

AUDITOR GENERAL'S REPORT

Audit of Water Billing and Collections – Phase II:

Water Billing and Water Meter Management Controls Require Strengthening

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EXECUTIVE SUMMARY

2015 Audit Work Plan included an audit of water billing and collection

The Auditor General's 2015 Audit Work Plan included an audit of the City's water billing and collection processes. We selected this audit due to the significant amount of revenue relied on by the City to provide water services to Citizens.

Auditor General completed audits on other revenue sources

The Auditor General has also completed audits on other City revenue streams, including property taxes, municipal land transfer tax and parking tags.

It is extremely important that revenues are billed and collected on a timely basis to ensure that City programs and infrastructure requirements can be fulfilled as planned.

One billion dollars billed annually in water revenues

Total revenue from water billing in 2015 was approximately one billion dollars. Revenue Services Division is responsible for billing and collection of water revenues. Toronto Water Division is responsible for ensuring water quality, distribution, meter installation and repairs.

Audit carried out in two phases

This audit was carried out in two phases. Phase I focused on the collection of outstanding water accounts. Phase II focused on the processes and controls to ascertain the accuracy and completeness of water billing, recording of customer payments, account adjustments and monitoring of service orders for water meter installation and repairs.

Three prior reports issued during 2016

This is the final report issued in relation to our audit of water billing. Three prior water revenue audits were completed in 2016. The reports are as follows:

1. Audit of Water Billing and Collection - Phase I: Overdue Water Account Collections Require Strengthening

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.AU5.3>

2. Audit of Water Billing and Collection - Phase II: Part 1 - Incorrect Vacant Land Status Properties Reduces City's Property Tax Revenue

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.AU7.3>

3. Audit of Water Billing and Collection - Phase II: Part 2 - Management of Water Supply Contract for the Region of York (include confidential attachment)

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2016.AU7.4>

Auditor General recommended controls to improve revenue collection

In earlier reports, the Auditor General recommended that water revenue and collection could be improved through enhanced processes and controls, and through better information sharing and coordination between Divisions. The Auditor General will follow-up on the implementation of these recommendations in 2017.

The focus of this audit was to determine whether all properties have water meters and if customers are being billed appropriately.

Key Findings – Final Report

Toronto Water and Revenue Services worked together to implement the WMP program

During the course of this audit, we noted that Toronto Water and Revenue Services Divisions have worked together to implement the Water Meter Program (WMP).

The program appears to have improved the water billing process by minimizing the need for estimating billings and more efficiently identifying water meter operating issues and potential fraud. Estimated billings were often the cause of customer disputes, credits and collection issues. Management advised that there are significant financial benefits to the City as a result of this program.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW9.6>

Audit noted areas where the City could be losing water revenue and incurring unnecessary operating cost

Overall, it appears that the majority of residential, commercial and industrial properties have been billed appropriately. We also noted areas of improvement such as the implementation of the water meter program.

While we noted improvement in some areas, we also found important areas where the City is losing revenue and incurring unnecessary operating cost. We reviewed water billing, consumption and payment data from January 1, 2013 to September 30, 2015. Our key findings are provided below:

Properties Without Water Meters or Billing

Properties without a water meter or water bills were noted

The audit noted 23 commercial and residential properties, including City-owned leased and licensed properties, without a water meter or consuming water without a water bill. Our sample included 183 properties selected from a list of 'Do Not Bill' properties and properties with building construction permits that closed between June 2014 and July 2015. We observed the following:

- Inadequate management of City-owned leased and licensed properties and properties classified as 'Do Not Bill' for water usage
- Inadequate communication between Toronto Building and Toronto Water Divisions on the status of closed building permits for properties under construction
- Inadequate mapping of water meters with addresses relating to multi residential properties (e.g. condominiums, townhouses), properties with more than one street address, and severed properties

Unbilled water usage on a property for 30 years estimated at over \$300,000

A City-owned property leased to a third party was not billed for water over the past 30 years since the inception of the lease agreement in 1986. The unbilled amount is estimated to exceed \$300,000. This amount was calculated using a comparable property's billing history. In another instance, a residential property was without a water meter for 11 years. Management has initiated back billing of certain properties and is investigating others.

Some specific examples of City-owned leased and licensed properties that were not billed for water include restaurants, retail shops, marinas and yacht clubs. Not billing for water on City-owned properties that are leased or licensed appears to be a City-wide issue. The Auditor General has recommended developing a billing process for City-owned leased and licensed properties in coordination with all City Divisions.

Repeat No-access Visits by Toronto Water Inspectors Waste City Resources and Impact Water Revenue

Toronto Water inspectors are often unable to gain access to some properties for installing and repairing meters, even though inspectors often contact property owners prior to visiting the properties. These no-access visits delay meter installation, meter readings and repairs.

50 repeat no-access site visits by Water Inspectors to a property over a nine year period to repair a meter

We noted 32 properties out of a sample of 165 properties where water meter repair and installation delays ranged from six months to over nine years. This sample was drawn from properties with a high number of estimated bills. One property recorded 50 no-access site visits over a nine year period to repair a meter.

8,500 no-access site visits by Toronto Water inspectors in a year

In 2016, there were 8,500 no-access site visits by Toronto Water inspectors to gain access to properties for meter installations and repairs. Unsuccessful visits waste City resources. We estimate Toronto Water can recover up to \$550,000 annually by implementing an administrative fee for no-access visits.

Exhibit 1 summarizes the types of issues noted during the audit at various properties. The unbilled revenue estimates are based on average billing history for similar properties. Some of the properties listed in Exhibit 1 are discussed in more detail in the Audit results section of this report.

