

Clause embodied in Report No. 5 of the Policy and Finance Committee, as adopted by the Council of the City of Toronto at its regular meeting held on April 23, 24, 25, 26, 27, and its special meeting held on April 30, May 1 and 2, 2001.

**3****Water and Wastewater  
2001 Operating Budget and  
2001-2005 Capital Program**

*(City Council at its regular meeting held on April 23, 24, 25, 26, 27, and its special meeting held on April 30, May 1 and 2, 2001, amended this Clause by:*

- (1) *striking out Recommendation (B) of the Policy and Finance Committee and inserting in lieu thereof the following:*

*“(B) that the list of projects and revised cashflows outlined in the report dated April 26, 2001, from the Commissioner of Works and Emergency Services, be approved.”; and*

- (2) *adding thereto the following:*

*“It is further recommended that:*

- (a) *the City Auditor be requested to conduct a detailed review of all additions to and withdrawals from the Water and Wastewater reserve accounts since amalgamation;*
- (b) *such review examine all documentation supporting additions to and withdrawals from the reserve accounts;*
- (c) *the review also include:*
- (i) *an examination of the appropriate Council authority for all such transactions, including circumstances where the nature of the reserve may have be changed from a reserve fund to a reserve; and*
- (ii) *consultations with Ernst & Young, the City’s external financial Auditors, in order to determine the extent of the audit work conducted by them on reserve transactions; and*
- (d) *the City Auditor also review the rationale and reasons for the fact that the City’s Water and Wastewater reserve accounts are not subject to a separate financial attest audit by the external City Auditors, Ernst & Young, as was the case at the pre-amalgamation municipalities; and*

- (e) *the following motion be referred to the Commissioner of Works and Emergency Services for further consideration, in consultation with the City Solicitor:*

*Moved by Councillor Moscoe:*

*‘That the Clause be amended to provide that the Home Isolation Program be amended to delete the requirement of the homeowner to absolve the City of liability in order to receive funds for a program which is already covered by the provisions of the Municipal Act.’ ”)*

**The Policy and Finance Committee recommends:**

- (A) **that a 2001 Capital Program of \$221 M be adopted so that no new borrowing is required;**
- (B) **that the Commissioner of Works and Emergency Services be requested to submit a report to the Works Committee on the amounts for each project and sub-project that are included in the recommended budget; and**
- (C) **the adoption of the following Recommendation No. (2) embodied in the communication (April 12, 2001) from the City Clerk, entitled “Water and Wastewater – 2001 Operating and Capital Budget – All Wards”:**

**“(2) the Budget Advisory Committee recommends to the Policy and Finance Committee, and Council:**

- (a) **the adoption of the 2001 Operating Budget, as presented, subject to the following \$6.6 million of adjustments:**
- (i) **adjustments to salary/benefits for additional gapping savings of \$1.1million;**
  - (ii) **reductions of \$698,100.00 for technical and support service charges from WES;**
  - (iii) **revised estimate of interest earnings of \$2.2 million;**
  - (iv) **decrease in non salary expense of \$1.9 million, based on review of 2000 actual expenses; and**
  - (v) **reductions in the Inter-Departmental charges of \$0.741 million from Finance – Revenue Division for billing, collection and client services;**
- (b) **that when the water rate and financing options are presented for the 2002-2006 Capital Budgets of the Water and Wastewater Programs, the Chief Financial Officer and Treasurer and the Commissioner of**

**Works and Emergency Services be requested to report to the Budget Advisory Committee and the Works Committee on same, such options to include:**

- (i) the total debt to net expenditure ratio being maintained at current levels; and**
- (ii) rate increases being limited to a maximum of 5 percent per year;**

**and further the said report also include, but not be limited to:**

- (iii) realistic expenditure levels; and**
- (iv) sources of funding;**
- (c) that \$50,000.00 be approved to hire consultants for a drainage study at Hogg's Hollow, such study to be funded within the existing operating expenditure as outlined by staff;**
- (d) the adoption of Recommendations Nos. (1), (2) and (5) of the joint report (January 24, 2001) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer, as recommended by the Works Committee, embodied in the report (February 28, 2001) from the City Clerk, respecting the No Fault Flood Grant Program: Basement Flooding Damages and Clean-up Cost; and**
- (e) the adoption of the recommendations of the Works Committee, embodied in the report (March 28, 2001) from the City Clerk, respecting the Universal Metering Program and Implementation of a New Modern Meter Reading Technology.**

