



**STAFF REPORT
ACTION REQUIRED**

Implementing a Mandatory Downspout Disconnection Program

Date:	October 17, 2007
To:	Public Works and Infrastructure Committee
From:	Lou Di Gironimo, General Manager, Toronto Water
Wards:	All
Reference Number:	P:\2007\Cluster B\TW\pw07041 (AFS# 3141)

SUMMARY

The purpose of this report is to provide an overview of the operational issues associated with implementing a Mandatory Disconnection Program and recommend a phased implementation approach within the City of Toronto, with an initial focus on those properties located within the combined sewer service area.

RECOMMENDATIONS

The General Manager, Toronto Water recommends that:

1. Municipal Code Chapter 681, Sewers be amended such that:
 - a. The connection of downspouts to combined or storm sewers in the combined sewer area of the City, as identified on the map attached as Attachment 1 of this Report, is prohibited;
 - b. The General Manager be authorized to exempt properties from the prohibition set out in Recommendation 1.a. where the General Manager, in the General Manager's sole discretion, determines that the property meets the criteria set out in Attachment 2 of this Report ; and
 - c. The amendments in Recommendations 1 and 2 shall come into force three years from the date of their enactment;
2. Authority be granted to the City Solicitor to submit any Bills required to enact the amendments to Municipal Code Chapter 681, Sewers, proposed in Recommendation 1 of this Report, subject to any necessary refinements, including stylistic, format and organization, as may be identified by the City Solicitor and General Manager, Toronto Water;

3. Low-income property owners be given financial assistance equivalent to participation in the current Downspout Disconnection Program, provided they comply with the eligibility and administrative details as outlined in Attachment 3;
4. The General Manager shall be authorized to prescribe any form of agreement, in consultation with the City Solicitor, and prescribe any City form required to implement the financial assistance provisions of Recommendation 3 and to amend or revise those forms from time to time;
5. No further applications be accepted for the existing voluntary Downspout Disconnection Program after October 31, 2007;
6. Those currently on the waiting list of the existing Downspout Disconnection Program as of October 31, 2007 continue to be processed under that program, provided that: the property owner accepts and executes the Downspout Disconnection Permission/Release Agreement document and the General Manager of Toronto Water receives the executed document within 3 weeks of its delivery to the property owner, failing which the Downspout Disconnection Permission/Release Agreement document and the terms contained therein shall be revoked and withdrawn;
7. All Downspout Disconnection Permission/Release Agreement documents, and the terms contained therein, delivered to property owners by the City *prior to October 31, 2006* which have not been accepted and executed by the respective property owners and returned to and received by the General Manager of Toronto Water prior to October 1, 2007 be hereby revoked and withdrawn by the City effective immediately and the affected property owners be notified by the City in writing;
8. All property owners delivered a Downspout Disconnection Permission/Release Agreement document by the City *on or after October 31, 2006* be notified that the Downspout Disconnection Permission/Release Agreement document and the terms contained therein shall be revoked and withdrawn by the City if the Downspout Disconnection Permission/Release Agreement document is not accepted and executed by the respective property owner and returned to and received by the General Manager of Toronto Water within 30 days of the notification date;
9. The General Manager of Toronto Water report back on the status of the mandatory disconnection program within three years; and
10. The appropriate City officials be authorized and directed to take the necessary actions to give effect thereto.

FINANCIAL IMPACT

Toronto Water's 2007 Operating Budget and Toronto Water's 2008 Operating Budget submission contain sufficient funding to service the applications currently on the Voluntary Downspout Disconnection Program list, as recommended in this report.

Toronto Water's 2007 Capital Budget and Toronto Water's 2008-2012 Capital Budget request contains funding in WBS Element CWW438-01 – Downspout Disconnection Program, sufficient to fund the downspout disconnections for applications currently on the Voluntary Downspout Disconnection Program list; to provide financial subsidies for low income property owners for the disconnection of roof downspouts in accordance with

the criteria contained in this report; and to implement the supporting Communications and Public Education Campaign proposed in this report.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

City Council, at its meeting on September 25, 26, 27 and 28, 2006, requested the General Manager, Toronto Water to submit a policy and implementation report in 2007 with respect to the mandatory disconnection of downspouts. The Council Decision Document regarding this request can be found at:

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060925/pof7rpt/cl056.pdf>

ISSUE BACKGROUND

Downspout connections to the City's sanitary sewer system are strictly prohibited, through the City's Sewer Use By-Law (Municipal Code Chapter 681-11, A (2) and Q (1)); and the By-Law no longer permits downspouts in new homes to be connected to any sewer system. In accordance with the By-Law, property owners are responsible for complying with these requirements, which includes the cost of disconnecting illegally connected downspouts. At this time, downspouts connected to the City's combined (sanitary and storm) sewer; and storm sewer systems are permitted within the By-Law.