Customer Bill Reversals, Adjustments and Refunds Consume Significant Staff Resources

City processed over 158,000 transactions relating to bill reversals, adjustments, and refunds

Customer refunds arise from payment errors by property owners and various billing adjustments made by the City. In 2015, the City processed over 158,000 transactions relating to bill reversals, adjustments, and refunds. The processing of these transactions consumes staff resources. For customer requested payment transfers, the City charges an administrative fee. We noted the following:

\$63,000 in administrative fee not billed

- The City did not consistently charge the administrative fee for customer payment transfers. This amount was approximately \$63,000

City can recover \$35,000 annually by charging a refund fee

- The City could recover administrative costs up to \$35,000 annually if an administrative fee is charged on customer initiated refunds due to payment errors
- Also, we expect that staff resources could be saved by reducing the number of bill reversals, adjustments and refunds that arise from estimated bills

Controls at Customer Service Counter Operations Require Strengthening

Controls at Customer Service Counters require strengthening

The City operates eight customer service counters for payment collection and addressing customer inquiries. Our review identified the following:

- Inadequate segregation of duties as customer service counter supervisors administer cash collection and also have access to process adjustments to customer accounts
- Daily cash variances were not being adequately explained and documented

Less significant findings reported through management letter

The Auditor General has also issued a separate letter to management detailing other less significant issues that came to our attention during the audit. These issues relate to updating customer service counter policies and procedures, cleaning-up customer information in the water billing system, and improving refund processes.

The Auditor General has made 15 recommendations in this report. We understand that certain recommendations may require changes to the existing water billing system and may not be feasible given that Revenue Services is implementing a new water billing system in 2018. These recommendations should be considered for the new system implementation.

Findings and Recommendations Relevant to City Agencies and Corporations

This report includes a number of findings and recommendations that have relevance to City Agencies and Corporations. For example, findings related to leased and licensed properties where utility billings may be more prone to errors and omissions. City Agencies and Corporations as landlords need to ensure that all agreed upon charges are billed and recovered from properties leased or licensed to third parties.

The Auditor General will follow-up on the actions taken by the Heads of Agencies and Corporations in the next follow-up cycle in 2018.

Conclusion

The majority of residential, commercial and industrial properties appear to have been billed appropriately. The water billing for City-owned leased and licensed properties requires significant improvement. Revenue Services, Toronto Water and Toronto Building Divisions need to work closer to expedite meter installation and ensure everyone using water is appropriately billed.

The total impact of unbilled water usage on revenues could not be determined due to the complexity and time required to review all the potential unbilled properties and leases. However, we estimate from our sampled properties and through potential cost recoveries, a total saving of over \$3 million over five years.

In addition, we estimate there is \$1.3 million in unbilled revenues that could be recovered from our sample. The amount recovered depends on how far back the City can retroactively bill these properties. The Auditor General expects once the recommendations are fully implemented, the total revenue recovered would be substantial.

BACKGROUND

One billion dollars in annual water revenues for 323 million cubic meters of water

In 2015, the City of Toronto billed approximately one billion dollars in annual water revenues for 323 million cubic meters of water (one cubic meter equals 1,000 liters of water). There are approximately 516,000 active residential, commercial and industrial water accounts. The cost of the City's water program is heavily funded through water revenue.

Water Rates and Frequency of Billing in 2017

The City bills customers for water at a general rate of \$3.6225 per cubic meter. Customers enrolled in the Industrial Water Rate Program receive a discounted rate of \$2.5356 per cubic meter for consumption exceeding 5,000 cubic meters. The majority (91 per cent) of residential and commercial customers are billed three times a year, whereas high volume industrial clients are billed monthly.

Payment Options for Water Bills

Customers have a variety of payment options to pay water bills

Customers have a variety of payment options available to pay water bills. These include, paying in person at financial institutions or at designated City locations, through online or telephone banking, and pre-authorized payment. In 2016, approximately 90 per cent of customers paid water bills electronically.

Water Billing System Upgrade

Management has started working on developing a new utility billing system

Revenue Services uses a legacy water billing system known as WMACS. This system was developed in-house and has been in use since amalgamation. The system is due for replacement. Management is developing a new utility billing system expected to be implemented in 2018.

AUDIT OBJECTIVES, SCOPE AND METHODOLOGY

The Auditor General's 2015 Audit Work Plan included an audit of the City's water billing and collection processes. The 2015 Audit Work Plan is available at:

<http://www.toronto.ca/legdocs/mmis/2015/au/bgrd/backgroundfile-79980.pdf>

Audit Objective and Scope

The purpose of this audit was to assess processes and controls to ascertain the accuracy and completeness of water billing, recording of customer payments, account adjustments and monitoring of service orders for water meter installation and repairs.

The scope of the audit included a review of water billing and payments from January 1, 2013 to September 30, 2015.

Methodology

Our audit methodology included the following:

- Review of policies and procedures, including City bylaws relating to water billing and collections
- Review of processes and controls for accurate, complete and timely billing
- Analysis of consumption, billing and payment accounts, and building permit data
- Verification of amounts billed and collected, including accounting and bank reconciliation processes
- Review of information technology access controls over water billing and payment applications
- Review of previous audit reports
- Interviews with City staff in various City Divisions including; Revenue Services, Toronto Water, Toronto Building, Parks Forestry & Recreation, Legal Services, Accounting Services and Geospatial Competency Centre

Compliance with generally accepted government auditing standards

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT RESULTS

Findings from audit work and recommendations

As part of this audit, we sampled a selected number of property accounts to review water meter installations, billings, account adjustments, payments, and refunds. In addition, we visited customer service counters to review daily collection and deposit procedures.