**The Policy and Finance Committee submits the following communication (April 12, 2001) from the City Clerk, Budget Advisory Committee entitled, "2001 Operating and Capital Budget (All Wards)":**

Recommendations:

The Budget Advisory Committee:

- (1) submits, without recommendation, the 2001 Capital Budget for Water and Wastewater; and**

- (2) recommends to the Policy and Finance Committee, and Council:
- (a) the adoption of the 2001 Operating Budget, as presented, subject to the following \$6.6 million of adjustments:
    - (i) adjustments to salary/benefits for additional gapping savings of \$1.1million;
    - (ii) reductions of \$698,100.00 for technical and support service charges from WES;
    - (iii) revised estimate of interest earnings of \$2.2 million;
    - (iv) decrease in non salary expense of \$1.9 million, based on review of 2000 actual expenses; and
    - (v) reductions in the Inter-Departmental charges of \$0.741 million from Finance – Revenue Division for billing, collection and client services;
  - (b) that when the water rate and financing options are presented for the 2002-2006 Capital Budgets of the Water and Wastewater Programs, the Chief Financial Officer and Treasurer and the Commissioner of Works and Emergency Services be requested to report to the Budget Advisory Committee and the Works Committee on same, such options to include:
    - (i) the total debt to net expenditure ratio being maintained at current levels; and
    - (ii) rate increases being limited to a maximum of 5 percent per year;and further the said report also include, but not be limited to:
    - (iii) realistic expenditure levels; and
    - (iv) sources of funding;
  - (c) that \$50,000.00 be approved to hire consultants for a drainage study at Hogg's Hollow, such study to be funded within the existing operating expenditure as outlined by staff;
  - (d) the adoption of Recommendations Nos. (1), (2) and (5) of the joint report (January 24, 2001) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer, as recommended by the Works Committee, embodied in the report (February 28, 2001) from the City Clerk, respecting the No Fault Flood Grant Program: Basement Flooding Damages and Clean-up Cost; and

- (e) the adoption of the recommendations of the Works Committee, embodied in the report (March 28, 2001) from the City Clerk, respecting the Universal Metering Program and Implementation of a New Modern Meter Reading Technology.

The Budget Advisory Committee reports for the information of the Policy and Finance Committee, and Council, having:

- (a) requested the Chief Financial Officer and Treasurer to report to the Works Committee by June 2001, providing:
  - (i) details on the costs of services provided to the Water/Wastewater Program by the Revenue Division of Finance;
  - (ii) City initiatives that can be undertaken to reduce these costs charged in 2002 and future years;
  - (iii) initiatives with the Region of Peel and other service delivery providers to reduce the costs of Finance Services; and
  - (iv) details of the corporate charges and initiatives to reduce these costs, if possible;
- (b) requested the Commissioner of the Works and Emergency Services to include in the report respecting Wet Weather Flow Master Plan to be presented to the Works Committee meeting scheduled to be held on July 4, 2001, the following:
  - (i) options with respect to increasing water rates over a five year period to allow for a 1 percent renewal of pipe infrastructure without increasing the debt; and
  - (ii) an aggressive and speedy downspout disconnection plan for the City that would clear the two year backlog; and further identify the avoided cost of building and replacing tunnels as a result of the implementation of this plan;
- (c) requested the Commissioner of the Works and Emergency Services to provide an update on the ongoing discussions with the Region of York respecting the sale of water to the July 4, 2001 meeting of the Works Committee;
- (d) requested the Commissioner of Works and Emergency Services to report to the Works Committee on:
  - (i) projects that improve water efficiency and water conservation being rated as high priority in the five year Capital Water and Wastewater report, including how it affects the currently ranked prioritized list of other City departments; and
  - (ii) further savings that can be achieved for the purchase of chlorine, to include purchasing in bulk and the transportation of the containers; and

- (e) received the following communications and reports:
- (i) (February 27, 2001) from Councillor Joanne Flint respecting a drainage study for Hogg's Hollow;
  - (ii) (April 2, 2001) from the President, Toronto Civic Employees' Union Local 416 CUPE expressing opposition to the short turnaround time of this budget;
  - (iii) (March 30, 2001) from the Commissioner of Works and Emergency Services providing information to the Budget Advisory Committee, in response to a request from the Works Committee following the review of the 2001 Water and Wastewater Operating Budget; and recommending that this report be received for information; and
  - (iv) (March 14, 2001) from the City Clerk advising that City Council, at its meeting held on March 6, 7 and 8, 2001, directed that Clause No. 7(b) of Report No. 3 of The Works Committee, entitled "No-Fault Flood Grant Program: Basement Flooding Damages and Clean-up Costs", be struck out and referred back to the Budget Advisory Committee for consideration and the hearing of deputations by Members of Council only; and
  - (v) (April 11, 2001) from Councillor John Filion, Ward 23 Willowdale, requesting he Budget Advisory Committee to maintain the North York "no fault" grant until such time as the City does the necessary sewer work to correct the problem in the area.