It is estimated that 350,000 residential properties (70 percent of the approximately 500,000 residential properties in the City) are directly connected to the City's sewer systems today; of which 120,000 properties are connected to combined sewers.

A City-wide Voluntary Downspout Disconnection Program was established in 1998 to encourage property owners to disconnect their downspouts from the City's storm or combined sewer systems. The rationale for the program and budget allocation can be found at: <http://www.toronto.ca/legdocs/agendas/committees/wu/wu981104/it006.htm>

This program is administered at no cost to the property owner; and where the City administers, pays for and guarantees the work of a private contractor hired to undertake the disconnection. The City spends an estimated \$1,300 per property (ie. an estimated \$1000 in contract costs and \$300 in inspection and administration costs) for the disconnection of downspouts through this program.

Since that time there have been numerous requests from Committee and Council for reports on the feasibility of establishing a "mandatory" program. The Council Decision Documents for reports submitted in 1999, 2003, 2004 and 2005 can be found, respectively, at:

<http://www.toronto.ca/legdocs/1999/agendas/council/cc/cc990511/wu7rpt/cl007.htm>

<http://www.toronto.ca/legdocs/2003/agendas/council/cc030624/wks5rpt/cl012.pdf>

<http://www.toronto.ca/legdocs/2004/agendas/committees/wks/wks041109/it021.pdf>

<http://www.toronto.ca/legdocs/2005/agendas/committees/wks/wks050427/it024.pdf>

These reports highlighted the challenges in instituting a mandatory program and recommended instead, operational changes to increase the level of interest and uptake through the existing Voluntary Disconnection Program. However, in spite of the fact that the Program is fully subsidized and that a number of operational changes have been implemented over time to help increase uptake levels, including targeted (area specific) communication and mailings, the uptake has been low with annual disconnections remaining relatively constant at about 2,000 per year.

Further, in 2006, an intensive door-to-door campaign, directed at increasing the uptake of this voluntary Program, was tested in a chronic basement flooding prone area of the City, consisting of a neighbourhood of about 550 homes. Up to three visits were required by staff, which included evenings, weekends and holidays to ensure that contact was made with the affected residents, over a one month period. Notwithstanding, the direct benefit to the community by this program, the significant level of effort made in increasing interest and uptake levels; and the fact that there was no cost to the homeowner, only 60% of the homeowners agreed to participate in the Program. The pilot did, however, demonstrate that this level of effort was not sustainable across the City and was not a practical approach to increasing uptake levels in the Program.

In 2006, in recognition of the merits associated with disconnecting downspouts in chronic basement flooding prone areas (where downspouts are connected to the separated storm sewer system), the staff report, referenced in the above-noted Decision History, recommended advancing a mandatory program across the City.

COMMENTS

Implementation Issues

The key hurdles to overcome in the implementation of a mandatory downspout disconnection program are the responsibilities and costs borne by the property owner and the City, respectively.

Property Owner Responsibilities & Impacts

The impact on the individual property owner will vary depending on local/site conditions. This ranges from relatively simple disconnections where the downspouts can be easily disconnected and directed so as not to adversely impact buildings or create flooding situations, to more complex disconnections where eaves troughs may have to be reoriented and landscaping modified to ensure safe drainage. Further, in some cases, there will be an aesthetic impact associated with the disconnection, where roof leaders may have to be extended, away from the foundation wall, across lawns and/or gardens.

City Responsibilities & Impacts

The impact to the City is associated with the administration of this type of program; where there will be a need for an intensive public education campaign, followed by inspections and by-law enforcement. The administration is further complicated, should financial incentives be provided to help offset the cost of disconnection, where an

estimated 30 additional staff would be required to carry out pre and post disconnection inspections and handle administrative responsibilities to ensure proper financial controls are in place with the disbursements made by the City. This cost has been estimated at \$2.6 million per year. Based on the above, it is not recommended to implement a mandatory program across the entire City with a financial subsidy as was described in the 2006 report referred to in the Decision History.