This section of the report contains the findings from our audit work followed by specific recommendations. To perform our testing, we selected samples from various data sources. The sample details are included in the findings.

A. WATER METER INSTALLATION AND BILLING

Exhibit 1 summarizes the types of issues noted during the audit at various properties. The unbilled revenue estimates are based on average billing history for similar properties. Some of the properties listed in Exhibit 1 are discussed in more detail in the Audit Results section of this report.

A.1. Properties Without Water Meters or Billing

Our sample included 183 properties as follows:

- 92 out of 685 'Do Not Bill' properties, including 4 properties provided by Revenue Services
- 91 out of 2,494 properties with building construction permits that closed between June 2014 and July 2015

Properties without a water meter and unbilled usage identified

Among the 183 properties, 23 or 12.5 per cent did not have a water meter or were not billed even though there was evidence of water usage. These include the following:

- 18 (19.5 per cent) City-owned leased or licensed properties out of 92 'Do Not Bill' properties.
- 5 (5.5 per cent) of 91 properties that were completed and the building permit status was unknown to Toronto Water and Revenue Services.

We also found that certain categories of properties were not mapped to a water meter. This included multi residential properties, properties with more than one street address and severed properties. There is a potential risk that certain properties will continue to remain unbilled because they are not mapped to a meter.

Since these issues are based on a sample, we expect there are additional properties with similar issues.

A.1.1 Inadequate Management of Properties Classified as ‘Do Not Bill’ Accounts

Process for managing ‘Do Not Bill’ properties needs strengthening

Revenue Services Division assigns ‘Do Not Bill’ status to properties that are exempt from water billing. The majority of these are City-owned Parks, Forestry & Recreation properties. As of December 2016, there were 685 properties classified as ‘Do Not Bill’ water accounts. When the City sells or leases City-owned properties to third parties, these accounts should be billed.

A number of City-owned properties leased or licensed to third parties were not billed for water consumption

We noted 18 of 92, or 19.5 per cent of the 'Do Not Bill' status properties that were sampled, should have been billed. These are City-owned properties that are leased or licensed to third parties. The lease and license agreements require that the lessee and licensee be billed for water separately. These properties include restaurants, sports complex, retail shops, marinas and yacht clubs. In certain cases, the period for which these properties remained unbilled is significant. For one property, water was not billed for a 30 year period. We estimate that based on the average billing history for a comparable property, the amount of unbilled water revenue exceeds \$300,000.

Risk of revenue loss is higher with major leases

Our estimates only considered current period leases because historical information was not readily available. Some lease agreements include multiple properties in one agreement. The Division should review all leases current and historical to determine the unbilled revenue.

Unbilled City-owned leased and licensed properties appear to be a City-wide issue

Water billing issues for City-owned leased and licensed properties appear to be a City-wide problem. Real Estate Services could not provide a list of City-wide leases. Therefore, we could not determine the full extent of the revenue leakage. Revenue Services should coordinate with Real Estate Services to identify all lease and license agreements.

List of 106 leased properties provided to Revenue Services to investigate water billing

In addition, Parks, Forestry & Recreation provided us with a list of 106 leases. We observed that a number of properties have no account created in the water billing system. Revenue Services management advised that these properties will be reviewed in coordination with Parks, Forestry & Recreation Division.

Divisions do not inform Revenue Services of changes to the billable status of City-owned leased properties

The process for managing 'Do Not Bill' properties needs to be strengthened because the revenue loss to the City can be significant. City Divisions should advise Revenue Services when there are changes in the 'Do Not Bill' status for City-owned leased properties. However, we found that Divisions do not always inform Revenue Services when there is a change in the billable status for these properties.

Furthermore, other applicable charges under the lease agreements, such as, property taxes, electricity, gas and shared expenses may have been omitted.

'Garbage Only' Accounts Require Similar Investigation as 'Do Not Bill' Properties

Similar to 'Do Not Bill' properties, as of January 2017 there were 24,115 accounts classified as 'Garbage Only'.

Management advised that these properties share a single common water service and water meter but have individual solid waste billings for each of the units within a complex. Approximately one per cent of the 24,115 'Garbage Only', or approximately 240 accounts are those that are temporarily assigned this status because the properties are vacant or under construction.

List of properties provided to management for investigation

We identified approximately 90 properties classified as 'Garbage Only' accounts where construction had been completed from January 2013 to May 2016. Water meters were not installed at some of these properties.

We recognize that not all 'Garbage Only' accounts require a water bill, however we could not confirm the extent of properties that are not being billed appropriately. Controls similar to the ones recommended for 'Do Not Bill' properties are needed to review all 'Garbage Only' accounts on a periodic basis.