Background:

The Budget Advisory Committee at its meeting held on April 11, 2001, had before it the following reports and communications a copy of which was forwarded to all Members of Council:

- (a) (March 28, 2001) from the City Clerk, entitled "Water and Wastewater – 2001-2005 Capital Program", advising that the Works Committee, at its meeting held on March 28, 2001, recommended to the Budget Advisory Committee:
  - (1) the adoption of the 2001 Capital Program request for Water and Wastewater;
  - (2) that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer closely monitor capital expenditures and report to the Works Committee on a quarterly basis, with the agreement that no projects or contracts move forward beyond the level of funding in the Water and Wastewater Reserve;
  - (3) that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer be requested to report to the Works Committee by July

- 2001 on capital financing of the Water and Wastewater Division in terms of long-term planning of the Capital Program; and
- (4) that the Chief Financial Officer and Treasurer be requested to report to the Works Committee by July 2001 with a recommended financing strategy and resulting cash flow targets for the Water and Wastewater programs for the years 2002-2003;
- (b) (March 28, 2001) from the City Clerk, entitled "Status of the Universal Metering Program and Implementation of a New Modern Meter Reading Technology", advising that the Works Committee, at its meeting held on March 28, 2001, recommended to the Budget Advisory Committee:
- (1) the adoption of the joint report dated March 14, 2001, from the Chief Financial Officer and Treasurer and the Commissioner of Works and Emergency Services;
  - (2) that the Terms of Reference for the Proposal Call be reviewed with Toronto Hydro in order to ensure that the opportunities for synergy are maximized in the research; and
  - (3) that Toronto Hydro be requested to join in the consultant's study and provide input on an ongoing basis in a collaborative context;
- (c) (March 28, 2001) from the City Clerk, entitled "Water and Wastewater - 2001 Operating Budget", advising that the Works Committee, at its meeting held on March 28, 2001, recommended to the Budget Advisory Committee the adoption of the recommended 2001 Water and Wastewater Operating Budget;
- (d) (March 30, 2001) from the Chief Financial Officer and Treasurer, entitled "Water Rate and Financing Options for the 2001 Operating and 2001-2005 Capital Budgets of the Water and Wastewater Program", reporting to the Budget Advisory Committee on setting the context for the 2001-operating and 2001-2005 capital budget requests for the water and wastewater programs by providing an overview of the requests and various funding scenarios in response to these requests including their potential financial impacts, while addressing overall funding issues arising therefrom; and recommending that:
- (1) the Budget Advisory Committee recommend option(s) for review by the Works Committee in their deliberation on the 2002-2005 capital program of Water and Wastewater program and that the Works Committee report back by July 2001 to the Budget Advisory Committee;
  - (2) the Committee approve the 2001 capital financing strategy, including financing an amount not to exceed \$68 million to be debentured, if required, for a term up to, but not exceeding 30 years; and
  - (3) the Chief Financial Officer and Treasurer be directed to prepare a formal rate report recommending 2002 rate and a multiyear rate strategy by no later than July 2001;





- (e) (March 30, 2001) from the Commissioner of Works and Emergency Services, entitled “2001 Operating Budget – Water and Wastewater Services Division – Works and Emergency Services Department”, providing additional information to the Budget Advisory Committee, in response to a request from the Works Committee following the review of the 2001 Water and Wastewater Operating Budget; and recommending that this report be received for information;
- (f) (February 28, 2001) from the City Clerk, entitled “No Fault Flood Grant Program: Basement Flooding Damages and Clean-Up Cost”, advising that the Works Committee at its special meetings held on February 21 and 28, 2001, recommended to the Budget Advisory Committee the adoption of Recommendations Nos. (1), (2) and (5) embodied in the joint report (January 24, 2001) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer;
- (g) (March 14, 2001) from the City Clerk, advising that City Council, at its meeting held on March 6, 7 and 8, 2001, had before it Clause No. 7 of Report No. 3 of The Works Committee, headed “Other Items Considered by the Committee”, directed that the item, entitled “No-Fault Flood Grant Program: Basement Flooding Damages and Clean-up Costs”, embodied in the aforementioned Clause, be struck out and referred back to the Budget Advisory Committee for consideration and the hearing of depositions by members of Council only.

