

STAFF REPORT ACTION REQUIRED

Basement Flooding Protection Subsidy Program

Date:	April 16, 2007	
То:	Public Works and Infrastructure Committee	
From:	Lou Di Gironimo, General Manager, Toronto Water	
Wards:	All	
Reference Number:	P:\2007\Cluster B\TW\pw07015 (AFS# 4236)	

SUMMARY

The purpose of this report is to seek Council approval for the terms and conditions of a new City-wide Basement Flooding Protection Subsidy Program ("BFPSP"). In the past, this Program was made available only to those property owners, as specifically approved by Council, who had filed a basement flooding complaint during a particular storm event. Implementation of all the works identified in the Program provides an individual property owner the maximum basement flooding protection from sewer back-up situations.

In July 2006, Council authorized staff to develop a new City-wide Basement Flooding Protection Subsidy Program as part of the 2007 Toronto Water Budget process. This report outlines the details of the program and clarifies that subsidies are available to owners of existing single, duplex or tri-plex residential buildings, regardless of their flooding history and describes the communication and education activities proposed to be undertaken in support of this program.

RECOMMENDATIONS

The General Manager of Toronto Water recommends that:

- 1. the Basement Flooding Protection Subsidy Program be adopted as described in the attachment for this report; and
- 2. the General Manager of Toronto Water continue to monitor the implementation of the Basement Flooding Protection Subsidy Program and be authorized to revise or amend the type of basement flooding protection work ("Eligible Works")

qualifying for a subsidy and the subsidy limits applicable to such work, subject to the total subsidy limit of \$3,200.00 per property, and to otherwise administer the Program, as the General Manager may deem necessary, to improve the effectiveness of the Program

FINANCIAL IMPACT

The approved 2007 Capital Budget & Forecast for Toronto Water identifies multi-year funding in the amount of \$500,000 per year from 2007 to 2010, inclusive, for a total of \$2,000,000 in WBS Element CWW421-01 Basement Flooding Home Isolation Program.

DECISION HISTORY

City Council at its meeting on July 25, 26 and 27, 2006, adopted without amendment, Clause 41 of Policy and Finance Committee Report 6 entitled "Considerations for Amendments to the 2005 Flood Damage Grant Program". It was agreed to expand the program City-wide and requested the General Manager, Toronto Water to incorporate funding, to support the Program, as part of the 2007 Capital Budget submission.

An electronic copy of the report is available at: http://www.toronto.ca/legdocs/2006/agendas/council/cc060725/pof6rpt/cl041.pdf

City Council at its meeting on February 5, 6, 7 and 8, 2007, adopted without amendment, Clause EX3.1 of Executive Committee Meeting No.3 entitled "2007-2016 Capital Program Toronto Water Analyst Briefing Notes", which provides funds in the amount of \$500,000 for each year, 2007 to 2010, inclusive, for the Basement Flood Protection Subsidy Program.

ISSUE BACKGROUND

In response to past extreme storm events (e.g. May 2000 and August 2005), where numerous basement flooding complaints were received across the City, City Council authorized Toronto Water to provide subsidies, through the "Voluntary Basement Flooding Protection Subsidy Program" in support of the implementation of works on private property to help protect against basement flooding as a result of sewer back-ups.

At this time, Toronto Water is in the process of undertaking a comprehensive engineering analysis of flood prone areas to determine what improvements can be made to the City's sewer systems to reduce basement flooding. It is expected that these improvements will require the construction of major capital works over an extended period of time. In the meantime, the BFPSP can help homeowners reduce the risks of basement flooding due to extreme storm events.

The BFPSP was initially approved in 2001 to provide relief to homeowners who were flooded by the May 12, 2000 storm event.

The BFPSP recognized several types of basement flood protection works that would be eligible for a subsidy. Under the original program, subject to a total subsidy limit of \$1,750.00 per property, the City funded:

- (a) \$1,000 for a backwater valve only or 50% of the total cost for such work, whichever is less;
- (b) \$1,600 for a sump pump only or 50% of the total cost for such work, whichever is less;
- (c) \$2,600 for a backwater valve and sump pump or 50% of the total cost for such work, whichever is less;
- (d) \$500 for downspout disconnection or 50% of the total cost for such work, whichever is less; and
- (e) \$400 to sever and cap a connecting pipe or 50% of the total cost for such work, whichever is less.

The homeowner was required to obtain a minimum of two quotes from licensed plumbing or drain contractors. The homeowner was also required to obtain a plumbing permit for a backwater valve and have it inspected by Toronto Building.