Recommendations:

- 1. City Council request the Director, Revenue Services, to coordinate with Real Estate Services, Parks, Forestry & Recreation, Toronto Water and other City Divisions, and develop a plan to:**
 - a. compile a complete list of all City-owned leased and licensed properties and determine whether water consumption is being billed in compliance with the lease or licensing agreement;**
 - b. implement a communication process for 'Do Not Bill' properties for timely status updates when these properties are leased, licensed or sold, to verify whether they should be billed for water consumption;**
 - c. review existing 'Do Not Bill' properties to identify if they should be billed for water usage and adjust the designation accordingly;**
 - d. review existing 'Garbage Only' properties to determine if any of these accounts are billable for water; and**
 - e. periodically monitor the status of all 'Do Not Bill' and 'Garbage Only' accounts for updating the billable status.**

- 2. City Council request the Director, Revenue Services, in consultation with the City Solicitor, Real Estate Services, Parks Forestry & Recreation and Toronto Water to:**
 - a. determine the back billing period for outstanding unbilled water consumption for City-owned leased and licensed properties and where required install water meters; and**
 - b. retroactively bill the water consumption accordingly.**

- 3. City Council request the Treasurer, implement a similar process (as per recommendations 1 and 2) to ensure that applicable property taxes, solid waste charges and any other relevant city charges are being collected on all City-owned properties that are leased or licensed.**

A.1.2 Inadequate Communication Between Toronto Building and Toronto Water on the Status of Permits for Properties Under Construction

Toronto Building should notify Toronto Water Division when construction has reached a point where a water meter can be installed. However, there is no process in place.

Five properties had no water meter

We sampled 91 out of 2,494 properties with building construction permits that closed between June 2014 and July 2015, to determine whether these properties had a water meter installed. We noted five properties as at December 2016, with completed construction and no meter installed. Management has since back billed three properties for \$10,000 and the remaining two properties are being investigated.

Management has back billed three properties for \$10,000

Any billing delays could result in loss of revenue. The prolonged estimated billing and back billing of water charges also result in customer disputes. For example,

A property without a water meter for 11 years

- A property without a water meter for 11 years was back billed \$7,000 during 2016. This amount was later reversed as the City could not prove any occupancy. The City does not have a process and criteria for obtaining third party information such as Toronto Hydro consumption data to determine occupancy.

City reversed \$41,000 on a bill when disputed by a customer due to billing delays

- A property owner received a large bill for \$41,000 that was delayed. This amount was reversed because the owner claimed the water leak could have been detected earlier if the City sent the bill on time.

Shared Service Arrangement Between Toronto Building and Toronto Water Needed

Shared Service Arrangement Between Toronto Building and Toronto Water would result in operating efficiencies

In addition to improving communication when construction permits are completed, there are other opportunities for synergies between Toronto Water and Toronto Building Divisions.

Toronto Water inspectors visit properties under construction to install and check water meters. These properties are frequently inspected by Toronto Building inspectors to approve construction and close building permits. This presents an opportunity to explore shared services between the two Divisions to efficiently deliver City services.

Toronto Building inspectors should work with Toronto Water to identify unmetered properties during building inspections and report on the progress of significant construction completion. This would reduce the number of follow-up inspection visits required for meter installations and ensure timely installations.

Recommendations:

- 4. City Council request the General Manager, Toronto Water, to coordinate with Toronto Building and explore opportunities for shared services relating to construction permit status reporting and water meter verification during building inspections.**
- 5. City Council request the Director, Revenue Services, to explore opportunities for obtaining third party information, such as Toronto Hydro consumption data to assist in estimating water consumption.**

A.1.3. Not All Property Addresses are Mapped to a Water Meter

Property addresses not mapped to a water meter present a risk an unmetered property will not be identified

Properties with multiple residences (e.g. condominiums, townhouses) may share a common water meter. In this case, each building's water consumption is billed to a single meter. We found that the water billing system does not have records for some of these properties. Documentation is not available to determine whether the properties are connected to a meter. It is possible that some properties remain unmapped and without a meter for an extended period of time.

For example, we were unable to identify the associated water meter at a townhouse complex with properties located on multiple streets. Management advised that the complex is connected to a meter in a property across the road. In the absence of any documentation we cannot confirm if this property is connected to a meter.

Management advised that mapping could be implemented for future developments. There are challenges with old properties where retroactive updates would be difficult and cost prohibitive.

Systems with property address information can be used to identify unmapped and unmetered properties.

We noted that property address information exist in several Divisional systems:

- IBMS for building permit management
- Hansen for service order management
- OAR for property source data information
- TMACS for property taxes, and
- WMACS for water billing

We could not reconcile addresses in the water billing system to other systems due to variations in the address data. Some properties are associated with more than one address in the City systems such as corner properties and severed properties that have been split into multiple addresses.

Divisions should share information to validate the completeness of their customer records. This could assist in detecting properties without a water meter. As well, Revenue Services could use this information for property taxes.

Recommendations:

- 6. City Council request the Director, Revenue Services and General Manager, Toronto Water, to evaluate the feasibility of updating the water billing system with water meter records for multi residential properties, severed properties and properties with more than one street address associated with the same meter. A process should be developed for future updates to ensure every address is mapped to a water meter.**
- 7. City Council request the Director, Revenue Services and General Manager, Toronto Water, to review all property addresses in the various systems with a view to integrating data and developing exception reports for properties without a water meter. A similar process should be developed for billing other revenue sources, such as, property taxes and solid waste charges.**

A.2. Repeat No-access Site Visits By Toronto Water Inspectors Waste City Resources

Water inspectors are often unable to gain access to properties

A service order is created when water meter installation, repairs or meter reads are required. Toronto Water inspectors attempt to contact property owners before the service call. Often inspectors cannot access the property because the owner is not available or there is a safety concern. We refer to these as 'no-access' site visits. We noted the following:

50 repeat no-access site visits to a property

- One property recorded 50 repeat no-access site visits over a nine year period to repair a meter. This property continues to be billed through estimates.

A property remained without a water meter for five years

- In another instance, a property remained without a meter for five years because Toronto Water staff could not access the property. This property was retroactively billed for five years based on estimates.

Repeat no-access site visits waste City resources and delay water meter installation and repairs. From our sample of 165 properties, there were 32 properties or 19 per cent where water meter work was delayed from six months to over nine years. This sample was drawn from 2,000 properties with a high number of estimated bills.

