.336 M in funding for the Clean Harbour project to be applied in years 2019- 2021.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 25 of 33**

Projected Water / Wastewater / Storm Debt

The 2019 Water, Wastewater and Storm Budget incorporates a significant reliance on both rate supported debt and growth-related debt supported from development charges over the 10-year forecast period. The forecasted rate supported debt financing for the 10-year period 2019–2028 has increased by \$17.2 M from the 2018 Rate Budget. The increase in debt is because of a conscious effort to maintain Council approved minimum reserve balances, while staying within Council approved debt levels. The forecasted DC supported debt financing has increased by approximately \$72.8 M over the same period, resulting in an overall net increase in forecasted debt financing of \$109.4 M from the forecast in the 2018 Rate Budget. The increased reliance on DC supported debt is attributable to an increase in the Growth Capital forecast in the 2019 Rate Budget compared to the 2018 Rate Budget, specifically the inclusion of the WWTP expansion Project. The Growth Capital is partially offset with a \$30 M contribution from DC reserves in 2019 in the 2018 Rate Budget.

The 10-year capital program relies on a significant amount of debt financing, with the associated debt charges funded from both rates and development charges. The rate supported debt is projected to peak at \$307 M in 2022, compared with the 2018 budget forecasted debt peak of \$303 M in 2021. The debt funded from DC's is projected to peak at \$708 M in 2028, whereas the 2018 forecast was \$451 M in 2027. The increase in DC supported debt is due to the accelerated construction timeline of the WWTP expansion project, which for the first time has its entire construction cost in the 10-year forecast. The WWTP is planned to be 100% DC funded.

Table 6 provides the ten-year debt forecast compared to the 2018 Budget forecast.

Table 6

Projected Rate & DC Supported Outstanding Debt											
(\$ Millions)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2018 Rate Budget											
Funded from Rates	178	236	302	303	286	262	236	219	200	173	147
Funded from DC's	69	151	286	312	325	333	344	364	370	451	430
Total	247	387	589	615	611	595	581	583	570	624	578
2019 Rate Budget											
Funded from Rates	160	187	222	274	307	284	267	254	226	198	173
Funded from DC's	5	102	221	298	377	391	400	416	511	612	708
Total	165	289	443	572	684	675	667	669	737	810	880
Increase (Decrease)	(82)	(97)	(146)	(44)	73	81	87	86	167	186	303

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 26 of 33

Consistent with the 2018 Rate Budget and to more accurately forecast debt levels and the associated debt charges, the major multi-year Wastewater Treatment Plant projects are budgeted based on the projected cash flow of expenditures for the 2019 Rate Capital Budget, versus full commitment based budgeting.

Chart 14 compares the total outstanding debt (Rate and DC Funded) from the 2018 Budget forecast to the 2019 Budget forecast. The graph illustrates the lower debt requirements in 2019–2021 and higher debt levels in 2022–2028 from the 2018 forecast for the 10-year period 2019–2028. The higher debt levels in the later years can be attributed to the accelerated timeline of the WWTP expansion Project which is to be 100% DC debt funded.

Chart 14

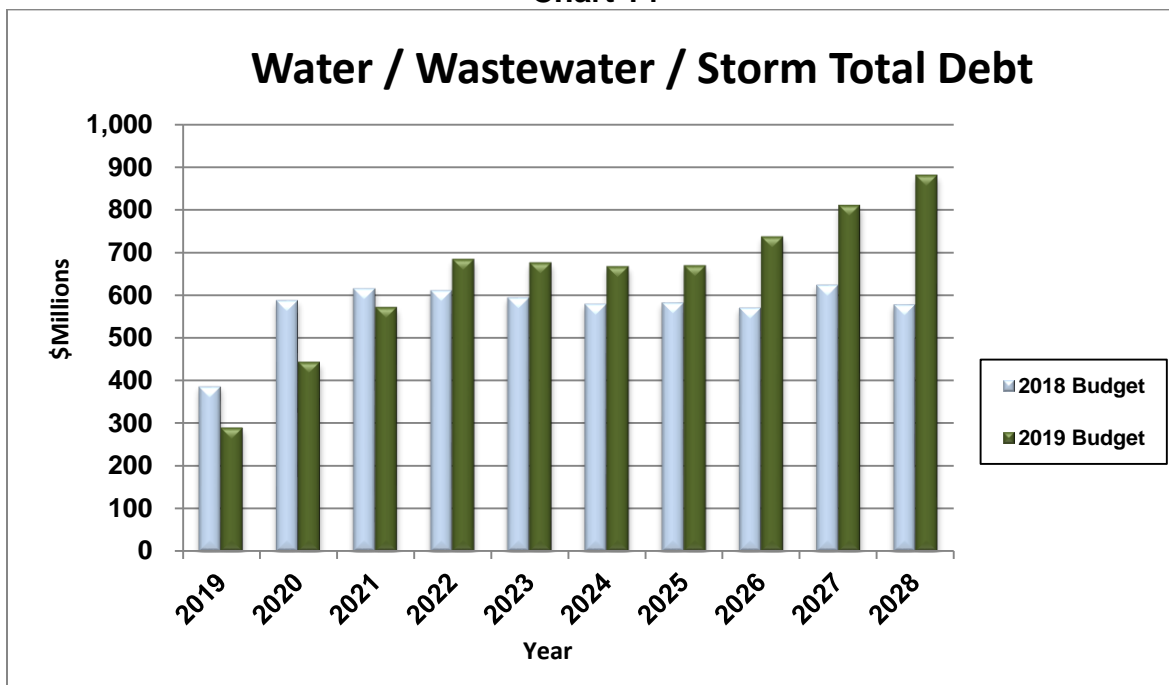


Chart 15 illustrates the projected outstanding debt for the 10-year period (2019–2028) and the funding source of the associated debt charges.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 27 of 33

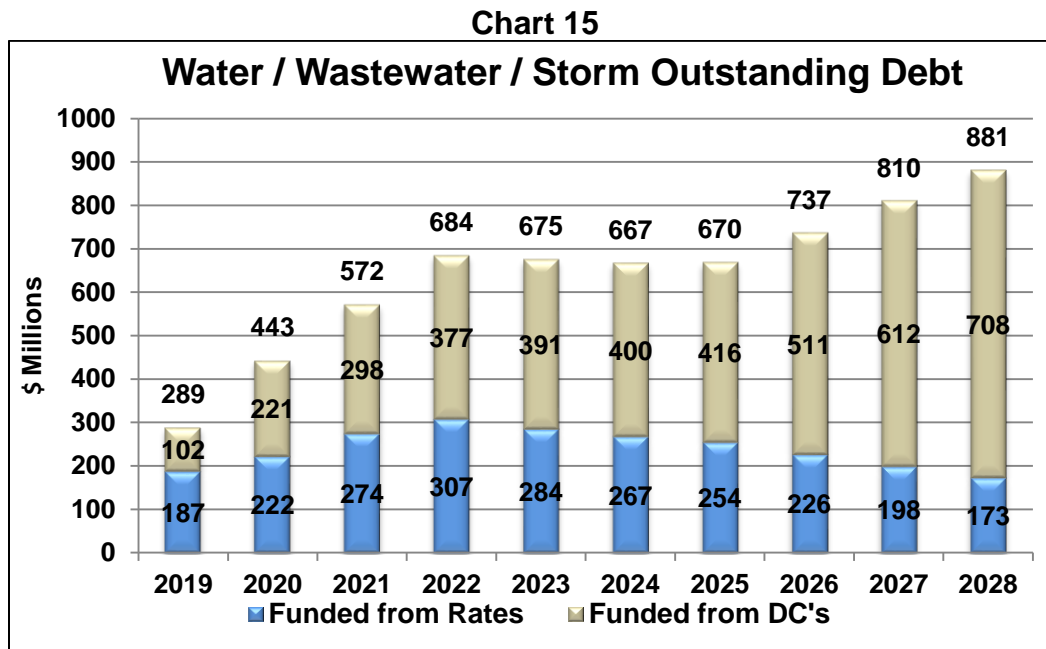
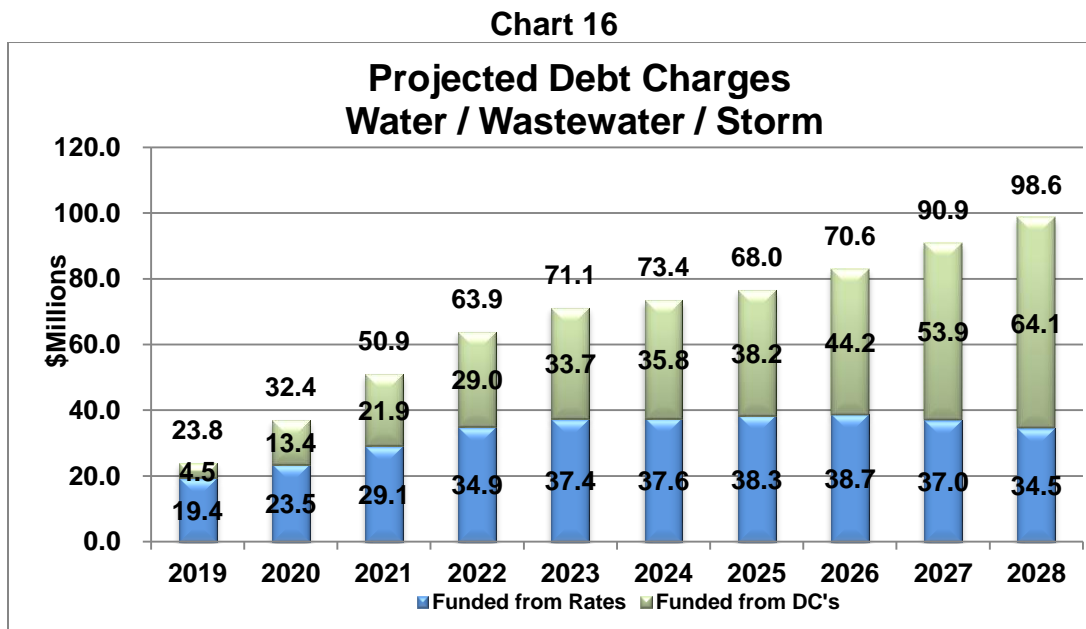


Chart 16 shows the forecasted debt charges funded by water / sewer rates and by Development Charges. In the upcoming years, Finance staff in conjunction with Public Works Staff will monitor the forecasted DC Debt charges in comparison to DC Revenue, to mitigate potential risks to the rate payer. The majority of this risk lies with the implementation plan of the WWTP expansion project, currently forecasted for construction in years 2026-2028.



OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 28 of 33**

Impact of Capital Budget on Operating Budget

As summarized in Table 7, the 2019 Rate Budget incorporates \$126.2 M capital financing costs which is an increase of \$9.1 M from the 2018 Rate budget. The 2019 budgeted debt charges increase by \$2.3 M, while contribution to capital increased by \$6.8 M when compared to the 2018 budget. DC exemption funding remains unchanged at \$9.0 M.

Table 7

WATER, WASTEWATER & STORM IMPACT OF CAPITAL ON OPERATING BUDGET					
(000's)					
	2018	2019	CHANGE		2019 - 2028
	APPROVED	PROPOSED	\$	%	FORECAST
Debt to be Issued	16,615	14,341	(2,274)	-13.7%	130,834
Debt Charges (Net of DCs)	17,108	19,366	2,258	13.2%	330,325
Contribution to Capital	90,972	97,804	6,832	7.5%	1,257,553
DC Exemption Funding	9,000	9,000	0	0.0%	81,000
Impact on Operating Budget	117,080	126,170	9,090	7.8%	1,668,878

Chart 17 highlights the annual debt servicing requirement for the Rate Supported Capital program. Financing costs are projected to increase from \$126 M in 2019 to \$212 M in 2028. Rate supported debt charges are expected to increase from 8.7% of total revenues in 2019 to 13.9% in 2023, and then decline to 10.2% in 2028.

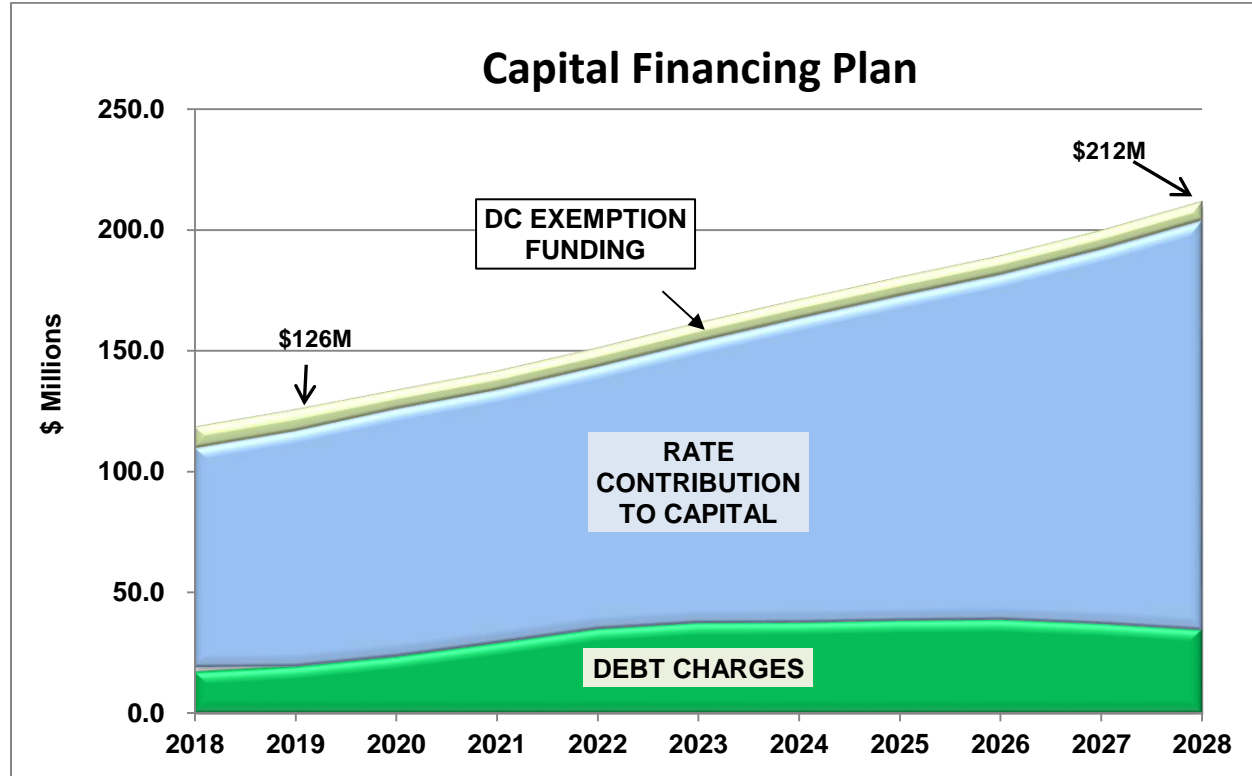
OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 29 of 33**

Chart 17



Debt Management

Council approved a Debt Management Policy and Lease Financing Policy (Report FCS13074) in October 2013, which contains the City-internal goals on debt levels, statutory limits on debt and financial ratios related to debt. These ratios are provided in Appendix “U” to Report FCS18087. Staff will ensure these ratios will remain well within the affordability range and acceptable levels of prudent financial management.

The debt related financial indicators include the following items:

I. City-internal Goals on Debt Levels:

1. Total tax and rate-supported debt as a percentage of City Own-Source revenues, not to exceed 60%, unless approved by Council.

The City’s debt ratios for 23.2% in 2017, forecasted 29% in 2018 and forecasted 24.1% for 2019 are well within the limit, of 60%.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget (FCS18087) (City Wide) - Page 30 of 33

2. Total Development Charge (DC) supported debt as a percentage of the total DC Eligible Costs for the forecast period of the latest DC Background Study, not to exceed 25%, unless approved by Council.

The City considers the limit of 25% to be an appropriate balance between two competing uses of revenues generated by development charges: i) to sustain and ensure adequate infrastructure (capital), services and resources to support the City's growth plans and (ii) to repay the debt issued for development.

The City's debt ratios of 2.0% in 2017 and forecasted 1.4% in 2018 and forecasted 2.0% for 2019 are well within the limit, of 25%.

II. Statutory Limits:

1. The annual debt and financial obligation limit for the City is calculated in accordance with Section 3 of Ontario Regulation 403/02 as amended.

The City's debt service charges as a percentage of City Own Source Revenue of 5.1% in 2017 and forecasted 4.7% in 2018 and forecasted 5.5% for 2019 are well within the limit, of 25%.

2. Outstanding variable interest rate bank loan agreements and variable interest rate debentures, in total, cannot exceed 15% of the total outstanding debt of the City as set out in Ont. Reg. 276/02 s(2). The City's debt ratios are below the limit at 6.1% for 2017 and forecasted 4.8% for 2018 are well within the limit, of 15%.

III. Financial ratios

The debt related financial ratios will remain well within the affordability range and acceptable levels of prudent financial management. Appendix "U" to Report FCS18087 provides the results of the following ratios:

- Debt and debt service charges per capita;
- Debt service charges as a percentage of City Own Source Revenue;
- Debt service charges as a percentage of the municipal levy;
- Debt to operating revenues;
- Debt to reserves and reserve funds; and,
- Cash and liquid assets to debt service; cash and liquid assets minus debt.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 31 of 33**

According to Ontario Regulation 403/02, Council shall, before giving authorization for capital work that would require a long-term debt or financial obligation, have the City Treasurer calculate an updated Annual Repayment Limit (ARL) using the most recent Annual Repayment Limit determined by the Ministry. The most recent ARL, determined and sent in writing by the Ministry to the City Treasurer, is the 2018 ARL in the amount of \$267,321,748 and is based on 2016 Financial Information Returns.

Using this 2018 ARL, the City Treasurer has calculated an updated ARL of \$204,747,217, shown on page two of Appendix “U” to Report FCS18087. The 2018 ARL was adjusted for possible debt service charges of \$50,965,070 corresponding to approximately \$529 M of debt which has been approved by Council in 2018 and prior years but not yet issued. The 2018 ARL was then further adjusted for debt service charges assumed or discharged on debt since December 31, 2016 to the end of this fiscal year 2018. According to this calculation, the updated ARL of \$204,747,217 represents a maximum amount which the City has available to commit to payments related to debt and financial obligations before the statutory limit is breached and corresponds to approximately \$2.1 B of additional borrowing which the City could undertake (assuming a 15-year term and 5% interest rate).

The related tax and rate impacts would be considered before approving debt within these limits.

ALTERNATIVES FOR CONSIDERATION

Beyond the recommended rate increase, staff can direct changes to this budget submission albeit any changes, in all likelihood, would require a review of the 2019 Capital Budget submissions.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement and Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 32 of 33**

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

Built Environment and Infrastructure

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

Our People and Performance

Hamiltonians have a high level of trust and confidence in their City government.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" – 2019 Hamilton Water Operating Budget – Combined Water, Wastewater and Storm

Appendix "B" – 2019 Hamilton Water Operating Budget – Water

Appendix "C" – 2019 Hamilton Water Operating Budget – Combined Wastewater and Storm

Appendix "D" – 2019 Hamilton Water Operating Budget – Wastewater

Appendix "E" – 2019 Hamilton Water Operating Budget – Storm

Appendix "F" – 2019 Rate Supported Staffing Summary and 2019 Rate Budget – Business Case Summary

Appendix "G" – 2019 Water and Wastewater / Storm Fees and Charges Effective January 1, 2019 – 2019 Private Fire Line Rates – 2019 Proposed User Fees and Charges)

Appendix "H" – Source of Capital Financing – 2019 to 2028 Rate Program Capital Budget

Appendix "I" – 2019 – 2028 Water / Wastewater / Storm Capital Financing Plan (2019 – 2028 Capital Financing Charges – Rate Programs)

Appendix "J" – Source of Capital Financing – 2019 to 2028 Rate Program Capital Budget

Appendix "K" – Water System – 2019 Capital Budget Project List

Appendix "L" – Water System – 2019 – 2028 Capital Budget List

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

**SUBJECT: 2019 Recommended Water, Wastewater and Stormwater Budget
(FCS18087) (City Wide) - Page 33 of 33**

Appendix “M” – Source of Capital Financing – 2019 to 2028 Rate Program Capital Budget

Appendix “N” – Wastewater System – 2019 Capital Budget Project List

Appendix “O” – Wastewater System – 2019 – 2028 Capital Budget List

Appendix “P” – Source of Capital Financing – 2019 to 2028 Rate Program Capital Budget

Appendix “Q” – Storm Water Management – 2019 Capital Budget Project List

Appendix “R” – Storm Water Management – 2019 – 2028 Capital Budget List

Appendix “S” – 2019 Rate Program Capital Budget Summary

Confidential Appendix “T” – Financing Details – Land Acquisition

Appendix “U” – City of Hamilton Debt Policy – Ratios and Treasurer’s Updated 2018 Annual Repayment Limit

MC/JS/dt

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2018	2018	2019	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2018 PROJECTED ACTUAL / 2018 RESTATED BUDGET	%	2019 REQUESTED / 2018 RESTATED BUDGET	%
<u>OPERATING EXPENDITURES:</u>	\$	\$	\$	\$	%	\$	%
<u>Environmental Services</u>							
Divisional Administration & Support	2,079,860	1,926,480	2,242,620	153,380	7.4%	162,760	7.8%
Woodward Upgrades	1,220,310	1,703,560	1,524,540	(483,250)	(39.6%)	304,230	24.9%
Customer Service	432,400	322,600	421,610	109,800	25.4%	(10,790)	(2.5%)
Outreach & Education	1,325,620	1,214,070	1,350,860	111,550	8.4%	25,240	1.9%
Service Co-ordination	3,110,320	3,090,320	4,401,610	20,000	0.6%	1,291,290	41.5%
Engineering Systems & Data Collection	1,278,170	1,098,620	1,286,870	179,550	14.0%	8,700	0.7%
Compliance & Regulations	798,230	818,230	871,210	(20,000)	(2.5%)	72,980	9.1%
Laboratory Services	3,449,120	3,528,030	3,527,640	(78,910)	(2.3%)	78,520	2.3%
Environmental Monitoring & Enforcement	1,755,150	1,674,260	1,818,020	80,890	4.6%	62,870	3.6%
Water Distribution & Wastewater Collection	21,484,360	21,200,590	21,369,840	283,770	1.3%	(114,520)	(0.5%)
Plant Operations & Maintenance	43,041,230	43,238,620	41,383,390	(197,390)	(0.5%)	(1,657,840)	(3.9%)
Capital Delivery	1,865,830	1,717,340	1,859,660	148,490	8.0%	(6,170)	(0.3%)
Sustainable Initiatives	1,470,340	1,439,640	1,497,370	30,700	2.1%	27,030	1.8%
Infrastructure Planning & System Design	2,459,220	2,289,320	2,464,770	169,900	6.9%	5,550	0.2%
Wastewater Abatement Program	1,000,000	1,000,000	1,150,000	-	0.0%	150,000	15.0%
Alectra Utilities Service Contract	5,559,720	5,559,720	5,700,000	-	0.0%	140,280	2.5%
Corporate & Departmental Support Services	6,145,090	6,299,770	6,432,040	(154,680)	(2.5%)	286,950	4.7%
Utilities Arrears Program	500,000	500,000	500,000	-	0.0%	-	-
Gapping Target	-	-	(300,000)	-	-	(300,000)	-
Sewer Lateral Management Program	500,000	500,000	500,000	-	0.0%	-	-
Hamilton Harbour Remedial Action Plan	305,000	304,980	395,000	20	0.0%	90,000	29.5%
Protective Plumbing Program (3P)	2,000,000	1,199,980	1,250,000	800,020	40.0%	(750,000)	(37.5%)
Financial Charges	188,210	164,630	177,000	23,580	12.5%	(11,210)	(6.0%)
	101,968,180	100,790,760	101,824,050	1,177,420	1.2%	(144,130)	(0.1%)
Capital and Reserve Recoveries	(8,678,950)	(8,397,230)	(6,099,580)	(281,720)	3.2%	2,579,370	(29.7%)
Sub-Total Environmental Services	93,289,230	92,393,530	95,724,470	895,700	1.0%	2,435,240	2.6%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Water Quality Initiatives	36,982,000	36,982,000	51,762,000	-	-	14,780,000	40.0%
Wastewater	45,474,000	45,474,000	42,837,000	-	-	(2,637,000)	(5.8%)
Stormwater	8,516,000	8,516,000	3,205,000	-	-	(5,311,000)	(62.4%)
Sub-Total Contributions to Capital	90,972,000	90,972,000	97,804,000	-	-	6,832,000	7.5%
<u>Contributions for DC Exemptions</u>							
Water Quality Initiatives	2,547,000	2,547,000	2,547,000	-	-	-	0.0%
Wastewater	4,590,000	4,590,000	4,590,000	-	-	-	0.0%
Stormwater	1,863,000	1,863,000	1,863,000	-	-	-	0.0%
Sub-Total Contributions for DC Exemptions	9,000,000	9,000,000	9,000,000	-	-	-	0.0%

**2019 HAMILTON WATER OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM**

	2018	2018	2019	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2018 PROJECTED ACTUAL / 2018 RESTATED BUDGET	%	2019 REQUESTED / 2018 RESTATED BUDGET	%
<u>OPERATING EXPENDITURES:</u>	\$	\$	\$	\$	%	\$	%
Capital Debt Charges							
Water Quality Initiatives	9,448,542	6,582,511	9,762,487	2,866,031	30.3%	313,945	3.3%
Wastewater	8,737,296	7,012,631	10,120,380	1,724,665	19.7%	1,383,084	15.8%
Stormwater	1,839,143	651,022	3,950,054	1,188,121	64.6%	2,110,911	114.8%
DC Debt Charges Recoveries	(2,917,437)	(162,840)	(4,467,237)	(2,754,597)	94.4%	(1,549,800)	53.1%
Sub-Total Debt Charges	17,107,544	14,083,324	19,365,685	3,024,220	17.7%	2,258,141	13.2%
Sub-Total Capital Financing	117,079,544	114,055,324	126,169,685	3,024,220	2.6%	9,090,141	7.8%
Reserve Transfers	494,513	1,458,810	365,324	(964,296)	(195.0%)	(129,189)	(26.1%)
Sub-Total Capital and Reserve Impacts on Operating	117,574,058	115,514,134	126,535,009	2,059,924	1.8%	8,960,951	7.6%
TOTAL EXPENDITURES	210,863,288	207,907,664	222,259,479	2,955,624	1.4%	11,396,191	5.4%
REVENUES:							
Rate Revenue							
Residential	92,860,600	90,865,306	97,938,766	(1,995,294)	(2.1%)	5,078,166	5.5%
Industrial/Commercial/Institutional/Multi-res	102,918,990	101,835,660	107,752,759	(1,083,330)	(1.1%)	4,833,769	4.7%
Haldimand	2,196,300	2,196,300	2,353,282	-	0.0%	156,982	7.1%
Halton	237,458	237,458	247,782	-	0.0%	10,324	4.3%
Raw Water	2,000	25,000	150,000	23,000	1150.0%	148,000	7400.0%
Non-Metered	550,000	550,000	580,000	-	0.0%	30,000	5.5%
Private Fire Lines	1,350,000	1,475,000	1,550,000	125,000	9.3%	200,000	14.8%
Hauler / 3rd Party Sales	1,475,000	1,475,000	1,225,000	-	0.0%	(250,000)	(16.9%)
Overstrength Agreements	2,249,480	2,249,480	2,249,480	-	0.0%	-	0.0%
Sewer Surcharge Agreements	4,000,000	4,000,000	5,200,000	-	0.0%	1,200,000	30.0%
Sub-Total Utility Rates	207,839,828	204,909,204	219,247,069	(2,930,624)	(1.4%)	11,407,241	5.5%
Non-Rate Revenue							
Local Improvement Recoveries	275,850	275,850	275,850	-	-	-	-
Permits / Leases / Agreements	1,439,600	1,439,600	1,365,050	-	-	(74,550)	(5.2%)
Investment Income	450,000	450,000	450,000	-	0.0%	-	-
General Fees and Recoveries	858,010	833,010	921,510	(25,000)	(2.9%)	63,500	7.4%
Sub-Total Non-Rate Revenue	3,023,460	2,998,460	3,012,410	(25,000)	(.8%)	(11,050)	(.4%)
TOTAL REVENUES	210,863,288	207,907,664	222,259,479	(2,955,624)	(1.4%)	11,396,191	5.4%
NET EXPENDITURES	-	0	-	(0)	-	-	-

CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2018	2019	2020	2021	2022	CHANGE		CHANGE		CHANGE	
	RESTATED BUDGET	REQUESTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	PROJECTED BUDGET	2019 REQUESTED / 2018 RESTATED BUDGET	%	2020 PROJECTED / 2019 REQUESTED BUDGET	%	2021 PROJECTED / 2020 PROJECTED BUDGET	%
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Environmental Services											
Divisional Administration & Support	2,079,860	2,242,620	2,309,898	2,379,195	2,450,571	162,760	7.8%	67,279	3.0%	69,297	3.0%
Woodward Upgrades	1,220,310	1,524,540	1,570,276	1,617,384	1,665,906	304,230	24.9%	45,736	3.0%	47,108	3.0%
Customer Service	432,400	421,610	434,258	447,286	460,705	(10,790)	(2.5%)	12,648	3.0%	13,028	3.0%
Outreach & Education	1,325,620	1,350,860	1,391,386	1,433,127	1,476,121	25,240	1.9%	40,526	3.0%	41,742	3.0%
Service Co-ordination	3,110,320	4,401,610	4,533,658	4,669,668	4,809,758	1,291,290	41.5%	132,048	3.0%	136,010	3.0%
Engineering Systems & Data Collection	1,278,170	1,286,870	1,325,476	1,365,240	1,406,198	8,700	0.7%	38,606	3.0%	39,764	3.0%
Compliance & Regulations	798,230	871,210	897,346	924,267	951,995	72,980	9.1%	26,136	3.0%	26,920	3.0%
Laboratory Services	3,449,120	3,527,640	3,633,469	3,742,473	3,854,747	78,520	2.3%	105,829	3.0%	109,004	3.0%
Environmental Monitoring & Enforcement	1,755,150	1,818,020	1,872,561	1,928,737	1,986,600	62,870	3.6%	54,541	3.0%	56,177	3.0%
Water Distribution & Wastewater Collection	21,484,360	21,369,840	22,010,935	22,671,263	23,351,401	(114,520)	(0.5%)	641,095	3.0%	660,328	3.0%
Plant Operations & Maintenance	43,041,230	41,383,390	42,624,892	43,903,638	45,421,748	(1,657,840)	(3.9%)	1,241,502	3.0%	1,278,747	3.0%
Capital Delivery	1,865,830	1,859,660	1,915,450	1,972,913	2,032,101	(6,170)	(0.3%)	55,790	3.0%	57,463	3.0%
Sustainable Initiatives	1,470,340	1,497,370	1,542,291	1,588,560	1,636,217	27,030	0.0%	44,921	3.0%	46,269	3.0%
Infrastructure & Source Water Planning	2,459,220	2,464,770	2,538,713	2,614,874	2,693,321	5,550	0.2%	73,943	3.0%	76,161	3.0%
Wastewater Abatement Program	1,000,000	1,150,000	1,184,500	1,220,035	1,256,636	150,000	15.0%	34,500	3.0%	35,535	3.0%
Alectra Utilities Service Contract	5,559,720	5,700,000	5,871,000	6,047,130	6,228,544	140,280	2.5%	171,000	3.0%	176,130	3.0%
Corporate & Departmental Support Services	6,145,090	6,432,040	6,531,121	6,633,174	6,738,289	286,950	4.7%	99,081	1.5%	102,053	1.6%
Utilities Arrears Program	500,000	500,000	500,000	500,000	500,000	-	-	-	-	-	-
Gapping Target	-	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	-	-	-	-	-
Sewer Lateral Management Program	500,000	500,000	515,000	530,450	546,364	-	-	15,000	3.0%	15,450	3.0%
Hamilton Harbour Remedial Action Plan	305,000	395,000	406,850	419,056	431,627	90,000	29.5%	11,850	3.0%	12,206	3.0%
Protective Plumbing Program (3P)	2,000,000	1,250,000	1,287,500	1,326,125	1,365,909	(750,000)	(37.5%)	37,500	3.0%	38,625	3.0%
Financial Charges	188,210	177,000	182,310	187,779	193,413	(11,210)	(0)	5,310	3.0%	5,469	3.0%
Capital and Reserve Recoveries	(8,678,950)	(6,099,580)	(6,282,567)	(6,471,044)	(6,665,176)	2,579,370	(29.7%)	(182,987)	3.0%	(188,477)	3.0%
Sub-Total Environmental Services	93,289,230	95,724,470	98,496,324	101,351,333	104,492,993	2,435,240	2.6%	2,771,854	2.9%	2,855,010	2.9%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Water Quality Initiatives	36,982,000	51,762,000	30,761,000	42,634,000	44,001,000	14,780,000	40.0%	(21,001,000)	(40.6%)	11,873,000	38.6%
Wastewater	45,474,000	42,837,000	61,049,000	54,776,000	57,261,000	(2,637,000)	(5.8%)	18,212,000	42.5%	(6,273,000)	(10.3%)
Stormwater	8,516,000	3,205,000	10,865,000	7,525,000	7,355,000	(5,311,000)	(62.4%)	7,660,000	239.0%	(3,340,000)	(30.7%)
Sub-Total Contributions to Capital	90,972,000	97,804,000	102,675,000	104,935,000	108,617,000	6,832,000	7.5%	4,871,000	5.0%	2,260,000	2.2%
Contributions for DC Exemptions											
Water Quality Initiatives	2,547,000	2,547,000	2,240,000	2,240,000	2,240,000	-	0.0%	(307,000)	(12.1%)	-	0.0%
Wastewater	4,590,000	4,590,000	4,080,000	4,080,000	4,080,000	-	0.0%	(510,000)	(11.1%)	-	0.0%
Stormwater	1,863,000	1,863,000	1,680,000	1,680,000	1,680,000	-	0.0%	(183,000)	(9.8%)	-	0.0%
Sub-Total Contributions for DC Exemptions	9,000,000	9,000,000	8,000,000	8,000,000	8,000,000	-	0.0%	(1,000,000)	(11.1%)	-	0.0%
Debt Charges											
Water Quality Initiatives	9,448,542	9,762,487	16,037,531	22,956,813	28,534,306	313,945	3.3%	6,275,044	64.3%	6,919,282	43.1%
Wastewater	8,737,296	10,120,380	13,646,238	18,471,030	24,415,779	1,383,084	15.8%	3,525,858	34.8%	4,824,792	35.4%
Stormwater	1,839,143	3,950,054	7,259,647	9,513,939	10,927,629	2,110,911	114.8%	3,309,592	83.8%	2,254,292	31.1%
DC Debt Charges Recoveries	(2,917,437)	(4,467,237)	(13,433,955)	(21,872,783)	(28,972,349)	(1,549,800)	53.1%	(8,966,718)	200.7%	(8,438,828)	62.8%
Sub-Total Debt Charges	17,107,544	19,365,685	23,509,461	29,068,999	34,905,364	2,258,141	13.2%	4,143,777	21.4%	5,559,538	23.6%
Sub-Total Capital Financing	117,079,544	126,169,685	134,184,461	142,003,999	151,522,364	9,090,141	7.8%	8,014,777	6.4%	7,819,538	5.8%
Reserve Transfers	494,513	365,324	166,276	151,352	255,975	(129,189)	(26.1%)	(199,049)	(54.5%)	(14,924)	(9.0%)
Sub-Total Capital and Reserve Impacts on Operating	117,574,058	126,535,009	134,350,737	142,155,351	151,778,339	8,960,951	7.6%	7,815,728	6.2%	7,804,614	5.8%
TOTAL EXPENDITURES	210,863,288	222,259,479	232,847,061	243,506,685	256,271,332	11,396,191	5.4%	10,587,582	4.8%	10,659,624	4.6%

CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET	CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET	CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	92,860,600	97,938,766	103,206,630	108,616,861	114,372,031	5,078,166	5.5%	5,267,864	5.4%	5,410,231	5.2%
Industrial/Commercial/Institutional/Multi-res	102,918,990	107,752,759	112,678,981	117,500,794	123,673,707	4,833,769	4.7%	4,926,222	4.6%	4,821,812	4.3%
Haldimand	2,196,300	2,353,282	2,359,268	2,359,998	2,731,321	156,982	7.1%	5,986	0.3%	730	0.0%
Halton	237,458	247,782	259,960	270,220	285,271	10,324	4.3%	12,179	4.9%	10,260	3.9%
Raw Water	2,000	150,000	150,000	150,000	150,000	148,000	7400.0%	-	0.0%	-	0.0%
Non-Metered	550,000	580,000	580,000	610,000	640,000	30,000	5.5%	-	0.0%	30,000	5.2%
Private Fire Lines	1,350,000	1,550,000	1,596,500	1,644,395	1,693,727	200,000	14.8%	46,500	3.0%	47,895	3.0%
Hauler / 3rd Party Sales	1,475,000	1,225,000	1,261,750	1,299,603	1,338,591	(250,000)	(0)	36,750	3.0%	37,853	3.0%
Overstrength Agreements	2,249,480	2,249,480	2,316,964	2,386,473	2,458,068	-	0.0%	67,484	3.0%	69,509	3.0%
Sewer Surcharge Agreements	4,000,000	5,200,000	5,356,000	5,516,680	5,682,180	1,200,000	30.0%	156,000	3.0%	160,680	3.0%
Sub-Total Utility Rates	207,839,828	219,247,069	229,766,054	240,355,023	253,024,896	11,407,241	5.5%	10,518,985	4.8%	10,588,969	4.6%
Non-Rate Revenue											
Local Improvement Recoveries	275,850	275,850	275,850	275,850	275,850	-	-	-	-	-	-
Permits/Leases/Agreements	1,439,600	1,365,050	1,406,002	1,448,182	1,491,627	(74,550)	(5.2%)	40,952	3.0%	42,180	3.0%
Investment Income	450,000	450,000	450,000	450,000	450,000	-	-	-	-	-	-
General Fees and Recoveries	858,010	921,510	949,155	977,630	1,028,959	63,500	7.4%	27,645	3.0%	28,475	3.0%
Sub-Total Non-Rate Revenue	3,023,460	3,012,410	3,081,007	3,151,662	3,246,436	(11,050)	(0.4%)	68,597	2.3%	70,655	2.3%
TOTAL REVENUES	210,863,288	222,259,479	232,847,061	243,506,685	256,271,332	11,396,191	5.4%	10,587,582	4.8%	10,659,624	4.6%
NET EXPENDITURES	-	-	-	-	-	0	-	-	-	-	-

CITY OF HAMILTON
2019-2028 WATER, WASTEWATER & STORM OPERATING BUDGET
COMBINED WATER, WASTEWATER AND STORM
 (\$ 000'S)

	2018 Restated	2019 Requested	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	88,789	91,724	94,266	96,754	97,468	100,460	103,540	106,716	109,988	113,358	116,992
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	468	2,810	2,866	2,924	2,982	3,042	3,102	3,102
TOTAL OPERATING COSTS	93,289	95,724	98,496	101,351	104,493	107,628	110,856	114,182	117,608	121,136	124,770
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Water	36,982	51,762	30,761	42,634	44,001	58,219	61,865	76,319	83,263	74,719	82,942
Wastewater	45,474	42,837	61,049	54,776	57,261	49,460	48,560	51,645	49,155	69,065	80,340
Stormwater	8,516	3,205	10,865	7,525	7,355	8,705	15,385	6,395	10,275	11,135	6,075
Sub-total Contributions to Capital	90,972	97,804	102,675	104,935	108,617	116,384	125,810	134,359	142,693	154,919	169,357
Contributions for DC Exemptions											
Water	2,547	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Wastewater	4,590	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Stormwater	1,863	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	9,000	9,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Debt Charges											
Water	9,449	9,762	16,038	22,957	28,534	31,234	31,841	33,987	36,204	36,902	38,118
Wastewater	8,737	10,120	13,646	18,471	24,416	28,103	29,469	30,090	33,919	40,964	47,112
Stormwater	1,839	3,950	7,260	9,514	10,928	11,790	12,101	12,412	12,722	13,033	13,346
DC Debt Charges Recoveries	(2,917)	(4,467)	(13,434)	(21,873)	(28,972)	(33,719)	(35,820)	(38,162)	(44,165)	(53,913)	(64,073)
Sub-total Debt Charges	17,108	19,366	23,509	29,069	34,905	37,408	37,592	38,326	38,681	36,986	34,503
Reserve Transfers	495	365	166	151	256	102	(44)	31	391	465	381
Sub-Total Capital & Reserve Impacts on Operating	117,574	126,535	134,351	142,155	151,778	161,894	171,357	180,717	189,765	200,370	212,241
TOTAL EXPENDITURES	210,863	222,259	232,847	243,507	256,271	269,521	282,214	294,899	307,372	321,506	337,011
REVENUES											
Residential	92,861	97,939	103,207	108,617	114,372	120,472	126,790	133,544	140,997	148,616	156,573
Industrial/Commercial/Institutional/Multi-res	102,919	107,753	112,679	117,501	123,674	130,150	135,865	141,183	145,623	151,437	158,226
Haldimand	2,196	2,353	2,359	2,360	2,731	2,923	3,091	3,202	3,270	3,437	3,643
Halton	237	248	260	270	285	304	321	334	344	360	382
Raw Water	2	150	150	150	150	150	150	150	150	150	150
Non-Metered	550	580	580	610	640	670	700	730	760	790	820
Private Fire Lines	1,350	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906	1,963	2,022
Hauler / 3rd Party Sales	1,475	1,225	1,262	1,300	1,339	1,379	1,420	1,463	1,507	1,552	1,598
Overstrength Agreements	2,249	2,249	2,317	2,386	2,458	2,532	2,608	2,686	2,767	2,850	2,935
Sewer Surcharge Agreements	4,000	5,200	5,356	5,517	5,682	5,853	6,028	6,209	6,395	6,587	6,785
Non-Rate Revenue	3,023	3,012	3,081	3,152	3,246	3,344	3,444	3,547	3,654	3,763	3,876
TOTAL REVENUES	210,863	222,259	232,847	243,507	256,271	269,521	282,214	294,899	307,372	321,506	337,011
NET EXPENDITURES											
Rate Increase	4.50%	4.66%	4.50%	4.37%	4.48%	4.53%	4.39%	4.43%	4.60%	4.51%	4.51%
RESIDENTIAL BILL (200m³ p.a.)	\$ 690.70	\$ 722.90	\$ 755.45	\$ 788.45	\$ 823.75	\$ 861.05	\$ 898.85	\$ 938.70	\$ 981.90	\$ 1,026.20	\$ 1,072.45

2019 HAMILTON WATER OPERATING BUDGET WATER

	2018	2018	2019	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2018 PROJECTED / 2018 RESTATED BUDGET	ACTUAL	2019 REQUESTED / 2018 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
<u>Environmental Services</u>							
Divisional Administration & Support	935,942	866,922	1,012,984	69,020	7.4%	77,042	8.2%
Customer Service	216,640	161,740	211,240	54,900	25.3%	(5,400)	(2.5%)
Outreach & Education	677,800	607,020	690,420	70,780	10.4%	12,620	1.9%
Service Co-ordination	1,594,240	1,583,840	2,241,780	10,400	0.7%	647,540	40.6%
Engineering Systems & Data Collection	639,080	549,300	643,430	89,780	14.0%	4,350	0.7%
Compliance & Regulations	399,110	409,110	435,600	(10,000)	(2.5%)	36,490	9.1%
Laboratory Services	1,109,692	1,118,840	1,132,777	(9,149)	(0.8%)	23,085	2.1%
Water Distribution & Wastewater Collection	16,029,410	15,795,490	15,793,060	233,920	1.5%	(236,350)	(1.5%)
Plant Operations & Maintenance	21,152,795	21,265,505	20,354,155	(112,710)	(0.5%)	(798,640)	(3.8%)
Capital Delivery	839,624	772,804	836,847	66,820	8.0%	(2,777)	(0.3%)
Sustainable Initiatives	661,653	647,843	673,816	13,810	2.1%	12,163	1.8%
Infrastructure Planning & System Design	1,106,649	1,030,199	1,109,142	76,450	6.9%	2,493	0.2%
Alectra Utilities Service Contract	2,997,360	2,997,360	2,850,000	-	0.0%	(147,360)	(4.9%)
Corporate & Departmental Support Services	2,663,120	2,728,950	2,872,450	(65,830)	(2.5%)	209,330	7.9%
Utilities Arrears Program	250,000	250,000	250,000	-	0.0%	-	0.0%
Gapping Target			(300,000)	-		(300,000)	
Financial Charges	3,620	(20,000)	-	23,620	652.5%	(3,620)	(100.0%)
	51,276,734	50,764,922	50,807,699	511,812	1.0%	(469,034)	(0.9%)
Capital and Reserve Recoveries	(3,255,192)	(3,255,192)	(1,881,768)	-	0.0%	1,373,424	(42.2%)
Sub-Total Environmental Services	\$ 48,021,542	\$ 47,509,730	\$ 48,925,932	\$ 511,812	1.1%	\$ 904,390	1.9%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Water Quality Initiatives	36,982,000	36,982,000	51,762,000	-	-	14,780,000	40.0%
Sub-Total Contributions to Capital	36,982,000	36,982,000	51,762,000	-	-	14,780,000	40.0%
<u>Contributions for DC Exemptions</u>							
Water Quality Initiatives	2,547,000	2,547,000	2,547,000	-	-	-	0.0%
Sub-Total Contributions for DC Exemptions	2,547,000	2,547,000	2,547,000	-	-	-	0.0%
<u>Debt Charges</u>							
Water Quality Initiatives	9,448,542	6,582,511	9,762,487	2,866,031	30.3%	313,945	3.3%
DC Debt Charges Recoveries	(1,176,642)	(24,584)	(976,370)	(1,152,058)	97.9%	200,272	(17.0%)
Sub-Total Debt Charges	8,271,901	6,557,927	8,786,118	1,713,974	20.7%	514,217	6.2%
Sub-Total Capital Financing	47,800,901	46,086,927	63,095,118	1,713,974	3.6%	15,294,217	32.0%
Reserve Transfers	6,389,555	7,243,866	(4,745,039)	(854,311)	(13.4%)	(11,134,594)	(174.3%)
Sub-Total Cap/Reserve Impacts on Operating	54,190,456	53,330,793	58,350,079	859,663	1.6%	4,159,623	7.7%
TOTAL EXPENDITURES	102,211,998	100,840,523	107,276,010	1,371,474	1.3%	5,064,013	5.0%

**CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
WATER**

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET		CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET		CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Environmental Services											
Divisional Administration & Support	935,942	1,012,984	1,043,373	1,074,675	1,106,915	77,042	8.2%	30,390	3.0%	31,301	3.0%
Customer Service	216,640	211,240	217,577	224,105	230,828	(5,400)	(2.5%)	6,337	3.0%	6,527	3.0%
Outreach & Education	677,800	690,420	711,133	732,467	754,441	12,620	1.9%	20,713	3.0%	21,334	3.0%
Service Co-ordination	1,594,240	2,241,780	2,309,033	2,378,304	2,449,654	647,540	40.6%	67,253	3.0%	69,271	3.0%
Engineering Systems & Data Collection	639,080	643,430	662,733	682,615	703,093	4,350	0.7%	19,303	3.0%	19,882	3.0%
Compliance & Regulations	399,110	435,600	448,668	462,128	475,992	36,490	9.1%	13,068	3.0%	13,460	3.0%
Laboratory Services	1,109,692	1,132,777	1,166,760	1,201,763	1,237,815	23,085	2.1%	33,983	3.0%	35,003	3.0%
Water Distribution & Wastewater Collection	16,029,410	15,793,060	16,266,852	16,754,857	17,257,503	(236,350)	(1.5%)	473,792	3.0%	488,006	3.0%
Plant Operations & Maintenance	21,152,795	20,354,155	20,964,780	21,593,723	22,341,535	(798,640)	(3.8%)	610,625	3.0%	628,943	3.0%
Capital Delivery	839,624	836,847	861,952	887,811	914,445	(2,777)	(0.3%)	25,105	3.0%	25,859	3.0%
Sustainable Initiatives	661,653	673,816	694,030	714,851	736,296	12,163	1.8%	20,214	3.0%	20,821	3.0%
Infrastructure & Source Water Planning	1,106,649	1,109,142	1,142,416	1,176,688	1,211,989	2,493	0.2%	33,274	3.0%	34,272	3.0%
Alectra Utilities Service Contract	2,997,360	2,850,000	2,935,500	3,023,565	3,114,272	(147,360)	(4.9%)	85,500	3.0%	88,065	3.0%
Corporate & Departmental Support Services	2,663,120	2,872,450	2,958,624	3,047,382	3,138,804	209,330	7.9%	86,174	3.0%	88,759	3.0%
Utilities Arrears Program	250,000	250,000	250,000	250,000	250,000	-	-	-	-	-	-
Gapping Target	-	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	-	-	-	-	-
Financial Charges	3,620	-	-	-	-	(3,620)	(100.0%)	-	-	-	-
Capital and Reserve Recoveries	(3,255,192)	(1,881,768)	(1,938,221)	(1,996,368)	(2,056,259)	1,373,424	(42.2%)	(56,453)	3.0%	(58,147)	3.0%
Sub-Total Environmental Services	48,021,542	48,925,932	50,395,209	51,908,566	53,567,323	904,390	1.9%	1,469,278	3.0%	1,513,356	3.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Water Quality Initiatives	36,982,000	51,762,000	30,761,000	42,634,000	44,001,000	14,780,000	40.0%	(21,001,000)	(40.6%)	11,873,000	38.6%
Sub-Total Contributions to Capital	36,982,000	51,762,000	30,761,000	42,634,000	44,001,000	14,780,000	40.0%	(21,001,000)	(40.6%)	11,873,000	38.6%
Contributions for DC Exemptions											
Water Quality Initiatives	2,547,000	2,547,000	2,240,000	2,240,000	2,240,000	-	0.0%	(307,000)	(0)	-	0.0%
Sub-Total Contributions for DC Exemptions	2,547,000	2,547,000	2,240,000	2,240,000	2,240,000	-	0.0%	(307,000)	(0)	-	0.0%
Debt Charges											
Water Quality Initiatives	9,448,542	9,762,487	16,037,531	22,956,813	28,534,306	313,945	3.3%	6,275,044	64.3%	6,919,282	43.1%
DC Debt Charges Recoveries	(1,176,642)	(976,370)	(4,140,195)	(7,882,087)	(10,249,945)	200,272	(17.0%)	(3,163,825)	324.0%	(3,741,892)	90.4%
Sub-Total Debt Charges	8,271,901	8,786,118	11,897,336	15,074,726	18,284,360	514,217	6.2%	3,111,219	35.4%	3,177,390	26.7%
Sub-Total Capital Financing	47,800,901	63,095,118	44,898,336	59,948,726	64,525,360	15,294,217	32.0%	(18,196,781)	(28.8%)	15,050,390	33.5%
Reserve Transfers	6,389,555	(4,745,039)	17,086,574	5,090,437	5,396,711	(11,134,594)	(174.3%)	21,831,613	(460.1%)	(11,996,137)	(70.2%)
Sub-Total Capital and Reserve Impacts on Operating	54,190,456	58,350,079	61,984,910	65,039,163	69,922,071	4,159,623	7.7%	3,634,831	6.2%	3,054,253	4.9%
TOTAL EXPENDITURES	102,211,998	107,276,010	112,380,119	116,947,729	123,489,394	5,064,013	5.0%	5,104,109	4.8%	4,567,609	4.1%

CITY OF HAMILTON
2019-2028 WATER, WASTEWATER & STORM OPERATING BUDGET
WATER

	2018 Restated	2019 Requested	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	48,022	48,926	50,395	51,909	53,568	55,175	56,830	58,535	60,291	62,100	63,963
TOTAL OPERATING COSTS	48,022	48,926	50,395	51,909	53,568	55,175	56,830	58,535	60,291	62,100	63,963
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Water	36,982	51,762	30,761	42,634	44,001	58,219	61,865	76,319	83,263	74,719	82,942
Sub-total Contributions to Capital	36,982	51,762	30,761	42,634	44,001	58,219	61,865	76,319	83,263	74,719	82,942
Contributions for DC Exemptions											
Water	2,547	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Sub-total Contributions to Capital	2,547	2,547	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240	2,240
Debt Charges											
Water	9,449	9,762	16,038	22,957	28,534	31,234	31,841	33,987	36,204	36,902	38,118
DC Debt Charges Recoveries	(1,177)	(976)	(4,140)	(7,882)	(10,250)	(11,142)	(11,412)	(12,668)	(14,377)	(16,233)	(18,559)
Sub-total Debt Charges	8,272	8,786	11,897	15,075	18,284	20,091	20,429	21,319	21,827	20,669	19,559
Reserve Transfers											
	6,390	(4,745)	17,087	5,090	5,388	(5,044)	(3,142)	(12,927)	(15,647)	(34)	370
Sub-Total Capital & Reserve Impacts on Operating	54,190	58,350	61,985	65,039	69,913	75,507	81,391	86,951	91,683	97,594	105,111
TOTAL EXPENDITURES	102,212	107,276	112,380	116,948	123,481	130,681	138,222	145,486	151,974	159,694	169,074
REVENUES											
Residential	45,303	47,795	50,232	52,422	55,298	58,335	61,926	66,075	70,176	73,935	78,426
Industrial/Commercial/Institutional/Multi-res	50,240	52,541	55,087	57,333	60,465	64,276	67,895	70,736	72,892	76,512	81,010
Haldimand	2,196	2,353	2,359	2,360	2,731	2,923	3,091	3,202	3,270	3,437	3,643
Halton	237	248	260	270	285	304	321	334	344	360	382
Raw Water	2	150	150	150	150	150	150	150	150	150	150
Non-Metered	275	290	290	305	320	335	350	365	380	395	410
Private Fire Lines	1,350	1,550	1,597	1,644	1,694	1,745	1,797	1,851	1,906	1,963	2,022
Hauler / 3rd Party Sales	685	435	448	461	475	490	504	519	535	551	568
Non-Rate Revenue	1,924	1,914	1,957	2,002	2,062	2,124	2,188	2,253	2,321	2,391	2,462
TOTAL REVENUES	102,212	107,276	112,380	116,948	123,481	130,681	138,222	145,486	151,974	159,694	169,074
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-
Rate Increase	3.8%	4.7%	4.3%	3.5%	4.7%	4.8%	5.3%	5.7%	5.2%	4.6%	5.3%
RESIDENTIAL BILL (200m³ p.a.)	\$ 333.30	\$ 349.00	\$ 363.85	\$ 376.70	\$ 394.35	\$ 413.15	\$ 435.25	\$ 460.25	\$ 484.10	\$ 506.20	\$ 533.10

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
COMBINED WASTEWATER AND STORM

	2018	2018	2019	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2018 PROJECTED / 2018 RESTATED BUDGET	ACTUAL	2019 REQUESTED / 2018 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
<u>Environmental Services</u>							
Divisional Administration & Support	1,143,919	1,059,559	1,229,636	84,360	0	85,717	7.5%
Woodward Upgrades	1,220,310	1,703,560	1,524,540	(483,250)	(0)	304,230	24.9%
Customer Service	215,760	160,860	210,370	54,900	25.4%	(5,390)	(2.5%)
Outreach & Education	647,820	607,050	660,440	40,770	0	12,620	1.9%
Service Co-ordination	1,516,080	1,506,480	2,159,830	9,600	0	643,750	42.5%
Engineering Systems & Data Collection	639,090	549,320	643,440	89,770	0	4,350	0.7%
Compliance & Regulations	399,120	409,120	435,610	(10,000)	(0)	36,490	9.1%
Laboratory Services	2,339,429	2,409,190	2,394,864	(69,762)	(0)	55,435	2.4%
Environmental Monitoring & Enforcement	1,755,150	1,674,260	1,818,020	80,890	4.6%	62,870	3.6%
Water Distribution & Wastewater Collection	5,454,950	5,405,100	5,576,780	49,850	0	121,830	2.2%
Plant Operations & Maintenance	21,888,435	21,973,115	21,029,235	(84,680)	(0.4%)	(859,200)	(3.9%)
Capital Delivery	1,026,207	944,537	1,022,813	81,670	0	(3,394)	(0.3%)
Sustainable Initiatives	808,687	791,797	823,555	16,890	0	14,868	1.8%
Infrastructure & Source Water Planning	1,352,571	1,259,121	1,355,629	93,450	0	3,058	0.2%
Wastewater Abatement Program	1,000,000	1,000,000	1,150,000	-	-	150,000	15.0%
Alectra Utilities Service Contract	2,562,360	2,562,360	2,850,000	-	0.0%	287,640	11.2%
Corporate & Departmental Support Services	3,481,970	3,570,820	3,559,590	(88,850)	(2.6%)	77,620	2.2%
Utilities Arrears Program	250,000	250,000	250,000	-	-	-	-
Sewer Lateral Management Program	500,000	500,000	500,000	-	-	-	-
Hamilton Harbour Remedial Action Plan	305,000	304,980	395,000	20	0	90,000	29.5%
Protective Plumbing Program (3P)	2,000,000	1,199,980	1,250,000	800,020	40.0%	(750,000)	(37.5%)
Financial Charges	184,590	184,630	177,000	(40)	(0)	(7,590)	(0)
Capital and Reserve Recoveries	(5,423,758)	(5,142,038)	(4,217,812)	(281,720)	5.2%	1,205,946	(22.2%)
Sub-Total Environmental Services	45,267,689	44,883,800	46,798,539	383,889	0.8%	1,530,850	3.4%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Wastewater	45,474,000	45,474,000	42,837,000	-	-	(2,637,000)	(0)
Stormwater	8,516,000	8,516,000	3,205,000	-	-	(5,311,000)	(1)
Sub-Total Contributions to Capital	53,990,000	53,990,000	46,042,000	-	-	(7,948,000)	(0)
<u>Contributions for DC Exemptions</u>							
Wastewater	4,590,000	4,590,000	4,590,000	-	-	-	-
Stormwater	1,863,000	1,863,000	1,863,000	-	-	-	-
Sub-Total Contributions for DC Exemptions	6,453,000	6,453,000	6,453,000	-	-	-	-

**CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
COMBINED WASTEWATER AND STORM**

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET		CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET		CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Environmental Services											
Divisional Administration & Support	1,143,919	1,229,636	1,266,525	1,304,521	1,343,656	85,717	7.5%	36,889	3.0%	37,996	3.0%
Woodward Upgrades	1,220,310	1,524,540	1,570,276	1,617,384	1,665,906	304,230	24.9%	45,736	3.0%	47,108	3.0%
Customer Service	215,760	210,370	216,681	223,182	229,877	(5,390)	(2.5%)	6,311	3.0%	6,500	3.0%
Outreach & Education	647,820	660,440	680,253	700,661	721,681	12,620	0	19,813	3.0%	20,408	3.0%
Service Co-ordination	1,516,080	2,159,830	2,224,625	2,291,364	2,360,105	643,750	42.5%	64,795	3.0%	66,739	3.0%
Engineering Systems & Data Collection	639,090	643,440	662,743	682,625	703,104	4,350	0.7%	19,303	3.0%	19,882	3.0%
Compliance & Regulations	399,120	435,610	448,678	462,139	476,003	36,490	9.1%	13,068	3.0%	13,460	3.0%
Laboratory Services	2,339,429	2,394,864	2,466,709	2,540,711	2,616,932	55,435	2.4%	71,846	3.0%	74,001	3.0%
Environmental Monitoring & Enforcement	1,755,150	1,818,020	1,872,561	1,928,737	1,986,600	62,870	3.6%	54,541	3.0%	56,177	3.0%
Water Distribution & Wastewater Collection	5,454,950	5,576,780	5,744,083	5,916,406	6,093,898	121,830	2.2%	167,303	3.0%	172,323	3.0%
Plant Operations & Maintenance	21,888,435	21,029,235	21,660,112	22,309,915	23,080,213	(859,200)	(3.9%)	630,877	3.0%	649,803	3.0%
Capital Delivery	1,026,207	1,022,813	1,053,497	1,085,102	1,117,655	(3,394)	(0.3%)	30,684	3.0%	31,605	3.0%
Sustainable Initiatives	808,687	823,555	848,261	873,709	899,920	14,868	1.8%	24,707	3.0%	25,448	3.0%
Infrastructure & Source Water Planning	1,352,571	1,355,629	1,396,297	1,438,186	1,481,332	3,058	0.2%	40,669	3.0%	41,889	3.0%
Wastewater Abatement Program	1,000,000	1,150,000	1,184,500	1,220,035	1,256,636	150,000	15.0%	34,500	3.0%	35,535	3.0%
Alectra Utilities Service Contract	2,562,360	2,850,000	2,935,500	3,023,565	3,114,272	287,640	11.2%	85,500	3.0%	88,065	3.0%
Corporate & Departmental Support Services	3,481,970	3,559,590	3,572,498	3,585,792	3,599,486	77,620	2.2%	12,908	0.4%	13,295	0.4%
Utilities Arrears Program	250,000	250,000	250,000	250,000	250,000	-	-	-	-	-	-
Sewer Lateral Management Program	500,000	500,000	515,000	530,450	546,364	-	-	15,000	3.0%	15,450	3.0%
Hamilton Harbour Remedial Action Plan	305,000	395,000	406,850	419,056	431,627	90,000	29.5%	11,850	3.0%	12,206	3.0%
Protective Plumbing Program (3P)	2,000,000	1,250,000	1,287,500	1,326,125	1,365,909	(750,000)	(37.5%)	37,500	3.0%	38,625	3.0%
Financial Charges	184,590	177,000	182,310	187,779	193,413	(7,590)	(0)	5,310	3.0%	5,469	3.0%
Capital and Reserve Recoveries	(5,423,758)	(4,217,812)	(4,344,346)	(4,474,677)	(4,608,917)	1,205,946	(22.2%)	(126,534)	3.0%	(130,330)	3.0%
Sub-Total Environmental Services	45,267,689	46,798,539	48,101,114	49,442,768	50,925,671	1,530,850	3.4%	1,302,576	2.8%	1,341,653	2.8%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Wastewater	45,474,000	42,837,000	61,049,000	54,776,000	57,261,000	(2,637,000)	(0)	18,212,000	42.5%	(6,273,000)	(10.3%)
Stormwater	8,516,000	3,205,000	10,865,000	7,525,000	7,355,000	(5,311,000)	(1)	7,660,000	239.0%	(3,340,000)	(30.7%)
Sub-Total Contributions to Capital	53,990,000	46,042,000	71,914,000	62,301,000	64,616,000	(7,948,000)	(0)	25,872,000	56.2%	(9,613,000)	(13.4%)
Contributions for DC Exemptions											
Wastewater	4,590,000	4,590,000	4,080,000	4,080,000	4,080,000	-	-	(510,000)	(11.1%)	-	0.0%
Stormwater	1,863,000	1,863,000	1,680,000	1,680,000	1,680,000	-	-	(183,000)	(9.8%)	-	0.0%
Sub-Total Contributions for DC Exemptions	6,453,000	6,453,000	5,760,000	5,760,000	5,760,000	-	-	(693,000)	(10.7%)	-	0.0%
Debt Charges											
Wastewater	8,737,296	10,120,380	13,646,238	18,471,030	24,415,779	1,383,084	15.8%	3,525,858	34.8%	4,824,792	35.4%
Stormwater	1,839,143	3,950,054	7,259,647	9,513,939	10,927,629	2,110,911	114.8%	3,309,592	83.8%	2,254,292	31.1%
DC Debt Charges Recoveries	(1,740,795)	(3,490,867)	(9,293,760)	(13,990,696)	(18,722,403)	(1,750,072)	100.5%	(5,802,893)	166.2%	(4,696,936)	50.5%
Sub-Total Debt Charges	8,835,644	10,579,567	11,612,125	13,994,273	16,621,004	1,743,924	19.7%	1,032,558	9.8%	2,382,148	20.5%
Sub-Total Capital Financing	69,278,644	63,074,567	89,286,125	82,055,273	86,997,004	(6,204,076)	(9.0%)	26,211,558	41.6%	(7,230,852)	(8.1%)
Reserve Transfers	(5,895,042)	5,110,363	(16,920,298)	(4,939,085)	(5,140,736)	11,005,405	(186.7%)	(22,030,661)	(431.1%)	11,981,213	(70.8%)
Sub-Total Capital and Reserve Impacts on Operating	63,383,602	68,184,930	72,365,827	77,116,188	81,856,268	4,801,329	7.6%	4,180,897	6.1%	4,750,361	6.6%
TOTAL EXPENDITURES	108,651,290	114,983,469	120,466,941	126,558,956	132,781,938	6,332,179	5.8%	5,483,473	4.8%	6,092,014	5.1%

**CITY OF HAMILTON
 2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
 COMBINED WASTEWATER AND STORM**

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET		CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET		CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Rate Revenue											
Residential	47,557,920	50,143,510	52,974,280	56,195,265	59,073,566	2,585,590	5.4%	2,830,770	5.6%	3,220,985	6.1%
Industrial/Commercial/Institutional/Multi-res	52,679,040	55,211,628	57,592,157	60,167,847	63,208,778	2,532,588	4.8%	2,380,528	4.3%	2,575,690	4.5%
Non-Metered	275,000	290,000	290,000	305,000	320,000	15,000	5.5%	-	0.0%	15,000	5.2%
Hauler / 3rd Party Sales	790,000	790,000	813,700	838,111	863,254	-	0.0%	23,700	3.0%	24,411	3.0%
Overstrength Agreements	2,249,480	2,249,480	2,316,964	2,386,473	2,458,068	-	0.0%	67,484	3.0%	69,509	3.0%
Sewer Surcharge Agreements	4,000,000	5,200,000	5,356,000	5,516,680	5,682,180	1,200,000	30.0%	156,000	3.0%	160,680	3.0%
Sub-Total Utility Rates	107,551,440	113,884,619	119,343,101	125,409,376	131,605,847	6,333,179	5.9%	5,458,483	4.8%	6,066,275	5.1%
Non-Rate Revenue											
Local Improvement Recoveries	265,850	265,850	265,850	265,850	265,850	-	-	-	-	-	-
Permits/Leases/Agreements	513,000	515,000	530,450	546,364	562,754	2,000	0.4%	15,450	3.0%	15,914	3.0%
General Fees and Recoveries	321,000	318,000	327,540	337,366	347,487	(3,000)	(0.9%)	9,540	3.0%	9,826	3.0%
Sub-Total Non-Rate Revenue	1,099,850	1,098,850	1,123,840	1,149,580	1,176,092	(1,000)	(0.1%)	24,990	2.3%	25,740	2.3%
TOTAL REVENUES	108,651,290	114,983,469	120,466,941	126,558,956	132,781,938	6,332,179	5.8%	5,483,473	4.8%	6,092,014	5.1%
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	0	-

CITY OF HAMILTON
2019-2028 WATER, WASTEWATER & STORM OPERATING BUDGET
COMBINED WASTEWATER AND STORM
(\$ 000'S)

	2018 Restated	2019 Requested	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	40,768	42,799	43,871	44,846	43,900	45,285	46,710	48,181	49,697	51,258	53,029
BIO-SOLIDS	4,500	4,000	4,230	4,129	4,215	4,302	4,392	4,484	4,578	4,676	4,676
TERTIARY TREATMENT	-	-	-	468	2,810	2,866	2,924	2,982	3,042	3,102	3,102
TOTAL OPERATING COSTS	45,268	46,799	48,101	49,443	50,925	52,453	54,026	55,647	57,317	59,036	60,807
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Wastewater	45,474	42,837	61,049	54,776	57,261	49,460	48,560	51,645	49,155	69,065	80,340
Stormwater	8,516	3,205	10,865	7,525	7,355	8,705	15,385	6,395	10,275	11,135	6,075
Sub-total Contributions to Capital	53,990	46,042	71,914	62,301	64,616	58,165	63,945	58,040	59,430	80,200	86,415
Contributions for DC Exemptions											
Wastewater	4,590	4,590	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080	4,080
Stormwater	1,863	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	6,453	6,453	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760	5,760
Debt Charges											
Wastewater	8,737	10,120	13,646	18,471	24,416	28,103	29,469	30,090	33,919	40,964	47,112
Stormwater	1,839	3,950	7,260	9,514	10,928	11,790	12,101	12,412	12,722	13,033	13,346
DC Debt Charges Recoveries	(1,741)	(3,491)	(9,294)	(13,991)	(18,722)	(22,577)	(24,408)	(25,495)	(29,788)	(37,680)	(45,514)
Sub-total Debt Charges	8,836	10,580	11,612	13,994	16,621	17,316	17,163	17,007	16,854	16,317	14,944
Reserve Transfers	(5,895)	5,110	(16,920)	(4,939)	(5,132)	5,146	3,098	12,959	16,038	499	11
Sub-Total Capital & Reserve Impacts on Operating	63,384	68,185	72,366	77,116	81,865	86,387	89,966	93,766	98,081	102,776	107,130
TOTAL EXPENDITURES	108,651	114,983	120,467	126,559	132,790	138,840	143,992	149,413	155,398	161,812	167,937
REVENUES											
Residential	47,558	50,144	52,974	56,195	59,074	62,137	64,864	67,469	70,821	74,682	78,147
Industrial/Commercial/Institutional/Multi-res	52,679	55,212	57,592	60,168	63,209	65,874	67,970	70,447	72,731	74,925	77,216
Non-Metered	275	290	290	305	320	335	350	365	380	395	410
Hauler / 3rd Party Sales	790	790	814	838	863	889	916	943	972	1,001	1,031
Overstrength Agreements	2,249	2,249	2,317	2,386	2,458	2,532	2,608	2,686	2,767	2,850	2,935
Sewer Surcharge Agreements	4,000	5,200	5,356	5,517	5,682	5,853	6,028	6,209	6,395	6,587	6,785
Non-Rate Revenue	1,100	1,099	1,124	1,150	1,184	1,220	1,256	1,294	1,333	1,373	1,414
TOTAL REVENUES	108,651	114,983	120,467	126,559	132,790	138,840	143,992	149,413	155,398	161,812	167,937
NET EXPENDITURES	-	-	-	-	-	-	-	-	-	-	-
Rate Increase	5.2%	4.6%	4.7%	5.1%	4.3%	4.3%	3.5%	3.2%	4.0%	4.5%	3.7%
RESIDENTIAL BILL (200m³ p.a.)	\$ 357.40	\$ 373.90	\$ 391.60	\$ 411.75	\$ 429.40	\$ 447.90	\$ 463.60	\$ 478.45	\$ 497.80	\$ 520.00	\$ 539.35

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
WASTEWATER

	2018	2018	2019	CHANGE		CHANGE	
	RESTATED BUDGET	PROJECTED ACTUAL	REQUESTED BUDGET	2018 PROJECTED / 2018 RESTATED BUDGET	ACTUAL	2019 REQUESTED / 2018 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
<u>Environmental Services</u>							
Divisional Administration & Support	935,962	866,942	1,006,104	69,020	7.4%	70,142	7.5%
Woodward Upgrades	1,220,310	1,703,560	1,524,540	(483,250)	(39.6%)	304,230	24.9%
Customer Service	172,950	129,030	168,630	43,920	25.4%	(4,320)	(2.5%)
Outreach & Education	518,250	485,630	528,350	32,620	6.3%	10,100	1.9%
Service Co-ordination	913,990	908,190	1,301,020	5,800	0.6%	387,030	42.3%
Engineering Systems & Data Collection	511,270	439,450	514,750	71,820	14.0%	3,480	0.7%
Compliance & Regulations	385,540	393,540	414,730	(8,000)	(2.1%)	29,190	7.6%
Laboratory Services	2,207,768	2,274,810	2,258,943	(67,042)	(3.0%)	51,175	2.3%
Environmental Monitoring & Enforcement	1,691,530	1,613,880	1,752,210	77,650	4.6%	60,680	3.6%
Water Distribution & Wastewater Collection	4,939,610	4,899,110	5,042,270	40,500	0.8%	102,660	2.1%
Plant Operations & Maintenance	21,076,645	21,150,365	20,209,645	(73,720)	(0.3%)	(867,000)	(4.1%)
Capital Delivery	839,624	772,804	836,847	66,820	8.0%	(2,777)	(0.3%)
Sustainable Initiatives	661,653	647,843	673,816	13,810	2.1%	12,163	1.8%
Infrastructure Planning & System Design	1,106,649	1,030,199	1,109,142	76,450	6.9%	2,493	0.2%
Wastewater Abatement Program	1,000,000	1,000,000	1,150,000	-	0.0%	150,000	15.0%
Alectra Utilities Service Contract	2,562,360	2,562,360	2,850,000	-	0.0%	287,640	11.2%
Corporate & Departmental Support Services	3,053,570	3,142,450	3,129,340	(88,880)	(2.9%)	75,770	2.5%
Utilities Arrears Program	250,000	250,000	250,000	-	0.0%	-	0.0%
Sewer Lateral Management Program	500,000	500,000	500,000	-	0.0%	-	0.0%
Financial Charges	183,670	183,670	177,000	-	0.0%	(6,670)	(3.6%)
	44,731,350	44,953,832	45,397,336	(222,482)	(0.5%)	665,986	1.5%
Capital and Reserve Recoveries	(4,410,242)	(4,128,522)	(3,397,058)	(281,720)	6.4%	1,013,184	(23.0%)
Sub-Total Environmental Services	40,321,108	40,825,310	42,000,278	(504,202)	(1.3%)	1,679,170	4.2%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Wastewater	45,474,000	45,474,000	42,837,000	-	-	(2,637,000)	(5.8%)
Sub-Total Contributions to Capital	45,474,000	45,474,000	42,837,000	-	-	(2,637,000)	(5.8%)
<u>Contributions for DC Exemptions</u>							
Wastewater	4,590,000	4,590,000	4,590,000	-	-	-	0.0%
Sub-Total Contributions for DC Exemptions	4,590,000	4,590,000	4,590,000	-	-	-	0.0%

**CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
WASTEWATER**

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET	CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET	CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Environmental Services											
Divisional Administration & Support	935,962	1,006,104	1,036,287	1,067,376	1,099,397	70,142	7.5%	30,183	3.0%	31,089	3.0%
Woodward Upgrades	1,220,310	1,524,540	1,570,276	1,617,384	1,665,906	304,230	24.9%	45,736	3.0%	47,108	3.0%
Customer Service	172,950	168,630	173,689	178,900	184,267	(4,320)	(2.5%)	5,059	3.0%	5,211	3.0%
Outreach & Education	518,250	528,350	544,201	560,527	577,342	10,100	1.9%	15,851	3.0%	16,326	3.0%
Service Co-ordination	913,990	1,301,020	1,340,051	1,380,252	1,421,660	387,030	42.3%	39,031	3.0%	40,202	3.0%
Engineering Systems & Data Collection	511,270	514,750	530,193	546,098	562,481	3,480	0.7%	15,443	3.0%	15,906	3.0%
Compliance & Regulations	385,540	414,730	427,172	439,987	453,187	29,190	7.6%	12,442	3.0%	12,815	3.0%
Laboratory Services	2,207,768	2,258,943	2,326,711	2,396,513	2,468,408	51,175	2.3%	67,768	3.0%	69,801	3.0%
Environmental Monitoring & Enforcement	1,691,530	1,752,210	1,804,776	1,858,920	1,914,687	60,680	3.6%	52,566	3.0%	54,143	3.0%
Water Distribution & Wastewater Collection	4,939,610	5,042,270	5,193,538	5,349,344	5,509,825	102,660	2.1%	151,268	3.0%	155,806	3.0%
Plant Operations & Maintenance	21,076,645	20,209,645	20,815,934	21,440,412	22,184,625	(867,000)	(4.1%)	606,289	3.0%	624,478	3.0%
Capital Delivery	839,624	836,847	861,952	887,811	914,445	(2,777)	(0.3%)	25,105	3.0%	25,859	3.0%
Sustainable Initiatives	661,653	673,816	694,030	714,851	736,296	12,163	1.8%	20,214	3.0%	20,821	3.0%
Infrastructure Planning & System Design	1,106,649	1,109,142	1,142,416	1,176,688	1,211,989	2,493	0.2%	33,274	3.0%	34,272	3.0%
Wastewater Abatement Program	1,000,000	1,150,000	1,184,500	1,220,035	1,256,636	150,000	15.0%	34,500	3.0%	35,535	3.0%
Alectra Utilities Service Contract	2,562,360	2,850,000	2,935,500	3,023,565	3,114,272	287,640	11.2%	85,500	3.0%	88,065	3.0%
Corporate & Departmental Support Services	3,053,570	3,129,340	3,129,340	3,129,340	3,129,340	75,770	2.5%	-	-	-	-
Utilities Arrears Program	250,000	250,000	250,000	250,000	250,000	-	0.0%	-	-	-	-
Sewer Lateral Management Program	500,000	500,000	515,000	530,450	546,364	-	0.0%	15,000	3.0%	15,450	3.0%
Financial Charges	183,670	177,000	182,310	187,779	193,413	(6,670)	(3.6%)	5,310	3.0%	5,469	3.0%
Capital and Reserve Recoveries	(4,410,242)	(3,397,058)	(3,498,970)	(3,603,939)	(3,712,057)	1,013,184	(23.0%)	(101,912)	3.0%	(104,969)	3.0%
Sub-Total Environmental Services	40,321,108	42,000,278	43,158,906	44,352,293	45,582,482	1,679,170	4.2%	1,158,628	2.8%	1,193,387	2.8%
					45,682						
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Wastewater	45,474,000	42,837,000	61,049,000	54,776,000	57,261,000	(2,637,000)	(5.8%)	18,212,000	42.5%	(6,273,000)	(10.3%)
Sub-Total Contributions to Capital	45,474,000	42,837,000	61,049,000	54,776,000	57,261,000	(2,637,000)	(5.8%)	18,212,000	42.5%	(6,273,000)	(10.3%)
Contributions for DC Exemptions											
Wastewater	4,590,000	4,590,000	4,080,000	4,080,000	4,080,000	-	0.0%	(510,000)	(0)	-	0.0%
Sub-Total Contributions for DC Exemptions	4,590,000	4,590,000	4,080,000	4,080,000	4,080,000	-	0.0%	(510,000)	(0)	-	0.0%
Debt Charges											
Wastewater	8,737,296	10,120,380	13,646,238	18,471,030	24,415,779	1,383,084	15.8%	3,525,858	34.8%	4,824,792	35.4%
DC Debt Charges Recoveries	(1,007,689)	(1,669,722)	(4,444,780)	(7,198,788)	(10,828,497)	(662,033)	65.7%	(2,775,058)	166.2%	(2,754,009)	62.0%
Sub-Total Debt Charges	7,729,607	8,450,658	9,201,459	11,272,241	13,587,281	721,051	9.3%	750,800	8.9%	2,070,783	22.5%
Sub-Total Capital Financing	57,793,607	55,877,658	74,330,459	70,128,241	74,928,281	(1,915,949)	(3.3%)	18,452,800	33.0%	(4,202,217)	(5.7%)
Reserve Transfers	10,368,575	16,937,533	2,804,537	11,900,190	11,987,597	6,568,957	63.4%	(14,132,996)	(83.4%)	9,095,653	324.3%
Sub-Total Capital and Reserve Impacts on Operating	68,162,182	72,815,191	77,134,995	82,028,431	86,915,879	4,653,009	6.8%	4,319,805	5.9%	4,893,436	6.3%
TOTAL EXPENDITURES	108,483,290	114,815,469	120,293,901	126,380,725	132,598,360	6,332,179	5.8%	5,478,433	4.8%	6,086,823	5.1%

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
STORM

	2018 RESTATED BUDGET	2018 PROJECTED ACTUAL	2019 REQUESTED BUDGET	CHANGE 2018 PROJECTED ACTUAL / 2018 RESTATED BUDGET		CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET	
	\$	\$	\$	\$	%	\$	%
<u>OPERATING EXPENDITURES:</u>							
<u>Environmental Services</u>							
Divisional Administration & Support	207,957	192,617	223,532	15,340	7.4%	15,575	7.5%
Customer Service	42,810	31,830	41,740	10,980	25.6%	(1,070)	(2.5%)
Outreach & Education	129,570	121,420	132,090	8,150	6.3%	2,520	1.9%
Service Co-ordination	602,090	598,290	858,810	3,800	0.6%	256,720	42.6%
Engineering Systems & Data Collection	127,820	109,870	128,690	17,950	14.0%	870	0.7%
Compliance & Regulations	13,580	15,580	20,880	(2,000)	(14.7%)	7,300	53.8%
Laboratory Services	131,661	134,380	135,921	(2,720)	(2.1%)	4,260	3.2%
Environmental Monitoring & Enforcement	63,620	60,380	65,810	3,240	5.1%	2,190	3.4%
Water Distribution & Wastewater Collection	515,340	505,990	534,510	9,350	1.8%	19,170	3.7%
Plant Operations & Maintenance	811,790	822,750	819,590	(10,960)	(1.4%)	7,800	1.0%
Infrastructure Planning & System Design	245,922	228,922	246,487	17,000	6.9%	565	0.2%
Corporate & Departmental Support Services	428,400	428,370	430,250	30	0.0%	1,850	0.4%
Hamilton Harbour Remedial Action Plan	305,000	304,980	395,000	20	0.0%	90,000	29.5%
Protective Plumbing Program (3P)	2,000,000	1,199,980	1,250,000	800,020	40.0%	(750,000)	(37.5%)
Financial Charges	920	960	-	(40)	(4.3%)	(920)	(100.0%)
	<u>5,960,097</u>	<u>5,072,006</u>	<u>5,619,014</u>	<u>888,091</u>	<u>14.9%</u>	<u>(341,082)</u>	<u>(5.7%)</u>
Capital and Reserve Recoveries	(1,013,516)	(1,013,516)	(820,754)	-	0.0%	1,013,516	(100.0%)
Sub-Total Environmental Services	4,946,581	4,058,490	4,798,261	888,091	18.0%	672,434	13.6%
<u>Capital and Reserve Impacts on Operating</u>							
<u>Contributions to Capital</u>							
Stormwater	8,516,000	8,516,000	3,205,000	-	-	(5,311,000)	(62.4%)
Sub-Total Contributions to Capital	8,516,000	8,516,000	3,205,000	-	-	(5,311,000)	(62.4%)
<u>Contributions for DC Exemptions</u>							
Stormwater	1,863,000	1,863,000	1,863,000	-	-	-	0.0%
Sub-Total Contributions for DC Exemptions	1,863,000	1,863,000	1,863,000	-	-	-	0.0%
<u>Debt Charges</u>							
Stormwater	1,839,143	651,022	3,950,054	1,188,121	64.6%	2,110,911	114.8%
DC Debt Charges Recoveries	(733,106)	(24,363)	(1,821,145)	(708,743)	96.7%	(1,088,039)	148.4%
Sub-Total Debt Charges	1,106,037	626,659	2,128,909	479,378	43.3%	1,022,872	92.5%
Sub-Total Capital Financing	11,485,037	11,005,659	7,196,909	479,378	4.2%	(4,288,128)	(37.3%)
Reserve Transfers	(16,263,617)	(14,896,149)	(11,827,169)	(1,367,468)	8.4%	4,436,448	(27.3%)
Sub-Total Cap\Reserve Impacts on Operating	(4,778,581)	(3,890,490)	(4,630,261)	(888,091)	18.6%	148,320	(3.1%)
TOTAL EXPENDITURES	168,000	168,000	168,000	-	0.0%	0	0.0%

CITY OF HAMILTON
2019 HAMILTON WATER OPERATING BUDGET
STORM

	2018 RESTATED BUDGET	2018 PROJECTED ACTUAL	2019 REQUESTED BUDGET	CHANGE 2018 PROJECTED ACTUAL / 2018 RESTATED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET
	\$	\$	\$	%	\$ %
REVENUES:					
<u>Non-Rate Revenue</u>					
General Fees and Recoveries	168,000	168,000	168,000	-	0.0%
Sub-Total Non-Rate Revenue	168,000	168,000	168,000	-	0.0%
TOTAL REVENUES	168,000	168,000	168,000	-	0.0%
NET EXPENDITURES	-	0	0	(0)	-

**CITY OF HAMILTON
2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
STORM**

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET	CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET	CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET			
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
OPERATING EXPENDITURES:											
Environmental Services											
Divisional Administration & Support	207,957	223,532	230,238	237,145	244,259	15,575	7.5%	6,706	3.0%	6,907	3.0%
Customer Service	42,810	41,740	42,992	44,282	45,610	(1,070)	(2.5%)	1,252	3.0%	1,290	3.0%
Outreach & Education	129,570	132,090	136,053	140,134	144,338	2,520	1.9%	3,963	3.0%	4,082	3.0%
Service Co-ordination	602,090	858,810	884,574	911,112	938,445	256,720	42.6%	25,764	3.0%	26,537	3.0%
Engineering Systems & Data Collection	127,820	128,690	132,551	136,527	140,623	870	0.7%	3,861	3.0%	3,977	3.0%
Compliance & Regulations	13,580	20,880	21,506	22,152	22,816	7,300	53.8%	626	3.0%	645	3.0%
Laboratory Services	131,661	135,921	139,998	144,198	148,524	4,260	3.2%	4,078	3.0%	4,200	3.0%
Environmental Monitoring & Enforcement	63,620	65,810	67,784	69,818	71,912	2,190	3.4%	1,974	3.0%	2,034	3.0%
Water Distribution & Wastewater Collection	515,340	534,510	550,545	567,062	584,074	19,170	3.7%	16,035	3.0%	16,516	3.0%
Plant Operations & Maintenance	811,790	819,590	844,178	869,503	895,588	7,800	1.0%	24,588	3.0%	25,325	3.0%
Infrastructure Planning & System Design	245,922	246,487	253,882	261,498	269,343	565	0.2%	7,395	3.0%	7,616	3.0%
Corporate & Departmental Support Services	428,400	430,250	443,158	456,452	470,146	1,850	0.4%	12,908	3.0%	13,295	3.0%
Hamilton Harbour Remedial Action Plan	305,000	395,000	406,850	419,056	431,627	90,000	29.5%	11,850	3.0%	12,206	3.0%
Protective Plumbing Program (3P)	2,000,000	1,250,000	1,287,500	1,326,125	1,365,909	(750,000)	(37.5%)	37,500	3.0%	38,625	3.0%
Financial Charges	920	-	-	-	-	(920)	(1)	-	-	-	-
Capital and Reserve Recoveries	(1,013,516)	(820,754)	(845,377)	(870,738)	(896,860)	192,762	(19.0%)	(24,623)	3.0%	(25,361)	3.0%
Sub-Total Environmental Services	4,946,581	4,798,261	4,942,208	5,090,475	5,243,189	(148,320)	(3.0%)	143,948	3.0%	148,266	3.0%
Capital and Reserve Impacts on Operating											
Contributions to Capital											
Stormwater	8,516,000	3,205,000	10,865,000	7,525,000	7,355,000	(5,311,000)	(62.4%)	7,660,000	239.0%	(3,340,000)	(30.7%)
Sub-Total Contributions to Capital	8,516,000	3,205,000	10,865,000	7,525,000	7,355,000	(5,311,000)	(62.4%)	7,660,000	239.0%	(3,340,000)	(30.7%)
Contributions for DC Exemptions											
Stormwater	1,863,000	1,863,000	1,680,000	1,680,000	1,680,000	-	0.0%	(183,000)	(9.8%)	-	0.0%
Sub-Total Contributions for DC Exemptions	1,863,000	1,863,000	1,680,000	1,680,000	1,680,000	-	0.0%	(183,000)	(9.8%)	-	0.0%
Debt Charges											
Stormwater	1,839,143	3,950,054	7,259,647	9,513,939	10,927,629	2,110,911	114.8%	3,309,592	83.8%	2,254,292	31.1%
DC Debt Charges Recoveries	(733,106)	(1,821,145)	(4,848,980)	(6,791,907)	(7,893,906)	(1,088,039)	148.4%	(3,027,835)	166.3%	(1,942,927)	40.1%
Sub-Total Debt Charges	1,106,037	2,128,909	2,410,666	2,722,032	3,033,723	1,022,872	92.5%	281,757	13.2%	311,365	12.9%
Sub-Total Capital Financing	11,485,037	7,196,909	14,955,666	11,927,032	12,068,723	(4,288,128)	(37.3%)	7,758,757	107.8%	(3,028,635)	(20.3%)
Reserve Transfers	(16,263,617)	(11,827,169)	(19,724,835)	(16,839,275)	(17,128,333)	4,436,448	(27.3%)	(7,897,665)	66.8%	2,885,560	(14.6%)
Sub-Total Capital and Reserve Impacts on Operating	(4,778,581)	(4,630,261)	(4,769,168)	(4,912,243)	(5,059,611)	148,320	(3.1%)	(138,908)	3.0%	(143,075)	3.0%
TOTAL EXPENDITURES	168,000	168,000	173,040	178,231	183,578	0	0.0%	5,040	3.0%	5,191	3.0%

CITY OF HAMILTON
 2019 - 2022 WATER, WASTEWATER AND STORM OPERATING BUDGET
STORM

	2018 RESTATED BUDGET	2019 REQUESTED BUDGET	2020 PROJECTED BUDGET	2021 PROJECTED BUDGET	2022 PROJECTED BUDGET	CHANGE 2019 REQUESTED / 2018 RESTATED BUDGET		CHANGE 2020 PROJECTED / 2019 REQUESTED BUDGET		CHANGE 2021 PROJECTED / 2020 PROJECTED BUDGET	
	\$	\$	\$	\$	\$	\$	%	\$	%	\$	%
REVENUES:											
Non-Rate Revenue											
General Fees and Recoveries	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
Sub-Total Non-Rate Revenue	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
TOTAL REVENUES	168,000	168,000	173,040	178,231	183,578	-	0.0%	5,040	3.0%	5,191	3.0%
NET EXPENDITURES	-	0	(0)	(0)	0	0	-	(0)	-	0	-

CITY OF HAMILTON
2019-2028 WATER, WASTEWATER & STORM OPERATING BUDGET
STORM
 (\$ 000'S)

	2018 Restated	2019 Requested	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast	2027 Forecast	2028 Forecast
OPERATING EXPENDITURES											
OPERATING COSTS	4,947	4,798	4,942	5,090	5,243	5,400	5,562	5,729	5,901	6,078	6,261
TOTAL OPERATING COSTS	4,947	4,798	4,942	5,090	5,243	5,400	5,562	5,729	5,901	6,078	6,261
CAPITAL & RESERVE IMPACTS ON OPERATING											
Contributions to Capital											
Stormwater	8,516	3,205	10,865	7,525	7,355	8,705	15,385	6,395	10,275	11,135	6,075
Sub-total Contributions to Capital	8,516	3,205	10,865	7,525	7,355	8,705	15,385	6,395	10,275	11,135	6,075
Contributions for DC Exemptions											
Stormwater	1,863	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Sub-total Contributions to Capital	1,863	1,863	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Debt Charges											
Stormwater	1,839	3,950	7,260	9,514	10,928	11,789	12,099	12,409	12,718	13,028	13,340
DC Debt Charges Recoveries	(733)	(1,821)	(4,849)	(6,792)	(7,894)	(8,605)	(8,926)	(9,246)	(9,567)	(9,887)	(10,210)
Sub-total Debt Charges	1,106	2,129	2,411	2,722	3,034	3,184	3,174	3,163	3,152	3,141	3,130
Transfer to Reserves	(16,264)	(11,827)	(19,725)	(16,839)	(17,128)	(18,781)	(25,606)	(16,766)	(20,801)	(21,821)	(16,927)
Sub-Total Capital & Reserve Impacts on Operating	(4,779)	(4,630)	(4,769)	(4,912)	(5,060)	(5,211)	(5,368)	(5,529)	(5,695)	(5,865)	(6,041)
TOTAL EXPENDITURES	168	168	173	178	184	189	195	201	207	213	219
REVENUES											
Non-Rate Revenue	168	168	173	178	184	189	195	201	207	213	219
TOTAL REVENUES	168	168	173	178	184	189	195	201	207	213	219
NET EXPENDITURES	(0)	(0)	0	0	(0)	0	(0)	0	0	(0)	0

**HAMILTON WATER
2019 RATE SUPPORTED STAFFING SUMMARY**

Deptid	Deptid Description	2018 REQUESTED	2018* RESTATED	2019 MAINTENANCE	2019 PROGRAM CHANGES	2019 REQUESTED	2019 REQUESTED vs. 2018 RESTATED
510200	Director Hamilton Water	3.00	3.00	3.00	0.00	3.00	0.00
510203	WWW Operations Director	2.00	2.00	2.00	0.00	2.00	0.00
510205	Woodward Upgrades	8.00	10.00	10.00	1.00	11.00	1.00
510210	Customer Service & Community Outreach	2.00	2.00	2.00	0.00	2.00	0.00
510215	Education & Outreach	5.25	5.65	5.65	0.00	5.65	0.00
510220	Service Co-ordination	23.00	22.00	21.00	0.00	21.00	-1.00
510230	Engineering Systems & Data Collection	9.00	9.00	9.00	0.00	9.00	0.00
510240	Compliance & Regulations	6.00	6.00	7.00	0.00	7.00	1.00
510250	Laboratory Services	26.00	26.00	26.00	0.00	26.00	0.00
510260	Environmental Monitoring & Enforcement	13.00	13.00	13.00	0.00	13.00	0.00
510270	Water Distribution (WD) & Wastewtr Collection (WWC)	6.00	5.00	5.00	1.00	6.00	1.00
510275	WD & WWC Contracts	20.00	20.00	20.00	0.00	20.00	0.00
510280	WD & WWC Construction	24.00	23.00	23.00	0.00	23.00	0.00
510285	WD & WWC Maintenance	19.00	20.00	20.00	0.00	20.00	0.00
510290	WD & WWC Operations	19.00	20.00	20.00	0.00	20.00	0.00
510300	WWW Planning & Capital Director	2.00	2.00	2.00	0.00	2.00	0.00
510305	Sustainable Initiatives	7.00	7.00	7.00	0.00	7.00	0.00
510310	Plant Operations & Maintenance	6.00	6.00	6.00	2.00	8.00	2.00
510320	Plant Maintenance	36.00	36.00	35.00	0.00	35.00	-1.00
510330	Plant Operations	39.00	37.00	37.00	0.00	37.00	0.00
510340	Capital Delivery	11.00	10.00	10.00	3.00	13.00	3.00
510350	Infrastructure Planning and System Design	16.00	16.00	17.00	0.00	17.00	1.00
Total RATE Supported Staff		302.25	300.65	300.65	7.00	307.65	7.00

Note: * Council approved 1.6 FTE transfer to Corporate Call Centre

2019 Rate Budget - Business Case Summary

DEPARTMENT: Public Works

DIVISION	SERVICE / PROGRAM	DESCRIPTION OF PROGRAM ENHANCEMENT	2019 IMPACT			ANNUALIZED IMPACT
			\$ GROSS	\$ NET	FTE Impact	\$ NET
Hamilton Water	Woodward Upgrades Operational Support	Maintenance Operator required to support Woodward Upgrades Project	\$ 101,150	\$ -	1.00	\$ -
Hamilton Water	Water and Wastewater Capital Program	Capital Delivery Project Managers to support the WWTP Expansion, CWWF, growth related projects and asset replacement	\$ 433,110	\$ -	3.00	\$ -
Hamilton Water	Sewer Lateral Cross Connection Program	Project Managers to deliver the Cross Connection program as per Council's direction to reduce sanitary discharges <u>NOTE:</u> Council approved a 2 year temporary assignment and requested we report back in 2019	\$ 225,910	\$ -	2.00	\$ -
Hamilton Water	Wastewater Quality Management System	Technologist to develop the framework of a Wastewater Quality Management System <u>NOTE:</u> This position is term and task for 24 months	\$ 99,595	\$ -	1.00	\$ -
Divn Subtotal			\$ 859,765	\$ -	7.00	\$ -
DEPARTMENT TOTAL			\$ 859,765	\$ -	7.00	\$ -

TOTAL NET Impact = net annualized (full year) amount - please state under "Description of Program Enhancement" if other revenue sources will be used to offset the cost of the program change (therefore identify gross cost); also please identify if 2019 calendar (part-year) impact is significantly different due to delayed implementation.

CITY OF HAMILTON
2019 WATER AND WASTEWATER/STORM FEES AND CHARGES
Effective January 1, 2019

A) Daily Water & Wastewater/Storm Fixed Charges

The fixed daily charge is not related to the direct costs of consumption and are not dependent upon or related to the amount of consumption incurred. The fixed charges are intended to offset the fixed costs of maintaining the water, wastewater and storm systems.

Meter Size	Water Rate	Wastewater/ Storm Rate
15 mm	\$ 0.36	\$ 0.38
16 mm	\$ 0.36	\$ 0.38
20 mm	\$ 0.36	\$ 0.38
21 mm	\$ 0.36	\$ 0.38
25 mm	\$ 0.90	\$ 0.95
38 mm	\$ 1.80	\$ 1.90
50 mm	\$ 2.88	\$ 3.04
75 mm	\$ 5.76	\$ 6.08
100 mm	\$ 9.00	\$ 9.50
150 mm	\$ 18.00	\$ 19.00
200 mm	\$ 28.80	\$ 30.40
250 mm	\$ 41.40	\$ 43.70
300 mm	\$ 61.20	\$ 64.60

B) Metered Water Consumption Charges

Water consumption shall be charged on a per cubic metre basis at the rates indicated in the table below. The total monthly Water Consumption Charge is the sum of usage in all blocks at the rate for each block.

Consumption Block	Monthly Water Consumption (m3)	Residential	Multi-Residential, Commercial, Institutional & Industrial
		Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.78	1.55
2	>10	1.55	1.55

C) Wastewater/Storm Treatment Charges

Wastewater/Storm Treatment Charges are based on metered water consumption and the cost of wastewater collection and treatment, and stormwater management. Charges are on a per cubic metre basis at the rates indicated in the table below. The total monthly Wastewater/Storm Treatment Charge is the sum of usage in all blocks at the rate for each block.

Treatment Block	Monthly Water Consumption (m3)	Residential	Multi-Residential, Commercial, Institutional & Industrial
		Rate (\$/m3)	Rate (\$/m3)
1	0-10	0.84	1.68
2	>10	1.68	1.68

D) Non-Metered Annual Water & Wastewater/Storm Rate

Flat Rate Water Customers Annual Rate: \$565.75

Flat Rate Wastewater/Storm Customers Annual Rate: \$613.20

Combined Flat Rate Water & Wastewater/Storm Customers Annual Rate: \$1,178.95

City of Hamilton - 2019 Private Fire Line Rates

This service shall consist of permanent unmetered connections to the main for the purpose of supplying water to private fire protection systems such as automatic sprinkler systems, standpipes and private hydrants. This service shall also include reasonable quantities of water used for testing check valves and other backflow protection devices.

Unmetered Service

Size of Connection		Monthly Rate
mm	inches	
25	1	\$ 3.42
38	1.5	\$ 7.87
50	2	\$ 13.68
75	3	\$ 30.78
100	4	\$ 54.72
150	6	\$ 123.12
200	8	\$ 218.88
250	10	\$ 218.88
300	12	\$ 218.88

2019 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes:
Regular Hours: M - F: 7:00am - 4:30pm
After Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026	510220	45608	4	Replacement Cost for Lost Meter Note: Cost to replace a meter that has been lost, stolen or damaged. Includes meter, installation and administrative costs.						
			4a)	15mm Displacement	\$239.58	\$215.93	y	\$244.00	1.8%	To achieve full cost recovery
			4b)	16mm Displacement	\$239.58	\$215.93	y	\$244.00	1.8%	To achieve full cost recovery
			4c)	20mm Displacement	\$374.01	\$335.67	y	\$379.31	1.4%	To achieve full cost recovery
			4d)	21mm Displacement	\$0.00	\$335.67	y	\$379.31	N/A	New Fee
			4e)	25mm Displacement	\$430.28	\$386.46	y	\$436.70	1.5%	To achieve full cost recovery
			4f)	38mm Displacement	\$1,181.45	\$1,066.39	y	\$1,205.02	2.0%	To achieve full cost recovery
			4g)	50mm Turbine	\$1,465.95	\$1,297.30	y	\$1,465.95	0.0%	Current fee achieves full cost recovery
			4h)	50mm Displacement	\$1,804.05	\$1,596.50	y	\$1,804.05	0.0%	Current fee achieves full cost recovery
			4i)	50mm Compound	\$2,338.65	\$2,069.60	y	\$2,338.65	0.0%	Current fee achieves full cost recovery
			4j)	100mm Turbine	\$3,688.43	\$3,264.16	y	\$3,688.50	0.0%	Current fee achieves full cost recovery
			4k)	100mm Compound	\$5,959.17	\$5,273.63	y	\$5,959.20	0.0%	Current fee achieves full cost recovery
			4l)	100mm Fire Service Turbine	\$7,889.55	\$7,121.80	y	\$8,047.63	2.0%	To achieve full cost recovery
			4m)	100mm Fire Service Compound	\$9,947.31	\$8,802.92	y	\$9,947.30	0.0%	Current fee achieves full cost recovery
			4n)	100mm Magnetic Flow Meter	\$10,756.83	\$9,709.99	y	\$10,972.29	2.0%	To achieve full cost recovery
			4o)	100mm Fire Rated Magnetic Flow Meter	\$11,229.77	\$9,937.83	y	\$11,229.75	0.0%	Current fee achieves full cost recovery
			4p)	150mm Turbine	\$6,787.23	\$6,006.42	y	\$6,787.25	0.0%	Current fee achieves full cost recovery
			4q)	150mm Compound	\$10,327.97	\$9,139.82	y	\$10,328.00	0.0%	Current fee achieves full cost recovery
			4r)	150mm Fire Service Turbine	\$11,993.87	\$10,826.60	y	\$12,234.06	2.0%	To achieve full cost recovery
			4s)	150mm Fire Service Compound	\$15,235.20	\$13,752.42	y	\$15,540.23	2.0%	To achieve full cost recovery
			4t)	150mm Magnetic Flow Meter	\$12,255.19	\$10,845.31	y	\$12,255.20	0.0%	Current fee achieves full cost recovery
			4u)	150mm Fire Rated Magnetic Flow Meter	\$13,611.64	\$12,045.75	y	\$13,611.70	0.0%	Current fee achieves full cost recovery
			4v)	200mm Turbine	\$7,195.92	\$6,495.74	y	\$7,340.19	2.0%	To achieve full cost recovery
			4w)	200mm Compound	\$11,550.97	\$10,222.12	y	\$11,551.00	0.0%	Current fee achieves full cost recovery
			4x)	200mm Fire Service Turbine	\$15,803.69	\$14,265.39	y	\$16,119.89	2.0%	To achieve full cost recovery
			4y)	200mm Fire Service Compound	\$21,254.25	\$19,185.36	y	\$21,679.46	2.0%	To achieve full cost recovery
			4z)	200mm Magnetic Flow Meter	\$14,408.13	\$13,006.04	y	\$14,696.83	2.0%	To achieve full cost recovery
			4aa)	200mm Fire Rated Magnetic Flow Meter	\$15,735.16	\$14,203.88	y	\$16,050.38	2.0%	To achieve full cost recovery
			4ab)	250mm Turbine	\$12,504.00	\$11,287.26	y	\$12,754.60	2.0%	To achieve full cost recovery
			4ac)	250mm Magnetic Flow Meter	\$14,765.94	\$13,067.26	y	\$14,766.00	0.0%	Current fee achieves full cost recovery
			4ad)	250mm Fire Rated Magnetic Flow Meter	\$17,726.88	\$15,687.52	y	\$17,726.90	0.0%	Current fee achieves full cost recovery
			4ae)	250mm Fire Service Turbine	\$19,894.87	\$17,958.66	y	\$20,293.29	2.0%	To achieve full cost recovery
			4af)	250mm Fire Service Compound	\$29,046.42	\$25,704.87	y	\$29,046.50	0.0%	Current fee achieves full cost recovery
			4ag)	50mm Strainer	\$435.62	\$409.71	y	\$462.97	6.3%	To achieve full cost recovery
			4ah)	100mm Strainer	\$823.35	\$759.70	y	\$858.46	4.3%	To achieve full cost recovery
			4ai)	150mm Strainer	\$1,329.12	\$1,216.23	y	\$1,374.34	3.4%	To achieve full cost recovery
			4aj)	200mm Strainer	\$2,272.17	\$2,067.48	y	\$2,336.25	2.8%	To achieve full cost recovery
			4ak)	250mm Strainer	\$3,697.13	\$3,533.73	y	\$3,993.11	8.0%	To achieve full cost recovery
R84-026	510220	45690	5	Bench Testing Water Meters Note: Cost to have a water meter tested for accuracy. If the meter tests within the accuracy standards as set out by AWWA then the property owner is responsible for the cost of the test and the replacement cost of the water meter, otherwise cost borne by the City. Fee includes removal of existing meter and installation of replacement meter.						
			5a)	15 mm & 16 mm Diameter	\$334.51	\$308.67	y	\$348.80	4.3%	To achieve full cost recovery
			5b)	16-25mm Diameter - Test where meter has been removed from service within prior 90 days	NA	\$127.60	y	\$144.19	N/A	New Fee
			5c)	20 mm Diameter	\$382.76	\$354.22	y	\$400.27	4.6%	To achieve full cost recovery
			5d)	25 mm Diameter	\$439.04	\$405.02	y	\$457.67	4.2%	To achieve full cost recovery
			5e)	38 mm Diameter	\$985.51	\$879.98	y	\$994.38	0.9%	To achieve full cost recovery
			5f)	50 mm Diameter	\$1,742.49	\$1,542.08	y	\$1,742.55	0.0%	Current fee achieves full cost recovery
			5g)	100 mm plus diameter (In Situ testing)	\$1,010.45	\$897.60	y	\$1,014.29	0.4%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead**
For general inquiries, please call (905) 546-4426 between 8:30am - 4:30pm

2019 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes:
Regular Hours: M - F: 7:00am - 4:30pm
After Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
10-103	510220	45644	6	Backflow Prevention Program Note: Costs for contractor registration fee, administration fees for processing backflow prevention test reports and survey forms. 6a) Annual Program Registration Fee 6b) Test Report receipt and processing (per submission of each test report) 6c) Cross Connection Survey Form processing (per form upon submission) 6d) Backflow Prevention Device Investigation - Regular Hours 6e) Backflow Prevention Device Investigation - After Hours	\$148.30 \$171.50 \$175.00 \$158.55 \$140.80 \$233.80	\$133.53 \$64.26 \$175.00 \$140.80 \$206.90	y y y y y	\$150.89 \$72.61 \$175.16 \$159.10 \$233.80	1.7% 1.6% 1.8% 1.8% 0.0%	To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery Current fee achieves full cost recovery
R84-026	514330	45590	7	Construction Water Note: Charge for unmetered water used for construction prior to meter installation. Paid at the time of submitting building permit payment. 7a) Single Residential (per lot or townhouse) 7b) Multi-residential (per apartment/condo unit) 7c) Industrial/Commercial/Institutional (\$71,000 sqft of building area or \$/ha where no structure is constructed)	\$91.40 \$42.75 \$30.00	\$95.05 \$44.45 \$31.20	n n n	\$95.05 \$44.45 \$31.20	4.0% 4.0% 4.0%	Equal to variable water rate increase Equal to variable water rate increase Equal to variable water rate increase
R84-026	514330	41208	8	Hydrant Adaptor Fees Note: Costs to install or remove water meter & backflow prevention device. When moving a hydrant adaptor from one site to another for the same customer, both removal & installation fees apply. This service requires a usage deposit and a damage deposit.	\$2.25	\$2.35	n	\$2.35	4.4%	Rate is 1.5x volumetric water rate
R84-026	514330	41209	8a)	Usage Cost (Metered Hauled Water Rate/m ³)	\$137.98	\$145.90	n	\$145.90	5.7%	To achieve full cost recovery
R84-026	514330	41209	8b)	Hydrant Adaptor Connection/Disconnection Fee (Regular Hours-Fee for Both Services)	\$263.72	\$274.40	n	\$274.40	4.0%	To achieve full cost recovery
R84-026	514330	41209	8c)	Hydrant Adaptor Connection/Disconnection Fee (After Hours/Emergency-Fee for Both Services)	\$290.70	\$300.00	n	\$300.00	3.2%	Deposit rounded to the nearest \$100
R84-026	514330	41209	8d)	Non-Refundable Usage Deposit	\$5,829.00	\$6,000.00	n	\$6,000.00	2.9%	Deposit rounded to the nearest \$100
R84-026	514330	41209	8e)	Security/Damage Deposit	\$80.00	\$81.30	n	\$81.30	1.6%	To achieve full cost recovery
R84-026	514330	41209	8f)	Hydrant adaptor rental fee for initial 7 days	\$5.90	\$6.02	n	\$6.02	2.0%	To achieve full cost recovery
R84-026	514330	41209	8g)	Per Diam hydrant adaptor rental fee after initial 7 days	\$358.30	\$357.80	n	\$357.80	-0.1%	To achieve full cost recovery
R84-026	514330	47244	9	Private Water Station Agreement Fees 9a) Annual Renewal 9b) New Application	\$1,193.65	\$1,217.22	n	\$1,217.22	2.0%	To achieve full cost recovery
R84-026	514330	47232	10	Water Haulage Fees 10a) Annual Water Haulage License Fee Note: Annual license fee to utilize the City's public filling stations. 10b) Account review Note: Costs charged for administrative services to provide customer account information for personal or taxation purposes.	\$56.50 \$146.45	\$57.33 \$87.68	y y	\$64.78 \$99.08	14.7% -32.3%	No cards issued, Online Registration To achieve full cost recovery
R84-026	510220	45519	11	General Administration Fees 11a) General Administrative Requests (per hour)/Report Requests 11b) Permit Cancellation administrative fee 11c) Permit Renewal Fee 11d) Lead Line Replacement Loan Application Fee 11e) Monthly AMI Manual Meter Read Fee 11f) Water Shut-off Admin Fee 11g) Water Shut-off Notice on Door	\$76.50 \$45.80 \$45.80 \$57.30 \$3.39 NA NA	\$68.71 \$41.03 \$41.03 \$51.36 \$3.00 \$20.00 \$25.00	y y y y y y y	\$77.64 \$46.36 \$46.36 \$58.04 \$3.39 \$22.60 \$28.25	1.5% 1.2% 1.2% 1.3% 0.0% 0.0% 0.0%	To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery To achieve full cost recovery Current fee achieves full cost recovery New Fee New Fee

*Costs not specifically addressed in this schedule will be invoiced at Actual Cost plus overhead.
For general inquiries, please call (905) 466-4426 between 8:30am - 4:30pm

