

Attachment A – Resource Assessment for Stormwater Charge Implementation & Sustainment

This attachment outlines the resources necessary to efficiently implement and sustain a stormwater charge. Given that staff are not recommending the implementation of a stormwater charge at this time, this attachment is for information only.

Implementation

Stormwater charge implementation is divided into five parts: GIS analysis; Stormwater Charge Management System development, integration and testing; program management and development; communications; and operationalization.

Table A1 summarizes the costs associated with each of the stormwater charge's implementation categories. The "Cost" column provides the figures for all costs associated with that category, including costs that could be absorbed with existing staffing resources. The "Net New Cost" column provides the figures for components that would require new resources paid for by Toronto Water, either within its own budget or paid to the specified division. These net new costs include new FTEs listed in Table A2 below, but prorated for the implementation timeline.

Table A 1: Stormwater charge implementation costs

Category	Division	Cost	Net New Cost
GIS Analysis	I&T -- Geospatial Competency Centre	\$95,000	-
Stormwater Charge Management System development, integration & testing	Toronto Water -- Integrated Technology Management	\$457,000	\$291,000
	Revenue Services	\$117,000	\$117,000
	I&T -- Enterprise Solutions Delivery	\$60,000	\$60,000
	I&T -- Solutions Development & Sustainment	\$20,000	\$20,000
	I&T -- Web Revitalization Team	\$50,000	\$50,000

Category	Division	Cost	Net New Cost
Program Management & Development	Toronto Water -- Stormwater Core Team	\$549,500	\$549,500
Communications	Strategic Communications & Toronto Water	\$650,000	\$650,000
Operationalization	Toronto Water	\$352,500	\$352,500
Various	Various (Working Group members)	\$703,500	-
	Total	\$3,054,500	\$2,090,000

1. GIS Analysis

The methods developed for the development of the stormwater charge implementation plan provide a robust foundation for future analysis. Existing results for tiered flat rate properties would be used for the first iteration of the stormwater charge.

Results for Large Properties would be reviewed in order to calculate individualized stormwater charges. The current automated method of analysis is close in accuracy to manual analysis while being orders of magnitude more efficient. The automated method of analysis could be further improved using other available data sources (e.g., LIDAR) and software solutions.

GIS Analysis Resources

GCC would allocate two staff for the last two quarters of 2017 to work on the stormwater charge project in order to improve the processes that have already been developed. Based on learnings from work conducted this summer, GCC would perhaps need new temporary resources for future years, which would be requested as part of Toronto Water's budget process.

2. Stormwater Charge Management System Development, Integration & Testing

GIS analysis results would be transferred into the "Stormwater Charge Management System", a term used to describe the information technology system that would support key functionality of the stormwater charge. The system would also receive MPAC tax class to assign the correct stormwater category to each property. After the stormwater charge rates were calculated, each property would be assigned its appropriate tier and associated charge (or individualized charge for Large Properties). The system would also keep track of information about adjustments related to requests for review, technical exemptions, and stormwater charge credits.

The Stormwater Charge Management System would need to communicate with other systems such as Revenue Services Division's WMACS system for water billing, and the MyWaterToronto portal for bill estimates. For this communication to occur, the System would leverage existing infrastructure that was developed and built for Toronto Water's Water Meter Program and integration of a Toronto Water work management system to 311.

Toronto Water would assign all properties a stormwater charge (tiered flat rate or individualized rate) before interfacing with Revenue Services' system, meaning that WMACS would not be required to conduct any calculations, thereby reducing the burden on that system.

As the owners and operators of WMACS, Revenue Services has an intimate knowledge of the dataset with which they work. The highest priority task for Revenue Services would be to detail the business and policy rules required to interface stormwater charge records with WMACS. In the vast majority of cases, the relationship between property (on which the stormwater charge is calculated) and water account is one-to-one. Where this is not the case, rules would have to be established with the goal of always administering one stormwater charge per property. Where a property has no water account (e.g., parking lot separate from a building), a new "stormwater charge only" bill would be developed and administered.

Stormwater Charge Management System Resources

There does not appear to be any existing single information technology application in the City that can be easily modified as a whole to meet the needs of the Stormwater Charge Management System. After examining various options, the most cost- and time-effective option would be to integrate existing components in the City's systems with features that fit the stormwater charge program, while minimizing the scope to build a new solution in-house. The Stormwater Charge Management System and related integration needs that would be implemented by Toronto Water's Integrated Technology Management unit are estimated to have a net new cost of \$291,000 for development and implementation.

Revenue Services would require two Revenue Clerks for this stage of the project at a net new cost of \$117,000. Working Group members from Revenue Services and the business management analyst from the Stormwater Charge Core Team (described below) would help to oversee the work of the Revenue Services staff.

Following the completion of detailed business requirements gathering, I&T would be required to modify WMACS to accommodate the stormwater charge. This task would require one staff working for six months on development and testing at a net new cost of \$60,000.

Data from the Stormwater Charge Management System would be extracted to the MyWaterToronto web portal in order to develop the estimator tool described above. Existing I&T staff from Solutions Development & Sustainment section would be able to

complete this task in two months at a net new cost of \$20,000. The Web Revitalization Team would modify the MyWaterToronto webpage in two months at a net new cost of \$50,000.

Other staff would be involved with the project by providing oversight to components of the Stormwater Charge Management System that relate to their respective divisions. These duties would be assumed as part of their existing positions:

- Toronto Water, Integrated Technology Management
- Revenue Services, Water & Parking Tags
- I&T, Business Solutions Services

3. Program Management & Development

A Stormwater Charge Core Team would be required for the duration of the stormwater charge implementation period, comprising three staff: a Project Leader, a Business Management Analyst and a Policy & Program Advisor. The main tasks that these staff would be in charge of include general project management, business requirements gathering, policy development and harmonization, support programs development, and stakeholder liaising and consultation. The Core Team would also support hiring and training of staff needed for launch and sustainment, bylaw writing and approval, and the development of the financing model and stormwater charge rates. The net new cost of the Stormwater Water Charge Core Team would be \$549,500 over the 21 months needed to implement the program.