The BFPSP subsidy was subsequently amended to increase the participation rate for installing basement flood protection works. Subject to a total subsidy limit of \$3,200.00 per property, the City currently funds:

- (a) \$1,000 for a backwater valve only or 80% of the total cost for such work, whichever is less;
- (b) \$1,500 for a sump pump only or 80% of the total cost for such work, whichever is less;
- (c) \$2,300 for a backwater valve and sump pump or 80% of the total cost for such work, whichever is less;
- (d) \$500 for downspout disconnection or 80% of the total cost for such work, whichever is less; and
- (e) \$400 to sever and cap a connecting pipe or 80% of the total cost for such work, whichever is less.

Subsequent events in August 2003, August 2005, May 2006, July 10 and July 23, 2006 caused additional basement flooding. After each of these events, City Council approved extending the BFPSP to affected homeowners.

Up to and including 2006, subsidies for flood protection works were limited to homeowners who were affected by one of the specified storm events identified above. However, City Council at their meeting on July 25, 26 and 27, 2006 approved the expansion of the BFPSP on City-wide basis, irrespective of previous occurrences of basement flooding.

COMMENTS

Basement Flooding Protection Works Implemented within Residential Properties To-date

Since 2001 when the BFPSP was first established, to the end of 2006, subsidies in the amount of \$978,041 have been disbursed for flood protection works implemented. Based on a list of reported basement flooding incidences, a total of 3,019 homeowners were sent application forms for subsidies with information about causes of basement flooding and the rationale for installing backwater valves and sump pumps and disconnecting their downspouts. However, only 756 homeowners decided to participate in the subsidy program. The following table summarizes the subsidies provided by year, for which the subsidies were made available:

Year of Flood Event(s)	Number of Participants	Amount of Subsidy
2000	203	\$220,607
2003 & 2005	541	\$743,435
2006	12	\$13,999

Program Improvements

The primary purpose of the BFPSP is to provide general information to homeowners to help them reduce the risk of future flooding and to make available a subsidy to cover some of their costs to carry out the work. Information might include the causes of basement flooding and the advantages of implementing lot level control measures to reduce the risk of basement flooding, advice on hiring a competent plumbing contractor, general information about home drainage systems and BFPSP requirements. The subsidy is intended to help the homeowner defray the costs of undertaking work on their property which is typically required to prevent the backflow of sewage or storm water into their basement.

Private drainage systems can be complex and each one is unique. An accurate and complete understanding of the system is required before one can determine the best solution that will help to prevent basement flooding. Plumbing or drain contractors are usually called upon to resolve basement flooding problems. They should be able to use their experience with private drainage systems to pinpoint the problem and successfully install the most appropriate solution. City staff are not in a position to provide any analysis of a homeowner's drainage system or to recommend solutions.

The BFPSP could be improved by clarifying eligibility for the subsidy and improving communication with homeowners. Since the program will now be available to all homeowners and not just those who have experienced flooding, it will be necessary to advertise the program more broadly.

Prior to January 1, 2007, eligibility for a grant under the BFPSP had been restricted to homeowners who had received specific Council authority and notified the City that they had been flooded as a result of a particular flooding event. Since January 1, 2007, any homeowner will be eligible for a subsidy under the program, even if they have not been

flooded before. For further clarification, a "homeowner" includes only a person or persons who own and live in a residential building with three or less separate dwelling units such as single family, duplexes, and triplexes. This is consistent with the eligibility criteria for the City's Drain Grant Policy.

The City's website will be revised to reflect these latest changes. The website will make available an information package for homeowners including a blank application form, details of the types of flood protection works eligible, the applicable subsidies available and their respective limits, and general guidelines on how to carry out flood protection works with the assistance of a plumbing contractor. The program will also be advertised as a feature in the "Toronto Water Watch" flyer and at trade shows. Brochures will be updated and made available at the appropriate counters at each of the City's civic centres. Information about the changes to the program will also be communicated to all City Councillors.

A forum will be held to discuss the BFPSP and its objectives with Toronto's plumbing and drain industry and firms who manufacture flood protection works. This will increase understanding of what the City's expectations are and what the industry can deliver to help reduce the incidence of basement flooding. Ways to improve the flow of information between the plumber and the homeowner will also be explored.

Past participants in the BFPSP will be surveyed to get their opinions on how well the program served them and what improvements they might suggest.

As part of the information package, homeowners will be advised to have the plumbing contractor prepare a brief report complete with sketches or drawings documenting the results of their investigations and proposed solution. The report would demonstrate to the homeowner the thoroughness of work done by the contractor.

As part of the application form the homeowner will be required to verify to the City that they have been advised by a licensed plumbing contractor of the type of flood protection works installed and are aware of any future and ongoing maintenance requirements.