The Budget Advisory Committee also had before it during consideration of the foregoing matter the following communications, and copies thereof are on file in the office of the City Clerk:

- (a) (February 27, 2001) from Councillor Joanne Flint, Ward 25 Don Valley West, entitled “Drainage Study - Hogg’s Hollow”, requesting the Budget Advisory Committee to allocate \$50,000.00 to hire consultants for the purpose of providing a drainage study for Hogg’s Hollow;
- (b) (April 2, 2001) from Mr. Brian Cochrane, President, Toronto Civic Employees’ Union Local 416 CUPE, entitled “Water and Wastewater Capital and Operating Budget”, expressing opposition to the short turnaround time of this budget; and
- (c) (April 11, 2001) from Councillor John Filion, Ward 23 Willowdale, requesting the Budget Advisory Committee to maintain the North York “no fault” grant until such time as the City does the necessary sewer work to correct the problem in the area.

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(Report dated March 28, 2001, addressed to the Budget Advisory Committee from the City Clerk, entitled “Water and Wastewater – 2001-2005 Capital Program”)

Recommendations:

The Works Committee at its meeting on March 28, 2001, recommended to the Budget Advisory Committee:

- (1) the adoption of the 2001 Capital Program request for Water and Wastewater;
- (2) that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer closely monitor capital expenditures and report to the Works Committee on a quarterly basis, with the agreement that no projects or contracts move forward beyond the level of funding in the Water and Wastewater Reserve;
- (3) that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer report to the Works Committee by July 2001 on capital financing of the Water and Wastewater Division in terms of long-term planning of the Capital Program; and
- (4) that the Chief Financial Officer and Treasurer report to the Works Committee by July 2001 with a recommended financing strategy and resulting cash flow targets for the Water and Wastewater programs for the years 2002-2003.

The Works Committee reports, for the information of the Budget Advisory Committee, having:

- (1) requested that the Commissioner of Works and Emergency Services submit to the Works Committee for its meeting July 4, 2001, further information on the following:
  - (i) acceleration of water efficiency initiatives already approved, such as the toilet replacement program and water efficiency kits, including opportunities for alternative funding, such as through the Toronto Atmospheric Fund;
  - (ii) options for accelerating the downspout disconnection program; and
  - (iii) non-structural items in the Wet Weather Flow Management Master Plan; and
- (2) referred the following motion to the Policy and Finance Committee for consideration:

Moved by Councillor Balkissoon:

“That the City Auditor be requested to conduct a detailed review of all additions to and withdrawals from the Water and Wastewater reserve accounts since amalgamation;

That such review examine all documentation supporting additions to and withdrawals from the reserve accounts;

That the review also include an examination of the appropriate Council authority for all such transactions, including circumstances where the nature of the reserve may have been changed from a reserve fund to a reserve;

That the review also include consultations with Ernst & Young, the City's external financial auditors, in order to determine the extent of the audit work conducted by them on reserve transactions; and

That the City Auditor also review the rationale and reasons for the fact that the City's Water and Wastewater reserve accounts are not subject to a separate financial attest audit by the external City Auditors, Ernst & Young, as was the case at the pre-amalgamation municipalities."

Background:

The Works Committee at its meeting on March 28, 2001, had before it a report (March 26, 2001) from the Chief Financial Officer and Treasurer recommending that:

- (1) the Water and Wastewater Capital Program for 2001–2005, totalling \$1.880 billion, as outlined in Appendix A and Appendix B, be received;
- (2) the Works Committee recommend a level of funding for the Water and Wastewater Capital Program and request the Commissioner of Works and Emergency Services to report back to the Budget Advisory Committee prior to final wrap-up of the Capital Budget with any changes required to meet the cash flow level recommended for 2001; and
- (3) the Chief Financial Officer and Treasurer report to the Budget Advisory Committee prior to the commencement of the 2002 Capital Budget process with a recommended financing strategy and resulting cash flow targets for the Water and Wastewater programs for the years 2002-2003.

The General Manager, Water and Wastewater Services, Works and Emergency Services, gave a presentation to the Committee on the 2001 Water and Wastewater Operating Budget submission and the Water and Wastewater Capital Program 2001-2005, and submitted a copy of his presentation.

The following persons appeared before the Works Committee in connection with the foregoing matter:

- Mr. Bill Guthrie, Vice-President, Toronto Civic Employees' Union – CUPE Local 416; and
- Ms. Shelley Petrie, Toronto Environmental Alliance.