Other staff that would be involved with the program management and development component of the project would assume their duties as part of their existing positions, and would include staff from the following divisions:

- Toronto Water, Operational Support -- development of support programs
- Corporate Finance -- continued refinement of the water financing model and stormwater charge rates
- Policy, Planning, Finance & Administration -- continued refinement of the water financing model
- Legal Services -- provide legal advice to the project, in particular related to the development of associated by-laws
- Engineering staff from Toronto Water, Water Infrastructure Management -- development of technical components of support programs
- Toronto Water, Strategic Planning & Workforce Development -- development of job descriptions, organizational charts, etc., plus hiring functions
- 311 Toronto -- training Customer Service Representatives
- Toronto Water, General Manager's Office -- coordinate between project team, General Manager's Office, Councillors, etc.

4. Communications Plan

The communications plan would focus on public education and awareness of the upcoming changes to the water account portion of the utility bill. The goal would be to encourage knowledge of what stormwater is as well as the associated personal, environmental and financial impacts. The communications would ensure that residents and businesses know what changes to expect to their bills and when. For Large Properties eligible for the incentives program, the communications would also provide full program information including the application process. Communications activities would employ a variety of tactics including: web, social media, community outreach, notification via City publications, advertising and direct mail. The proposed budget would be \$650,000.

Staff that would be involved with the communications portion of the project would assume implementation of the stormwater charge as part of their existing positions, and would include staff from the following divisions:

- Strategic Communications -- coordinate and execute communications plan
- Policy, Planning, Finance & Administration, Public Consultation Unit -- public outreach

5. Operationalization

In the twelve months leading up to the launch of the stormwater charge, staff would be required to reach out to the 5,500 Large Properties to ensure they understand that the stormwater charge would be added to their water bill, provide their estimated stormwater charges, and provide more information about the incentive program and its eligibility criteria. This group of staff would include the Program Coordinator that would be hired to oversee the ongoing delivery of the stormwater charge program. The net new cost for operationalization would be \$352,500.

Sustainment

Sustainment of the stormwater charge program is described in four parts: GIS analysis updates; Stormwater Charge Management System sustainment; communications; and program delivery.

Total annual costs associated with sustaining the stormwater charge program would range from \$2.1M to \$4.0M. The cost required for sustainment would be funded through the operating budget.

Table A2 summarizes each of the permanent full time employees (FTEs) required for sustainment of the stormwater charge program. The associated annual costs include benefits and overhead.

Table A 2: New permanent staff required for sustainment

Title	FTE(s)	Cost/year
Systems Integrator 1	1	\$135,560
Revenue Clerk 4	2	\$209,680
Project Leader	1	\$145,800
Business Management Analyst	1	\$135,560
Policy & Program Advisory	1	\$135,560
Program Manager	1	\$135,560
Water Consultant	3	\$335,640
Inspector	1	\$111,880
Total	11	\$1,345,240

Table A3 summarizes the costs associated with ongoing communications and the estimated cost recovery implications resulting from technical exemptions and the incentives program for Large Properties.

Table A 3: Communications and foregone revenue costs

Program Component	Cost/year
Communications	\$10,000
Cost recovery implications from technical exemptions to tiered flat rate properties	\$160,000
Cost recovery implications from technical exemptions to Large Properties	\$116,000
Cost recovery implications from incentives/credits to Large Properties	\$466,000 - \$2,330,000
Total	\$752,000 - \$2,616,000

1. GIS Analysis Updates

GIS analysis for all properties would need to be conducted every five years, the costs for which could be absorbed with existing resources at I&T and Toronto Water. Revised assessments of Large Properties would be conducted as development applications for these properties are submitted, or every five years, whichever is sooner.

2. Stormwater Charge Management System Sustainment

Staff from Toronto Water's Integrated Technology Management Unit would sustain the Stormwater Charge Management System, and staff from Revenue Services would fulfill billing and analytical duties.

3. Communications

After implementation, there would be some communications work to remind residents, organizations and business about the change, largely through the City's utility bill brochure, other City publications, and social media. There would be some ongoing communications needs to support the Large Properties eligible for an incentive, most of which could be accomplished at the operational level and supported by the overall annual communications work done targeting the ICI sector. The proposed annual budget would be \$10,000.

4. Program Delivery

Ongoing operations of the stormwater charge program would require a fulltime Program Manager, plus support staff to execute the program components.

Program Components for Tiered Flat Rate Properties

Using data from existing Toronto Water programs (e.g., mandatory downspout disconnection program exemptions), staff estimated the resources necessary to process applications for requests for review and technical exemptions for tiered flat rate properties. Based on the experiences of other municipalities with stormwater charges, staff estimated applications from 1% of properties for requests for review (approximately 4,700 applications) and from 0.1% of properties for technical exemptions (approximately 470 applications). Processing these applications would require three FTEs.

Program Components for Large Properties

Staff estimated the resources necessary to process applications for requests for review, technical exemptions and incentives for Large Properties (i.e., those that are one hectare or larger). The average uptake for incentive programs in other municipalities is approximately 4%, which in Toronto would translate to approximately 220 applications. Staff also estimated similar uptake rates for requests for review and technical exemptions, for a total of approximately 660 applications. The staffing needs for these three support programs for Large Properties would be four FTEs, including one inspector to verify on-site works.