Homeowners will be strongly encouraged at every opportunity to do their due-diligence before hiring a plumbing contractor, by shopping around for the best contractor, asking for and calling references to confirm that the flood protection work was done successfully and to the satisfaction of the reference.

Workshops, seminars, or information sessions will be organized as required with the plumbing and drain industry to review issues that cause basement flooding, review traditional and advanced techniques to undertake comprehensive investigations of home drainage systems, and how to use a systems approach to establish an appropriate solution. The City could then prepare a list of those contractors who participated at the workshop and make it available to homeowners who request help in finding a contractor.

Similar events could be organized for members of the public if it is determined that there is enough interest.

CONTACT

Ted Bowering, P.Eng. Manager, Program & Policy Development Toronto Water Phone: 416-338-5473 Fax: 416-338-2828 Email: tbowerin@toronto.ca

SIGNATURE

Michael D'Andrea, P.Eng. Director, Water Infrastructure Management Toronto Water Phone: 416-397-4631 Fax: 416-338-2828 Email: mdandre@toronto.ca

Lou Di Gironimo General Manager, Toronto Water

ATTACHMENTS

1. Summary of the Basement Flooding Protection Subsidy Program

Summary of the Basement Flooding Protection Subsidy Program

Who is eligible?

Homeowners in the City of Toronto who live in their own home, including single family, duplex, and triplex buildings are eligible for subsidies.

Homeowners who have experienced basement flooding or those who have not experienced flooding but wish to undertake flood protection works are eligible for subsidies.

Homeowners must disconnect their downspouts from the City's sewer systems, where feasible in the determination of the City, to be eligible for subsidies.

Toronto Water provides subsidies for flood protection works through Toronto Water's annual Capital Works budget. Subsidies are subject to available funding in the Capital Works budget and are provided on a first come-first serve basis.

Subsidies are provided one-time only for each property on a no-fault or subsidy basis.

The subsidy is available only to existing homes, not for homes under construction.

What is eligible?

The homeowner must consult with a licensed plumbing or drain contractor to determine what type of flood protection works is most suitable to reduce the potential for future basement flooding.

The following works, upon proper installation, are eligible basement flood protection works (the "Eligible Works"):

- Backwater valve and / or Sump pump
- Downspout disconnection
- Pipe severance and capping

The Total Subsidy Limit per property for all Eligible Works is \$3200.00.

Subject to the Total Subsidy Limit, upon approval of a subsidy application, the City will subsidize the costs to supply and install the Eligible Works up to the following limits:

- (a) \$1,000 for a backwater valve or 80% of the total cost for such work, whichever is less;
- (b) \$1,500 for a sump pump or 80% of the total cost for such work, whichever is less;
- (c) \$2,300 for a backwater valve and sump pump or 80% of the total cost for such work, whichever is less;

- (d) \$500 for downspout disconnection or 80% of the total cost for such work, whichever is less; and
- (e) \$400 to sever and cap a connecting pipe or 80% of the total cost for such work, whichever is less.

Costs for a specific type of Eligible Works which exceed the subsidy limit for such Eligible Works cannot be carried over or applied, in whole or part, to any other type of Eligible Works when calculating the homeowner's total subsidy.

The Eligible Works must be completed and paid for in full prior to application for the subsidy.

Process

Homeowners are advised to get quotations from a minimum of two licensed plumbing or drain contractors.

Homeowners are responsible to retain the services of a qualified contractor and obtain all necessary approvals and permits to carry out the necessary work including a plumbing permit from Toronto Building.

Homeowners are responsible for payment of the contractor's invoice for work on their property. Toronto Water will not deal directly with any contractor.

Homeowners are advised to have the contractor prepare a brief report that describes the existing private drainage works and the layout for proposed flood protection works.

Homeowners must submit a fully completed application form, in a form prescribed by the General Manager of Toronto Water, within one year after the flood protection works were completed including:

- A detailed invoice of the Eligible Work completed by the contractor indicating that the Eligible Works have been "Paid in Full";
- The date when Toronto Building inspected the flood protection works.

A subsidy cheque will be mailed to the homeowner within eight to ten weeks of the approval of the subsidy application.

Homeowners are solely responsible for the undertaking of any basement flooding protection measures and works and for retaining any necessary qualified professionals and contractors to perform the works. Homeowners acknowledge that the City does not in any way warrant the appropriateness of flood protection works or any type of such works or the workmanship of the goods and services of any contractor and further agree not to make a claim against the City or anyone for whom at law it is responsible, with respect thereto.