Implementation Proposal

As noted above, downspout connections are not permitted to the City's sanitary sewer system, through the City's Sewer Use By-Law. Accordingly, connections to the combined sewer system should be targeted as a first priority in the implementation of a mandatory City-wide program. Further, through the development of the City's Wet Weather Flow Master Plan, City Council established the areas of the City serviced with combined sewers as a priority for downspout disconnection, to be addressed in the first 10 years of the Plan implementation. A copy of the Council Decision Document associated with this request can be found at:

<http://www.toronto.ca/legdocs/2002/agendas/council/cc021126/pof15rpt/cl023.pdf>

The City's combined sewer service area, presented in Attachment 1, includes most of the former City of Toronto, York and East York and the south-west portion of former Scarborough. In many cases, as a result of extensive sewer separation work undertaken by the former municipalities where the road drainage was directed to separated storm sewers, the remaining "combined sewer" functions similar to separated sanitary sewers in other areas of the City, except that roof downspouts remain connected, contributing to combined sewer overflow discharges and water quality impacts along the waterfront and area watercourses. Further, even for smaller rainfall events which do not create overflow conditions, relatively clean "roof runoff", is mixed with sanitary sewage and conveyed to the City's wastewater treatment facilities for final treatment and disposal. This creates an additional and unnecessary load on the treatment plants. Ironically, the dirtier "road runoff", intercepted by the separated storm sewers is routed directly to the lake and rivers untreated.

It is estimated that about 120,000 properties would be affected by a mandatory program targeting the area of the City serviced by combined sewers.

It is proposed that the affected property owners be given three years to comply with the mandatory program, enforced through amendments to the City's Sewer Use By-Law. Exemptions would be permitted for extenuating, site specific conditions, as noted in Attachment 2. The exemptions would apply to situations where disconnecting the downspouts would create a hazardous condition such as flooding of adjacent properties or contributing to slope failures or erosion in ravines; or where the disconnection is technically not practical (e.g. disconnections requiring internal reconstruction and plumbing retrofits) or feasible.

For the reasons noted above, it is proposed that no financial subsidies be provided to affected property owners, but financial support would be provided to low income property owners.

It is also proposed that applications for the City's existing Voluntary Downspout Disconnection Program, currently on file and those received by October 31, 2007 be processed through the existing process. The existing Voluntary Downspout Disconnection Program would cease to exist thereafter.

A further report to the Public Works and Infrastructure Committee is expected early in 2008, documenting the outcome of the first set of Class Environmental Assessment projects undertaken in the priority chronic basement flooding prone areas. A review of the merits of accelerating the implementation of a mandatory downspout disconnection program for these targeted areas will be included in this report.

Before the end of the three year phase-in period for the combined sewer service area, a report to the Public Works and Infrastructure Committee will be submitted to provide an update on the status of the phase-in of the mandatory program and to detail the phase-in of the program, across the rest of the City.

Assistance for Low-Income Property Owners

Financial assistance in the form of cost reimbursement is available to eligible property owners if the gross household income of the property owners is verified to be less than \$40,000. The eligibility criteria and administrative processes are described in Attachment 3.

Communications and Public Education Campaign

To ensure the successful implementation of the mandatory downspout disconnection program, notification activities will include a variety of methods to achieve widespread public awareness of the new rules. These will include announcement in print publications, posting on the City website, distribution of information to community centres, public libraries, and Councillor and Constituency Offices. The City will set up a help-line to assist Toronto residents to comply with the new program.

A multi-faceted, public education campaign will deliver a combination of information, comprehensive advice and tips at key points throughout the 3 year program roll out, including: a how to "do-it-yourself"; how to contract the work out; and ideas on how to use the rainwater and avoid flooding hazards. The targeted audience will be all owners of affected properties within the City's combined sewer service area, through various media, and in several languages.

The key elements of the education campaign will be:

- a website (www.toronto.ca/downspoutdisconnection) with useful information for residents;
- brochures, fact sheets and technical guides, distributed through civic centres, libraries and other community locations;

- spring and fall advertising in newspapers, and magazines;
- displays and information at public events such as Community Environment Days, Canada Blooms and the Canadian National Exhibition;
- ongoing communication with the industry (building) sector on compliance issues;
- multilingual outreach;
- partnerships with community agencies, particularly those reaching multicultural audiences; and
- TW will consult with staff in other City divisions, commercial stakeholders and the public on an ongoing basis to assess and adapt its educational approach.