Cost of Toronto Water Inspectors Repeat No-access Site Visits Should be Recovered

Administrative fee is not charged for no-access site visits

In 2016, there were 8,500 failed attempts by Toronto Water inspectors to gain access to properties for meter installations and repairs. These no-access site visits are an unnecessary cost to the City. Currently an administrative fee is not charged for no-access visits even if the visits are requested and scheduled with property owners.

The implementation of a fee would recover inspection costs and expedite water meter installations and repairs. Management has agreed to review a fee structure for no-access site visits.

Potential cost recovery of up to \$550,000 annually

We estimate if the fee is implemented this would result in a cost recovery of up to \$550,000 annually. This is based on the current manual water meter reading fee that Toronto Water charges.

System Reports Required For Management of Water Meter Service Orders

Toronto Water does not have system generated reports for tracking service orders. For example, reports for aging service orders, repeat site visits and service status will assist management in expediting open service orders and analyzing trends.

Recommendations:

- 8. City Council request the General Manager, Toronto Water, to evaluate whether a service fee can be charged on scheduled and repeat no-access site visits.**
- 9. City Council request the General Manager, Toronto Water, to develop system reports for water meter service order management. The reports should include information such as, delays and other useful information that will help to effectively manage water meter service orders.**

B. CUSTOMER BILL REVERSALS, ADJUSTMENTS AND REFUNDS CONSUME SIGNIFICANT STAFF RESOURCES

158,000 bill reversals, adjustments and refund transactions amounted to \$36 million

In 2015, the City processed over 158,000 bill reversals, adjustments and refund transactions which amounted to approximately \$36 million. These transactions are initiated by the customer or the City. The majority of transactions adjust the differences between the actual and estimated billed amounts. As well, customer payment errors also require refunds or adjustments. Decreasing the number of these transactions will free-up staff resources.

Revenue Services does not have system reports to identify reasons for bill reversals, adjustments or refunds. The use of specific codes to identify reasons and to distinguish between the customer and City initiated transactions would help in monitoring these transactions and analyzing trends.

B.1. Administrative Fee for Payment Transfers Not Consistently Charged

An administrative fee of \$42.27 per request (2017 rate) is charged for customer requests to transfer an incorrect payment from one account to another.

City did not collect \$63,000 in administrative fee over two years

We observed that the administrative fee for payment transfers is not charged consistently. The payment transfer fee is manually processed and prone to omissions. We estimate the City did not collect \$63,000 over a two year period.

B.2. Administrative Fee for Processing Refunds Would Help Recover Staffing Costs

City could recover administrative costs of approximately \$35,000 annually

The City does not charge an administrative fee for processing refunds initiated due to customer payment errors. There were 6,331 refunds processed during 2014 and 2015. Our review of a sample of 47 refunds identified 14 refunds or 30 per cent were due to customer payment errors. For example, the City of Ottawa charges \$27 for processing a refund due to customer payment error. We estimate the City could recover \$35,000 annually by charging a similar fee.

Recommendations:

- 10. City Council request the Director, Revenue Services, to develop an automated process for consistently charging the administrative fee for water bill payment transfers.**
- 11. City Council request the Director, Revenue Services, to evaluate whether an administrative fee can be charged for processing refunds resulting from customer payment errors.**
- 12. City Council request the Director, Revenue Services, to evaluate whether separate transaction codes can be created to identify customer and City initiated bill reversals, adjustments and refunds. Reports should be developed using the new codes to identify and monitor the underlying reasons for these transactions.**

C. CONTROLS AT CUSTOMER SERVICE COUNTER OPERATIONS REQUIRE STRENGTHENING

The City operates eight customer service counters for payment collection and addressing customer inquiries. These service counters provide payment services for water, property taxes and parking tags. Over \$250 million a year in collections are handled through these service counters.

No independent review of supervisor's collection variances

Customer service supervisors may be required to perform front line counter responsibilities during peak periods or when counter staff are absent. When performing front line staff roles, the daily reconciliations performed by supervisors are not independently reviewed.

Counter supervisors also have access to the water billing system for applying payments and processing adjustments to customer accounts. This results in a lack of segregation of duties. The responsibility for collecting payments and adjusting customer accounts should be segregated.

Reasons for collection variances are not consistently documented

Front line counter staff reconcile their payment receipts daily. When the amount collected differs from the amount recorded in the system, the difference should be explained on a reconciliation form. The reasons for the differences in the amount collected were not always documented. Over a three year period, the total amount collected was \$51,549 less than the amount recorded in the system. This difference included a small percentage of cash shortages. The remaining were data entry errors and were corrected.

Recommendation:

- 13. City Council request the Director, Revenue Services, to review and enhance the current cash receipts procedures at customer service counters to ensure:**
- a. there is adequate segregation of duties and compensating controls for customer service supervisors;**
 - b. that standard operating procedures for documenting daily variances and compliance requirements are updated; and**
 - c. that an appropriate dollar threshold triggers senior management's review of collection variances.**

D. OTHER ISSUES

D.1. Monitoring of User Access for Water Billing System Requires Improvement

The Auditor General has issued a number of reports that have raised concerns relating to weak user access controls, including:

1. Improving Controls Over Property Tax Assessments and Payment in Lieu of Taxes (PILTs), 2015

<http://www.toronto.ca/legdocs/mmis/2015/au/bgrd/backgroundfile-84553.pdf>

2. Controls Over Parking Tags Need Strengthening, 2010

<http://www.toronto.ca/legdocs/mmis/2010/au/bgrd/backgroundfile-27126.pdf>

Access control reviews require strengthening

The water billing system had 393 active users in February 2016. We noted 39 active user ID's never logged in since their accounts were created. These user ID's should have been removed or suspended. We also noted four temporary ID's did not have expiry dates.