(Report dated March 28, 2001, addressed to the Budget Advisory Committee from the City Clerk, entitled “Status of the Universal Metering Program and Implementation of a New Modern Meter Reading Technology”)

Recommendations:

The Works Committee at its meeting on March 28, 2001, recommended to the Budget Advisory Committee:

- (1) the adoption of the joint report dated March 14, 2001, from the Chief Financial Officer and Treasurer and the Commissioner of Works and Emergency Services;
- (2) that the Terms of Reference for the Proposal Call be reviewed with Toronto Hydro in order to ensure that the opportunities for synergy are maximized in the research; and
- (3) that Toronto Hydro be requested to join in the consultant’s study and provide input on an ongoing basis in a collaborative context.

Background:

The Works Committee at its meeting on March 28, 2001, had before it a joint report (March 14, 2001) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer recommending that the firm EMA Canada Inc. be retained at an upset limit of \$148,752 including GST, to assess the existing metering technologies throughout the City, consider the available options for a new city-wide meter reading system and develop a business case and an implementation plan for the preferred meter reading technology in conjunction with a change out program for the existing ageing water meters and the new meters to be installed under the Universal Metering Program for the former Cities of Toronto and Etobicoke.

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(Joint report dated March 14, 2001, addressed to the Works Committee from the Chief Financial Officer and Treasurer and the Commissioner of Works and Emergency Services)

Purpose:

To report on the results following the Request for Proposals (RFP) and recommend a firm to undertake a “Water Meter and Meter Reading Systems Business Case Development”. The RFP objectives include a review and assessment of the metering technologies and the financial options for a modern, city-wide, meter reading system. Further, the report provides a status update of the Universal Metering Program for the former Cities of Toronto and Etobicoke.

Financial Implications:

Sufficient funds have been included in the 2001 Capital Watermain Needs Assessment (account WP51601) to fund the development of a water meter and meter reading systems business case. The financial implications and financing options for implementing a new state of the art city-wide meter reading system will be included in a final report to the Works Committee in the fall of 2001.

With regard to the financing of the Universal Metering Program, Council approved the deferral of the water rate decreases (under the phased-in competitive rate structure) for the former City of Toronto metered customers, for three and one-half years. By the end of April 2003, by sustaining the former Toronto rate at the pre-harmonization level, sufficient revenues will be generated to fund the Universal Metering Program, and the former Toronto water rate for metered customers will be allowed to reduce to the fully implemented harmonized water rate. Although the Universal Metering Program has not yet been launched, a reserve account has been established for the revenue from the deferral of the rate decreases in the former City of Toronto to fund this program from 2001 to 2003.

Recommendation:

It is recommended that the firm of EMA Canada Inc. be retained at an upset limit of \$148,752, including GST, to assess the existing metering technologies throughout the City, consider the available options for a new city-wide meter reading system and develop a business case and an implementation plan for the preferred meter reading technology in conjunction with a change out program for the existing ageing water meters and the new meters to be installed under the Universal Metering Program for the former Cities of Toronto and Etobicoke.

Background:

At its meeting of July 27, 28, 29 and 30, 1999, during consideration of the water rate harmonization report, Council adopted the Works Committee Recommendations Nos. (7) and (10) (Clause No. 10 of Report No. 2) which requested that the Chief Financial Officer and Treasurer report to the Works Committee regarding joint meter reading and billing opportunities and financing options for automated meter reading and billing.

Also in July 1999, Council approved the Universal Metering Program at a cost of \$20.5 million to be implemented over a three and a one-half year period. The purpose of this project is to convert customer accounts from flat rate to meter through the installation of water meters. There are currently 81,000 flat rate premises in former Toronto and Etobicoke that would require the installation of a water meter under this program.

Council further approved the deferral of the water rate decreases (under the phased-in competitive rate structure) for the former City of Toronto metered customers, by three and one-half years. By the end of April 2003, by sustaining the former Toronto rate at the pre-harmonization level, sufficient revenues will be generated to fund the Universal Metering Program and the former Toronto water rate for metered customers will be allowed to reduce to the fully implemented harmonized water rate.

## Comments:

### Current Practices:

Responsibility for water meter reading and billing in the City of Toronto resides with the Finance Department, Revenue Services Division. The installation and servicing of meters is largely the responsibility of the Works and Emergency Services Department, Water and Wastewater Division.