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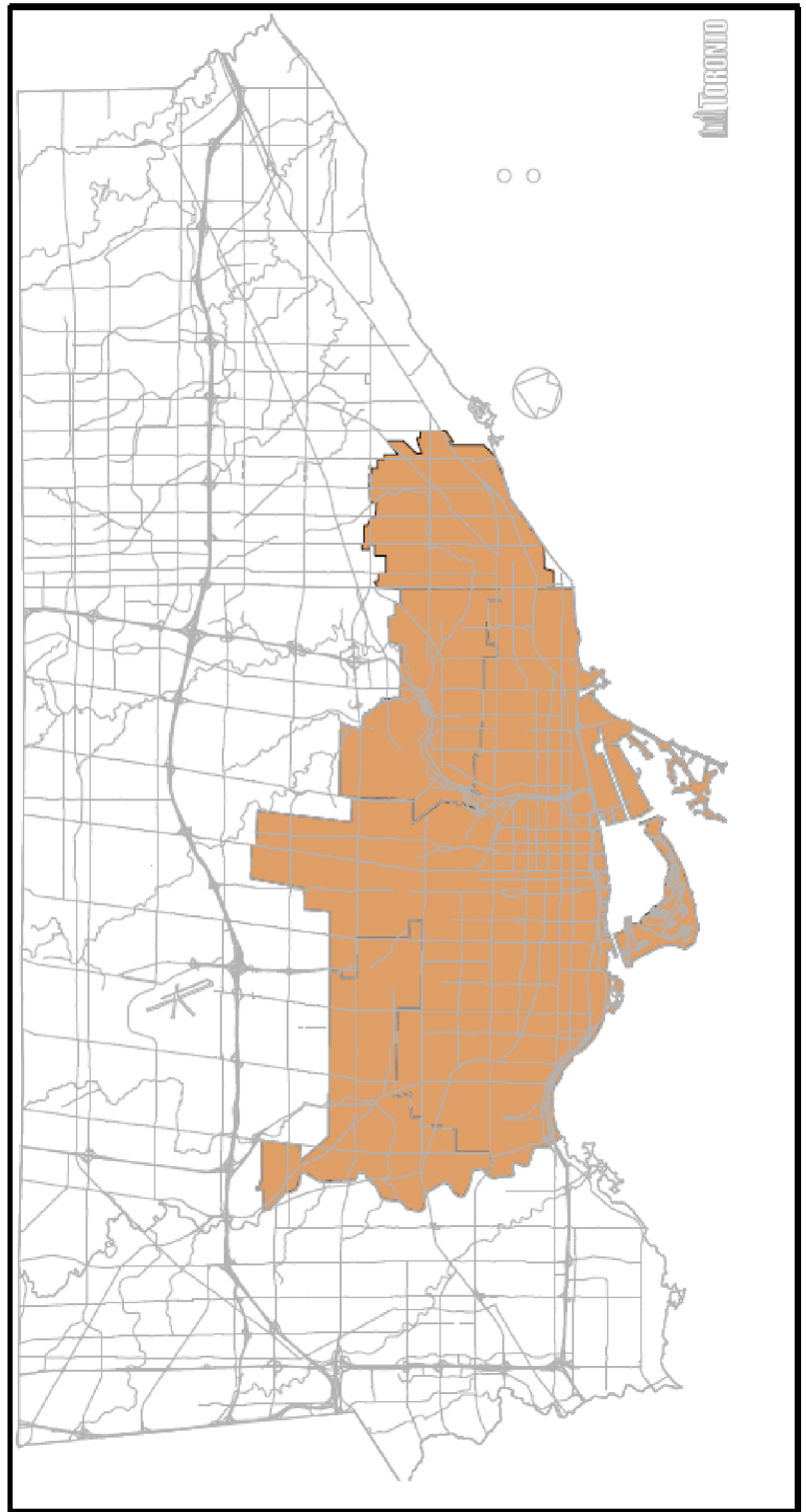
Lou Di Gironimo,
 General Manager, Toronto Water

ATTACHMENTS

Attachment 1: Figure 1. City of Toronto Combined Sewer Area
 Attachment 2: Mandatory Downspout Disconnection Program - Exemption Criteria
 Attachment 3: Eligibility Criteria: Financial Assistance Program for Low Income Property Owners

Attachment 1

Figure 1. City of Toronto Combined Sewer Service Area



Attachment 2

Mandatory Downspout Disconnection Program - Exemption Criteria

The following exemptions are permitted within the Mandatory Downspout Disconnection Program:

1. Disconnection of downspouts which would create a hazardous condition.

Examples:

- there is no location for discharge on the property that would not create a discharge onto an adjoining property or directly onto a public sidewalk;
- the only feasible discharge location would create an unstable slope condition
- the only feasible discharge location would create erosive conditions in a ravine or other protected area
- the disconnection would create an inflow to a sanitary sewer
- the disconnection would result in migration of soil contaminants off of the property

Note that disconnection on to paved areas is not in itself a “hazardous” condition and that it may be possible to disconnect some downspouts at a property, but not others.