The above deficiencies have the potential for unauthorized access and changes to information in the water billing system. Such unauthorized transactions include adjustments or reversals to customer accounts.

Revenue Services has implemented a review process for information technology systems access monitoring. This process should be enhanced to include other criteria, such as monitoring user accounts with no activity and temporary accounts without an expiry date.

Recommendation:

- 14. City Council request the Director, Revenue Services, to revise the procedure for granting and monitoring user access in the water billing system. The access should be removed on a timely basis for inactive and unauthorized accounts. The practice of creating temporary accounts without expiry dates should be stopped.**

D.2. Relevance of Findings and Recommendations to City Agencies and Corporations

This report includes a number of findings and recommendations that could have relevance to City Agencies and Corporations, such as, findings relating to leased and licensed properties where utility billings may have the potential for errors and omissions. City Agencies and Corporations as landlords need to ensure that all agreed upon charges are billed and recovered on properties leased or licensed to third parties.

The Auditor General will follow-up on the actions taken by the Heads of Agencies and Corporations in the next follow-up cycle in 2018.

Recommendation:

- 15. City Council request the City Manager, to forward this report to the Heads of City Agencies and Corporations for review and necessary action.**

CONCLUSION

The majority of residential, commercial and industrial properties appear to be billed appropriately. The water billing for City-owned leased and licensed properties requires significant improvement. Revenue Services, Toronto Water and Toronto Building Divisions need to work closer to ensure everyone using water is appropriately billed.

The Auditor General has made 15 recommendations in this report to improve communication and coordination between City Divisions, strengthen water billing processes and controls and has identified opportunities for additional revenue and cost recovery.

In total, the Auditor General has made 44 recommendations in the four reports issued for this audit.

We would like to express our thanks for the co-operation we received from staff in Revenue Services, Toronto Water, Toronto Building, Parks Forestry & Recreation, Accounting Services, Legal Services, Real Estate Services Divisions and Geospatial Competency Centre staff during this audit.

Listing of Selected Properties Supporting Audit Findings

Property #	Property Type	Issue	Estimated Unbilled Water Revenue (\$) N/A Not Applicable	Comments
1	Commercial	No Meter/ Unbilled Usage	\$388,000 over 24 years	<ul style="list-style-type: none"> City-owned property with commercial tenant No water billing since 1992
2	Commercial	No Meter/ Unbilled Usage	\$377,000 over 30 years	<ul style="list-style-type: none"> City-owned property with commercial tenant No water billing since 1986
3	Commercial	No Meter/ Unbilled Usage	\$138,000 over 11 years	<ul style="list-style-type: none"> City-owned property with commercial tenant No water billing since 2005
4	Commercial	No Meter/ Unbilled Usage	\$138,000 over 11 years	<ul style="list-style-type: none"> City-owned property with commercial tenant No water billing since 2005
5	Commercial	No-access/ Prolonged Estimated bills	Not known	<ul style="list-style-type: none"> 50 no-access visits from 2008 to 2017 (9 years) to resolve meter issues estimated to have cost the City over \$4,000 in visits alone. Estimated billing from 2008 to early 2017 Average estimate monthly billing \$13,000
6	Residential	No Meter/ Unbilled Usage	To be back billed \$4,500	<ul style="list-style-type: none"> No meter 4 years after construction permit closed
7	Residential	No Meter/ Unbilled Usage	Property back billed \$2,400	<ul style="list-style-type: none"> No meter 2.5 years after construction permit closed Per Google Street View construction significantly completed in early 2014 Auditor General informed management
8	Residential	No Meter/ Unbilled Usage	Estimated amount to be back billed in 2017	<ul style="list-style-type: none"> No water meter for 4 years after construction permit closed Per Google Street View construction significantly completed early 2014 Auditor General informed management
9	Residential	No Meter/ Unbilled Usage	Property to be back billed \$3,500 to date of permit close	<ul style="list-style-type: none"> No meter 4 years after construction permit closed Auditor General informed management
10	Residential	No-access/ No Meter	Property will be back billed in 2017. City will estimate the amount.	<ul style="list-style-type: none"> Meter install delayed since early 2015 No-access to property

Listing of Selected Properties Supporting Audit Findings

Property #	Property Type	Issue	Estimated Unbilled Water Revenue (\$) N/A Not Applicable	Comments
11	Residential – Multi Unit	No-access/ Delayed Meter Repairs/ Prolonged Estimated bills	Not known	<ul style="list-style-type: none"> 15 no-access property visits between 2013 and 2016 to fix meter Estimated bills for 3.5 years
12	Commercial	Prolonged Estimated Billing	Not known	<ul style="list-style-type: none"> Meter stopped working in late 2013 Estimated billing since 2013 Average bill for this account \$23,000 per month
13	Commercial	No-access/ Delayed Meter Repairs	Not known	<ul style="list-style-type: none"> No-access for 18 months to fix water meter 18 no-access site visits from 2013 to 2014 Estimated billing from 2013 to 2014
14	Commercial	No-access/ Delayed Meter Repairs	Owner billed \$65,000 after issue resolved	<ul style="list-style-type: none"> 27 no-access property visits between 2013 and 2016 to fix meter
15	Commercial	No-access/ Delayed Meter Repairs/ Prolonged Estimated bills	Not known	<ul style="list-style-type: none"> 14 no-access property visits for 2.5 years to resolve meter issues 28 estimated bills Total estimated bills \$62,000
16	Commercial	No-access/ Delayed Meter Repairs	Not known	<ul style="list-style-type: none"> 15 no-access property visits for over 1 year to resolve meter issues 18 estimated bills Estimated average monthly bill of \$1,600
17	Residential – Multi Unit	Unmapped Property to Water Meter	N/A	<ul style="list-style-type: none"> Address for a townhouse complex not found in water billing system Meter located at a property on a different street No documentation to map the property to associated meter
18	Commercial – Multi Unit	Unmapped Property to Water Meter	N/A	<ul style="list-style-type: none"> Address for complex not found in water billing system Per Revenue Services the account is at a different address, no documentation to map the property to the associated meter
19	Residential	Delayed Meter Install/ Unbilled Usage	Property back billed \$3,200 to the date property sold	<ul style="list-style-type: none"> Delayed meter installation for 4 years after construction 3 no-access property visits