Currently, the City of Toronto continues to obtain water consumption meter readings based on the previous practices of the former municipalities, prior to amalgamation. These readings measure the amount of water consumed by the customer and are used to calculate the billings. The meter reading function is managed by either in-house staff, as is the case in the former Cities of Toronto, Etobicoke and East York; by a contract company, in the case of Scarborough and York; or self-read as in the former North York, where mail-out cards are sent to the residential customer class to provide their own reading either by phoning in or mailing back the filled in meter cards. The meter reading equipment differs in make and type within each of the above Districts. This fragmented approach to meter reading is operationally inefficient and costly and results in poor customer service.

Based on staff research, the current methods utilized by the City to gather metered water consumption are considered well below industry standards. Both the Finance and Works and Emergency Services Departments are committed to a uniform method of service delivery that is customer focused and cost effective.

### Possible Options:

Over the course of the last year, staff has researched a number of meter reading technologies available in the market place. Among the wide variety of meter reading systems and options currently available, the following may be the most viable and adaptable to the City's water meter services operation for the longer term:

- (1) remote touch pad reading system;
- (2) radio frequency based drive-by automated meter reading system;
- (3) telephone in-bound system; and
- (4) fixed area network wireless collection of data.

The remote touch pad technology is currently being used predominantly in former Etobicoke and Scarborough. This method permits meter servicemen to gather readings by touching a remote pad installed on the exterior of a property. The exterior touch pad is wired to the meter on the inside of the house to remotely provide the inside reading.

The radio frequency based drive-by automated meter reading system permits the gathering of readings while driving by a property at a speed of 30-40 kilometres/hour. This technology has

been adopted by some major American cities such as Philadelphia, Houston and Pasadena, and is being considered by other Canadian cities such as Calgary and Hamilton. The benefits of this technology are that readings can be gathered accurately, easily and quickly resulting in substantial savings in on-going operating costs. Other cities that have opted for this method of reading have found much greater customer satisfaction and significantly reduced customer complaints.

The telephone in-bound system is currently being used for high volume accounts in the former City of Toronto. Readings are transmitted through telephone lines to an integrated billing system. This method is also highly effective from a customer service perspective and can provide value added services should any company desire frequent readings. The reading system currently being used has recently received an upgrade as part of the work undertaken to comply with Year 2000 readiness requirements. The disadvantage of this system is the high maintenance costs and the associated servicing requirement by City staff each time the customer's telephone line is affected, i.e., change in telephone number and/or cut-line.

Finally, the fixed area network system is likely the most technically advanced system and the most viable should the City elect to partner with the other utilities within the electric and gas market. Under this method, readings within a certain radius are gathered via radio frequency into a collection unit that is located on street polls. The device then forwards the readings through cell phone technology to a computer for utilization in the billing process. This technology has the capability of providing a high degree of value added services to customers requiring frequent consumption data. Readings can be polled as often as every five minutes and therefore may be very appropriate to public utilities which are facing deregulation and are therefore required to become increasingly able to justify their cost structure.

Each technology has its pros and cons and requires an up-front capital investment. A preliminary review completed by Finance staff suggests that a business case exists for introducing a standardized method of reading water meters across the City. The business case is strengthened significantly when factoring into the calculations the likely need for undertaking a water meter asset management program.

#### Current Water Meter Infrastructure:

Our preliminary review indicates that a high percentage of the City's residential, commercial and industrial water meters are aged and are reaching the end of their useful life. According to industry studies and staff testing on a small scale, the current meters in place may not be registering accurate water consumption. This may be distorting the accurate accounting of water consumption with the potential for revenue losses. In order to evaluate the level of accuracy loss associated with the current state of the meter infrastructure, this report proposes to retain a consultant to develop a plan for sample testing of the City's residential and large commercial and industrial meters that will forecast the estimated losses in meter reading accuracy to apply across the City.

In addition, the current meter reading technologies are cumbersome and cannot easily provide readings. Providing accurate and timely readings and permitting water usage analysis and

customer consumption profiles that will assist in the development of pricing structures, are key components of any future water efficiency program.