2. Disconnection of downspouts is not technically feasible.

Examples:

- there are no external downspouts, because the roof drains are internal to the building
- the building is a heritage building and the downspouts can't be moved

Attachment 3

Eligibility Criteria: Financial Assistance Program for Low Income Property Owners

1. Definitions:

HOUSEHOLD INCOME — The combined gross income of all eligible persons occupying the eligible property in respect of which the application for financial assistance is made.

ELIGIBLE PROPERTY — Property classified as residential property on the annual assessment roll, or a portion of property classified as residential property.

OWNER — A person assessed as the owner of residential real property, and includes an owner within the meaning of the *Condominium Act*.

ELIGIBLE PERSON — A low-income property owner who meets the qualifications set out below:

- A. Who owns the residential real property; and
- B. Who has a household income of \$40,000 or less.

2. Eligibility to receive financial assistance:

A person is eligible to receive financial assistance if:

- A. The person is an eligible person; and
- B. The eligible person has made an application for financial assistance in accordance with the provisions of Section 3; and
- C. Where title to the eligible property is held by an eligible person and his or her spouse or same sex spouse and no other owner, one of the joint owners must qualify as an eligible person, but where title to the eligible property is held jointly by an eligible person and a person or persons who are not his or her spouse or same sex spouse, all of the joint owners must qualify as an eligible person; and
- D. Payment for all taxes payable for all previous years and water charges payable for the current year has been made in full.

3. Applications for financial assistance.

- A. Applications for financial assistance must be in writing on a form prepared by the City Treasurer for this purpose. An application must include documentation in support thereof in a form satisfactory to the City Treasurer, to establish that the applicant or, in the case of property held jointly in accordance with Section 2 (D),

the applicant's spouse is an eligible person, that the residential real property with respect to which the application is made is eligible for such financial assistance.

- B. The property owner must obtain a minimum of three quotations from licensed contractors. Reimbursement will be based on the lowest quote.
- C. The property owner must contact Toronto Water prior to any downspout disconnection work being completed, in order for a Downspout Disconnection Inspector to inspect the property before any work is completed.
- D. An inspection will also be conducted by a Toronto Water Downspout Disconnection Inspector after the work is completed and prior to approval of the low-income financial assistance, in order to verify the eligible work was completed.
- E. The original paid invoice and three cost estimates from licensed contractors must be forwarded to Toronto Water for processing. The invoice must be itemized in detail to indicate the work done, materials used, and cost itemized, to the satisfaction of Toronto Water.
- F. Reimbursement will be provided where licensed contractors undertake and perform the necessary downspout disconnection work.
- G. The property owner is responsible to retain the services of a licensed contractor and obtain all necessary approvals and permits if so required to carry out the necessary exterior downspout disconnection work on private property.
- H. The property owner is responsible for payment of the contractor's invoice for work on private property. Toronto Water will not deal directly with any private contractor for payment or dispute resolution.
- I. Low income assistance applications must be submitted to Toronto Water within one year from the date of a paid invoice.
- J. An application of financial assistance may be denied where the request for low income financial assistance is ineligible under the terms of the Downspout Disconnection Policy.

4. Financial Assistance.

- A. The financial assistance for eligible low-income eligible persons referred to above shall be in the form of cost reimbursement for eligible works.
- B. There is no reimbursement for costs incurred by the property owner related to property maintenance work, for example, rotting fascia board, roofing work, for

upgraded specialty finishes, for example copper materials, for damaged goods, landscaping or for the restoration of property after the downspout disconnection work is completed. Reimbursement is only provided strictly for work directly related to the downspout disconnection and for standard aluminum eaves trough and downspout materials as described below under section 5. Eligible Works. Any interior work is not reimbursable.

- C. Financial assistance is provided per property on a no-fault basis.

5. Eligible Work

- A. Supply and install standard aluminum downspouts, including all necessary fittings, removal of existing downspouts as required and disposal of all surplus and waste material.
- B. Supply and install standard aluminum eavestroughs including all necessary fittings, removal of existing eavestroughs as required and disposal of all surplus and waste material.
- C. Disconnection of downspouts from household drain including plugging or capping of abandoned pipe with concrete or PVC or ABS cap as required and disposal of all surplus and waste material.
- D. Supply and install PVC splash blocks.