2019 PROPOSED USER FEES AND CHARGES

PUBLIC WORKS
HAMILTON WATER

For Billing Purposes:
Regular Hours: M - F: 7:00am - 4:30pm
After Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
R84-026			12	Water Inspection Services Note: Costs associated with various permit and inspection services related to water services for properties.						
	514330	47235	12a)	Private Water Service Repair/Replacement Inspection (Reg Hours - Max 1 Hour Total Labour)	\$96.40	\$92.97	Y	\$105.06	9.0%	To achieve full cost recovery
	514330	47235	12b)	Private Water Service Repair/Replacement Inspection (After Hours /Emerg - Max 1 Hour Labour)	\$168.40	\$157.17	Y	\$177.60	5.5%	To achieve full cost recovery
	514330	45690	12c)	Water Service Abandonment Inspection (Regular Hours -Max 1 Hour Total Labour)	\$86.43	\$82.95	Y	\$93.73	8.4%	To achieve full cost recovery
	514330	45690	12d)	Water Service Abandonment Inspection (After Hours / Emergency - Max 1 Hour Total Labour)	\$157.48	\$147.19	Y	\$166.32	5.6%	To achieve full cost recovery
	514330	45690	12e)	Water Service Inspection for Demolition (Regular Hours -Max 1 Hour Total Labour)	\$86.43	\$82.95	Y	\$93.73	8.4%	To achieve full cost recovery
	514330	45690	12f)	Water Service Inspection for Demolition (After Hours / Emergency - Max 1 Hour Total Labour)	\$157.48	\$147.19	Y	\$166.32	5.6%	To achieve full cost recovery
	514330	45690	12g)	Missed or Cancelled Inspection	\$61.44	\$60.40	Y	\$68.25	11.1%	To achieve full cost recovery
R84-026	514330	45690	13	Upsize Public Portion Water Service from 20mm to 25mm Note: Charge for upsizing a public portion water service from 20mm to 25mm, when a public portion water service replacement is already being completed by the City.	\$124.70	\$150.00	n	\$150.00	20.3%	To achieve full cost recovery
R84-026	514330	45679	14	Turning Water Off or On Note: Turning water off at the curb to enable a property owner to complete internal plumbing repairs, or a private water service repair or replacement, and then turning the water back on.						
			14a)	Turning Water On/Off (Regular Hours)	\$115.95	\$123.35	n	\$123.35	6.5%	To achieve full cost recovery
			14b)	Turning Water On/Off (After Hours/Emergency)	\$197.35	\$206.70	n	\$206.70	4.7%	To achieve full cost recovery
			14c)	Turning Water On/Off During the Same Visit (Regular Hours - Max 1/2 Hour Total Labour)	\$63.22	\$82.95	n	\$82.95	31.2%	To achieve full cost recovery
			14d)	Turning Water On/Off During the Same Visit (After Hours/Emerg - Max 1/2 Hour Total Labour)	\$106.17	\$113.35	n	\$113.35	6.8%	To achieve full cost recovery
			14e)	Non-compliance Turn Water Off	NA	\$82.95	n	\$82.95	0.0%	New Fee
			14f)	Non-compliance Turn Water On	NA	\$82.95	n	\$82.95	0.0%	New Fee
R84-026	514330	45636	15	Hydrant Flow Test / Water Quality Flushing Note: Cost to operate a City Fire Hydrant(s) for a maximum of 1 hour total labour.	\$96.43	\$91.98	Y	\$103.94	7.8%	To achieve full cost recovery
R84-026	514330	45690	16	Water Quality/Quantity Service Calls Note: Cost for a service call to investigate a water quality/quantity complaint and the issue resides on private property. No charge for water quality/quantity complaints related to issues originating from the City's distribution system. Missed appointments will be billed the corresponding service call rate.						
			16a)	Service Call (Regular Hours - Max 1 Hour Total Labour)	\$86.43	\$82.95	Y	\$93.73	8.4%	To achieve full cost recovery
			16b)	Service Call (After Hours - Max 1 Hour Total Labour)	\$157.48	\$147.19	Y	\$166.32	5.6%	To achieve full cost recovery
R84-026	510290	45690	17	Hydrant Repair, Replace or Relocate Note: Cost to repair, replace, or relocate a City Fire Hydrant including labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026	514330	45690	18	Watermain Shutdowns Note: Costs associated with isolating a watermain to facilitate third party work.						
			18a)	Watermain Shutdown / Recharge (Regular Hours-Maximum 1 Hour Total Labour)	\$120.74	\$128.07	n	\$128.07	6.1%	To achieve full cost recovery
			18b)	Watermain Shutdown / Recharge (After Hours / Emergency-Maximum 1 Hour Total Labour)	\$220.86	\$230.54	n	\$230.54	4.4%	To achieve full cost recovery
R84-026	510350	45408	19	Environmental Records Search PRISM Reports related to soil contamination Reports - Environmental Assessments and Master Plans - plus fee per page	\$177.04	\$156.67	Y	\$177.04	0.0%	Current fee achieves full cost recovery
					\$17.40	\$15.40	Y	\$17.40	0.0%	Current fee achieves full cost recovery
					\$0.11	\$0.10	Y	\$0.11	0.0%	Current fee achieves full cost recovery
R84-026	514330	45690	20	Miscellaneous Water Distribution System Repair Note: Cost for the City to repair damage to the water distribution system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
R84-026	514330	45690	21	Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Water Distribution Operator in minimum increments of 30 minutes.						
			21a)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$41.95	\$22.57	Y	\$25.50	-39.2%	To achieve full cost recovery
			21b)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$54.45	\$33.85	Y	\$38.25	-29.8%	To achieve full cost recovery
			21c)	1/2 Hour Additional Labour (Regular Hours)-Water Distribution Operator	\$37.12	\$22.55	n	\$22.55	-39.3%	To achieve full cost recovery
			21d)	1/2 Hour Additional Labour (After Hours)-Water Distribution Operator	\$48.19	\$33.85	n	\$33.85	-29.8%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead**
For general inquiries, please call (905) 546-4426 between 8:30am - 4:30pm

2019 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

For Billing Purposes
Regular Hours: M - F: 7:00am - 4:30pm
After Hours: M - F: 4:30pm - 7:00am, Weekends and Holidays

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
06-026	516175	47230	1	COLLECTION SYSTEM INSPECTION & MAINTENANCE Wastewater Inspection Services Note: Costs associated with various permit and inspection services related to sewer laterals for properties. Private Sewer Lateral Repair/Replacement Inspection (Regular Hours - Maximum 1 Hour Total Labour)	\$106.90	\$96.02	Y	\$108.50	1.5%	To achieve full cost recovery
			1a)	Private Sewer Lateral Repair/Replacement Inspection (After Hours / Emergency - Maximum 1 Hour Total Labour)	\$189.81	\$203.45	Y	\$229.90	21.1%	To achieve full cost recovery
			1b)	Missed or Cancelled Inspection	\$66.18	\$69.17	Y	\$78.16	18.1%	To achieve full cost recovery
			1c)	Mainline Sewer Inspection	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
			1d)	Note: CCTV inspection of mainline sewers (storm, sanitary or combined). Cost based on linear meter inspection.						
06-026	516175	45690	2	Sewer Related Service Calls Note: Cost for a service call to investigate a sewer related complaint and the issue resides on private property. No charge for sewer complaints related to issues originating from the City's sewer system. Missed appointments will be billed the corresponding service call rate.	\$84.38	\$85.59	Y	\$96.72	14.6%	To achieve full cost recovery
			2a)	Service Call (Regular Hours - Maximum 1 Hour Total Labour)	\$152.84	\$172.15	Y	\$194.53	27.3%	To achieve full cost recovery
06-026	516175	45690	3	Sewer Lateral Cleaning and Investigation Fees Note: When a property owner qualifies for the Sewer Lateral Management Program and chooses to hire their own Plumbing Contractor, these prices represent the maximum amounts that will be reimbursed to the property owner for the sewer lateral cleaning and investigation services performed by the independent Plumbing Contractor						
			3a)	Complete Sewer Lateral Investigation - Regular Hours	\$555.96	\$397.96	Y	\$449.69	-19.1%	Lower Contract Costs
			3b)	Complete Sewer Lateral Investigation - After Hours	\$663.31	\$439.57	Y	\$496.71	-25.1%	Lower Contract Costs
			3c)	Partial Sewer Lateral Cleaning - Regular Hours	\$328.83	\$130.05	Y	\$146.96	-55.3%	Lower Contract Costs
			3d)	Partial Sewer Lateral Cleaning - After Hours	\$379.68	\$182.07	Y	\$205.74	-45.8%	Lower Contract Costs
			3e)	Abandoned Sewer Lateral Investigation - Regular Hours	\$355.95	\$208.08	Y	\$235.13	-33.9%	Lower Contract Costs
			3f)	Abandoned Sewer Lateral Investigation - After Hours	\$433.92	\$260.10	Y	\$293.91	-32.3%	Lower Contract Costs
06-026	516175	45690	4	Miscellaneous Wastewater Collection System Repair Note: Cost for the City to repair damage to the wastewater collection system caused by a third party. Costs include labour, parts, materials, equipment, and permanent restoration.	Cost + 33% OH	Cost + 33% OH	Y	Cost + 33% OH	N/A	To achieve full cost recovery
06-026	516175	45690	5	Additional Labour Charges Note: Additional labour charge for all services/calls that exceed the allotted labour time. Costs are for a single Wastewater Collection Operator or Contract Inspector in minimum increments of 30 minutes.						
			5a)	1/2 Hour Additional Labour (Regular Hours) - Wastewater Collection	\$43.81	\$21.64	Y	\$24.45	-44.2%	To achieve full cost recovery
			5b)	1/2 Hour Additional Labour (After Hours) - Wastewater Collection	\$57.25	\$32.48	Y	\$36.70	-35.9%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead**
For general inquiries, please call (905) 566-4426 between 8:30am - 4:30pm

2019 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
LABORATORY SERVICES									
<u>Inorganic Tests:</u>									
Solids									
510250	45519	1	Total Suspended Solids (TSS)	\$24.52	\$21.70	y	\$24.52	0.0%	Current fee achieves full cost recovery
		1a)	TSS plus Volatile Suspended Solids (VSS)	\$24.52	\$21.70	y	\$24.52	0.0%	Current fee achieves full cost recovery
		1b)	Total Solids (TS)	\$20.45	\$18.90	y	\$21.36	4.4%	To achieve full cost recovery
		1c)	TS plus Volatile Solids (VS)	\$20.68	\$19.60	y	\$22.15	7.1%	To achieve full cost recovery
		1d)							
Skalar									
		2	Total Cyanide	\$35.48	\$33.10	y	\$37.40	5.4%	To achieve full cost recovery
		2a)	Phenolics	\$34.92	\$30.90	y	\$34.92	0.0%	Current fee achieves full cost recovery
		2b)	Total Kjeldhal Nitrogen (TKN)	\$35.48	\$31.40	y	\$35.48	0.0%	Current fee achieves full cost recovery
		2c)	Ammonia	\$39.10	\$34.60	y	\$39.10	0.0%	Current fee achieves full cost recovery
		2d)	Dissolved Organic Carbon	\$36.50	\$34.10	y	\$38.53	5.6%	To achieve full cost recovery
		2e)	Total Organic Carbon	\$36.50	\$34.10	y	\$38.53	5.6%	To achieve full cost recovery
		2f)	Reactive Silica	\$31.08	\$27.70	y	\$31.30	0.7%	To achieve full cost recovery
		2g)		\$56.95	\$50.40	y	\$56.95	0.0%	Current fee achieves full cost recovery
Ion Chromatography (IC Scan)									
		3	PC Titrate	\$17.35	\$16.10	y	\$18.19	4.9%	To achieve full cost recovery
		4	pH	\$17.18	\$16.00	y	\$18.08	5.3%	To achieve full cost recovery
		4a)	Alkalinity	\$17.18	\$16.00	y	\$18.08	5.3%	To achieve full cost recovery
		4b)	Conductivity	\$26.89	\$24.30	y	\$27.46	2.1%	To achieve full cost recovery
		4c)	Fluoride	\$26.78	\$24.50	y	\$27.69	3.4%	To achieve full cost recovery
		4d)	Turbidity	\$28.59	\$25.30	y	\$28.59	0.0%	Current fee achieves full cost recovery
		5	UV Transmittance	\$23.39	\$22.30	y	\$25.20	7.7%	To achieve full cost recovery
		6	Color Apparent	\$23.39	\$22.30	y	\$25.20	7.7%	To achieve full cost recovery
		7	Color True	\$42.83	\$37.90	y	\$42.83	0.0%	Current fee achieves full cost recovery
		8	Chemical Oxygen Demand (COD)	\$42.60	\$37.70	y	\$42.60	0.0%	Current fee achieves full cost recovery
		9	Biochemical Oxygen Demand (BOD)	\$42.15	\$37.30	y	\$42.15	0.0%	Current fee achieves full cost recovery
		10	Volatlie Acid						
<u>Microbiology Tests:</u>									
		11	Total Coliform/E coli/Total Background Coliform (DC)	\$24.75	\$21.90	y	\$24.75	0.0%	Current fee achieves full cost recovery
510250	45519	12	EC (mFC-BIG)	\$27.35	\$27.40	y	\$30.96	13.2%	To achieve full cost recovery
510250	45519	13	Heterotrophic Plate Count	\$28.14	\$25.70	y	\$29.04	3.2%	To achieve full cost recovery
510250	45519	14	Micro Examination	\$130.52	\$135.30	y	\$152.89	17.1%	To achieve full cost recovery
<u>Metals:</u>									
		15	ICP	\$60.74	\$57.60	y	\$65.09	7.2%	To achieve full cost recovery
510250	45519	16	ICP OES Scan (Wastewater)	\$28.87	\$26.90	y	\$30.40	5.3%	To achieve full cost recovery
		16a)	Total Phosphorous	\$28.87	\$26.90	y	\$30.40	5.3%	To achieve full cost recovery
		16b)	Total Dissolved Phosphorous						
		16c)	ICP MS	\$60.74	\$57.60	y	\$65.09	7.2%	To achieve full cost recovery
510250	45519	17	ICP MS Scan	\$51.64	\$45.70	y	\$51.64	0.0%	Current fee achieves full cost recovery
		17a)	AA						
		18	Mercury						
510250	45519	18a)							

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead

For general inquiries, please call 905.546.2424 ext 5834

2019 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
 HAMILTON WATER**

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 Including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 Including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
14-090	516175	47232	1	ENVIRONMENTAL MONITORING & ENFORCEMENT To Regulate the Discharge of any Matter into the Sanitary, Combined, and Storm Sewer Systems. Annual Permit to Discharge Hauled Sewage Note: Cost for administration and processing of annual permits required to haul sewage within Hamilton	\$324.00	\$324.00	n	\$324.00	0.0%	Current fee achieves full cost recovery
14-090	516175	41314	2	Discharge fees for Hauled Sewage generated: Inside the City - Compliant Note: Cost per truck full of sewage containing materials within Sewer Use By-law limits up to 1000 imperial gallons (4.54 m3) or any part thereof	\$48.20	\$49.15	n	\$49.15	2.0%	To achieve full cost recovery
14-090	516175	41314	2a)	greater than 1000 (4.54 m3) but less than or equal to 3500 imperial gallons (15.9m3)	\$48.20	\$49.15	n	\$49.15	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2b)	greater than 3500 (15.9 m3) but less than or equal to 5000 imperial gallons (22.7 m3)	\$96.39	\$98.30	n	\$98.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2c)	greater than 5000 (22.7 m3) but less than or equal to 8000 imperial gallons (36.3 m3)	\$144.59	\$147.45	n	\$147.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	2d)	greater than 8000 (36.3 m3) but less than or equal to 10000 imperial gallons (45.43 m3)	\$192.78	\$196.60	n	\$196.60	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3	Discharge fees for Hauled Sewage generated: Inside the City - Non-Compliant Note: Cost per truck full of sewage containing materials that exceed one or more Sewer Use By-law limits	\$48.20	\$49.15	n	\$49.15	2.0%	To achieve full cost recovery
14-090	516175	41314	3a)	up to 1000 imperial gallons (4.54 m3) or any part thereof	\$96.39	\$98.30	n	\$98.30	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3b)	greater than 1000 (4.54 m3) but less than or equal to 3500 imperial gallons (15.9m3)	\$144.59	\$147.45	n	\$147.45	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3c)	greater than 3500 (15.9 m3) but less than or equal to 5000 imperial gallons (22.7 m3)	\$240.98	\$245.75	n	\$245.75	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3d)	greater than 5000 (22.7 m3) but less than or equal to 8000 imperial gallons (36.3 m3)	\$289.17	\$294.90	n	\$294.90	2.0%	Has to remain a multiple of \$49.15
14-090	516175	41314	3e)	greater than 8000 (36.3 m3) but less than or equal to 10000 imperial gallons (45.43 m3)	\$8.50	\$8.50	n	\$8.50	0.0%	Rounded for cash handling purposes
14-090	516080	41315	4	Holding Tanks for Recreational Vehicles Note: Cost for Recreational Vehicles (RV's) to dump sewer waste at the Mountain Transfer Station	\$0.77	\$0.78	n	\$0.78	2.0%	To achieve full cost recovery
14-090	516080	41315	5	Overstrength Discharge Fees Note: Cost per Kilogram of each specified parameter that is in excess of Sewer Use By-law limits, and subject to a Sewer Discharge Permit	\$0.61	\$0.63	n	\$0.63	2.0%	To achieve full cost recovery
14-090	516080	41315	5a)	Biochemical Oxygen Demand (charge per kg)	\$0.65	\$0.66	n	\$0.66	2.0%	To achieve full cost recovery
14-090	516080	41315	5b)	Total suspended solids (charge per kg)	\$2.34	\$2.39	n	\$2.39	2.0%	To achieve full cost recovery
14-090	516080	41315	5c)	Oil & grease (animal/vegetable) (charge per kg)	\$1.65	\$1.68	n	\$1.68	2.0%	To achieve full cost recovery
14-090	516080	41315	5d)	Total Kjeldahl Nitrogen (charge per kg)	\$1.61	\$1.68	n	\$1.68	4.3%	Equal to variable wastewater rate increase
14-090	516080	41317	6	Surcharge Discharge Fee (charge per m3)			n			

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead**
 For general inquiries, please call 905-540-5190 or email: sewerusebylaw@hamilton.ca

2019 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
			7	Application Fees for Sewer Discharge Permits NOTE: Fee to be paid upon application for Sewer Discharge Permit						
14-090	510260	45519	7a)	Application Fee	\$697.32	\$617.10	y	\$697.32	2.0%	Increase due to incorporating 7b) and 7c) fees into Application Fee
14-090	510260	45519	7b)	Wastewater Characterization deposit (optional)	\$500.00	\$500.00	n	\$500.00	0.0%	Decrease due to difficulty collecting \$1500 as deposit from users without PO #
14-090	510260	45519	7c)	Amendment Fee (all permit types)	\$320.92	\$289.68	y	\$327.34	2.0%	To achieve full cost recovery
			8	Administrative Fees for Sewer Discharge Permits Note: Multiple permit holders pay the higher administration fee (for example, if the permit holder has both an Overstrength Discharge Permit and a Compliance Program Permit, they will pay \$810.00 per quarter)						
14-090	510260	45532	8a)	Overstrength Discharge Permit (charged quarterly)	\$416.00	\$427.00	n	\$427.00	2.6%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8b)	Sanitary Discharge Permit (charged quarterly)	\$416.00	\$427.00	n	\$427.00	2.6%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8c)	Chloride Discharge Permit (charged quarterly)	\$416.00	\$427.00	n	\$427.00	2.6%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8d)	Compliance Discharge Permit (charged quarterly)	\$1,022.50	\$1,050.00	n	\$1,050.00	2.7%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45532	8e)	Conditional Discharge Permit (charged quarterly)	\$1,022.50	\$1,050.00	n	\$1,050.00	2.7%	Lab/equip. costs up in 2018. Previous 2015, 2012
14-090	510260	45519	9	Information Requests Note: Fee per property for records search related to Sewer Use By-law historical violations	\$163.74	\$147.90	y	\$167.13	2.1%	To achieve full cost recovery
			10	Wastewater Sampling (optional) Note: Per unit costs to conduct wastewater sampling to determine permit conditions and limits						
14-090	510260	45532	10a)	Wastewater Sampling Vehicle Fee (per kilometer)	\$1.32	\$1.19	y	\$1.34	1.7%	To achieve full cost recovery
			10b)	Wastewater Sampling Technician Fee (per hour) Mon - Fri	\$40.68	\$38.90	y	\$43.96	8.1%	To achieve full cost recovery
			10c)	Wastewater Sampling Technician Fee (per hour) Sat	\$52.35	\$49.06	y	\$55.44	5.9%	EMT position - replaced by RFT one pay grade higher
			10d)	Wastewater Sampling Technician Fee (per hour) Sat	\$78.52	\$73.59	y	\$83.16	5.9%	EMT position - replaced by RFT one pay grade higher
			10e)	Wastewater Sampling Technician Fee (per hour) Sun	\$104.69	\$98.11	y	\$110.86	5.9%	EMT position - replaced by RFT one pay grade higher

Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead
For general inquiries, please call 905-546-5730 or email sewerusebylaw@hamilton.ca

2019 PROPOSED USER FEES AND CHARGES

**PUBLIC WORKS
HAMILTON WATER**

Dept. By-Law #	Dept ID	Account #	Ref #	Service Offered	2018 including HST (if applicable)	2019 Proposed Fee	HST (y/n)	2019 including HST (if applicable)	% Fee Change	Basis for Fee Increase or Decrease
				ENVIRONMENTAL MONITORING & ENFORCEMENT Fees related to the Wastewater Abatement Program						
03-272	510260	45532	1	Application Fee (plus cost recovery for peer review if required)	\$423.19	\$374.50	y	\$423.19	0.0%	Current fee achieves full cost recovery
03-272	510260	45532	2	Annual Administration Fee	\$783.43	\$712.80	y	\$805.46	2.8%	To achieve full cost recovery

*Costs not specifically addressed in the schedule will be invoiced at Actual Cost plus overhead**
 **For general inquiries, please call 905-540-5190 or email: sewerusebylaw@hamilton.ca*

City of Hamilton
Water System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Annual Projects													
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	240	-	-	-	-	-	-	-	240	240	-
City Wide	5141960711	PW Capital Water Consumption Program	200	-	-	-	-	-	-	-	200	200	-
<i>Sub-Total Annual Projects</i>			440	-	-	-	-	-	-	-	440	440	-
Coordinated - Replacement Projects													
13	5141970002	Baldwin / Court - West St. to Dundas St. - Road Restoration	180	-	-	-	-	-	-	-	180	180	-
4	5141970003	Brampton - Parkdale to Strathearne - Road Restoration	740	-	-	-	-	-	-	-	740	740	-
7	5141970004	Bruce Dale - Upper Wentworth to Upper Sherman (Eastmount Neighbourhood) - Road Restoration	780	-	-	-	-	-	-	-	780	780	-
3	5141970005	Cheever - Barton to Birge & Birge - Cheever to Wentworth - Road Restoration	240	-	-	-	-	-	-	-	240	240	-
1	5141970007	Haddon - Sterling to Marion - Road Restoration	310	-	-	-	-	-	-	-	310	310	-
10	5141970008	Hewitson - Dupont to Barton and Dupont - Road Restoration	230	-	-	-	-	-	-	-	230	230	-
1	5141970009	Locke - Herkimer to Main - Road Restoration	800	-	-	-	-	-	-	-	800	800	-
4	5141970010	Parkdale - Burlington to north end & Steel City Crt - Road Restoration	1,050	-	-	-	-	-	-	-	1,050	1,050	-
2	5141970012	Sheaffe / Park / Mulberry (Central Neighbourhood (North)) - Road Restoration	910	-	-	-	-	-	-	-	910	910	-
13	5141971302	Baldwin / Court - West St. to Dundas St.	110	-	-	-	-	-	-	-	110	110	-
4	5141971303	Brampton - Parkdale to Strathearne	600	-	-	-	-	-	-	-	600	600	-
7	5141971304	Bruce Dale - Upper Wentworth to Upper Sherman (Eastmount Neighbourhood)	1,710	-	-	-	-	-	-	-	1,710	1,710	-
3	5141971305	Cheever - Barton to Birge and Birge - Cheever to Wentworth	580	-	-	-	-	-	-	-	580	580	-
2	5141971306	Ferguson - Simcoe to Burlington	440	-	-	-	-	-	-	-	440	440	-
1	5141971307	Haddon - Sterling to Marion	510	-	-	-	-	-	-	-	510	510	-
10	5141971308	Hewitson - Dupont to Barton and Dupont	370	-	-	-	-	-	-	-	370	370	-
1	5141971309	Locke - Herkimer to Main	2,480	-	-	-	-	-	-	-	2,480	2,480	-
4	5141971310	Parkdale - Burlington to north end & Steel City Court	1,130	-	-	-	-	-	-	-	1,130	1,130	-
2	5141971312	Sheaffe / Park / Mulberry (Central Neighbourhood (North))	1,050	-	-	-	-	-	-	-	1,050	1,050	-
<i>Sub-Total Coordinated - Replacement Projects</i>			14,220	-	-	-	-	-	-	-	14,220	14,220	-
Coordinated - Upgrade Projects													
3	5141971313	Sherman - King to south end (LRT Enabling Project)	130	130	-	-	-	-	-	-	-	-	-
3	5141971314	Wentworth - Wilson to King (LRT Enabling Project)	130	130	-	-	-	-	-	-	-	-	-
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)	150	150	-	-	-	-	-	-	-	-	-
<i>Sub-Total Coordinated - Upgrade Projects</i>			410	410	-	-	-	-	-	-	-	-	-

City of Hamilton
Water System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Coordinated Projects													
City Wide	5141855777	Water infrastructure Analysis - Growth and Economic Opportunities	350	-	200	-	-	-	-	-	150	150	-
<i>Sub-Total Coordinated Projects</i>			350	-	200	-	-	-	-	-	150	150	-
Equipment Replacement													
City Wide	5141966151	SCADA servers and network	2,500	-	-	-	-	-	-	2,500	-	-	-
<i>Sub-Total Equipment Replacement</i>			2,500	-	-	-	-	-	-	2,500	-	-	-
Haldimand-Norfolk Projects													
11	5141564533	Upper Wentworth - South limit @ Hydro Corridor to Twenty	2,000	-	-	2,000	-	-	-	-	-	-	-
<i>Sub-Total Haldimand-Norfolk Projects</i>			2,000	-	-	2,000	-	-	-	-	-	-	-
Master Plan													
City Wide	5141555264	City-Wide Water Master Plan	100	-	-	90	-	-	-	-	10	10	-
City Wide	5141955010	Water Systems Planning Program	400	-	-	-	-	-	-	-	400	400	-
<i>Sub-Total Master Plan</i>			500	-	-	90	-	-	-	-	410	410	-
Master Plan - Development													
City Wide	5141996011	Intensification Infrastructure Upgrades Program - Water	400	-	-	200	-	-	-	-	200	200	-
<i>Sub-Total Master Plan - Development</i>			400	-	-	200	-	-	-	-	200	200	-
Master Plan - Horizontal Assets													
13, 15	5141796752	PD16 (Waterdown) Trunk Feedermain - PS HD016 to Hwy 5 at Algonquin (W-25) (CASH FLOWED)	880	-	-	660	-	-	-	-	220	220	-
11	5141996951	Binbrook Feedermain via Fletcher (W-30)	580	-	-	580	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Horizontal Assets</i>			1,460	-	-	1,240	-	-	-	-	220	220	-
Master Plan - Vertical Assets													
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	1,550	-	-	1,130	-	-	-	-	420	420	-
11	5141995951	PS HD019 (Binbrook) Capacity Upgrade (W-20)	220	-	-	220	-	-	-	-	-	-	-
City Wide	5142595552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	280	-	-	280	-	-	-	-	-	-	-
<i>Sub-Total Master Plan - Vertical Assets</i>			2,050	-	-	1,630	-	-	-	-	420	420	-
Outstations-Sustainable Asset Mgt (SAM)													
4	5141267274	Kenilworth Pumping Station (HD005) - Phase 2	330	-	-	-	-	-	-	-	330	330	-

City of Hamilton
Water System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
2	5141395353	Ferguson Avenue HD002 Pumping Station	330	-	-	-	-	-	-	-	330	330	-
14	5141666608	Lynden Additional Water Supply	3,520	-	-	-	-	-	-	2,700	820	820	-
10	5141667420	Ben Nevis & Dewitt (HD08A) Water Pumping Station Upgrades	550	-	-	-	-	-	-	-	550	550	-
13	5141667422	Osler Road Pumping Station (HD011) Upgrades	280	-	-	-	-	-	-	-	280	280	-
14	5141767650	New Greensville Communal Well	750	-	-	-	-	-	-	-	750	750	-
4, 10	5141967375	HDR01 Kenilworth and HDR1C Ben Nevis Reservoir Upgrades	7,550	-	-	-	-	-	500	500	6,550	2,209	4,341
City Wide	5141967752	Water Outstation Inspections - Asset Management	660	-	-	-	-	-	-	-	660	660	-
		<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>	13,970	-	-	-	-	-	500	3,200	10,270	5,929	4,341
Plans/Studies													
City Wide	5141955247	Alterations to the Drinking Water System	150	-	-	-	-	-	-	-	150	150	-
City Wide	5141955713	Pressure Districts and Drinking Water System Optimization	220	-	-	-	-	-	-	-	220	220	-
		<i>Sub-Total Plans/Studies</i>	370	-	-	-	-	-	-	-	370	370	-
Plant - Sustainable Asset Mgt (SAM)													
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)	11,350	-	-	-	-	-	-	-	11,350	1,350	10,000
City Wide	5141966420	Woodward WTP Chlorine Chemical Building	800	-	-	-	-	-	-	-	800	800	-
City Wide	5141966711	Water Treatment Studies Program	250	-	-	-	-	-	-	-	250	250	-
City Wide	5141966713	Water Maintenance Capital Program	2,000	-	-	-	-	-	-	-	2,000	2,000	-
		<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>	14,400	-	-	-	-	-	-	-	14,400	4,400	10,000
Plant - Water Quality Initiatives (WQI)													
City Wide	5141969075	City Environmental Lab Improvements Program	200	-	-	-	-	-	-	-	200	200	-
		<i>Sub-Total Plant - Water Quality Initiatives (WQI)</i>	200	-	-	-	-	-	-	-	200	200	-
Rehabilitation Project													
City Wide	5141761777	Beach Trunkmain Rehab	2,300	-	-	-	-	-	-	-	2,300	2,300	-
City Wide	5141960750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	3,000	-	-	-	-	-	-	-	3,000	3,000	-
City Wide	5141961502	Water Meter - Installation/Replacement/Repair - General Maintenance	2,860	-	-	-	640	-	-	-	2,220	2,220	-
		<i>Sub-Total Rehabilitation Project</i>	8,160	-	-	-	640	-	-	-	7,520	7,520	-
Replacement Project													
City Wide	5141960080	Valve Replacement Program	1,580	-	-	-	-	-	90	-	1,490	1,490	-
10	5141961341	Pineland/Teal/Community/Garden/South Service	110	-	-	-	-	-	-	-	110	110	-
City Wide	5141971074	Contingency for Unscheduled Works Program	100	-	-	-	-	-	55	-	45	45	-
		<i>Sub-Total Replacement Project</i>	1,790	-	-	-	-	-	145	-	1,645	1,645	-

City of Hamilton
Water System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Restorations													
City Wide	5141911101	Road Restoration Program	5,400	-	-	-	-	-	-	-	5,400	5,400	-
		<i>Sub-Total Restorations</i>	5,400	-	-	-	-	-	-	-	5,400	5,400	-
Technical Services Projects													
City Wide	4031957944	18-055 PW Asset Management (PW-AM) System Evaluation	750	-	-	-	-	-	-	-	750	750	-
City Wide	5141455425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	520	-	-	-	-	-	-	-	520	520	-
City Wide	5141949555	QA-QC Service Contract Program	160	-	-	-	-	-	-	-	160	160	-
City Wide	5141955556	Mapping Update Program	40	-	-	-	-	-	-	-	40	40	-
City Wide	5141957545	Water - Computer Model	280	-	-	-	-	-	-	-	280	280	-
City Wide	5141960577	Metallic Watermain Condition Assessment Program	580	-	-	-	-	-	-	-	580	580	-
5	5141980955	Centennial Secondary Plan - Servicing Study	100	-	-	90	-	-	-	-	10	10	-
		<i>Sub-Total Technical Services Projects</i>	2,430	-	-	90	-	-	-	-	2,340	2,340	-
Upgrade Projects													
14, 15	5141667423	Freelton Well (FDF01) Capacity Increase	440	-	-	407	-	-	-	-	33	33	-
City Wide	5141961910	Residential Water Meter and Meter Pit Installation for Non Metered Properties	180	-	-	-	-	-	-	-	180	180	-
City Wide	5141962073	Field Data Systems Program	110	-	-	-	-	-	-	-	110	110	-
City Wide	5141962078	Substandard Water Service Replacement Program	2,750	-	-	-	-	-	-	-	2,750	2,750	-
		<i>Sub-Total Upgrade Projects</i>	3,480	-	-	407	-	-	-	-	3,073	3,073	-
Vehicles-New													
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	50	-	-	-	-	-	-	-	50	50	-
City Wide	5141851810	Fleet Additions	650	-	-	-	-	-	-	-	650	650	-
		<i>Sub-Total Vehicles-New</i>	700	-	-	-	-	-	-	-	700	700	-
Water Quality Initiatives (WQI)													
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study	150	-	-	-	-	-	-	-	150	150	-
		<i>Sub-Total Water Quality Initiatives (WQI)</i>	150	-	-	-	-	-	-	-	150	150	-

City of Hamilton
 Water System
 2019 Capital Budget Project List
 (000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources		
												From Operating	Debt	
Watermain Lining														
City Wide	5141960072	Watermain Structural Lining	6,900	-	-	-	-	-	2,925	-	3,975	3,975	-	
<i>Sub-Total Watermain Lining</i>			6,900	-	-	-	-	-	2,925	-	3,975	3,975	-	
Total All Projects			82,280	410	200	5,657	640	-	3,570	5,700	66,103	51,762	14,341	

CITY OF HAMILTON
WATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	0	0	240	240	0	0	240	240	720	720	1,200	1,200	2019	Ongoing
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	0	0	50	50	0	0	0	0	0	0	50	50	2019	2019
City Wide	4031955522	State of the Infrastructure - Asset Management	0	0	0	0	100	100	100	100	700	700	900	900	2019	Ongoing
City Wide	4031957944	18-055 PW Asset Management (PW-AM) System Evaluation	0	0	750	750	0	0	0	0	0	0	750	750	2019	2020
City Wide	5141455425	Prestressed Concrete Cylinder Pipe Condition Assessment Inspection Program	2,230	355	520	520	0	0	0	0	0	0	2,750	875	2014	2019
4	5141641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
14, 15	5141667423	Freelton Well (FDF01) Capacity Increase	1,430	298	440	33	1,660	119	0	0	0	0	3,530	450	2016	2020
City Wide	5141761777	Beach Trunkmain Rehab	5,000	5,000	2,300	2,300	0	0	0	0	0	0	7,300	7,300	2017	2019
City Wide	5141851810	Fleet Additions	580	580	650	650	500	500	0	0	0	0	1,730	1,730	2018	2019
1, 2	5141861300	Barton - Queen to Locke	100	100	0	0	1,110	1,110	0	0	0	0	1,210	1,210	2018	2020
City Wide	5141911101	Road Restoration Program	0	0	5,400	5,400	5,400	5,400	5,400	5,400	37,800	37,800	54,000	54,000	2019	Ongoing
City Wide	5141949555	QA-QC Service Contract Program	0	0	160	160	150	150	150	150	1,050	1,050	1,510	1,510	2019	Ongoing
City Wide	5141955556	Mapping Update Program	0	0	40	40	0	0	40	40	120	120	200	200	2017	Ongoing
City Wide	5141955851	Water Efficiency Plan/Program	0	0	0	0	110	110	113	113	860	860	1,083	1,083	2019	Ongoing
City Wide	5141957545	Water - Computer Model	0	0	280	280	280	280	280	280	1,960	1,960	2,800	2,800	2019	Ongoing
City Wide	5141957626	Critical Watermain Inspection Program	0	0	0	0	330	330	330	330	2,310	2,310	2,970	2,970	2019	Ongoing
City Wide	5141960080	Valve Replacement Program	0	0	1,580	1,490	1,330	1,330	800	800	5,600	5,600	9,310	9,220	2019	Ongoing
City Wide	5141960577	Metallic Watermain Condition Assessment Program	0	0	580	580	700	700	700	700	4,900	4,900	6,880	6,880	2019	Ongoing
City Wide	5141960711	PW Capital Water Consumption Program	0	0	200	200	200	200	200	200	1,400	1,400	2,000	2,000	2019	Ongoing
City Wide	5141960750	Unscheduled Valve, Hydrant, Watermain & Misc Water Replace Program	0	0	3,000	3,000	2,500	2,500	2,500	2,500	14,000	14,000	22,000	22,000	2019	Ongoing
City Wide	5141961300	Stand-Alone Watermain Replacement	0	0	0	0	0	0	0	0	0	0	0	0	2022	Ongoing