Listing of Selected Properties Supporting Audit Findings

Property #	Property Type	Issue	Estimated Unbilled Water Revenue (\$) N/A Not Applicable	Comments
20	Industrial	Delayed Meter Install/ Unbilled Usage	Not known	<ul style="list-style-type: none"> • Delayed meter installation for 4 years • 9 no-access property visits • Multiple estimated bills
21	Industrial	No-access/ Delayed Meter Repairs	Not known	<ul style="list-style-type: none"> • 10 no-access site visits to repair water meter • Estimated bills from 2011 to 2013
22	Commercial	Delayed Water Bill	N/A	<ul style="list-style-type: none"> • Owner not billed for 1 year while property vacant • Water leak during period resulted in a bill of \$41,000 • Bill reversed – owner claimed if billed timely, would have noted higher consumption and fixed leak
23	Residential	Delayed Meter Install/ Unbilled Usage	N/A	<ul style="list-style-type: none"> • No meter since 2005 • Back billed \$7,000 in 2016 • Reversed entire \$7,000 as City could not prove property occupied during 11 year period
24	Residential	Delayed Meter Install/ Unbilled Usage	N/A	<ul style="list-style-type: none"> • Delayed meter installation • Meter installed 6 months after construction permit closed
25	Commercial	No Meter/ Unbilled Usage	\$8,000 over 4 years	<ul style="list-style-type: none"> • City-owned property with commercial tenant • Restaurant and retail store not billed for water usage

Management's Response to the Auditor General's Review of Toronto Water Billing and Collections – Phase II: Water Billing and Water Meter Management Controls Require Strengthening

Recommendation 1: City Council request the Director, Revenue Services, to coordinate with Real Estate Services, Parks, Forestry & Recreation, Toronto Water and other City Divisions, and develop a plan to:

- a. compile a complete list of all City-owned leased and licensed properties and determine whether water consumption is being billed in compliance with the lease or licensing agreement;
- b. implement a communication process for 'Do Not Bill' properties for timely status updates when these properties are leased, licensed or sold, to verify whether they should be billed for water consumption;
- c. review existing 'Do Not Bill' properties to identify if they should be billed for water usage and adjust the designation accordingly;
- d. review existing 'Garbage Only' properties to determine if any of these accounts are billable for water; and
- e. periodically monitor the status of all 'Do Not Bill' and 'Garbage Only' accounts for updating the billable status.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Service Division, will compile a list of all City-owned properties, with input from Real Estate, Parks, Forestry and Recreation Divisions and Toronto Water to confirm lease agreement status' and service connections/agreements, with anticipated completion by Q4, 2017.

Processes to address "do not bill" and "garbage only" properties will be developed in consultation with other City Divisions, with anticipated completion by Q1, 2018.

Recommendation 2: City Council request the Director, Revenue Services, in consultation with the City Solicitor, Real Estate Services, Parks Forestry & Recreation and Toronto Water to:

- a. determine the back billing period for outstanding unbilled water consumption for City-owned leased and licensed properties and where required install water meters; and
- b. retroactively bill the water consumption accordingly.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director Revenue Services in consultation with the City Solicitor, Real Estate Services, Parks Forestry & Recreation and Toronto Water will review outstanding unbilled water consumption for City-owned leased or licensed properties, and applicable billings will be issued prior to December 31, 2017.

**Management's Response to the Auditor General's Review of Toronto Water Billing and Collections
– Phase II: Water Billing and Water Meter Management Controls Require Strengthening**

Recommendation 3: City Council request the Treasurer, implement a similar process (as per recommendations 1 and 2) to ensure that applicable property taxes, solid waste charges and any other relevant city charges are being collected on all City-owned properties that are leased or licensed.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Treasurer will coordinate and ensure an initial and annual review by relevant Divisions of all of their leases; will advise MPAC of any leased properties to ensure that property taxes are charged and collected; and will review solid waste charges and any other city fees to property; to ensure all such amounts are properly charged to, and collected from, lessees or licensees, as appropriate by Q4, 2017

Recommendation 4: City Council request the General Manager, Toronto Water, to coordinate with Toronto Building and explore opportunities for shared services relating to construction permit status reporting and water meter verification during building inspections.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

Toronto Water Comments:

Toronto Water will work with Toronto Building to explore opportunities to include the meter installation in the permit process, possibly at the "Vapour barrier and Insulation" phase of the Permit process and will look at data integration with the billing system to provide addresses with no water meters.

Toronto Building Comments:

Toronto Building agrees to support the General Manager, Toronto Water with exploring opportunities for shared services relating to construction permit status reporting and water meter verification.