Of the total residential and small commercial accounts that are metered, approximately 50 percent must be read from within the home with the remaining 50 percent being read from a remote device wired from within to the exterior of the home. Although this is a more modern approach to meter reading, even this technology is becoming aged and not performing within standard. Often the outside reading and inside reading are not synchronized. Of the meters that must be read from within the home, access is an issue. The problems experienced in obtaining actual and accurate readings result in, on average, more than 25 percent of customers receiving estimated bills. In addition, of the actual reads acquired, approximately 15 percent are rejected from the billing system as they fall beyond specified parameters (i.e., error control). Staff is then required to review these irregularities resulting in operating inefficiencies. The number of customer complaints received by the Finance Department, Revenue Services Call Centre in regards to issues related to estimated bills exceeded 70,000 in 2000. This represents 41 percent of the overall number of water related enquiries received. The significant number of complaints demonstrates that the meter reading technologies currently being used do not provide a high level of customer satisfaction.

The City currently does not have a city-wide Water Meter Asset Management Program. This program is vital to sustaining the financial health of the services provided by the Water and Wastewater Division. As a result of the pre-amalgamation practices maintained by the former area municipalities, the City's water meter infrastructure consists of various meter types and makes. In addition, the 37mm and higher meters in East York are privately owned by the customers, which further complicates the maintenance process.

Another issue associated with the current state of the water meter infrastructure is the lack of an ongoing assessment program that determines the optimal meter size in relation to the consumption pattern applicable to any given commercial or industrial property. Various studies, including a pilot project undertaken in the former City of Toronto by the Public Works Department, revealed that substantial losses in revenue are accumulated, over time, from the use of oversized or wrong type water meters employed to register medium to high levels of consumption. Considering that approximately 10,500 accounts (water meters size 50mm and higher) or 2.5 percent of the City infrastructure generate approximately 65 percent of the total annual water revenue, it is essential to have the optimal meter in relation to the particular consumption pattern. However, it is difficult to quantify the average accuracy loss, unless extensive evaluation of the consumption pattern is undertaken.

Given these preliminary findings, it would appear that a structured revitalization of the water meter infrastructure across the City is required.

#### RFP Selection Process:

Although staff has undertaken and completed a significant amount of preliminary work to-date, it was felt that given the financial implications of the emerging direction, external expertise was required to provide validation. A Request for Proposals (RFP) was issued for the selection of a technical consultant. In order to secure the necessary consulting services, a Request for Proposals



(RFP) was issued by the Purchasing and Materials Management Division, Finance Department. Results of the consultant selection process are summarized below.

Consulting firms with experience in similar work were invited to submit proposals. The RFP was also advertised on the internet website.

Detailed written proposals were received from four firms/consortia, including separately sealed cost proposals. The agreed-upon selection process stipulated that the envelope containing the cost proposals would not be opened until the evaluation of the technical proposals had been completed.

A formal consultant selection committee, comprised of City staff from both the Works and Emergency Services Department and the Finance Department, was struck to evaluate the proposals. All technical submissions were evaluated first independently and then jointly by members of the consultant selection committee in accordance with a set of pre-established criteria. The technical proposals of three of the four firms/consortia met or exceeded the specified threshold. The selection committee also interviewed the short-listed firms to obtain further information and clarification of a technical nature. Subsequently, the separate cost proposal envelopes were opened and reviewed. The cost proposal from the firm scoring below the threshold was not reviewed and the separate sealed envelope was returned unopened.

Upon completion of the above process, the proposal from EMA Canada, Inc. was ranked first overall with the highest technical rating and the lowest cost/point. The latter calculation is based on the total of the costs in the fee proposal and the points awarded in the technical evaluation.

EMA Canada, Inc. proposed to provide the required consulting services for the total upset limit of \$148,752.00 including disbursements and GST. The selection committee concluded that the proposal submitted by EMA satisfied the overall project requirements at a reasonable cost and demonstrated an appropriate level of effort to properly address the necessary elements of the work.

The selected consultant will review and validate the analysis to date undertaken by staff and assist in the development of a full business case for the preferred meter reading technology.

More specifically, the consultant will:

- (a) review and validate the considerable work completed by staff and utilize this information as a reference point for all forecasted improvements;
- (b) assess and evaluate the current operation versus industry "Best Practices" to identify the areas of improvement and accurately estimate the potential cost savings;
- (c) assess and recommend a water meter asset management program for both the high volume and low volume customer base to maintain the City's meters in a state of good repair;

- (d) develop a Potential Alternatives Report, which must include a detailed cost/benefit analysis, both quantitative and qualitative, for each of the possible water meter reading solutions;
- (e) recommend the appropriate water meters and meter reading technology;
- (f) develop a full business case and a high level implementation plan for the preferred meter reading technology; and
- (g) consider possible alternatives to accelerate the implementation of the Universal Metering Program and assess any financial risk factors in relation to the overall project.