CITY OF HAMILTON
WATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
10	5141961341	Pineland/Teal/Community/Garden/South Service	0	0	110	110	1,870	1,870	0	0	0	0	1,980	1,980	2019	2020
City Wide	5141961502	Water Meter - Installation/Replacement/Repair - General Maintenance	0	0	2,860	2,220	3,670	3,030	3,740	3,100	23,320	19,480	33,590	27,830	2019	Ongoing
City Wide	5141961910	Residential Water Meter and Meter Pit Installation for Non Metered Properties	0	0	180	180	0	0	0	0	0	0	180	180	2019	2019
City Wide	5141962073	Field Data Systems Program	0	0	110	110	0	0	110	110	330	330	550	550	2019	Ongoing
City Wide	5141962078	Substandard Water Service Replacement Program	0	0	2,750	2,750	2,750	2,750	2,750	2,750	14,000	14,000	22,250	22,250	2019	Ongoing
City Wide	5141971074	Contingency for Unscheduled Works Program	0	0	100	45	0	0	200	200	600	600	900	845	2019	Ongoing
City Wide	5141971940	Unspecified Water Works	0	0	0	0	0	0	0	0	25,000	25,000	25,000	25,000	2020	2024
5	5141980955	Centennial Secondary Plan - Servicing Study	0	0	100	10	0	0	0	0	0	0	100	10	2019	2019
7	5142161300	Edwina - Lawson to Berko & Berko - Edwina to Lawfield	0	0	0	0	0	0	360	360	0	0	360	360	2021	2021
2	5142161300	Jackson - Catherine to Walnut	0	0	0	0	0	0	240	240	0	0	240	240	2021	2021
3	5142361300	Birge - Emerald to St. Matthews	0	0	0	0	0	0	0	0	300	300	300	300	2023	2023
3	5142361300	Evans - Wellington to East	0	0	0	0	0	0	0	0	400	400	400	400	2023	2023
1	5142461300	Amelia - Queen to West End	0	0	0	0	0	0	0	0	600	600	600	600	2024	2024
1	5142461300	Bold - Queen to Locke	0	0	0	0	0	0	0	0	780	780	780	780	2024	2024
1	5142461300	Caroline - Herkimer to Robinson	0	0	0	0	0	0	0	0	390	390	390	390	2024	2024
7	5142461300	Dallas - Upper Gage to West End	0	0	0	0	0	0	0	0	560	560	560	560	2024	2024
2	5142461300	James and Charlton Intersection	0	0	0	0	0	0	0	0	1,000	1,000	1,000	1,000	2024	2024
3	5142461300	Myler - Sanford to Milton/Milton - Barton to Princess	0	0	0	0	0	0	0	0	500	500	500	500	2024	2024
2	5142461300	Patrick - Walnut to west end	0	0	0	0	0	0	0	0	230	230	230	230	2024	2024
3	5142561300	Edward - Barnesdale to Lottridge	0	0	0	0	0	0	0	0	380	380	380	380	2025	2025
2	5142561300	Hess - Markland to Aberdeen	0	0	0	0	0	0	0	0	480	480	480	480	2025	2025
2	5142561300	John - Cannon to Barton	0	0	0	0	0	0	0	0	850	850	850	850	2025	2025
2	5142661300	Robinson - Hess to Park	0	0	0	0	0	0	0	0	1,050	1,050	1,050	1,050	2026	2026

CITY OF HAMILTON
WATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
3	5142761300	Clinton\Case\Ruth\Barnesdale	0	0	0	0	0	0	0	0	1,940	1,940	1,940	1,940	2027	2027
4	5142761300	Edgemont - Main to King	0	0	0	0	0	0	0	0	730	730	730	730	2027	2028
			10,590	8,583	22,400	21,118	22,660	20,479	18,253	17,613	152,360	148,520	226,263	216,313		
Projects Coordinated with Roads Program																
City Wide	5141970000	Coordinated Road and Subsurface Works	0	0	0	0	3,810	3,810	2,630	2,630	35,590	35,590	42,030	42,030	2019	Ongoing
13	5141970002	Baldwin / Court - West St. to Dundas St. - Road Restoration	0	0	180	180	0	0	0	0	0	0	180	180	2019	2019
4	5141970003	Brampton - Parkdale to Strathearne - Road Restoration	0	0	740	740	0	0	0	0	0	0	740	740	2019	2019
7	5141970004	Brucevale - Upper Wentworth to Upper Sherman (Eastmount Neighbourhood) - Road Restoration	0	0	780	780	0	0	0	0	0	0	780	780	2019	2019
3	5141970005	Cheever - Barton to Birge & Birge - Cheever to Wentworth - Road Restoration	0	0	240	240	0	0	0	0	0	0	240	240	2019	2019
1	5141970007	Haddon - Sterling to Marion - Road Restoration	0	0	310	310	0	0	0	0	0	0	310	310	2019	2019
10	5141970008	Hewitson - Dupont to Barton and Dupont - Road Restoration	0	0	230	230	0	0	0	0	0	0	230	230	2019	2019
1	5141970009	Locke - Herkimer to Main - Road Restoration	0	0	800	800	0	0	0	0	0	0	800	800	2019	2019
4	5141970010	Parkdale - Burlington to north end & Steel City Crt - Road Restoration	0	0	1,050	1,050	0	0	0	0	0	0	1,050	1,050	2019	2019
2	5141970012	Sheaffe / Park / Mulberry (Central Neighbourhood (North)) - Road Restoration	0	0	910	910	0	0	0	0	0	0	910	910	2019	2019
City Wide	5141971301	Watermain Replacement Coordinated with Roads	0	0	0	0	0	0	0	0	52,660	52,660	52,660	52,660	2019	Ongoing
13	5141971302	Baldwin / Court - West St. to Dundas St.	0	0	110	110	0	0	0	0	0	0	110	110	2019	2019
4	5141971303	Brampton - Parkdale to Strathearne	0	0	600	600	0	0	0	0	0	0	600	600	2019	2019
7	5141971304	Brucevale - Upper Wentworth to Upper Sherman (Eastmount Neighbourhood)	0	0	1,710	1,710	0	0	0	0	0	0	1,710	1,710	2019	2019
3	5141971305	Cheever - Barton to Birge and Birge - Cheever to Wentworth	0	0	580	580	0	0	0	0	0	0	580	580	2019	2019

CITY OF HAMILTON
WATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
2	5141971306	Ferguson - Simcoe to Burlington	0	0	440	440	0	0	0	0	0	0	440	440	2019	2019
1	5141971307	Haddon - Sterling to Marion	0	0	510	510	0	0	0	0	0	0	510	510	2019	2019
10	5141971308	Hewitson – Dupont to Barton and Dupont	0	0	370	370	0	0	0	0	0	0	370	370	2019	2019
1	5141971309	Locke - Herkimer to Main	0	0	2,480	2,480	0	0	0	0	0	0	2,480	2,480	2019	2019
4	5141971310	Parkdale - Burlington to north end & Steel City Court	0	0	1,130	1,130	0	0	0	0	0	0	1,130	1,130	2019	2019
2	5141971312	Sheaffe / Park / Mulberry (Central Neighbourhood (North))	0	0	1,050	1,050	0	0	0	0	0	0	1,050	1,050	2019	2019
3	5141971313	Sherman - King to south end (LRT Enabling Project)	0	0	130	0	1,250	250	0	0	0	0	1,380	250	2019	2020
3	5141971314	Wentworth - Wilson to King (LRT Enabling Project)	0	0	130	0	410	80	0	0	0	0	540	80	2019	2020
4	5141971315	Main - Delena to Normanhurst & Normanhurst - Main to Queenston (LRT Enabling Project)	0	0	150	0	5,280	480	0	0	0	0	5,430	480	2019	2020
4	5142071301	Delana / Beland / Dunsmore	0	0	0	0	170	170	1,260	1,260	0	0	1,430	1,430	2020	2021
1, 13	5142071301	Osler - South St to West Park	0	0	0	0	100	100	0	0	900	900	1,000	1,000	2020	2022
4	5142071301	Roxborough - Kenilworth to Strathearne (Homeside Neighbourhood)	0	0	0	0	850	850	0	0	0	0	850	850	2020	2020
4	5142171301	Barton - Parkdale to Talbot	0	0	0	0	0	0	1,200	1,200	0	0	1,200	1,200	2021	2021
2	5142171301	Strachan - James to east end	0	0	0	0	0	0	660	660	0	0	660	660	2021	2021
13	5142271301	Cairns / East St N / Sleepy Hollow / Spencer / Wilmar (Hunter Neighbourhood)	0	0	0	0	0	0	0	0	1,200	1,200	1,200	1,200	2022	2022
1	5142271301	Carling / Macklin St S / Olmstead / Tope (Westdale South)	0	0	0	0	0	0	0	0	730	730	730	730	2022	2022
1	5142271301	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	900	900	900	900	2022	2022
1	5142371301	Florence/Head/Morden/Napier/Nelson/Peel/Wellesley (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	800	800	800	800	2023	2023
3	5142471301	Burlington & Industrial - Birch to Gage	0	0	0	0	0	0	0	0	3,060	3,060	3,060	3,060	2024	2024
8	5142471301	Fennell - Upper James to Upper Wellington	0	0	0	0	0	0	0	0	650	650	650	650	2024	2024

**CITY OF HAMILTON
 WATER SYSTEM
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
2	5142471301	Ferguson/Foster/Walnut/Patrick	200	0	0	0	0	0	0	0	1,900	1,900	2,100	1,900	2024	2024
8	5142471301	Upper James - Mohawk to Fennell	0	0	0	0	0	0	0	0	3,350	3,350	3,350	3,350	2024	2024
7, 8	5142471301	Upper Wellington - Bryna to Mohawk	0	0	0	0	0	0	0	0	1,150	1,150	1,150	1,150	2024	2024
15	5142472304	Bridge 451 - Hwy 5 E, 120m e/o Mill St S	0	0	0	0	0	0	0	0	150	150	150	150	2024	2024
3	5142571301	Wilson - Wentworth to Sherman	0	0	0	0	0	0	0	0	900	900	900	900	2025	2025
3	5142671301	Sanford - Main to Cannon	0	0	0	0	0	0	0	0	1,500	1,500	1,500	1,500	2026	2026
3, 4	5142771301	Burlington & Industrial - Ottawa to Kenilworth	100	0	0	0	0	0	0	0	2,340	2,340	2,440	2,340	2027	2027
3	5142771301	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmore	0	0	0	0	0	0	0	0	1,050	1,050	1,050	1,050	2027	2027
			300	0	14,630	14,220	11,870	5,740	5,750	5,750	108,830	108,830	141,380	134,540		
Plant/Outstations Projects (SAM)																
4	5141166110	Water Treatment Plant - Process Upgrades (CASH FLOWED)	14,440	9,553	11,350	11,350	4,550	4,550	1,250	906	125,650	69,964	157,240	96,323	2011	2026
4	5141267274	Kenilworth Pumping Station (HD005) - Phase 2	2,950	300	330	330	0	0	0	0	0	0	3,280	630	2012	2019
2	5141395353	Ferguson Avenue HD002 Pumping Station	2,270	0	330	330	0	0	0	0	0	0	2,600	330	2013	2019
1	5141567273	Main / Whitney Pumping Station Replacement and Decommissioning	1,930	830	0	0	0	0	2,980	2,980	0	0	4,910	3,810	2015	2019
8	5141567520	Stone Church/Garth Water (HDR05) Reservoir	3,960	0	0	0	0	0	880	880	5,500	5,500	10,340	6,380	2015	2019
4	5141567575	High Lift Pumping Station (HLPS) Improvements - Phase 2 (CASH FLOWED)	880	220	0	0	550	550	2,470	2,470	2,470	2,470	6,370	5,710	2015	2019
14	5141666608	Lynden Additional Water Supply	4,570	2,230	3,520	820	0	0	0	0	0	0	8,090	3,050	2016	2019
10	5141667420	Ben Nevis & Dewitt (HD08A) Water Pumping Station Upgrades	2,590	1,340	550	550	0	0	0	0	0	0	3,140	1,890	2016	2019
12	5141667421	Glancaster Rd & Hwy 53 Pumping Station (HD018) Upgrades (CASH FLOWED)	6,040	4,400	0	0	0	0	6,210	6,210	0	0	12,250	10,610	2016	2018
13	5141667422	Osler Road Pumping Station (HD011) Upgrades	2,040	695	280	280	0	0	0	0	0	0	2,320	975	2016	2019

**CITY OF HAMILTON
 WATER SYSTEM
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (SAM)																
14	5141767650	New Greensville Communal Well	500	500	750	750	5,250	5,250	0	0	0	0	6,500	6,500	2017	2020
2	5141867420	St. Joseph's Tank Pulsation Dampener (HD002STK)	0	0	0	0	60	60	110	110	440	440	610	610	2021	2022
9	5141867651	HD007 Highland Rd Reservoir Upgrades	260	260	0	0	0	0	0	0	990	990	1,250	1,250	2018	2019
15	5141895852	Carlisle Water Supply System - Additional Water Storage (CASH FLOWED)	440	440	0	0	440	440	6,600	6,600	0	0	7,480	7,480	2018	2021
City Wide	5141966420	Woodward WTP Chlorine Chemical Building	0	0	800	800	0	0	0	0	0	0	800	800	2019	2019
City Wide	5141966711	Water Treatment Studies Program	0	0	250	250	0	0	250	250	750	750	1,250	1,250	2019	Ongoing
City Wide	5141966713	Water Maintenance Capital Program	0	0	2,000	2,000	2,000	2,000	2,000	2,000	14,000	14,000	20,000	20,000	2019	Ongoing
4, 10	5141967375	HDR01 Kenilworth and HDR1C Ben Nevis Reservoir Upgrades	0	0	7,550	6,550	0	0	0	0	0	0	7,550	6,550	2019	2019
City Wide	5141967751	Water Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	0	104,600	104,600	104,600	104,600	2022	Ongoing
City Wide	5141967752	Water Outstation Inspections - Asset Management	0	0	660	660	660	660	660	660	4,510	4,510	6,490	6,490	2019	Ongoing
			42,870	20,768	28,370	24,670	13,510	13,510	23,410	23,066	258,910	203,224	367,070	285,238		
Plant/Outstations Projects (WQI)																
4	5141966150	GAC Replacement	0	0	0	0	0	0	0	0	4,950	4,950	4,950	4,950	2019	Ongoing
City Wide	5141966911	Woodward WTP - Biological Filtration Pilot Study	0	0	150	150	250	250	0	0	0	0	400	400	2019	2020
City Wide	5141969075	City Environmental Lab Improvements Program	0	0	200	200	100	100	1,000	1,000	405	405	1,705	1,705	2019	Ongoing
			0	0	350	350	350	350	1,000	1,000	5,355	5,355	7,055	7,055		
Master Plan - Horizontal Assets																
13, 15	5141796752	PD16 (Waterdown) Trunk Feedermain - PS HD016 to Hwy 5 at Algonquin (W-25) (CASH FLOWED)	1,690	422	880	220	8,370	2,092	0	0	0	0	10,940	2,734	2017	2019
1	5141896850	Locke St Trunk Watermain - Main to Barton (W-19)	0	0	0	0	470	0	4,250	0	0	0	4,720	0	2018	2019
11	5141996951	Binbrook Feedermain via Fletcher (W-30)	0	0	580	0	3,870	0	2,530	0	0	0	6,980	0	2019	2020

**CITY OF HAMILTON
 WATER SYSTEM
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Master Plan - Horizontal Assets																
11	5142096250	Airport Lands External Water Servicing (Feedermain) (W-27)	0	0	0	0	1,080	0	7,170	0	10,340	0	18,590	0	2020	2025
6, 9	5142696250	HD07A Feedermain (W-22)	0	0	0	0	0	0	0	0	8,860	0	8,860	0	2026	2027
			1,690	422	1,460	220	13,790	2,092	13,950	0	19,200	0	50,090	2,734		
Master Plan - Vertical Assets																
12	5141395354	PD18 (Ancaster) Elevated Reservoir (W-14) (CASH FLOWED)	2,610	255	0	0	0	0	5,420	2,710	5,420	2,710	13,450	5,675	2013	2020
11	5141495551	PD7 (Upper Stoney Creek/Glanbrook) Elevated Reservoir (W-23)	1,990	0	0	0	13,250	0	0	0	0	0	15,240	0	2014	2020
City Wide	5141555264	City-Wide Water Master Plan	550	0	100	10	50	5	0	0	60	0	760	15	2015	2020
13	5141595553	PS HD12A (Governors @ Huntingwood) Rebuild with Capacity Upgrade & Standby Power Installation (W-04)	720	0	0	0	2,640	(30)	0	0	0	0	3,360	(30)	2015	2019
13	5141695883	PS HD016 (York and Valley) Capacity Upgrade, Standby Power & Building Expansion (W-26) (CASH FLOWED)	3,710	302	0	0	4,800	984	0	0	0	0	8,510	1,286	2016	2019
5	5141795850	Greenhill PS HD04B & HD05A Upgrades (W-28) (CASH FLOWED)	8,270	2,482	1,550	420	5,650	1,526	5,400	1,458	0	0	20,870	5,886	2017	2020
City Wide	5141955010	Water Systems Planning Program	0	0	400	400	300	300	300	300	1,830	1,830	2,830	2,830	2019	Ongoing
11	5141995951	PS HD019 (Binbrook) Capacity Upgrade (W-20)	0	0	220	0	1,430	0	0	0	0	0	1,650	0	2019	2020
9	5142495251	Highland Reservoir HDR07 (W-11) Expansion (CASH FLOWED)	0	0	0	0	0	0	0	0	12,420	0	12,420	0	2024	2026
City Wide	5142595552	P.S. HD07A - New District 7 (Elfrida area) Pumping Station (W-21)	0	0	280	0	0	0	0	0	19,200	0	19,480	0	2025	2027
			17,850	3,039	2,550	830	28,120	2,785	11,120	4,468	38,930	4,540	98,570	15,662		
Development/Extension Projects																
11	5141564533	Upper Wentworth - South limit @ Hydro Corridor to Twenty	200	0	2,000	0	0	0	0	0	0	0	2,200	0	2015	2019
City Wide	5141996011	Intensification Infrastructure Upgrades Program - Water	0	0	400	200	0	0	400	200	1,200	600	2,000	1,000	2019	Ongoing

**CITY OF HAMILTON
 WATER SYSTEM
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Development/Extension Projects																
12	5142080082	Shaver - Kastura to Westview	0	0	0	0	600	400	0	0	0	0	600	400	2020	2020
11	5142080220	RHBP - Twenty Rd Extension - Glover to Trinity Church	0	0	0	0	500	300	0	0	0	0	500	300	2020	2020
11	5142180182	Binbrook - Royal Winter/Binhaven to Fletcher	0	0	0	0	0	0	400	0	0	0	400	0	2021	2021
11	5142280280	RHBP - Nebo - 900m s/o Twenty to Dickenson	0	0	0	0	0	0	0	0	700	0	700	0	2022	2022
11	5142280281	RHBP - Dartnall Road Extension - Twenty to Dickenson	0	0	0	0	0	0	0	0	750	0	750	0	2022	2022
11	5142780784	RHBP - Dickenson - Nebo to 800m e/o Nebo	0	0	0	0	0	0	0	0	800	0	800	0	2027	2027
			200	0	2,400	200	1,100	700	800	200	3,450	600	7,950	1,700		
Coordinated Projects																
City Wide	5141855777	LRT Corridor - Water Infrastructure Assessment and Approvals	220	220	350	150	350	150	0	0	0	0	920	520	2018	2020
			220	220	350	150	350	150	0	0	0	0	920	520		
Equipment Replacement																
City Wide	5141966151	SCADA servers and network	0	0	2,500	0	1,000	1,000	0	0	0	0	3,500	1,000	2019	2020
			0	0	2,500	0	1,000	1,000	0	0	0	0	3,500	1,000		
Plans/Studies																
City Wide	5141955247	Alterations to the Drinking Water System	0	0	150	150	150	150	150	150	1,050	1,050	1,500	1,500	2019	Ongoing
City Wide	5141955713	Pressure Districts and Drinking Water System Optimization	0	0	220	220	110	110	110	110	110	110	550	550	2019	2022
			0	0	370	370	260	260	260	260	1,160	1,160	2,050	2,050		
Pumping Station																
2	5141767422	New PD2 Water Pumping Station (CASH FLOWED)	500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600	2017	2021
			500	500	0	0	0	0	0	0	12,100	12,100	12,600	12,600		
Watermain Lining																

**CITY OF HAMILTON
 WATER SYSTEM
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Watermain Lining																
City Wide	5141960072	Watermain Structural Lining	0	0	6,900	3,975	6,000	6,000	6,000	6,000	42,000	42,000	60,900	57,975	2019	Ongoing
13	5142260072	WM Structural Lining - Dundas Valley Watermain	0	0	0	0	0	0	0	0	1,500	1,500	1,500	1,500	2022	2022
			0	0	6,900	3,975	6,000	6,000	6,000	6,000	43,500	43,500	62,400	59,475		
Total Water System			74,220	33,532	82,280	66,103	99,010	53,066	80,543	58,357	643,795	527,829	979,848	738,887		

City of Hamilton
Wastewater System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Annual Projects													
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	240	-	-	-	-	-	-	-	240	240	-
City Wide	5161960711	PW Capital Water Consumption Program	200	-	-	-	-	-	-	-	200	200	-
<i>Sub-Total Annual Projects</i>			440	-	-	-	-	-	-	-	440	440	-
Computer Software Purchases													
City Wide	5161957545	Wastewater Computer Model Update & Maintenance	380	-	-	-	-	-	-	-	380	380	-
<i>Sub-Total Computer Software Purchases</i>			380	-	-	-	-	-	-	-	380	380	-
Coordinated - Replacement Projects													
3	5161971905	Cheever - Barton to Birge and Birge - Cheever to Wentworth	90	-	-	-	-	-	-	-	90	90	-
2	5161971945	Sheaffe / Park / Mulberry (Central Neighbourhood (North))	2,350	-	-	-	-	-	-	-	2,350	2,350	-
<i>Sub-Total Coordinated - Replacement Projects</i>			2,440	-	-	-	-	-	-	-	2,440	2,440	-
Coordinated Projects													
City Wide	5161855777	LRT Corridor - Wastewater Infrastructure Assessment and Approvals	350	-	200	-	-	-	-	-	150	150	-
<i>Sub-Total Coordinated Projects</i>			350	-	200	-	-	-	-	-	150	150	-
Development Projects													
2	4411506103	Pier 8 Sanitary PS & Forcemain	9,000	-	-	8,100	-	-	-	-	900	900	-
<i>Sub-Total Development Projects</i>			9,000	-	-	8,100	-	-	-	-	900	900	-
Equipment Replacement													
City Wide	5161966151	SCADA servers and network	1,500	-	-	-	-	-	-	1,500	-	-	-
<i>Sub-Total Equipment Replacement</i>			1,500	-	-	-	-	-	-	1,500	-	-	-
Maintenance Projects													
5, 6	5161968920	Fennell/Greenhill Drop Shaft	180	-	-	-	-	-	-	-	180	180	-
<i>Sub-Total Maintenance Projects</i>			180	-	-	-	-	-	-	-	180	180	-
Master Plan													
City Wide	5161555264	City-Wide Wastewater Master Plan	100	-	-	90	-	-	-	-	10	10	-
City Wide	5161955010	Wastewater Systems Planning Program	600	-	-	-	-	-	-	-	600	600	-
<i>Sub-Total Master Plan</i>			700	-	-	90	-	-	-	-	610	610	-

City of Hamilton
Wastewater System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Master Plan - Development													
City Wide	5161996011	Intensification Infrastructure Upgrades Program - Wastewater	400	-	-	200	-	-	-	-	200	200	-
		<i>Sub-Total Master Plan - Development</i>	400	-	-	200	-	-	-	-	200	200	-
Master Plan - Horizontal Assets													
1	5161596855	Royal to Main/King Sanitary Sewer Upgrades (WW-22) (CASH FLOWED)	6,840	-	-	6,840	-	-	-	-	-	-	-
5, 9	5161695747	Battlefield Trunk Sewer Twinning (WW-33) (CASH FLOWED)	10,500	-	-	10,500	-	-	-	-	-	-	-
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	1,650	-	-	1,650	-	-	-	-	-	-	-
1	5161996954	Aberdeen at Hillside Neighbourhood Sewer Separation	450	-	-	-	-	-	-	-	450	450	-
		<i>Sub-Total Master Plan - Horizontal Assets</i>	19,440	-	-	18,990	-	-	-	-	450	450	-
Master Plan - Vertical Assets													
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014	1,480	-	-	903	-	-	-	-	577	577	-
		<i>Sub-Total Master Plan - Vertical Assets</i>	1,480	-	-	903	-	-	-	-	577	577	-
Outstations-Sustainable Asset Mgt (SAM)													
12	5161267270	Ancaster Wastewater Outstations Upgrades	2,010	-	-	-	-	-	-	-	2,010	2,010	-
5	5161467756	Greenhill & Cochrane HCS01 Combined Sewer Overflow Tank Cleaning & Upgrades (CASH FLOWED)	930	-	-	-	-	-	-	-	930	930	-
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	3,200	-	-	-	-	-	-	-	3,200	3,200	-
1	5161767772	Decommissioning Aberdeen Sewage Pumping Station	60	-	-	-	-	-	-	-	60	60	-
City Wide	5161967752	Wastewater Outstation Inspections - Asset Management Program	520	-	-	-	-	-	-	-	520	520	-
		<i>Sub-Total Outstations-Sustainable Asset Mgt (SAM)</i>	6,720	-	-	-	-	-	-	-	6,720	6,720	-
Outstations-Wastewater Investment Needs (WINS)													
City Wide	5161667421	New Haulage Receiving Station	550	-	-	-	-	-	-	-	550	550	-
		<i>Sub-Total Outstations-Wastewater Investment Needs (WINS)</i>	550	-	-	-	-	-	-	-	550	550	-
Plant - Sustainable Asset Mgt (SAM)													
City Wide	5161066065	Waste Hauler Receiving Station - Eastport Drive SPS (HC017) Upgrades	650	-	-	-	-	-	-	-	650	650	-
City Wide	5161966511	Woodward WWTP - Digester #5	500	-	-	-	-	-	-	-	500	500	-
City Wide	5161966612	Woodward WWTP - South Secondary Clarifiers	4,500	-	-	-	4,000	-	-	-	500	500	-
City Wide	5161966713	Wastewater Maintenance Capital Program	4,000	-	-	-	-	-	-	2,400	1,600	1,600	-
City Wide	5162266102	Woodward WWTP - Expansion (CASH FLOWED)	1,500	-	-	1,500	-	-	-	-	-	-	-
		<i>Sub-Total Plant - Sustainable Asset Mgt (SAM)</i>	11,150	-	-	1,500	4,000	-	-	2,400	3,250	3,250	-

City of Hamilton
Wastewater System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Plant - Wastewater Investment Needs (WINS)													
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	64,531	42,708	-	3,499	18,324	-	-	-	-	-	-
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	250	-	-	60	-	-	-	-	190	190	-
City Wide	5161969075	City Environmental Lab Improvements Program	200	-	-	-	-	-	-	-	200	200	-
<i>Sub-Total Plant - Wastewater Investment Needs (WINS)</i>			64,981	42,708	-	3,559	18,324	-	-	-	390	390	-
Rehabilitation Project													
City Wide	5161960302	Emergency Repairs - Cross Connections Program	750	-	-	-	-	-	-	-	750	750	-
City Wide	5161960390	Wastewater System Lining Program	4,660	-	-	-	-	-	4,110	-	550	550	-
City Wide	5161960522	Sewer Lateral Management Program (WWC)	4,500	-	-	-	-	-	-	-	4,500	4,500	-
City Wide	5161960533	Trenchless Manhole Rehabilitation	80	-	-	-	-	-	-	-	80	80	-
City Wide	5161960574	Pre-Construction Mainline Condition Assessment	580	-	-	-	-	-	-	-	580	580	-
City Wide	5161960575	Mainline Sewer Condition Assessment Program	790	-	-	-	-	-	-	-	790	790	-
City Wide	5161960576	Sewer Lateral Condition Assessment Program	620	-	-	-	-	-	-	-	620	620	-
City Wide	5161960577	Mainline Sewer Condition Assessment for Compliance & Regulations	120	-	-	-	-	-	-	-	120	120	-
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	6,560	-	-	-	-	-	-	-	6,560	6,560	-
<i>Sub-Total Rehabilitation Project</i>			18,660	-	-	-	-	-	4,110	-	14,550	14,550	-
Repairs													
City Wide	5161960820	Open Cut Repairs for CIPP Program	580	-	-	-	-	-	-	-	580	580	-
<i>Sub-Total Repairs</i>			580	-	-	-	-	-	-	-	580	580	-
Replacement Project													
City Wide	5161961444	Sewer Lateral Replace/Rehab Program	3,570	-	-	-	-	-	-	-	3,570	3,570	-
City Wide	5161961740	Unscheduled Manhole and Sewermain Replacement Program	400	-	-	-	-	-	-	-	400	400	-
City Wide	5161971015	Sewer Lateral Replacement for Co-ordinated Projects	430	-	-	-	-	-	-	-	430	430	-
City Wide	5161971074	Contingency for Unscheduled Works Program	100	-	-	-	-	-	-	-	100	100	-
<i>Sub-Total Replacement Project</i>			4,500	-	-	-	-	-	-	-	4,500	4,500	-
Restorations													
City Wide	5161911101	Road Restoration Program	1,800	-	-	-	-	-	-	-	1,800	1,800	-
<i>Sub-Total Restorations</i>			1,800	-	-	-	-	-	-	-	1,800	1,800	-

City of Hamilton
Wastewater System
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Technical Services Projects													
12	5161768240	Western Interceptor Sewer CCTV and Sonar Inspection	920	-	-	-	-	-	-	-	920	920	-
City Wide	5161949555	QA-QC Service Contract Program	160	-	-	-	-	-	-	-	160	160	-
City Wide	5161955556	Mapping Update Program	40	-	-	-	-	-	-	-	40	40	-
City Wide	5161955640	Flow Monitoring Program	350	-	-	170	-	-	-	-	180	180	-
City Wide	5161955878	Forcemain Condition Assessment Program	310	-	-	-	-	-	-	-	310	310	-
City Wide	5161955955	Inflow & Infiltration Studies and Control Program	500	-	-	150	-	-	-	-	350	350	-
5	5161980955	Centennial Secondary Plan - Servicing Study	100	-	-	90	-	-	-	-	10	10	-
<i>Sub-Total Technical Services Projects</i>			2,380	-	-	410	-	-	-	-	1,970	1,970	-
Upgrade Projects													
5, 10	5161655350	Riverdale Flood Relief Remedial Measures EA	1,320	-	-	-	-	-	-	-	1,320	1,320	-
12	5161661434	Upsize Forcemain under Wilson Street (Intersection of Wilson Street & Rousseau Street)	170	-	-	-	-	-	-	-	170	170	-
City Wide	5161962073	Field Data Systems Program	110	-	-	-	-	-	-	-	110	110	-
<i>Sub-Total Upgrade Projects</i>			1,600	-	-	-	-	-	-	-	1,600	1,600	-
Vehicles-New													
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	50	-	-	-	-	-	-	-	50	50	-
<i>Sub-Total Vehicles-New</i>			50	-	-	-	-	-	-	-	50	50	-
Water Quality Initiatives (WQI)													
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)	550	-	-	-	-	-	-	-	550	550	-
<i>Sub-Total Water Quality Initiatives (WQI)</i>			550	-	-	-	-	-	-	-	550	550	-
Total All Projects			149,831	42,708	200	33,752	22,324	-	4,110	3,900	42,837	42,837	-

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	0	0	240	240	0	0	240	240	480	480	960	920	2019	Ongoing
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	0	0	50	50	0	0	0	0	0	0	50	50	2019	2019
City Wide	4031955522	State of the Infrastructure - Asset Management	0	0	0	0	100	100	100	100	700	700	900	900	2019	Ongoing
4	5161641226	Centralized Water and Wastewater Operations Centre (CASH FLOWED)	1,250	2,250	0	0	0	0	0	0	7,500	7,500	8,750	9,750	2016	2024
5, 10	5161655350	Riverdale Flood Relief Remedial Measures EA	220	0	1,320	1,320	0	0	0	0	0	0	1,540	1,320	2016	2020
6, 7	5161655351	Lawfield / Berrisfield Neighbourhoods	185	110	0	0	170	170	0	0	0	0	355	280	2016	2020
12	5161661434	Upsize Forcemain under Wilson Street (Intersection of Wilson Street & Rousseaux Street)	100	50	170	170	0	0	0	0	0	0	270	220	2016	2019
12	5161768240	Western Interceptor Sewer CCTV and Sonar Inspection	1,540	0	920	920	0	0	0	0	0	0	2,460	920	2017	2019
City Wide	5161911101	Road Restoration Program	0	0	1,800	1,800	1,800	1,800	1,800	1,800	12,600	12,600	18,000	18,000	2019	Ongoing
City Wide	5161949555	QA-QC Service Contract Program	0	0	160	160	150	150	150	150	1,050	1,050	1,510	1,510	2019	Ongoing
City Wide	5161955556	Mapping Update Program	0	0	40	40	0	0	40	40	120	120	200	200	2019	Ongoing
City Wide	5161955640	Flow Monitoring Program	0	0	350	180	170	70	160	110	830	430	1,510	790	2019	Ongoing
City Wide	5161955878	Forcemain Condition Assessment Program	0	0	310	310	300	300	300	300	2,100	2,100	3,010	3,010	2019	Ongoing
City Wide	5161955955	Inflow & Infiltration Studies and Control Program	0	0	500	350	0	0	300	150	900	450	1,700	950	2019	Ongoing
City Wide	5161957545	Wastewater Computer Model Update & Maintenance	0	0	380	380	280	280	280	280	1,960	1,960	2,900	2,900	2019	Ongoing
City Wide	5161960302	Emergency Repairs - Cross Connections Program	0	0	750	750	700	700	500	500	900	900	2,850	2,850	2019	Ongoing
City Wide	5161960390	Wastewater System Lining Program	0	0	4,660	550	4,500	4,500	4,500	4,500	31,500	31,500	45,160	41,050	2019	Ongoing
City Wide	5161960522	Sewer Lateral Management Program (WWC)	0	0	4,500	4,500	4,000	4,000	4,000	4,000	24,500	24,500	37,000	37,000	2019	Ongoing
City Wide	5161960533	Trenchless Manhole Rehabilitation	0	0	80	80	80	80	80	80	560	560	800	800	2019	Ongoing
City Wide	5161960574	Pre-Construction Mainline Condition Assessment	0	0	580	580	550	550	550	550	3,850	3,850	5,530	5,530	2019	Ongoing

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	5161960575	Mainline Sewer Condition Assessment Program	0	0	790	790	1,260	1,260	1,260	1,260	8,820	8,820	12,130	12,130	2019	Ongoing
City Wide	5161960576	Sewer Lateral Condition Assessment Program	0	0	620	620	600	600	600	600	4,200	4,200	6,020	6,020	2019	Ongoing
City Wide	5161960577	Mainline Sewer Condition Assessment for Compliance & Regulations	0	0	120	120	110	110	110	110	770	770	1,110	1,110	2019	Ongoing
City Wide	5161960711	PW Capital Water Consumption Program	0	0	200	200	200	200	200	200	1,130	1,130	1,730	1,730	2019	Ongoing
City Wide	5161960820	Open Cut Repairs for CIPP Program	0	0	580	580	550	550	550	550	3,850	3,850	5,530	5,530	2019	Ongoing
12	5161960942	Ancaster Sewage Works Pipeline CIPP Rehab - CASH FLOW	0	0	6,560	6,560	450	450	0	0	0	0	7,010	7,010	2019	2020
City Wide	5161961444	Sewer Lateral Replace/Rehab Program	0	0	3,570	3,570	4,000	4,000	4,000	4,000	28,000	28,000	39,570	39,570	2019	Ongoing
City Wide	5161961740	Unscheduled Manhole and Sewermain Replacement Program	0	0	400	400	400	400	350	350	2,450	2,450	3,600	3,600	2019	Ongoing
City Wide	5161962073	Field Data Systems Program	0	0	110	110	0	0	110	110	330	330	550	550	2019	Ongoing
City Wide	5161971015	Sewer Lateral Replacement for Co-ordinated Projects	0	0	430	430	300	300	300	300	2,700	2,700	3,730	3,730	2019	Ongoing
City Wide	5161971074	Contingency for Unscheduled Works Program	0	0	100	100	0	0	200	200	600	600	900	900	2019	Ongoing
City Wide	5161971940	Unspecified Works	0	0	0	0	0	0	0	0	86,100	86,100	86,100	86,100	2020	2024
5	5161980955	Centennial Secondary Plan - Servicing Study	0	0	100	10	0	0	0	0	0	0	100	10	2019	2019
City Wide	5162166810	Woodward WWTP - Maintenance Building (CASH FLOWED)	500	500	0	0	100	100	450	450	450	450	1,500	1,500	2021	2022
4	51622261240	Strathearne Ave South Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	2,300	2,300	2,300	2,300	2022	2022
5, 9	51622261251	Satellite City Trunk Sewer Rehabilitation - CASH FLOW	0	0	0	0	0	0	4,440	4,440	4,440	4,440	8,880	8,880	2021	2022
4	5162361340	Strathearne Ave North Trunk Sewer Rehabilitation	0	0	0	0	0	0	0	0	3,300	3,300	3,300	3,300	2023	2023
15	5162418420	Grindstone Creek Utility Bridge	0	0	0	0	0	0	0	0	3,900	3,900	3,900	3,900	2024	2024
2	5162461422	Patrick - Walnut to west end	0	0	0	0	0	0	0	0	460	460	460	460	2024	2024
			3,795	2,910	30,390	25,870	20,770	20,670	25,570	25,370	243,350	242,500	323,875	317,320		