Toronto Water will develop a work plan to address this matter and report on timelines by September 30, 2017.

**Management's Response to the Auditor General's Review of Toronto Water Billing and Collections
– Phase II: Water Billing and Water Meter Management Controls Require Strengthening**

Recommendation 5: City Council request the Director, Revenue Services, to explore opportunities for obtaining third party information, such as Toronto Hydro consumption data to assist in estimating water consumption.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services is meeting with Toronto Hydro in March 2017 to determine feasibility of exchange of consumption data, with anticipated completion of analysis by Q2, 2017.

Recommendation 6: City Council request the Director, Revenue Services and General Manager, Toronto Water, to evaluate the feasibility of updating the water billing system with water meter records for multi residential properties, severed properties and properties with more than one street address associated with the same meter. A process should be developed for future updates to ensure every address is mapped to a water meter.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

Revenue Services Comments:

On a go-forward basis, Revenue Services will update property records that have new water service connections or service changes to map water meter servicing.

Toronto Water Comments:

Toronto Water agrees that a process should be developed for future updates to ensure every address is mapped to a water meter. This type of mapping is not feasible in the current billing system and should be made a functional requirement of the new billing system.

Toronto Water will develop a work plan to address this matter and report on timelines by September 30, 2017.

Management's Response to the Auditor General's Review of Toronto Water Billing and Collections – Phase II: Water Billing and Water Meter Management Controls Require Strengthening

Recommendation 7: City Council request the Director, Revenue Services and General Manager, Toronto Water, to review all property addresses in the various systems with a view to integrating data and developing exception reports for properties without a water meter. A similar process should be developed for billing other revenue sources, such as, property taxes and solid waste charges.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

Revenue Services Comments

These reports already exist and the Director, Revenue Services will review the feasibility of improving reporting by integrating with other available data sources, and to extend this process to include property taxes and solid waste charges, with anticipated completion by Q1, 2018.

Toronto Water Comments:

Toronto Water will investigate the feasibility of integrating data of new properties for property address and water related systems to determine where there are properties without meters. This is not feasible on existing properties where a site service plan is not available as all the services are underground. Toronto Water will develop a work plan to address this matter and report on timelines by September 30, 2017.

Recommendation 8: City Council request the General Manager, Toronto Water, to evaluate whether a service fee can be charged on scheduled and repeat no-access site visits.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

Toronto Water will evaluate whether a service fee can be charged on scheduled and repeat no access visits for water meter installations, readings or maintenance.

Toronto Water will develop a work plan to address this matter and report on timelines by September 30, 2017.

Management's Response to the Auditor General's Review of Toronto Water Billing and Collections – Phase II: Water Billing and Water Meter Management Controls Require Strengthening

Recommendation 9: City Council request the General Manager, Toronto Water, to develop system reports for water meter service order management. The reports should include information such as, delays and other useful information that will help to effectively manage water meter service orders.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

Toronto Water will work with Revenue Services to develop automated reports for service order management by including this in the functional requirements of the new Enterprise Work Management System and using data from the billing system.

Toronto Water will develop a work plan to address this matter and report on timelines by September 30, 2017.

Recommendation 10: City Council request the Director, Revenue Services, to develop an automated process for consistently charging the administrative fee for water bill payment transfers.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services, will develop an automated process for consistently charging the administrative fee for water bill payment transfers by Q4, 2017.

Recommendation 11: City Council request the Director, Revenue Services, to evaluate whether an administrative fee can be charged for processing refunds resulting from customer payment errors.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services will evaluate feasibility of introducing administrative fees by Q2, 2018.

Management's Response to the Auditor General's Review of Toronto Water Billing and Collections – Phase II: Water Billing and Water Meter Management Controls Require Strengthening

Recommendation 12: City Council request the Director, Revenue Services, to evaluate whether separate transaction codes can be created to identify customer and City initiated bill reversals, adjustments and refunds. Reports should be developed using the new codes to identify and monitor the underlying reasons for these transactions.

Management's Response to the Auditor General's Review of Toronto Water Billing and Collections – Phase II: Water Billing and Water Meter Management Controls Require Strengthening

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services, will evaluate whether separate transaction codes can be created to identify customer and City initiated bill reversals, adjustments and refunds, with periodic reporting and monitoring processes by Q1, 2018.

Recommendation 13: City Council request the Director, Revenue Services, to review and enhance the current cash receipts procedures at customer service counters to ensure:

- a. there is adequate segregation of duties and compensating controls for customer service supervisors;
- b. that standard operating procedures for documenting daily variances and compliance requirements are updated; and
- c. that an appropriate dollar threshold triggers senior management's review of collection variances.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services will review and enhance customer cash receipts procedures by Q4, 2017.

Recommendation 14: City Council request the Director, Revenue Services, to revise the procedure for granting and monitoring user access in the water billing system. The access should be removed on a timely basis for inactive and unauthorized accounts. The practice of creating temporary accounts without expiry dates should be stopped.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

The Director, Revenue Services will review and revise the procedure for granting and monitoring user access to the water billing system by Q3, 2017.

**Management's Response to the Auditor General's Review of Toronto Water Billing and Collections
– Phase II: Water Billing and Water Meter Management Controls Require Strengthening**

Recommendation 15: City Council request the City Manager, to forward this report to the Heads of City Agencies and Corporations for review and necessary action.

Management Response: Agree Disagree

Comments/Action Plan/Time Frame:

City Manager will forward the report to the City Agencies and Corporations for their review and action, if any. Timeline: Q2, 2017