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
3	5161971905	Cheever - Barton to Birge and Birge - Cheever to Wentworth	0	0	90	90	0	0	0	0	0	0	90	90	2019	2019
2	5161971945	Sheaffe / Park / Mulberry (Central Neighbourhood (North))	0	0	2,350	2,350	0	0	0	0	0	0	2,350	2,350	2019	2019
1	5162271726	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	450	450	450	450	2022	2022
3	5162761725	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmore	0	0	0	0	0	0	0	0	90	90	90	90	2027	2027
3, 4	5162771220	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	820	820	820	820	2027	2027
			0	0	2,440	2,440	0	0	0	0	1,360	1,360	3,800	3,800		
Plant/Outstations Projects (SAM)																
City Wide	5161066065	Waste Hauler Receiving Station - Eastport Drive SPS (HC017) Upgrades	2,540	202	650	650	0	0	0	0	0	0	3,190	852	2010	2019
13	5161266213	Dundas WWTP Improvements (CASH FLOWED)	1,670	(1,400)	0	0	1,650	1,650	1,650	1,650	24,150	24,150	29,120	26,050	2012	2021
12	5161267270	Ancaster Wastewater Outstations Upgrades	6,310	0	2,010	2,010	0	0	0	0	0	0	8,320	2,010	2012	2019
13	5161267273	Dundas Wastewater Outstations Upgrades	2,730	280	0	0	2,300	2,300	0	0	0	0	5,030	2,580	2012	2019
5	5161467756	Greenhill & Cochrane HCS01 Combined Sewer Overflow Tank Cleaning & Upgrades (CASH FLOWED)	1,990	930	930	930	0	0	0	0	0	0	2,920	4,638	2014	2018
12, 13, 15	5161667622	FC001, DC009 & HC011 Wastewater Pumping Stations Upgrades	1,990	1,438	3,200	3,200	0	0	0	0	0	0	5,190	1,438	2016	2019
4	5161767420	Parkdale Avenue HC001 Wastewater Pumping Station Upgrades	660	110	0	0	2,750	2,750	0	0	0	0	3,410	2,860	2017	2019
1	5161767772	Decommissioning Aberdeen Sewage Pumping Station	0	0	60	60	110	110	1,190	1,190	0	0	1,360	1,360	2019	2021
City Wide	5161866420	Woodward WWTP - Primary Clarifiers (Galleries 1-8)	0	0	0	0	0	0	0	0	27,940	27,940	27,940	27,940	2018	2023
City Wide	5161966511	Woodward WWTP - Digester #5	0	0	500	500	3,000	3,000	0	0	0	0	3,500	3,500	2018	2019
City Wide	5161966612	Woodward WWTP - South Secondary Clarifiers	0	0	4,500	500	0	0	0	0	0	0	4,500	500	2019	2019

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Plant/Outstations Projects (SAM)																
City Wide	5161966713	Wastewater Maintenance Capital Program	0	0	4,000	1,600	2,000	2,000	2,000	2,000	26,000	26,000	34,000	31,600	2019	Ongoing
City Wide	5161967751	Wastewater Outstation Upgrades - Asset Management Program	0	0	0	0	0	0	0	28,000	28,000	28,000	28,000	2022	Ongoing	
City Wide	5161967752	Wastewater Outstation Inspections - Asset Management Program	0	0	520	520	520	520	520	3,340	3,340	4,900	4,900	2019	Ongoing	
City Wide	5162066311	Woodward WWTP - Digester #3	0	0	0	0	500	500	3,000	3,000	0	0	3,500	3,500	2020	2021
City Wide	5162067420	Main & King CSO Rehabilitation	0	0	0	0	910	910	0	0	0	0	910	910	2020	2020
City Wide	5162266011	Woodward WWTP - Secondary Digester	0	0	0	0	0	0	0	4,500	4,500	4,500	4,500	2022	2023	
City Wide	5162266102	Woodward WWTP - Expansion (CASH FLOWED)	0	0	1,500	0	1,750	0	1,750	0	291,374	0	296,374	0	2019	2028
			17,890	1,560	17,870	9,970	15,490	13,740	10,110	8,360	405,304	113,930	466,664	147,560		
Plant/Outstations Projects (WQI)																
City Wide	5161468422	Randle Reef Sediment Remediation (CASH FLOWED)	4,550	1,550	550	550	550	550	500	500	0	0	6,150	3,150	2014	2021
			4,550	1,550	550	550	550	550	500	500	0	0	6,150	3,150		
Plant/Outstations Projects (WINS)																
City Wide	5160866801	Woodward WWTP - Clean Harbour (CASH FLOWED)	152,212	3,266	64,531	0	89,194	18,484	97,160	42,046	3,378	2,981	406,475	66,777	2008	2021
City Wide	5160966910	Woodward WWTP - Biosolids Management Facility	10,220	630	250	190	28,030	0	2,770	2,240	19,390	15,680	60,660	18,740	2009	2051
City Wide	5161969075	City Environmental Lab Improvements Program	0	0	200	200	100	100	400	400	405	405	1,105	905	2019	Ongoing
			162,432	3,896	64,981	390	117,324	18,584	100,330	44,686	23,173	19,066	468,240	86,622		
Master Plan - Horizontal Assets																
1	5161596855	Royal to Main/King Sanitary Sewer Upgrades (WW-22) (CASH FLOWED)	18,040	0	6,840	0	0	0	0	0	0	0	24,880	0	2015	2018
5, 9	5161695747	Battlefield Trunk Sewer Twinning (WW-33) (CASH FLOWED)	1,650	0	10,500	0	10,500	0	0	0	0	0	22,650	0	2016	2019
11	5161696452	Airport Lands Dickenson Rd Trunk Sewer (WW-27, WW-26, WW-28) (CASH FLOWED)	2,750	0	1,650	0	6,800	0	20,300	0	51,900	0	83,400	0	2016	2018

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Master Plan - Horizontal Assets																
1	5161996954	Aberdeen at Hillside Neighbourhood Sewer Separation	0	0	450	450	0	0	2,230	2,230	990	990	3,670	3,670	2019	2024
			22,440	0	19,440	450	17,300	0	22,530	2,230	52,890	990	134,600	3,670		
Master Plan - Vertical Assets																
City Wide	5161555264	City-Wide Wastewater Master Plan	550	0	100	10	50	5	0	0	60	60	760	75	2015	2020
15	5161796786	First Street (Waterdown Sanitary) PS Upgrade DC014	3,450	1,345	1,480	577	0	0	0	0	0	0	4,930	1,922	2017	2019
City Wide	5161955010	Wastewater Systems Planning Program	0	0	600	600	300	300	300	300	1,830	1,830	3,030	3,030	2019	Ongoing
			4,000	1,345	2,180	1,187	350	305	300	300	1,890	1,890	8,720	5,027		
Development/Extension Projects																
2	4411506103	Pier 8 Sanitary PS & Forcemain	5,850	2,850	9,000	900	0	0	0	0	0	0	14,850	3,750	2015	2019
City Wide	5161996011	Intensification Infrastructure Upgrades Program - Wastewater	0	0	400	200	0	0	400	200	1,200	600	2,000	1,000	2019	Ongoing
9	5162080089	Rymal - Fletcher to Upper Centennial	0	0	0	0	5,330	0	0	0	0	0	5,330	0	2020	2020
6, 11	5162080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	830	0	0	0	0	0	830	0	2020	2020
11	5162280281	RHBP - Dartnall Road Extension - Twenty to Dickenson	0	0	0	0	0	0	0	0	400	0	400	0	2022	2022
			5,850	2,850	9,400	1,100	6,160	0	400	200	1,600	600	23,410	4,750		
Coordinated Projects																
City Wide	5161855777	LRT Corridor - Wastewater Infrastructure Assessment and Approvals	220	220	350	150	350	150	0	0	0	0	920	520	2018	2020
			220	220	350	150	350	150	0	0	0	0	920	520		
Equipment Replacement																
City Wide	5161966151	SCADA servers and network	0	0	1,500	0	1,000	1,000	0	0	0	0	2,500	1,000	2019	2019
			0	0	1,500	0	1,000	1,000	0	0	0	0	2,500	1,000		

**CITY OF HAMILTON
WASTEWATER SYSTEM
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Maintenance Projects																
5, 6	5161968920	Fennell/Greenhill Drop Shaft	0	0	180	180	550	550	390	390	16,650	16,650	17,770	17,770	2019	2026
4	5162068851	Pier 25 Dredging - Windermere Basin	170	170	0	0	0	0	0	0	13,500	13,500	13,670	13,670	2018	2021
4	5162161142	Eastern Sanitary Interceptor (ESI) at Battlefield Creek Trunk	0	0	0	0	0	0	290	290	0	0	290	290	2021	2021
			170	170	180	180	550	550	680	680	30,150	30,150	31,730	31,730		
Outstations-Wastewater Investment Needs (WINS)																
City Wide	5161667421	New Haulage Receiving Station	1,140	0	550	550	5,500	5,500	0	0	0	0	7,190	6,050	2016	2020
			1,140	0	550	550	5,500	5,500	0	0	0	0	7,190	6,050		
Total Wastewater System			222,487	14,501	149,831	42,837	185,344	61,049	160,420	82,326	759,717	410,486	1,477,799	611,199		

City of Hamilton
Storm Water Management
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources		
												From Operating	Debt	
Annual Projects														
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	240	-	-	-	-	-	240	-	-	-	-	-
	<i>Sub-Total Annual Projects</i>		240	-	-	-	-	-	240	-	-	-	-	-
Assessment Growth														
9	5181980960	RR56 and Swayze Road (Summit Park Phase 10 - 25T201309)	3,320	-	-	3,320	-	-	-	-	-	-	-	-
	<i>Sub-Total Assessment Growth</i>		3,320	-	-	3,320	-	-	-	-	-	-	-	-
Coordinated - Replacement Projects														
10	5181972290	Hewitson – Dupont to Barton and Dupont	520	-	-	-	-	-	520	-	-	-	-	-
1	5181972291	Haddon - Sterling to Marion	300	-	-	-	-	-	300	-	-	-	-	-
	<i>Sub-Total Coordinated - Replacement Projects</i>		820	-	-	-	-	-	820	-	-	-	-	-
Coordinated - Upgrade Projects														
13	5181572290	Baldwin / Court - West St. to Dundas St.	290	-	-	-	-	-	290	-	-	-	-	-
	<i>Sub-Total Coordinated - Upgrade Projects</i>		290	-	-	-	-	-	290	-	-	-	-	-
Development Projects														
11	5181880870	Lewis Rd Culvert - approximately 200m n/o Barton	200	-	-	200	-	-	-	-	-	-	-	-
15	5181880872	Flanders Drive Flooding	70	-	-	-	-	-	-	-	70	70	-	-
City Wide	5181980090	Storm Water Management Program	4,000	-	-	4,000	-	-	-	-	-	-	-	-
4	5181980961	Roxborough Storm Outlet	950	-	-	950	-	-	-	-	-	-	-	-
9	5181980980	SWMP - SM18 (Central Park)	3,630	-	-	3,630	-	-	-	-	-	-	-	-
15	5181980981	SWMP - W1 (Waterdown Bay Phase 2)	3,400	-	-	3,400	-	-	-	-	-	-	-	-
15	5181980983	SWMP - W3 (Waterdown Bay Phase 2)	4,000	-	-	4,000	-	-	-	-	-	-	-	-
15	5181980984	SWMP - W4 (Waterdown Bay Phase 2)	7,600	-	-	7,600	-	-	-	-	-	-	-	-
15	5181980985	SWMP - W5 (Waterdown Bay Phase 2)	3,860	-	-	3,860	-	-	-	-	-	-	-	-
	<i>Sub-Total Development Projects</i>		27,710	-	-	27,640	-	-	-	-	70	70	-	-
Maintenance Projects														
15	5181974950	Watercourse and Drainage Channel Maintenance	580	-	-	-	-	-	-	-	580	580	-	-
	5181974951	Shoreline Protection Program	350	-	-	-	-	-	-	-	350	350	-	-
	<i>Sub-Total Maintenance Projects</i>		930	-	-	-	-	-	-	-	930	930	-	-
Operations & Maintenance														
City Wide	5181917152	Cross Road Culvert Program	1,390	-	-	-	1,000	-	390	-	-	-	-	-

City of Hamilton
Storm Water Management
2019 Capital Budget Project List
(000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
City Wide	5181917458	Catch Basin Replacement/Rehabilitation Program	770	-	-	-	-	-	270	-	500	500	-
City Wide	5181960622	SWM Facility Maintenance Program	1,200	-	-	-	700	-	500	-	-	-	-
10, 11, 12, 13, 14, 15	5181960722	Municipal Drain Program	100	-	75	-	-	-	-	-	25	25	-
15	5181972940	Evans Road Culvert Twinning	170	-	-	-	-	-	-	-	170	170	-
<i>Sub-Total Operations & Maintenance</i>			3,630	-	75	-	1,700	-	1,160	-	695	695	-
Rehabilitation Project													
City Wide	5181960533	Trenchless Manhole Rehabilitation	80	-	-	-	-	-	80	-	-	-	-
<i>Sub-Total Rehabilitation Project</i>			80	-	-	-	-	-	80	-	-	-	-
Replacement Project													
5, 13	5181874841	Lower Davis Creek - Flood Control Facility	300	-	-	-	220	-	-	-	80	80	-
City Wide	5181917549	Concrete Box Culvert Rehabilitation/Repair (< 3.0m span)	580	-	-	-	-	-	580	-	-	-	-
City Wide	5181961740	Unscheduled Manhole and Sewermain Replacement Program	60	-	-	-	-	-	60	-	-	-	-
City Wide	5181972074	Contingency for Unscheduled Works Program	120	-	-	-	-	-	120	-	-	-	-
<i>Sub-Total Replacement Project</i>			1,060	-	-	-	220	-	760	-	80	80	-
SERG													
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG	60	-	-	-	-	-	-	-	60	60	-
11	5181872295	SERG - Winona Area Drainage Improvements	170	-	-	-	-	-	-	-	170	170	-
City Wide	5181955350	Climate Change Impact Assessment	550	-	-	-	-	-	-	-	550	550	-
City Wide	5181955421	Stormwater System Planning Program	480	-	-	-	-	-	-	-	480	480	-
	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	150	-	-	-	-	-	-	-	150	150	-
<i>Sub-Total SERG</i>			1,410	-	-	-	-	-	-	-	1,410	1,410	-
Technical Services Projects													
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan	100	-	-	80	-	-	-	-	20	20	-
City Wide	5181949555	QA-QC Service Contract Program	160	-	-	-	-	-	160	-	-	-	-
City Wide	5181955556	Mapping Update Program	40	-	-	-	-	-	40	-	-	-	-
City Wide	5181957545	Stormwater Computer Model	1,080	-	-	-	1,080	-	-	-	-	-	-
<i>Sub-Total Technical Services Projects</i>			1,380	-	-	80	1,080	-	200	-	20	20	-
Upgrade Projects													
City Wide	5181962073	Field Data Systems Program	110	-	-	-	-	-	110	-	-	-	-
<i>Sub-Total Upgrade Projects</i>			110	-	-	-	-	-	110	-	-	-	-

City of Hamilton
 Storm Water Management
 2019 Capital Budget Project List
 (000's)

City Ward	Project Number	Project Description	Gross Costs	Grants And Subsidies	Other External Revenue	Dev Charges (Inc Debt)	Reserves	WIP Reserves	WIP Other / Other Internal	WIP Debt	Net Cost	Financing Sources	
												From Operating	Debt
Vehicles-New													
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	50	-	-	-	-	-	50	-	-	-	-
<i>Sub-Total Vehicles-New</i>			50	-	-	-	-	-	50	-	-	-	-
Total All Projects			41,030	-	75	31,040	3,000	-	3,710	-	3,205	3,205	-

CITY OF HAMILTON
STORM WATER MANAGEMENT
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Rehabilitation, Replacement, & Upgrade Programs (SAM)																
City Wide	4031914405	Contaminated Soil & Rock Disposal Program	0	0	240	0	0	0	240	240	480	480	960	720	2019	Ongoing
City Wide	4031921960	Fleet Additions - Engineering Services - Construction	0	0	50	0	0	0	0	0	0	0	50	0	2019	2019
City Wide	4031955522	State of the Infrastructure - Asset Management	0	0	0	0	100	100	100	100	700	700	900	900	2019	Ongoing
City Wide	5181555422	City Wide GRIDS II Stormwater Master Plan	550	0	100	20	50	10	0	0	60	0	760	30	2015	2020
9, 11, 12, 15	5181562590	SWMP Retrofits	720	500	0	0	0	0	0	0	220	220	940	720	2015	2023
City Wide	5181767723	Pumping Stations	100	100	0	0	600	600	0	0	150	150	850	850	2017	2026
5, 13	5181874841	Lower Davis Creek - Flood Control Facility	250	250	300	80	0	0	0	0	0	0	550	330	2018	2019
City Wide	5181917152	Cross Road Culvert Program	0	0	1,390	0	1,400	1,400	1,410	1,410	10,150	10,150	14,350	12,960	2019	Ongoing
City Wide	5181917458	Catch Basin Replacement/Rehabilitation Program	0	0	770	500	500	500	500	500	3,500	3,500	5,270	5,000	2019	Ongoing
City Wide	5181917549	Concrete Box Culvert Rehabilitation/Repair (< 3.0m span)	0	0	580	0	550	550	550	550	3,850	3,850	5,530	4,950	2019	Ongoing
City Wide	5181949555	QA-QC Service Contract Program	0	0	160	0	150	150	150	150	1,050	1,050	1,510	1,350	2019	Ongoing
City Wide	5181955556	Mapping Update Program	0	0	40	0	0	0	40	40	120	120	200	160	2019	Ongoing
City Wide	5181957545	Stormwater Computer Model	0	0	1,080	0	1,080	1,080	0	0	3,280	3,280	5,440	4,360	2019	Ongoing
City Wide	5181960533	Trenchless Manhole Rehabilitation	0	0	80	0	80	80	80	80	560	560	800	720	2019	Ongoing
City Wide	5181960622	SWM Facility Maintenance Program	0	0	1,200	0	1,500	1,500	1,200	1,200	8,400	8,400	12,300	11,100	2019	Ongoing
10, 11, 12, 13, 14, 15	5181960722	Municipal Drain Program	0	0	100	25	100	25	100	25	700	175	1,000	250	2019	Ongoing
City Wide	5181961740	Unscheduled Manhole and Sewermain Replacement Program	0	0	60	0	50	50	50	50	350	350	510	450	2019	Ongoing
City Wide	5181962073	Field Data Systems Program	0	0	110	0	0	0	110	110	330	330	550	440	2019	Ongoing
City Wide	5181972074	Contingency for Unscheduled Works Program	0	0	120	0	0	0	200	200	600	600	920	800	2019	Ongoing
15	5181972940	Evans Road Culvert Twinning	0	0	170	170	490	490	0	0	0	0	660	660	2019	2020
15	5182017040	Highway 97 - Culvert Improvement Project	0	0	0	0	210	210	670	670	0	0	880	880	2020	2021
			1,620	850	6,550	795	6,860	6,745	5,400	5,325	34,500	33,915	54,930	47,630		

**CITY OF HAMILTON
STORM WATER MANAGEMENT
2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Projects Coordinated with Roads Program																
13	5181572290	Baldwin / Court - West St. to Dundas St.	20	0	290	0	0	0	0	0	0	0	310	0	2015	2019
10	5181972290	Hewitson – Dupont to Barton and Dupont	0	0	520	0	0	0	0	0	0	0	520	0	2019	2019
1	5181972291	Haddon - Sterling to Marion	0	0	300	0	0	0	0	0	0	0	300	0	2019	2019
13	5182072290	Highway 8 - Hillcrest to Park	0	0	0	0	580	580	0	0	0	0	580	580	2020	2020
13, 14	5182072290	Highway 8 - Woodley's Lane to Hillcrest	0	0	0	0	1,220	1,220	0	0	0	0	1,220	1,220	2020	2020
1	5182272290	Jones / Oxford / Tecumseh (Strathcona Neighbourhood)	0	0	0	0	0	0	0	0	140	140	140	140	2022	2022
3	5182672290	Industrial - Ottawa to Gage / Gage / Depew	0	0	0	0	0	0	0	0	440	440	440	440	2026	2026
3, 4	5182772290	Burlington & Industrial - Ottawa to Kenilworth	0	0	0	0	0	0	0	0	750	750	750	750	2027	2027
3	5182772290	Stipeley Neighbourhood (South) - Connaught / Balasm / Dunsmore	0	0	0	0	0	0	0	0	940	940	940	940	2027	2027
			20	0	1,110	0	1,800	1,800	0	0	2,270	2,270	5,200	4,070		
SERG Projects																
1	5181260214	SERG - Parkside and Kipling Flood Solutions (CASH FLOWED)	1,890	170	0	0	0	0	0	0	12,610	12,610	14,500	12,780	2012	2027
6	5181372295	SERG - Mount Albion Stormwater Management Facility Rehabilitation	670	0	0	0	0	0	0	0	330	330	1,000	330	2013	2022
13	5181823155	South St E and East St S in Dundas Drainage Improvement - SERG	60	60	60	60	110	110	0	0	220	220	450	450	2018	2020
11	5181872295	SERG - Winona Area Drainage Improvements	330	330	170	170	0	0	610	610	1,100	1,100	2,210	2,210	2018	2023
City Wide	5181955347	SERG - Watercourse Erosion Assessment	0	0	0	0	770	770	0	0	1,230	1,230	2,000	2,000	2019	2024
City Wide	5181955350	Climate Change Impact Assessment	0	0	550	550	0	0	0	0	0	0	550	550	2019	2020
City Wide	5181955421	Stormwater System Planning Program	0	0	480	480	380	380	380	380	2,660	2,660	3,900	3,900	2019	Ongoing
	5182155101	SERG - Stoney Creek & Battlefield Creek Flood and Erosion Control	0	0	150	150	200	200	0	0	0	0	350	350	2019	2020
City Wide	5182355075	SERG - Watershed Project Coordination and Stewardship Action Plans	0	0	0	0	0	0	0	0	2,000	2,000	2,000	2,000	2023	Ongoing

**CITY OF HAMILTON
 STORM WATER MANAGEMENT
 2019 - 2028 CAPITAL BUDGET LIST (000's)**

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
SERG Projects																
3	5182472295	Main - Prospect to Gage - SERG B-3	110	110	0	0	0	0	0	0	1,760	1,760	1,870	1,870	2024	2024
			3,060	670	1,410	1,410	1,460	1,460	990	990	21,910	21,910	28,830	26,440		
Development/Extension Projects																
11	5181880870	Lewis Rd Culvert - approximately 200m n/o Barton	460	0	200	0	0	0	0	0	0	0	660	0	2018	2019
15	5181880872	Flanders Drive Flooding	200	200	70	70	0	0	0	0	0	0	270	270	2018	2019
City Wide	5181980090	Storm Water Management Program	0	0	4,000	0	4,000	0	4,000	0	28,000	0	40,000	0	2019	Ongoing
4	5181980961	Roxborough Storm Outlet	0	0	950	0	0	0	0	0	0	0	950	0	2019	2019
9	5181980980	SWMP - SM18 (Central Park)	0	0	3,630	0	0	0	0	0	0	0	3,630	0	2019	2019
15	5181980981	SWMP - W1 (Waterdown Bay Phase 2)	0	0	3,400	0	0	0	0	0	0	0	3,400	0	2019	2019
15	5181980983	SWMP - W3 (Waterdown Bay Phase 2)	0	0	4,000	0	0	0	0	0	0	0	4,000	0	2019	2019
15	5181980984	SWMP - W4 (Waterdown Bay Phase 2)	0	0	7,600	0	0	0	0	0	0	0	7,600	0	2019	2019
15	5181980985	SWMP - W5 (Waterdown Bay Phase 2)	0	0	3,860	0	0	0	0	0	0	0	3,860	0	2019	2019
15	5182080082	SWMP - W19 (Parkside Hills Phase 2)	0	0	0	0	3,740	0	0	0	0	0	3,740	0	2020	2020
9	5182080086	SWMP - SM2 (Red Hill Phase 3/4)	0	0	0	0	4,120	0	0	0	0	0	4,120	0	2020	2020
11	5182080087	SWMP - B-10 (Mountaingate Subdivision)	0	0	0	0	9,960	0	0	0	0	0	9,960	0	2020	2020
9	5182080089	Rymal - Fletcher to Upper Centennial	0	0	0	0	1,100	0	0	0	0	0	1,100	0	2020	2020
6, 11	5182080584	RHBP - Nebo - Rymal to Twenty	0	0	0	0	2,000	0	0	0	0	0	2,000	0	2020	2020
			660	200	27,710	70	24,920	0	4,000	0	28,000	0	85,290	270		
Assessment Growth																
9	5181980960	RR56 and Swayze Road (Summit Park Phase 10 - 25T201309)	0	0	3,320	0	0	0	0	0	0	0	3,320	0	2019	2019
			0	0	3,320	0	0	0	0	0	0	0	3,320	0		
Maintenance Projects																

CITY OF HAMILTON
STORM WATER MANAGEMENT
2019 - 2028 CAPITAL BUDGET LIST (000's)

Ward (s)	Project Number	Project Description	Pre 2019		2019		2020		2021		2022-2028		Project Total		Start Year	End Year
			Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net		
Maintenance Projects																
15	5181974950	Watercourse and Drainage Channel Maintenance	0	0	580	580	460	460	460	460	4,420	4,420	5,920	5,920	2019	Ongoing
	5181974951	Shoreline Protection Program	0	0	350	350	400	400	750	750	2,810	2,810	4,310	4,310	2019	Ongoing
			0	0	930	930	860	860	1,210	1,210	7,230	7,230	10,230	10,230		
		Total Storm Water Management	5,360	1,720	41,030	3,205	35,900	10,865	11,600	7,525	93,910	65,325	187,800	88,640		



**2019 RECOMMENDED WATER,
WASTEWATER AND STORMWATER RATE
SUPPORTED BUDGET**

December 6, 2018

2019 RATE BUDGET



Performance Metrics / Statistics

2018 Highlights

Clean Harbour / Biosolids P3 Project

2018 Opportunities & Challenges

Future Outlook

State of the Infrastructure

2019 Operating Budget

1 WATER TREATMENT PLANT



80,550 ML TREATED
WHICH IS EQUAL TO 29% OF HAMILTON HARBOUR



DAY-TO-DAY
OPERATIONS AND
MAINTENANCE OF
13,137
FIRE HYDRANTS

SUPPORTING



7 AGENCIES
WITH
RESEARCH

21 WATER PUMPING STATIONS



4 WELL SYSTEMS
CARLISLE
FREELTON
GREENSVILLE
LYNDEN



13
RESERVOIRS



7
WATER TOWERS

6 ACTIVE
CONSTRUCTION
PROJECTS

151,290
WATER METERS



**REACHED
26,000**
YOUTH WITH
OUTREACH
ACTIVITIES



11,000
TESTS ON
WATER
TREATMENT
PLANT SAMPLES



440,000
PRINT PIECES

INCLUDING **4**
SUBSTANTIALLY
COMPLETED
PROJECTS

2,075 km
OF WATERMAINS

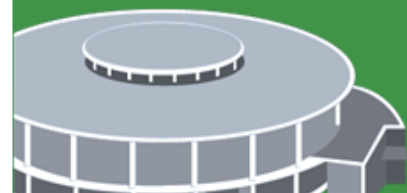
262
WATERMAIN
REPAIRS

17,000
TESTS ON
WATER
DISTRIBUTION
SAMPLES

17 WATER
MODELLING
EXERCISES
EXPECTED TO
BE COMPLETED

2 WASTEWATER TREATMENT PLANTS

118,110 ML TREATED
WHICH IS EQUAL TO 42% OF HAMILTON HARBOUR

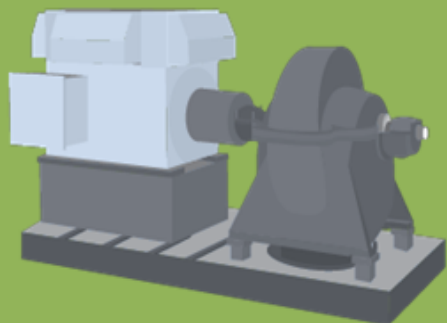


9,615 BACKWATER VALVES INSTALLED SINCE THE INCEPTION OF THE PROGRAM

ADDITIONAL SERVICES REVENUE \$10,025,000 (69 ACTIVE PERMITS)



70 PUMPING STATIONS



9 COMBINED SEWER OVERFLOW TANKS



6,600 MWH ELECTRICITY PRODUCED ENOUGH TO POWER 740 HOMES PER YEAR

MEGA WATT HOURS



6 ACTIVE CONSTRUCTION PROJECTS

1,165 km SANITARY SEWER

37,730 TONNES OF BIOSOLIDS REMOVED



ESTIMATED BIOGAS PRODUCTION 927,500 m³

INCLUDING 4 SUBSTANTIALLY COMPLETED PROJECTS

1,175 km STORM SEWER

575 km COMBINED SEWER

44,559 MANHOLES

44,000 TESTS ON WASTEWATER SAMPLES

730 DEVELOPMENT APPLICATION REVIEWS



14,100 TESTS ON ENVIRONMENTAL SAMPLES

8

SEWER MODELLING EXERCISES EXPECTED TO BE COMPLETED



2018 SYSTEM PERFORMANCE

Woodward WWTP

- ❖ 113,550 ML wastewater treatment (forecast)
 - 76% capacity utilization
- ❖ 18 months continuous compliance with wastewater effluent limits
- ❖ 37,730 tonnes biosolids removed (forecast)
- ❖ 6,600 MWH of electricity generated by cogeneration facility (740 homes powered / year)
- ❖ 927,500 m³ of renewable natural gas generated by the Bio-gas purification unit
- ❖ 14 Plant By-Passes during wet weather events
- ❖ 7 Odour complaints

Dundas WWTP

- ❖ 4,560 ML wastewater treatment (forecast)
- ❖ 45 months continuous compliance with wastewater effluent limits

COMPLIANCE



Water Treatment Plant

- ❖ 80,550 ML water treatment (forecast) (on par with 5 year average)
- ❖ 2 Confirmed Adverse Water Quality Incidents (AWQI's)
- ❖ YTD Global Adjustment - \$3.5M cost avoidance

2018 HIGHLIGHTS

OUR PRIORITIES



COMMUNITY ENGAGEMENT & PARTICIPATION

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.



ECONOMIC PROSPERITY & GROWTH

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.



HEALTHY & SAFE COMMUNITIES

Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.



CLEAN & GREEN

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.



BUILT ENVIRONMENT & INFRASTRUCTURE

Hamilton is supported by state of the art infrastructure, transportation options, buildings and public spaces that create a dynamic City.



CULTURE & DIVERSITY

Hamilton is a thriving, vibrant place for arts, culture, and heritage where diversity and inclusivity are embraced and celebrated.



OUR PEOPLE & PERFORMANCE

Hamiltonians have a high level of trust and confidence in their City government.

2018 HIGHLIGHTS



Clean and Green

- ❖ Drinking Water License renewal application, Financial Plan, DWQMS re-Accreditation
- ❖ Carlisle Conservation Committee – installation of automated meter infrastructure (AMI)
- ❖ Low Impact Development (LID) Rain Garden – Simcoe Street



Healthy and Safe Communities

- ❖ Events
 - 11th Children’s Water Festival
 - 1st World Toilet Day
- ❖ Water and Wastewater Master Plan (2031 growth data)



2018 HIGHLIGHTS



Our People & Performance

❖ Recruitment and Team Structure

- Senior Leadership transition
- Minor restructuring within Sections

❖ Our People Survey – 84.4% participation & Action Plans created



Built Environment and Infrastructure

❖ CWWF and Capital Projects:

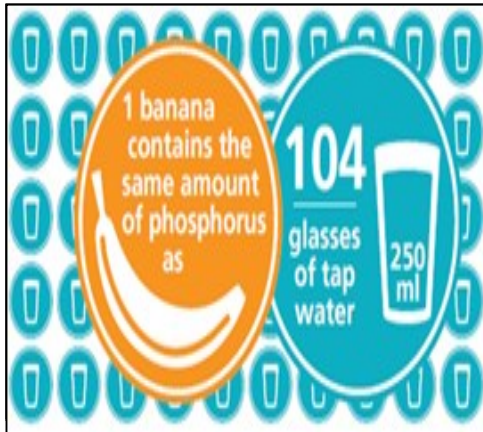
- Methane Sphere, CCP Building, Linear projects
- Binbrook SPS Upgrades and forcemain cleaning

❖ Inspections and Lining Program

- Smart Ball inspection for Woodward/Kenilworth transmission watermain (6km)
- 65 km watermain relined (since 2002)
- 380 km sewermain relined (since 2001)



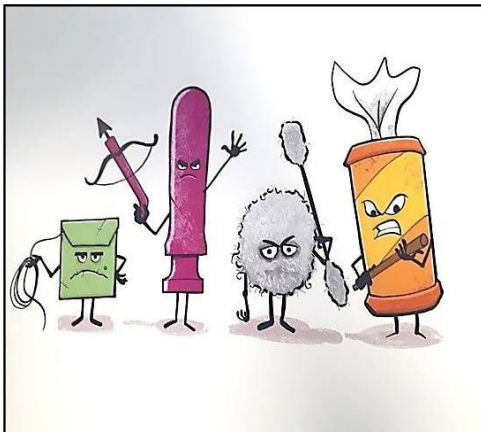
2018 HIGHLIGHTS



Corrosion Control Program

- ❖ System wide approach to control lead at the tap
- ❖ Extensive outreach and education campaign for residents and businesses
- ❖ Orthophosphate addition started in November 2018
- ❖ Post implementation monitoring and reporting ongoing

#OwnYourThrone Campaign



- ❖ Educational campaign focused on flushable and non-flushable items and the impact they have on the sewer system and the environment
- ❖ Message Delivery – billboards, bus benches, recreation facilities, social media, videos
- ❖ Audience: Hamilton residents, disposable wipes consumers, early years and childcare centres, nursing and long-term care homes and hospitals

2018 HIGHLIGHTS



Healthy and Safe Communities

❖ Protective Plumbing Program (Backwater Valves)

- Rostered contractor model continues to be a success
- 9,615 valves installed since 2009 for a total of approximately \$22.9M

❖ Sewer Lateral Management Program

- Upgrade of aged residential sewer service lines
- New rostered contractor model in 2018
- 762 inspections completed YTD, spot repairs, replacement or lining
- Approximately \$3M spent in 2018



❖ Poor Pressure Program (Lead Service Line Replacements)

- 667 services replaced YTD, 1424 size & type inspections
- Approximately \$2.2M spent in 2018

❖ Lead Filters

- Available to residents replacing their lead service lines
- 628 filters/kits distributed YTD



CLEAN HARBOUR PROGRAM



CLEAN HARBOUR PROGRAM

For more information, visit our website at

- ❖ www.hamilton.ca/cleanharbour
- ❖ www.hamilton.ca/city-initiatives/our-harbour/current-projects

RANDLE REEF



- ❖ 3 Phase project
- ❖ All containment walls have been installed (Phase 1)
- ❖ Next Steps:
 - Dredging
 - Capping
 - Landscaping
- ❖ To be complete in 2022
- ❖ Total project cost ~ \$139 M



WOODWARD UPGRADE PROJECT

Contract 1 Main Pump Station



Status: Construction
Contract Value: \$87.6M
Completion: Q2 2021

Contract 2 Electrical & Chlorine System



Status: Construction
Contract Value: \$61M
Completion: Q2 2021

Contract 3 Tertiary Treatment Upgrade



Status: Tendering
Contract Value: \$150M (Estimate)
Completion: Q4 2021

65,000 kg/yr	\$6,000,000 Average Payment Certificate	11 Trucks/Hr at Peak	250 Labourers at Peak

WOODWARD UPGRADE PROJECT

Woodward Upgrades Project Newsletter

A part of the Clean Harbour Program

November 2018



2092m³ of concrete
1.3-1.4 metres thick



240 truckloads of concrete

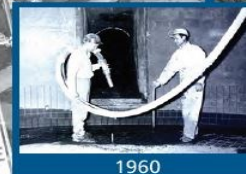


3 AM 5 PM
14 hour continuous pour

On September 27th, 2018 the WUP team achieved a major milestone in the construction of the Main Wastewater Pumping Station with the pouring of the concrete base slab. Utilizing 2,092m³ of concrete, Maple Ball Joint Venture, Lafarge, and Reimar Construction placed the base slab in a single continuous pour event. The reason for a single continuous pour was to reduce impacts to plant operations, reduce owner and consultant inspection requirements, and eliminate the need for construction joints in the base slab.



2018
90 Personnel



1960



P3 BIOSOLIDS PROJECT

- ❖ PPP Canada Financial Agreement with Infrastructure Canada
- ❖ Completed demolition of old incinerator building
- ❖ Air/Noise & Sewage ECA approved
- ❖ Building construction initiated

Status: Construction

Contract Value: \$106.5M NPV

Completion: Q1 2020



2018 OPPORTUNITIES AND CHALLENGES

2018 TRENDS AND ISSUES



Regulatory Challenges

- ❖ Lack of a Quality Management System for wastewater
- ❖ Watermain Disinfection Procedure – increased costs



Our People & Performance

- ❖ Recruitment (Drinking Water ORO, Engineering SPM/PMs)
- ❖ Increased staff workload
 - Operational support for WUP
 - 16 Clean Water/Wastewater Fund Projects
 - Development Applications



Built Environment and Infrastructure

- ❖ Delay in Capital rehabilitation is leading to increased operating costs
- ❖ Development pressures (Binbrook, Waterdown, Airport)

2019-2022 TRENDS AND ISSUES



Clean and Green

- ❖ Above industry standard non-revenue water ratio
- ❖ Lack of dedicated stormwater funding stream
- ❖ Low Impact Development governance (public / private and enforcement)

Healthy and Safe Communities

- ❖ Drinking water regulatory changes (i.e. lead limits)
- ❖ Climate Change – rainfall, elevated lake levels, frozen services

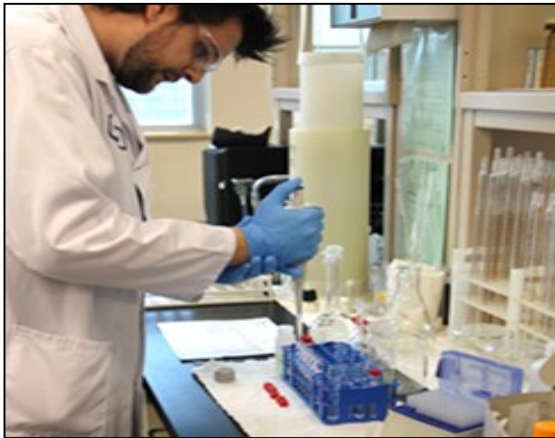
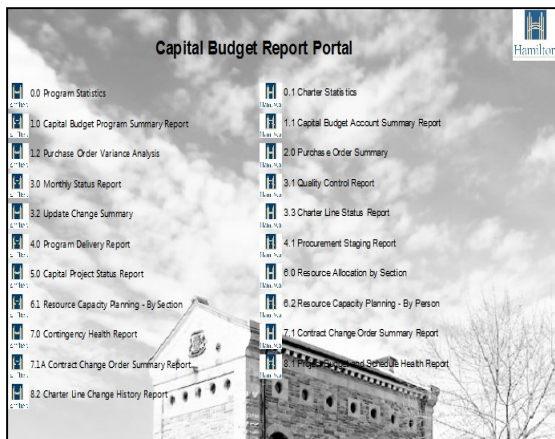
Built Infrastructure & Environment

- ❖ State of the Infrastructure
- ❖ Dundas WWTP Upgrades – funding strategy
- ❖ Light Rail Transit Project



FUTURE OUTLOOK

2019 MAJOR INITIATIVES



Organizational

- ❖ By-law updates
 - Backflow Prevention Bylaw
 - Sewer Use By-Law
 - Waterworks By-Law
- ❖ Stormwater rate review
- ❖ Dundas WWTP 100 Year Anniversary Event
- ❖ Project Management Office – reporting module

Operations

- ❖ Online backflow prevention test submissions
- ❖ Presence/Absence (Colilert) bacteria analysis test
- ❖ Consolidation of inventory and fleet management

Planning & Capital Program

- ❖ Flooding and Drainage Master Servicing study
- ❖ Capital Projects
 - Eastport PS, Lynden, Binbrook SPS

2020 to 2022 MAJOR INITIATIVES



Operations

- ❖ Expansion of Automated Metering to Industrial and Commercial sector
- ❖ Dead-end watermain flushing
- ❖ Review forcemain network and develop cleaning program
- ❖ Facility Plan for Woodward (WWTP)

Planning & Capital Program

- ❖ Woodward Upgrade Project - operational
- ❖ Biosolids P3 Project - operational
- ❖ Woodward Water Treatment Plant upgrade
- ❖ Dundas Wastewater Treatment Plant upgrade
- ❖ Water and Wastewater Master Servicing Plans



CONTINUOUS IMPROVEMENT HIGHLIGHTS

Customer Oriented

❖ Water Bulk Fill Station Upgrade

- Terminal upgrades
- Improved Customer Service
- Online procurement



❖ Sewer Lateral Management Program

- Program model after Protective Plumbing Program
- Quotes replaced with pre-qualified contractors
- Improved Customer Service



Process Oriented

❖ Sinkhole, Pothole & Road Cut Investigation Standard Protocol

- Clearly defined workflows and process for call centre
- Improved Customer Service

❖ Construction Cost Estimation Guidance Document

- Developed guidance document to provide consistency
- Resulted in smaller deviations between conceptual and detailed design estimates

CONTINUOUS IMPROVEMENT HIGHLIGHTS

Process Oriented / Financial Savings

❖ Anti-Stag Valve Project

- Existing level valves between districts historically fully open
- 37 anti-stag valves installed to control flows within pressure districts 4/8
- Flow reduced from 24/7 to less than 30 minutes per day
- Implementation in additional areas is planned for 2019
- Collaboration with the Office of Energy Initiatives



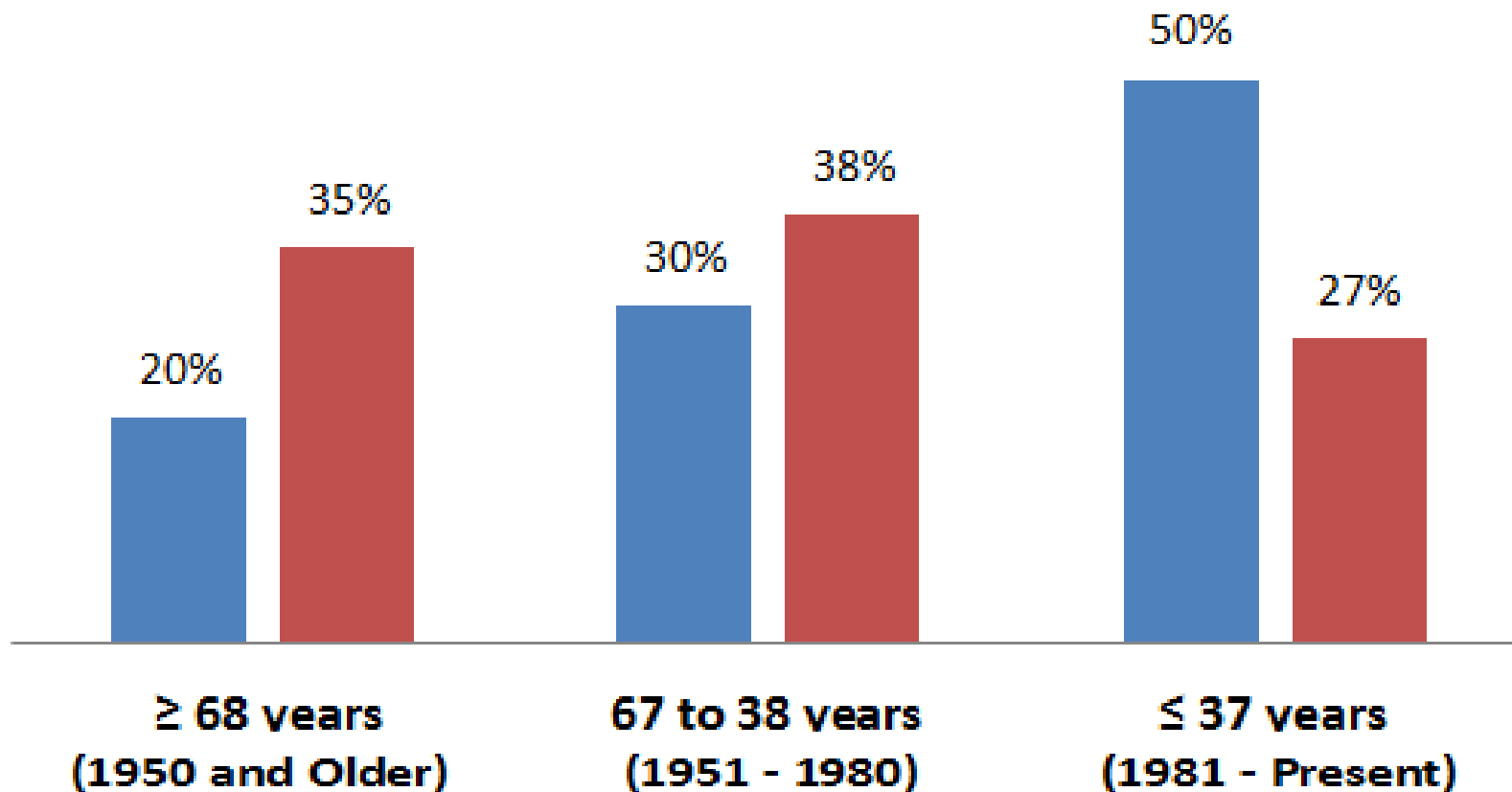
\$90,000 Capital Investment

\$225,000 Annual Energy Savings

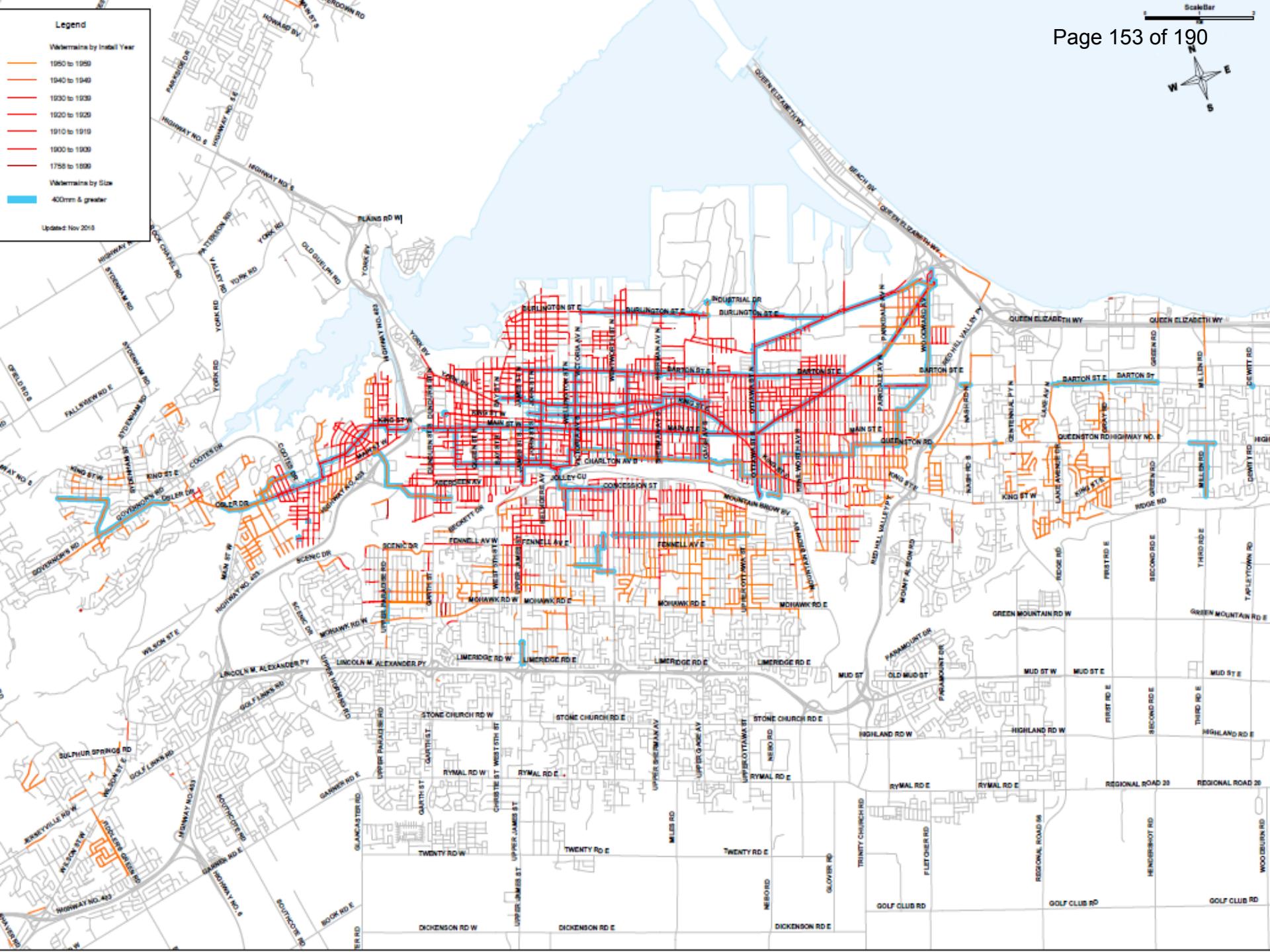
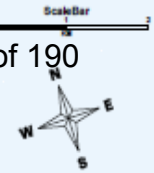
STATE OF THE INFRASTRUCTURE

WATERMAIN AGE PROFILE

■ Local Watermain (% of assets) ■ Transmission Watermain (% of assets)



9% of the Distribution Network is Transmission Watermain (450mm and larger)



Legend

Watermains by Install Year

- 1950 to 1959
- 1940 to 1949
- 1930 to 1939
- 1920 to 1929
- 1910 to 1919
- 1900 to 1909
- 1758 to 1899

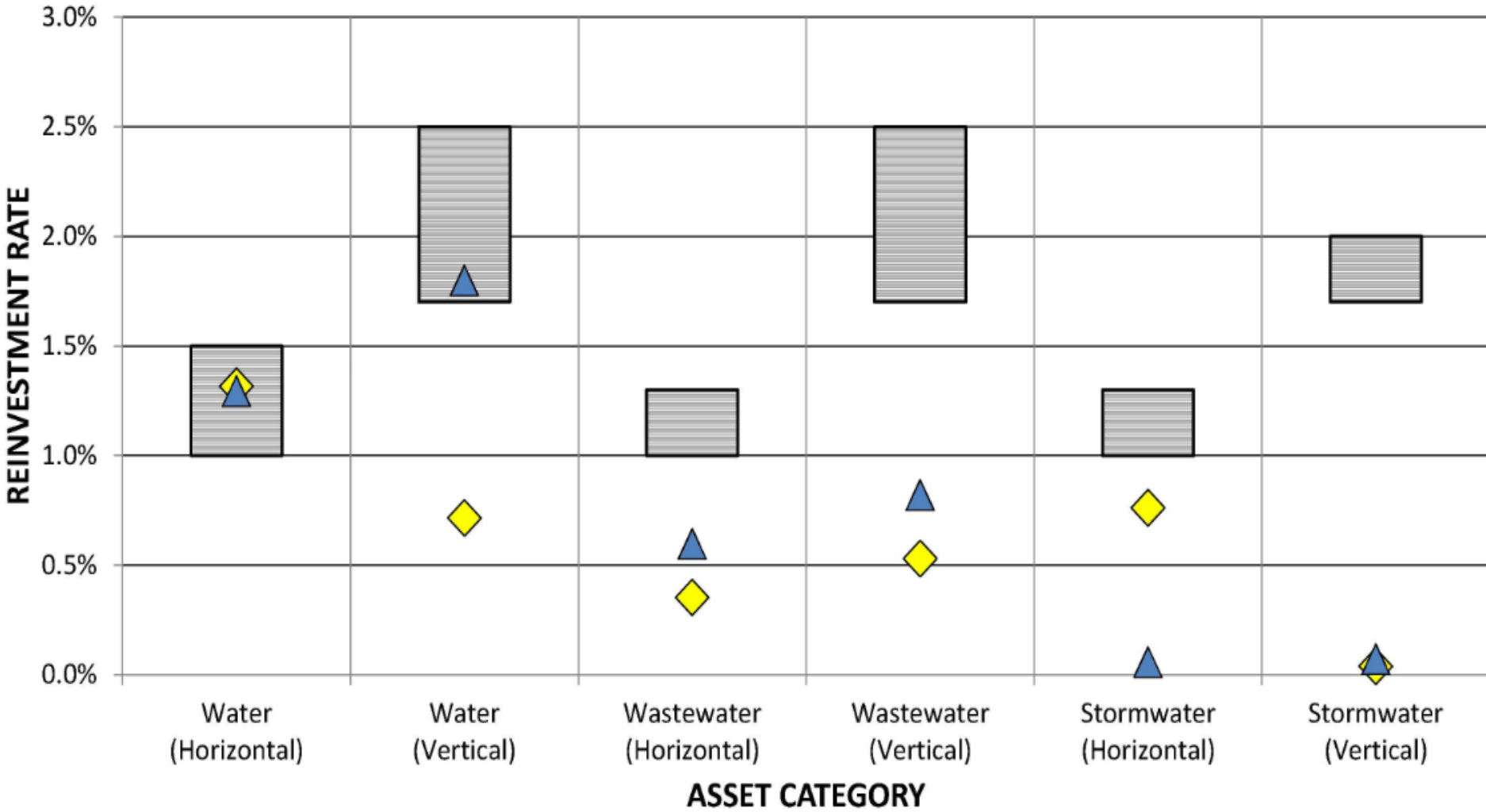
Watermains by Size

- 420mm & greater

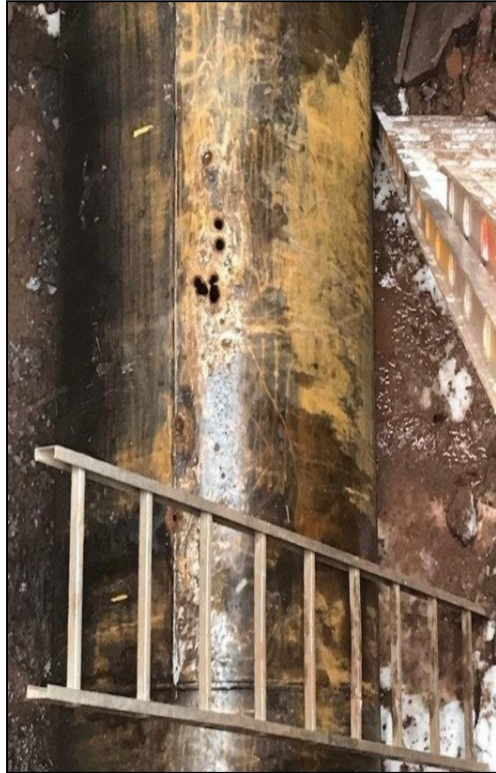
Updated Nov 2013

INFRASTRUCTURE REINVESTMENT RATE COMPARISON

Municipalities Target Range (CIRC)
 Average Past Reinvestment Rate (with Grants)
 Average Future Reinvestment Rate (with Grants)



MAJOR WATER DISTRIBUTION EVENTS



**Kenilworth Reservoir Break
\$ 74,698**



**May 31, 2018 – Upper Ottawa Corridor
6 Watermain Breaks - \$201,000**



**Upper Paradise Rd & Rymal Rd W
\$169,948**



**Delbrook Crt & Stroud Rd
\$ 150,000 (estimate)**

MAJOR WATER DISTRIBUTION EVENTS



Highway 403 & Southcote Rd



Grace & Dunn Ave



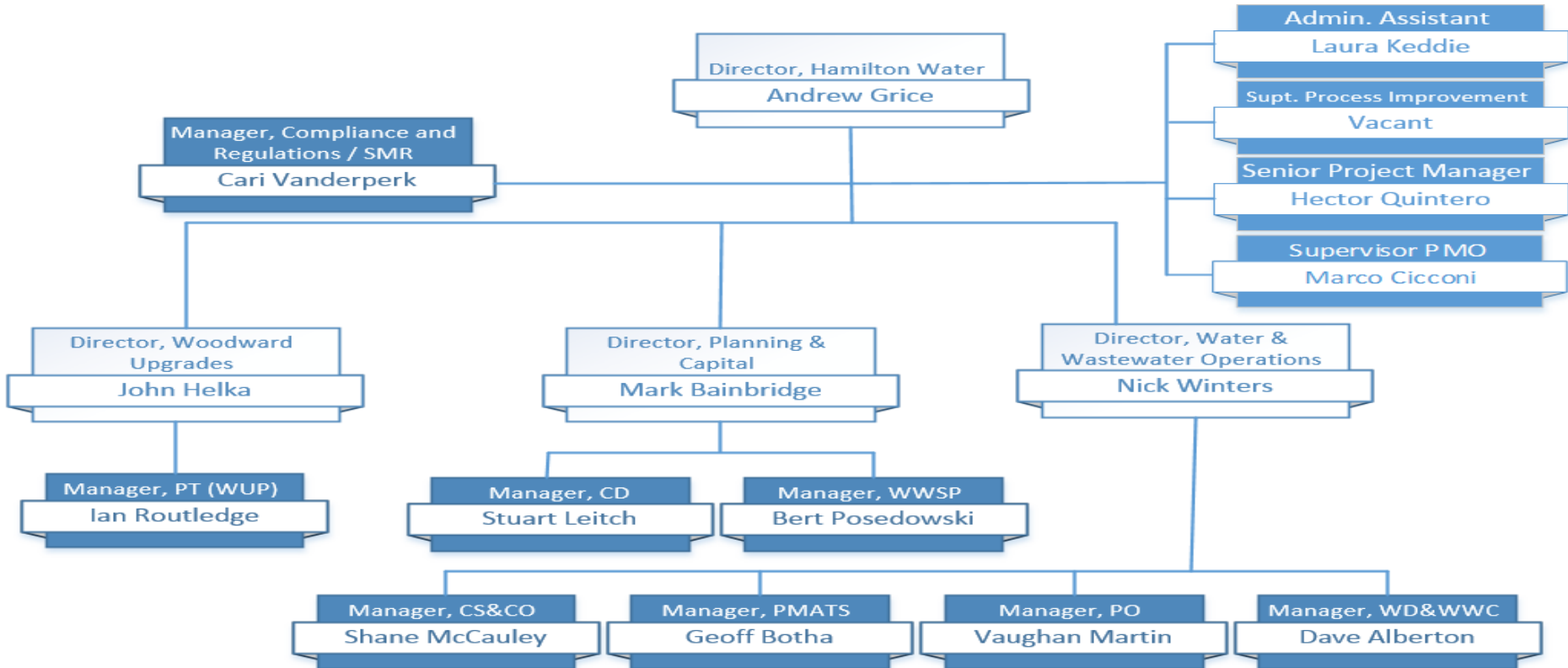
Clappison Ave and Dundas St E \$55,115



Mohawk Rd W & Southlea Dr

2019 OPERATING BUDGET

Hamilton Water

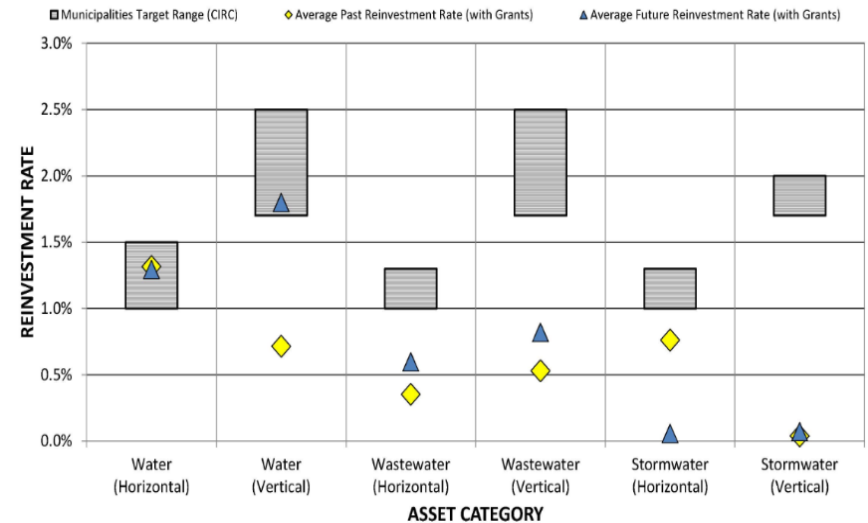


Complement (FTE)	Management	Other	Total	Staff to Mgt Ratio
2017	12	290.25	302.25	25.19
2018	12	288.65	300.65	25.05
2019 (Proposed)	12	295.65	307.65	24.64
Change	0	7	7	

2019 BUDGET DRIVERS

Item	Cost (\$)
Hydro	(1.13 M)
Protective Plumbing Program	(750 K)
Locates Contract	1.4 M
Operational Studies – Water Distribution	650 K
Employee Related Expenditures	400 K
Water Loss Program	300 K
Water Distribution Repair Parts	250 K
Corporate Security	250 K
HVAC	235 K

Proposed combined 4.66% Rate Increase is driven largely by increased capital expenditures.



OPERATING IMPACTS FROM GROWTH



- ❖ Woodward Upgrade Project
- ❖ Waterdown Tower
- ❖ Corrosion Control Program
- ❖ Centennial Storm Water station
- ❖ Eastport Wastehauler Station
- ❖ General growth of the system
 - Hydrants
 - Valves
 - Sewers
 - Watermains
 - Electricity Costs
 - Chemical Costs

2019 RESOURCE REQUEST

SECTION		Last Years 2019 Request	2019 Request	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast
WUP Office		0	0	0	0	0	0
WUP Operations		1	1	7	0	0	0
DIR Office		0	0	0	0	0	0
C&R		1	1* ^{TEMP}	0	1	0	0
PMO		0	0	1	0	0	0
P&C	CD	0	3	0	0	0	0
	WWSP	0	0	0	2	0	0
Operations	PMATS	0	0	1	2	0	0
	PO	0	0	0	0	1	0
	CS&CO	1	0	0	0	0	0
	WDWWC	2	2	1	0	2	0
TOTALS		5	6/ 1* ^{TEMP}	10	5	3	0
				25			

2019 RESOURCE REQUEST

(3) Project Managers, *Capital Delivery*

- ❖ Lead the delivery of capital projects to support growth (i.e. Airport)
- ❖ Ensure timely execution of Clean Water/Wastewater Fund projects

(1) Temporary WWQMS Technologist, *Compliance & Regulations*

- ❖ Development of Wastewater Quality Management System
- ❖ Proactive approach planning for Ministry changes to regulatory framework

(1) Maintenance Operator, *Plant Maintenance & Technical Services*

- ❖ Woodward Upgrades Project operational support
- ❖ Work with contractors to isolate treatment processes during construction

(2) Project Managers, *Water Distribution & Wastewater Collections*

- ❖ To support the Sewer Lateral Cross Connection Program
- ❖ Coordinates and assists with wastewater maintenance capital projects

WOODWARD UPGRADES PROJECT

PAST RESOURCE REQUESTS

Original 2016 WUP Request

- 2 FTE in 2018
- 9 FTE in 2020



Total Request: 11 FTEs

- 1 SCADA Technologist
- 1 Data Clerk
- 5 Maintenance Operators
- 2 Millwrights
- 2 Instrumentation Technicians

2017 WUP Request

Advanced FTE requests as temporary positions to assist in the delivery of the project

- 4 FTE in 2017
- 3 FTE in 2018
- 4 FTE in 2020



Total Request: 11 FTEs

- 1 SCADA Technologist
- 1 Process Supervisor
- 1 Process Technologist
- 1 Maintenance Operator

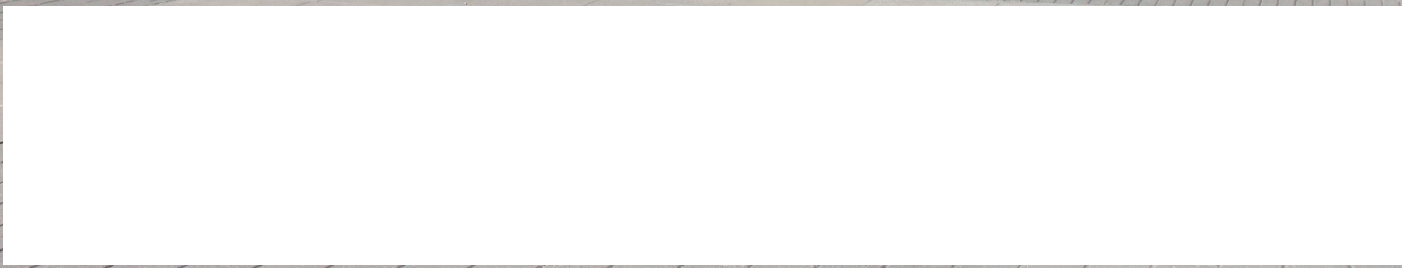
3 FTE approved during 2017 budget

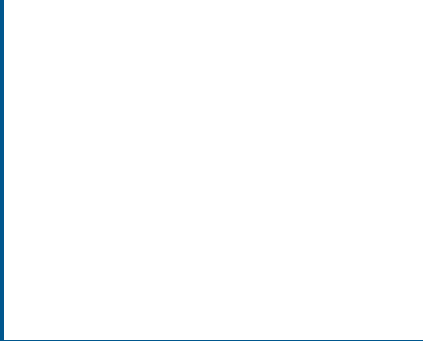
2019 WUP Request

- 1 FTE in 2019
- 7 FTE in 2020



Total Request: 8 FTEs (+ 3 FTEs Approved in 2017 = 11 FTEs)





2019 Water, Wastewater and Stormwater Budget

2019 RATE BUDGET

Snap Shot

Operating

- **\$222.3 M** Total Program Expenditures
- **\$219.3 M** Rate Revenue
- **\$3 M** Non-Rate Revenue

Capital

- **\$273.1 M** Rate Capital Program
 - 55% Wastewater
 - 30% Water
 - 15% Storm
- **\$2.34 B** capital investment forecast (2019 to 2028)
- **\$0.42 B** increase from last year's 10-year forecast

2019 RATE BUDGET

2019 RATE BUDGET - What your dollars buy you



40_{km}
SEWERMAIN INSPECTION

15.7_{km}
SEWERMAIN LINING



9,400
WATER VALVE
INSPECTIONS



13,300
HYDRANT INSPECTIONS

2,500
HYDRANTS TO BE PAINTED



30
ANTI-STAGNATION
VALVE
INSTALLATIONS



2,900
PREVENTATIVE
MAINTENANCE
WORK ORDERS
WATER/WASTEWATER
VERTICAL SYSTEMS



2
HYDRANT
TRUCK
UPGRADES




900 SEWER LATERAL INSPECTIONS
500 SEWER LATERAL LININGS

1,000,000_{m³}



BIOGAS RESOURCE RECOVERY



8.3_{km}
WATERMAIN INSPECTION

9.8_{km}
WATERMAIN LINING



8 SUBSTANTIALLY
COMPLETED
WATER /
WASTEWATER
STATION PROJECTS



1,100
INLET/OUTFALL
INSPECTIONS

LEAK
DETECTION /
DISTRICT
METERING



2019 RATE OPERATING BUDGET (000's)

By the Numbers

Summary of the 2019 Operating Budget				
(\$ millions)	2018 Restated Budget	2019 Requested Budget	2019 Requested / 2018 Restated Change	
			\$	%
<u>Expenditures</u>				
Program Expenditures	\$ 93.3	\$ 95.7	\$ 2.4	2.6%
Capital/Debt / Reserve Financing	\$ 117.6	\$ 126.6	\$ 9.0	7.6%
Total Expenditures	\$ 210.9	\$ 222.3	\$ 11.4	5.4%
<u>Revenues</u>				
Rate Revenue	\$ 207.8	\$ 219.3	\$ 11.5	5.5%
Non-Rate Revenue	\$ 3.1	\$ 3.0	(\$ 0.1)	(0.3%)
Total Revenue	\$ 210.9	\$ 222.3	\$ 11.4	5.4%
Average Residential Water / Wastewater / Storm Bill	\$ 690.70	\$ 722.90	\$ 32.20	4.66%

2019 CAPITAL BUDGET

The Source of Funding

\$43.6 M Revenues, Grants & Subsidies +
\$70.4 M Development Charges +
\$97.8 M from operating +
\$26.0 M Reserves +
\$21.0 M Work-in-progress (WIP) +
\$14.3 M Debt +

= \$273.1 M Gross Capital Expenditure

2019 METERED ACCOUNTS & REVENUE BY SECTOR

Where the \$ comes from

Metered Accounts by Sector



RESIDENTIAL

93%



ICI

7%

Revenue by Sector



RESIDENTIAL

48%



ICI &

Multi Residential

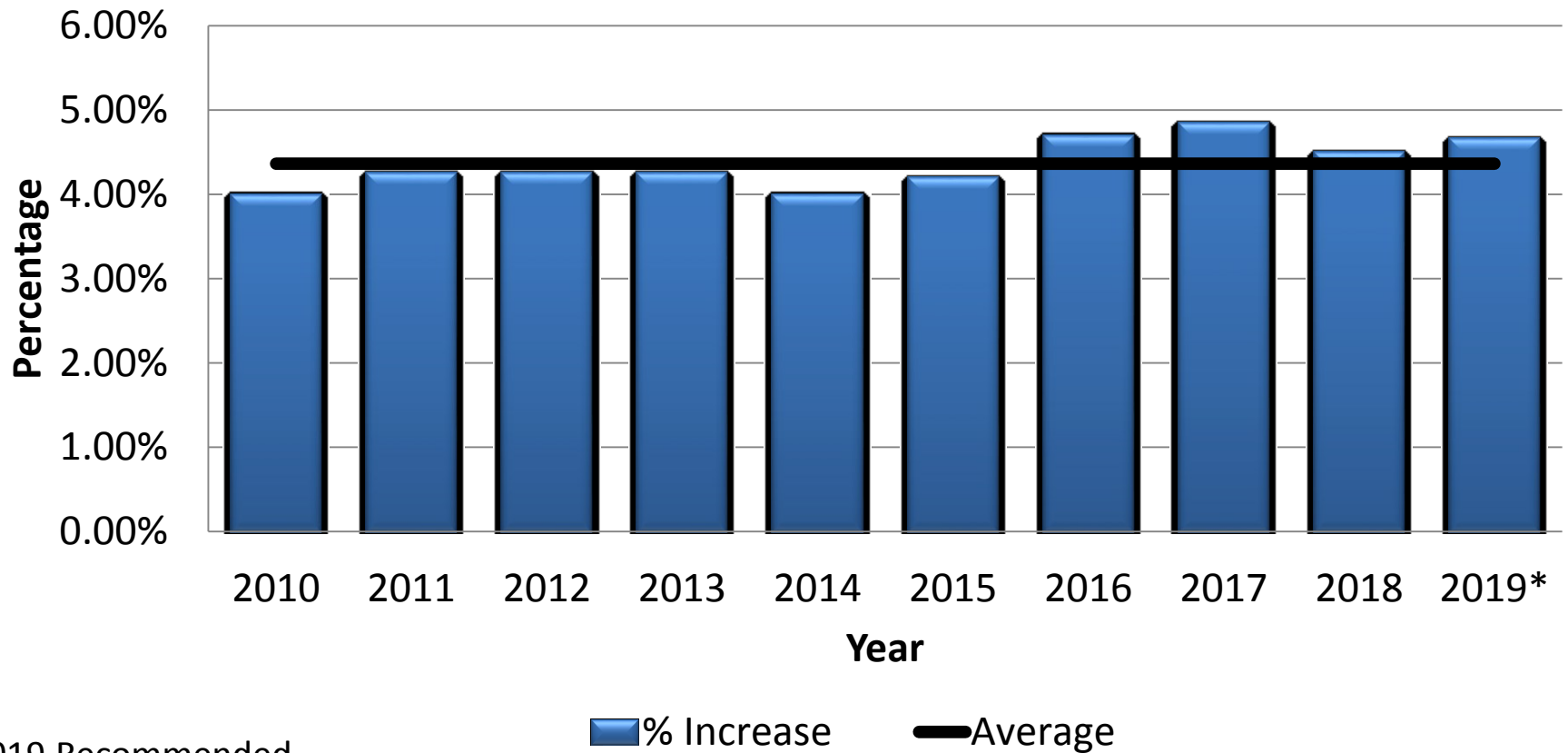
52%

RATE INFORMATION AT A GLANCE

10 Year Rate Increase Trend

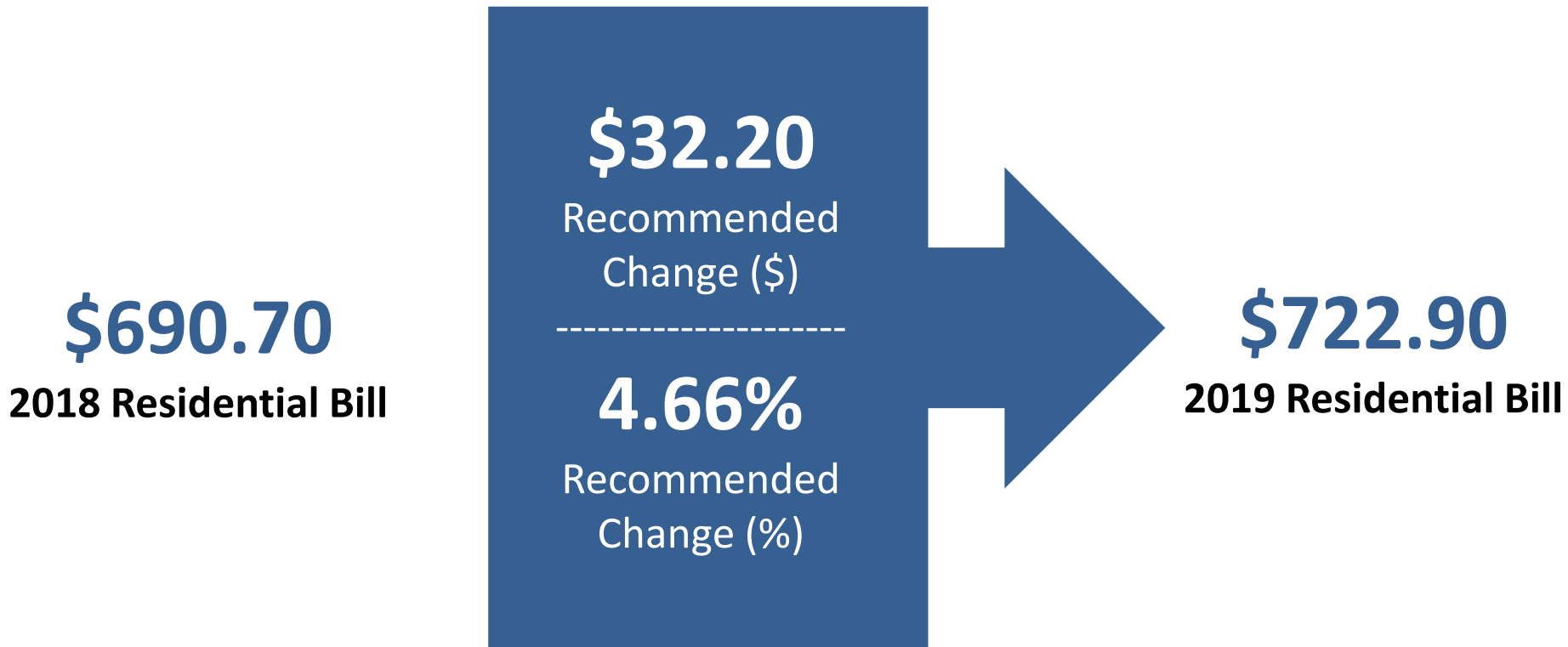
By the numbers

Annual Rate Increases



*2019 Recommended

2019 RESIDENTIAL AVERAGE BILL



Impact of Recommended 2019 Water and Wastewater/Storm Rate Increases on a Typical Residential Bill: 4.66%

Based on annual water consumption of 200m³

CONSUMPTION TRENDS AT A GLANCE

4 YEAR WATER CONSUMPTION FORECAST (M³)



2019 → 2022
CONSISTENT
Residential



2019 → 2022
CONSISTENT
ICI/ Multi Res



(Aldershot
Water Only)

2019 → 2022
CONSISTENT



(Caledonia & Cayuga
Water Only)

2019 → 2022
SLIGHT GROWTH

RESIDENTIAL WATER CONSUMPTION



2011

2017

+ 11,000 accounts



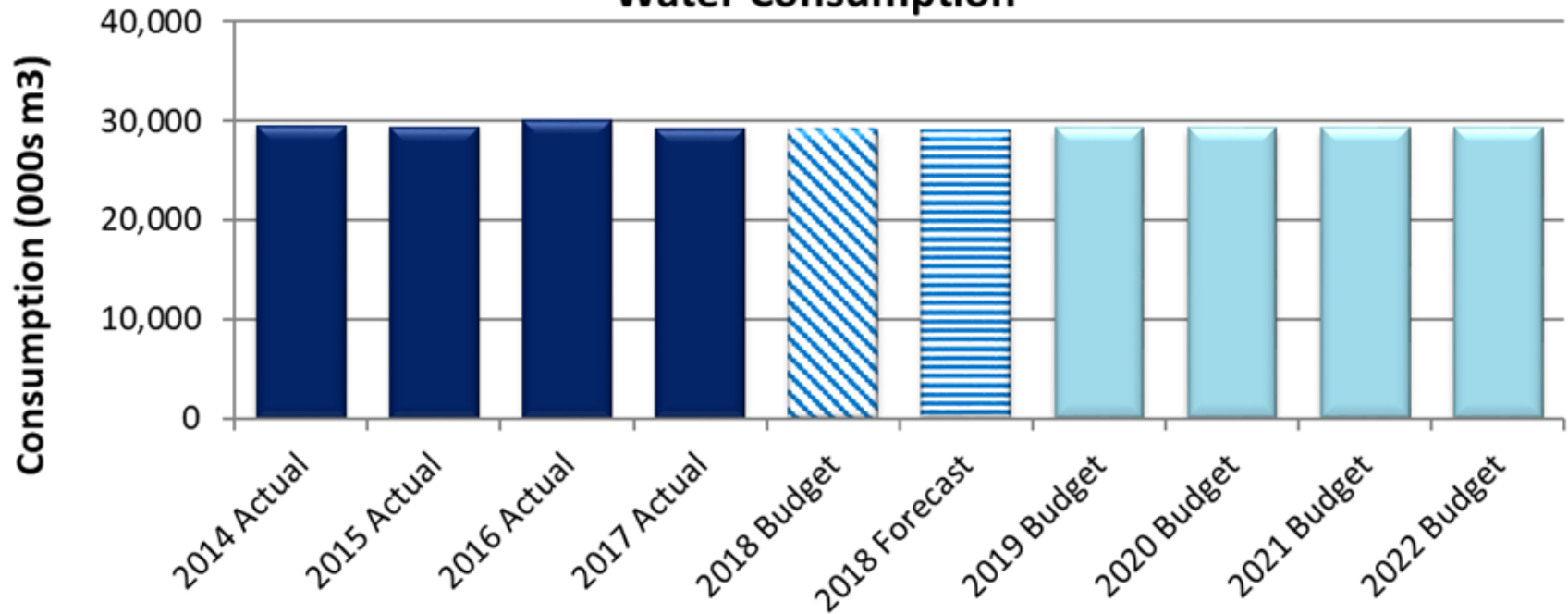
2011

2017

over 6% decrease
in consumption

ICI & MR CONSUMPTION FORECAST

Industrial/Commercial/Institutional & Multi-Res Water Consumption

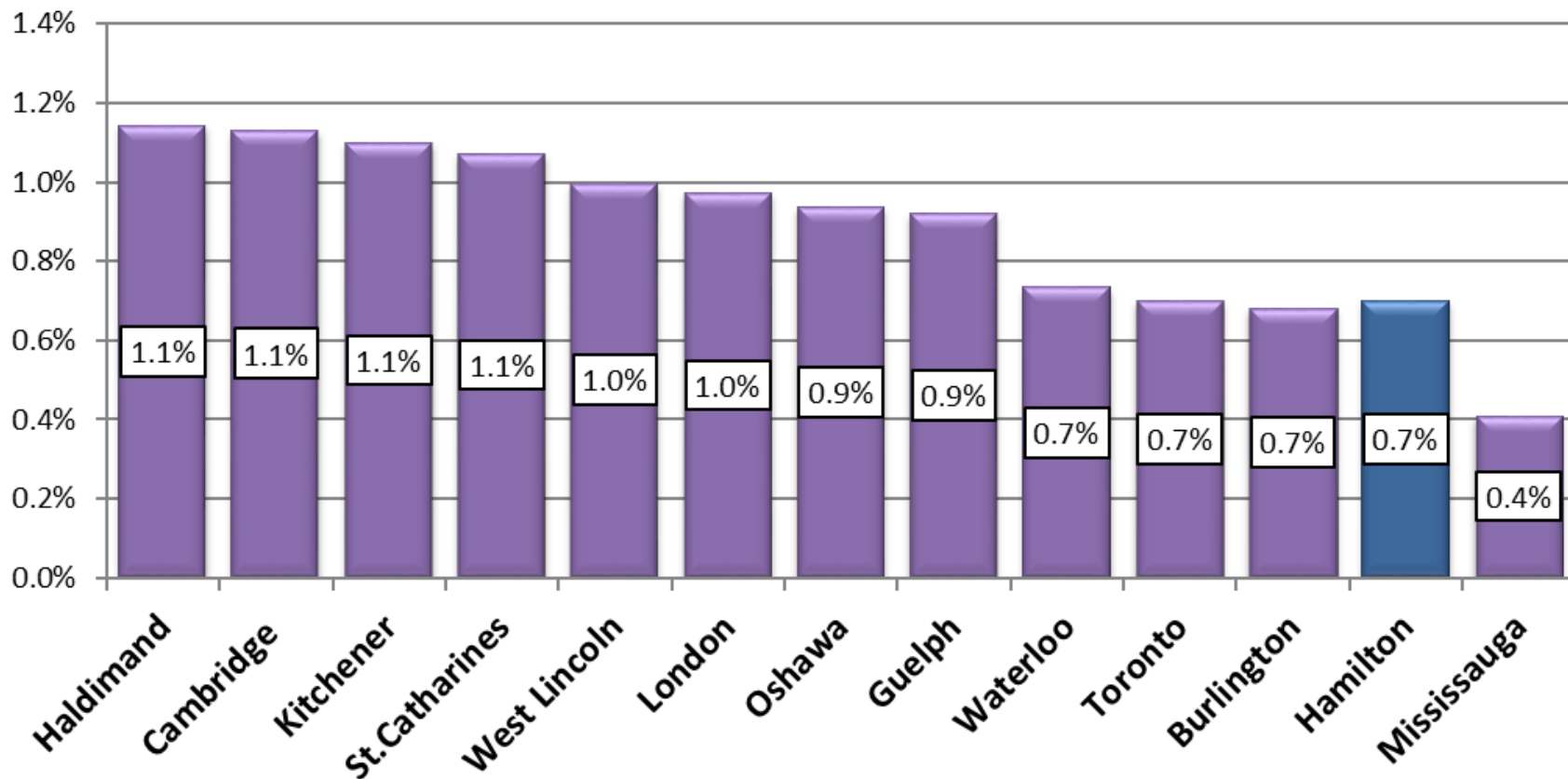


Consumption remains very consistent at just under 30M m³

MUNICIPAL COMPARATORS

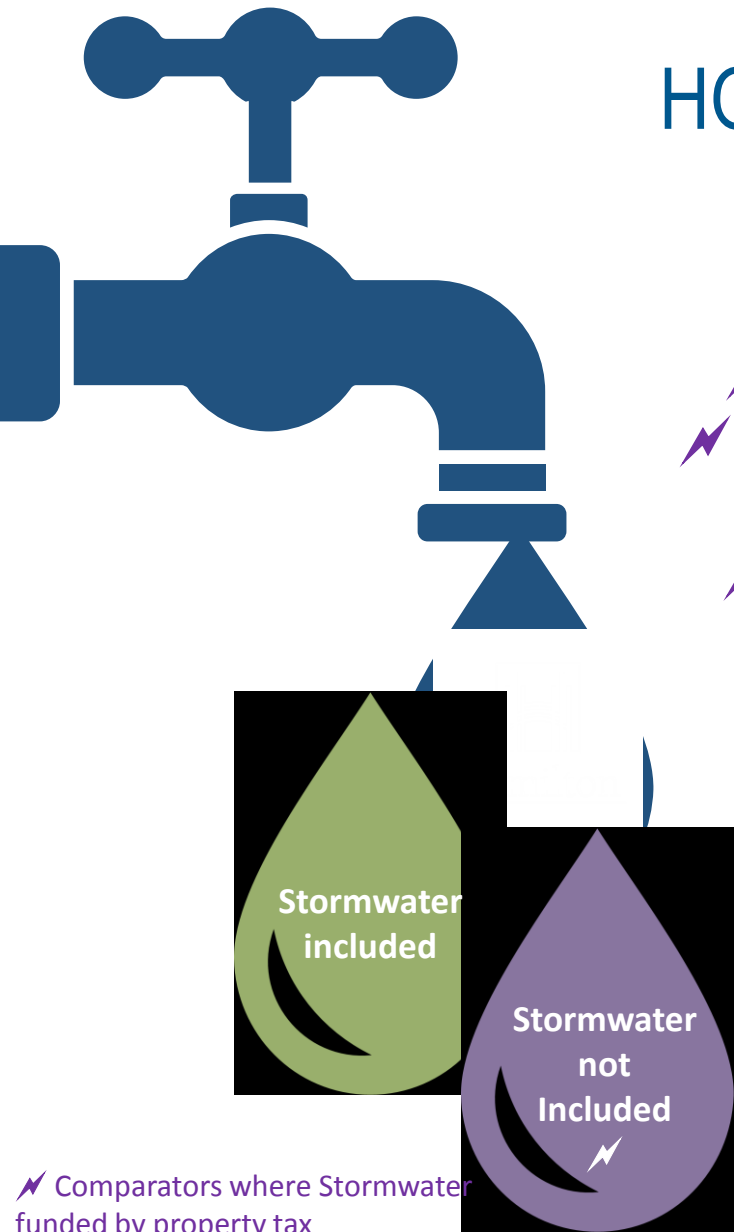
HOW DOES HAMILTON COMPARE?

2017 Water/WW as a % of Household Income



Source: BMA Management Consulting Inc. – Municipal Study 2017

HOW DOES HAMILTON COMPARE?



- Kitchener: \$1,361**
- ⚡ **Norfolk: \$1,167**
- ⚡ **Cambridge: \$1,086**
- ⚡ **West-Lincoln: \$1,059**
- London: \$1,054**
- ⚡ **Haldimand: \$1,043**
- Guelph: \$972**
- Waterloo: \$959**
- ⚡ **Brantford: \$905**
- ⚡ **Durham: \$877**
- ⚡ **St. Catharines: \$875**
- ⚡ **Halton: \$842**
- Toronto: \$761**
- Hamilton: \$690**
- Peel: \$567**

2018 Water Bill Residential

200m³/ (year)

Survey Average
\$948

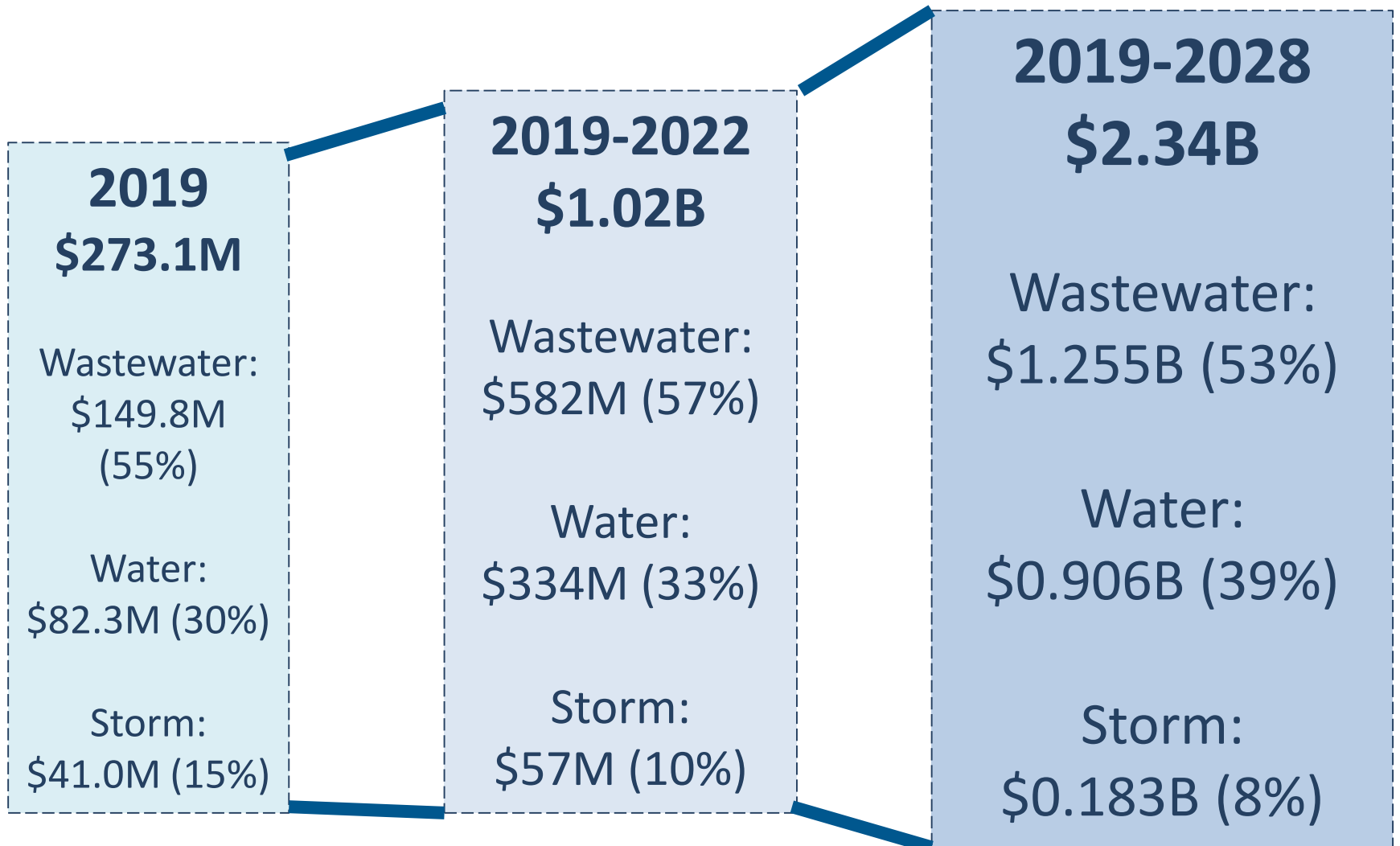
Hamilton provides **three** services for less than some municipalities which offer **two**

⚡ Comparators where Stormwater funded by property tax

CAPITAL INVESTMENT AT A GLANCE

LONG TERM CAPITAL PROGRAM

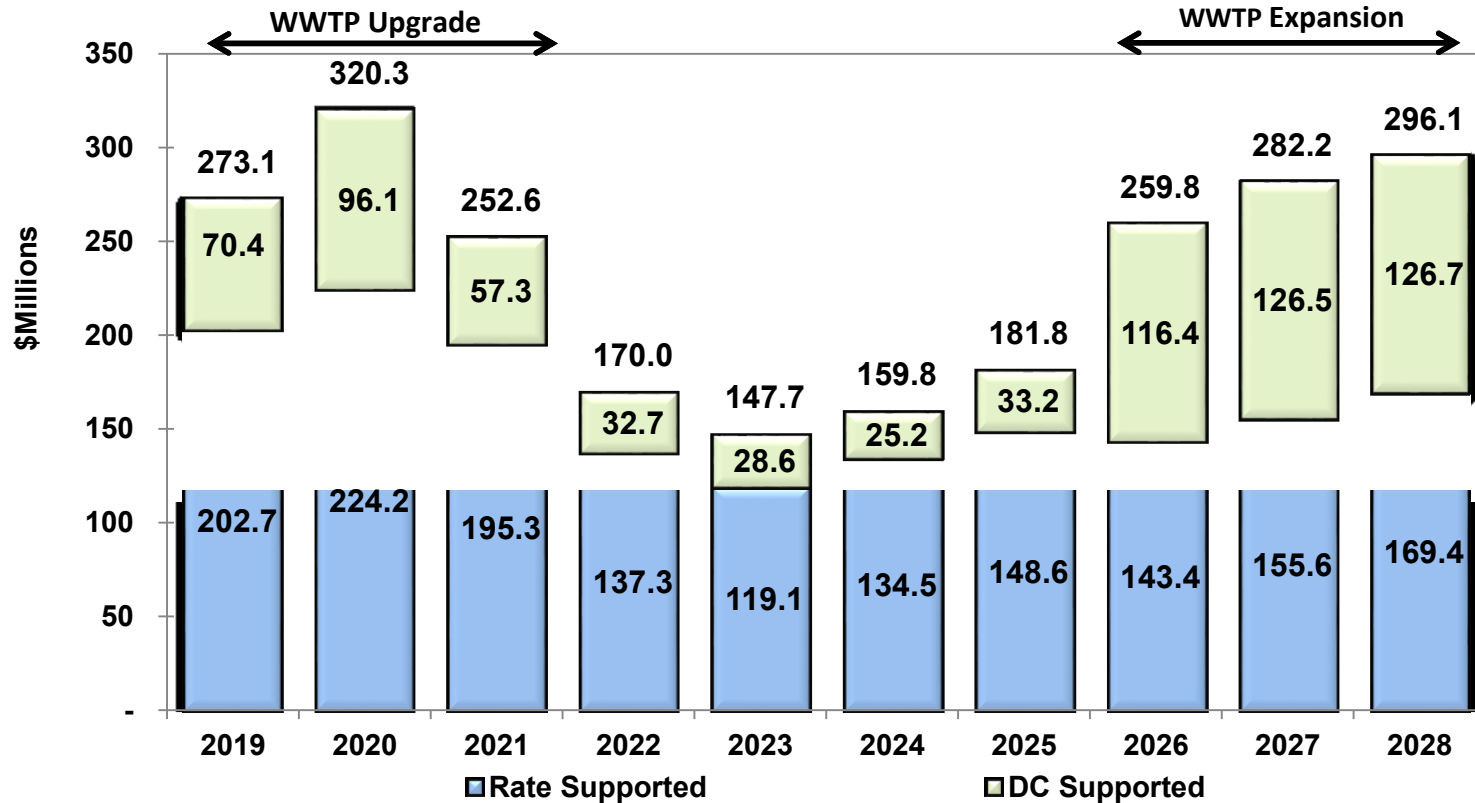
At a Glance



10 YEAR CAPITAL PROGRAM

How much we plan to spend

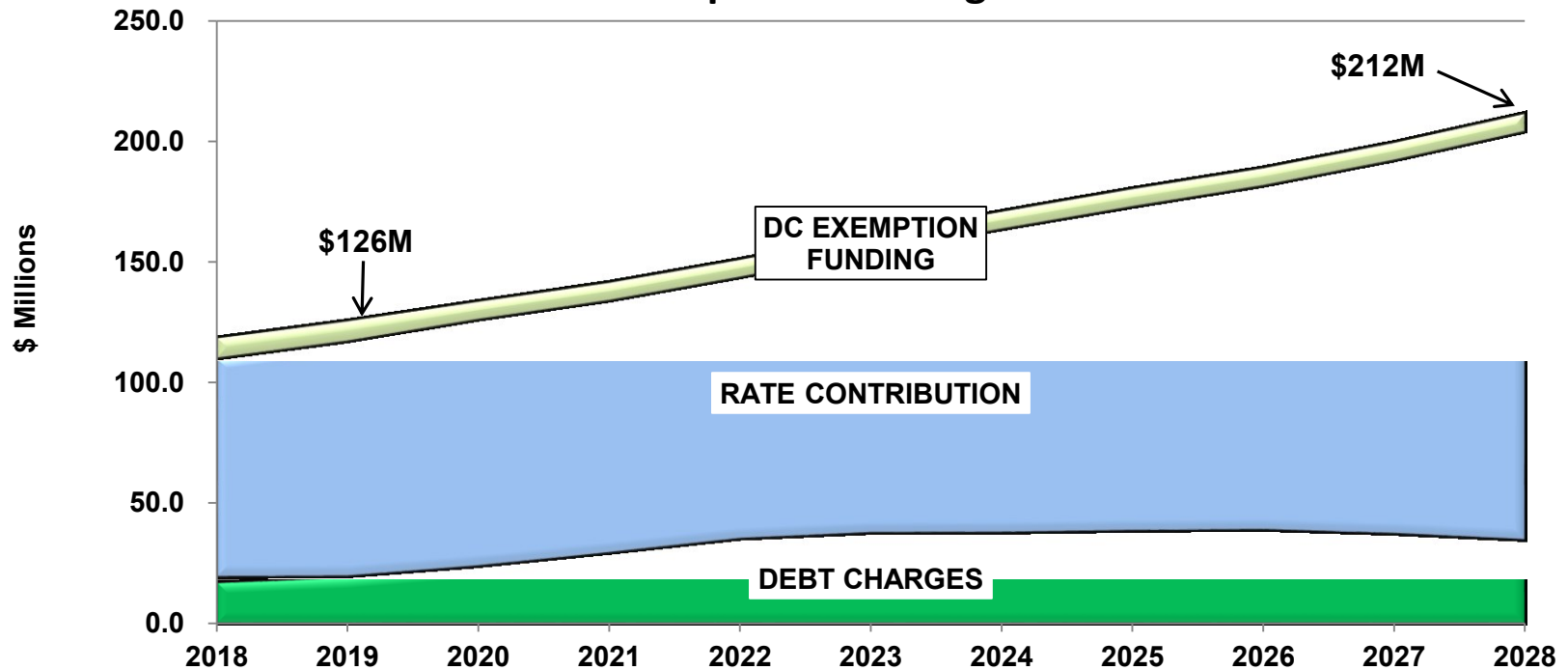
Total 10 Year Capital- \$2.34 Billion
Water / Wastewater / Storm



10 YEAR CAPITAL STRATEGY

How will we pay for it

Capital Financing Plan



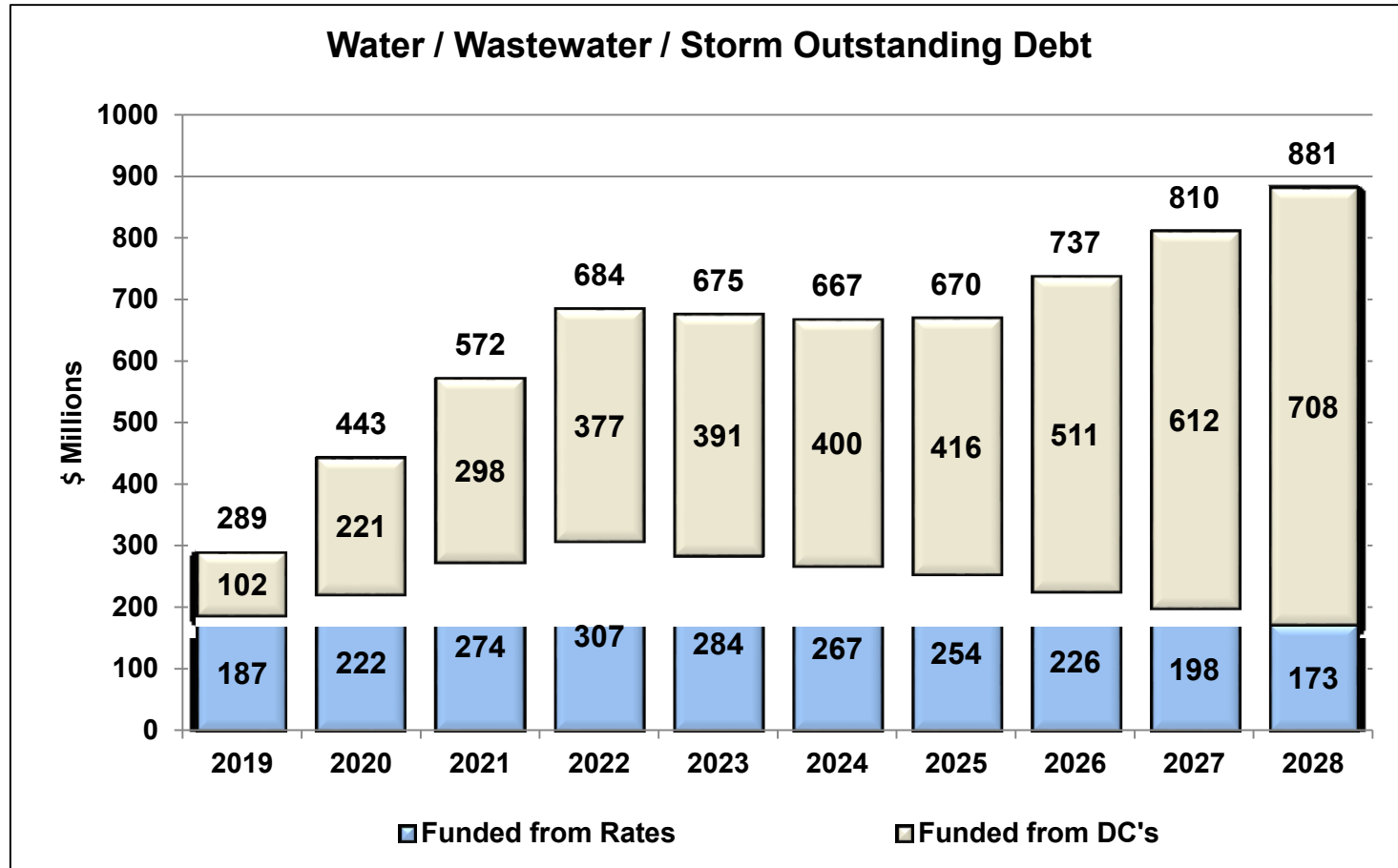
Contribution to capital increasing from \$126M in 2019 to \$212M in 2028

Largely due to capital construction

DEBT FUNDING AT A GLANCE

10 YEAR CAPITAL STRATEGY

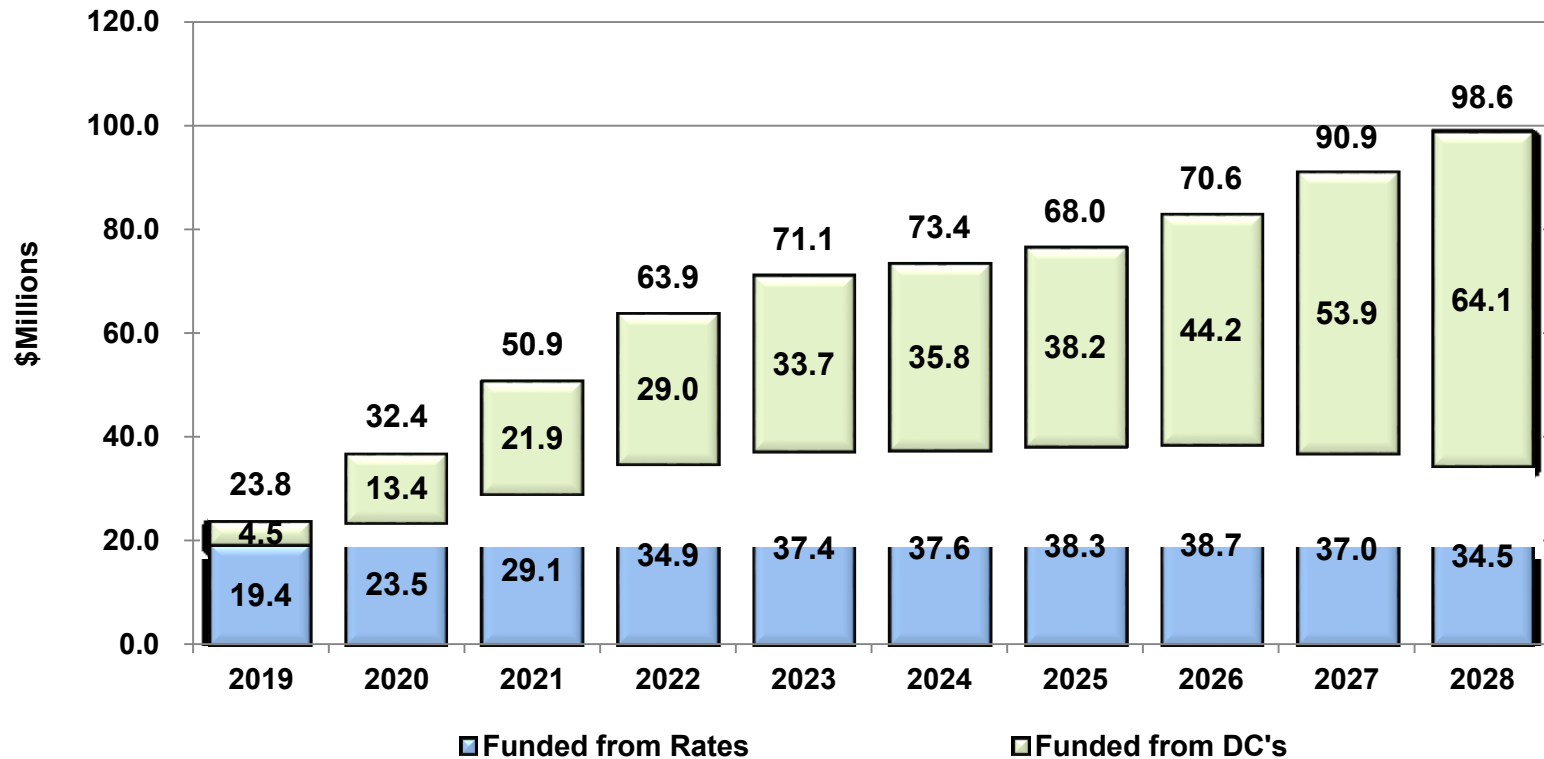
What does our debt look like?



10 YEAR CAPITAL STRATEGY

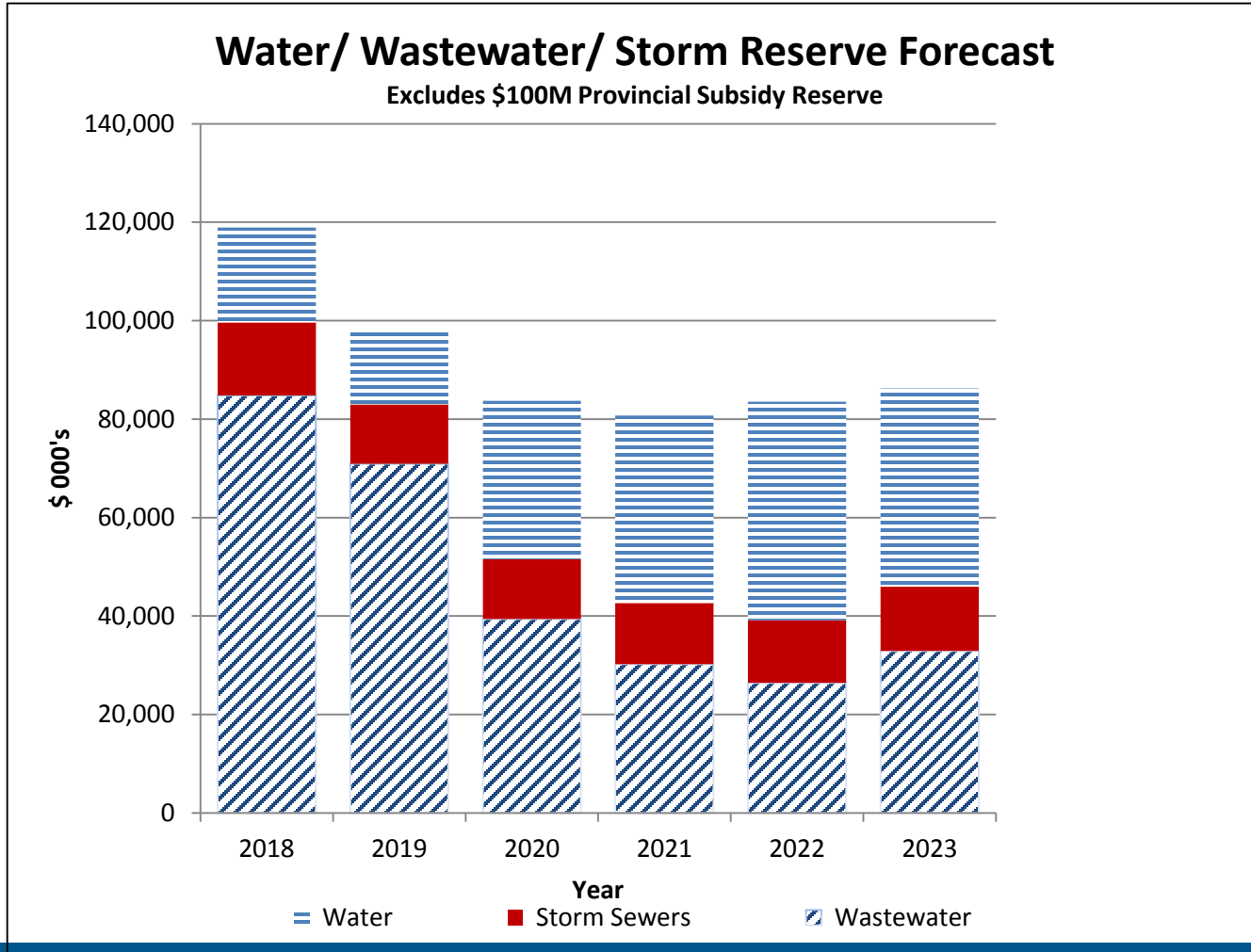
How much does our debt cost?

Projected Debt Charges
Water / Wastewater / Storm



10 YEAR CAPITAL STRATEGY

How much reserves will we use?





THANK YOU