The funding required for the technical consultant is available from within the approved 2000-2005 Water and Wastewater Capital Works Program under the funding for the Watermain Needs Assessment. A full report identifying the long-term strategy for meter reading along with recommendations for a water meter asset management program will be presented to Council early in the fall of 2001. The overall project will be managed and monitored by a Steering Committee with members from both Finance Revenue Services and Water and Wastewater. All operating and capital estimates and benefits will be provided in that report and incorporated, if deemed appropriate, in the 2002-2006 Water and Wastewater Capital Works Program.

Once the City has defined a strategy for the preferred meter reading technology, an approach can be made to the other utilities to explore opportunities for joint reading and billing as requested by Council.

#### Status of the Universal Metering Program:

Over the past year, Finance - Revenue Services and Works - Water and Wastewater staff have met to address the issue of what type of meter should be installed under the Universal Metering Program to ensure consistency with the future plans for a city-wide meter reading strategy. Given the significant size of the meter installation being planned under this project, the meters and the reading method to be utilized will determine the future type of meter and meter reading system for the new City.

The Universal Meter Program for the former Cities of Toronto and Etobicoke provides for the conversion of approximately 81,000 households from flat-rate to meter largely over a four-year period. This project is included in the 2001-2005 Water and Wastewater Capital Works Program submission at an estimated cost of \$20.5 million and an associated cash flow of \$963 thousand for 2001; \$6.5 million for 2002; \$7.4 million for 2003; and \$5.5 million for 2004.

Council has directed that the funding for this program be achieved by maintaining the former Toronto water metered accounts at pre-harmonized levels over the four year period during which time water rates will be harmonized. The rate harmonization began on November 1, 1999. The City is now in its second year of harmonizing water rates. By sustaining the rates at the pre-harmonized levels in former Toronto, the City has generated \$2.2 million in 2000. The following is estimated for the remaining years: for 2001, \$4.7 million; for 2002, \$8.0 million; and for 2003, \$5.6 million for a total of \$20.5 million.

Although this project was scheduled to begin in late 1999, it has been delayed in order to co-ordinate the selection of a meter technology with the City's future meter reading strategy. Nonetheless, water customers that wish to have a meter installed are being serviced upon request. The City is currently installing approximately between 1,500-3,000 meters a year under this regular installation program. The following table provides information on the number of flat-rate accounts at the end of each of the following years:

	1998	1999	2000	2001 Estimate
Toronto	84,000	81,000	79,500	78,000
Etobicoke	<u>1,500</u>	<u>1,500</u>	<u>1,500</u>	<u>1,500</u>
Total	85,500	82,500	81,000	79,500
Number of Conversions	N/A	3,000	1,500	1,500 (est.)

Conclusions:

In closing, this report reports on the City of Toronto Council approved Universal Metering Program. The Universal Metering Program should not be considered in isolation, but rather should be incorporated into the overall meter and billing strategy to be adopted by the City of Toronto. As such, all possible alternatives to accelerate its implementation should be assessed to minimize the financial risk factor in relation to the successful execution of the overall City strategy.

Also, included are the staff's preliminary findings in regards to the current state of the City's water meter infrastructure and possible available technologies in the market.

Through the retention of a technical consultant, EMA Canada Inc., it is anticipated that the staff's preliminary analysis and assumptions will be validated thus paving the way for the implementation of a modern and unified meter reading technology for the entire City of Toronto. The full strategy for water meter reading in the new City will be presented to Council in the fall of 2001.

Contact Names:

Carmela Romano, Manager, Accounting Financial, Billings and Meter Services, (416) 395-6730

Giuliana Carbone, Director, Revenue Services, (416) 392-8065

David Parrish, Director, District 1 and 2

Mario Crognale Director, District 3 and 4

Wayne Green, Director, Quality Control and Systems Planning, (416) 392-8242



(Report dated March 28, 2001, addressed to the Budget Advisory Committee from the City Clerk, entitled “Water and Wastewater – 2001 Operating Budget”)

Recommendation:

The Works Committee at its meeting on March 28, 2001, recommended to the Budget Advisory Committee the adoption of the recommended 2001 Water and Wastewater Operating Budget.

The Works Committee reports, for the information of the Budget Advisory Committee, having requested that:

- (1) the Commissioner of Works and Emergency Services provide to the Budget Advisory Committee for its wrap-up meeting the following:
  - (i) detailed breakdown of the expenditures in the amount of \$20,448.1 under “Other” in the 2001 Operating Budget request for Water and Wastewater;
  - (ii) report on the value received by water in exchange for the corporate charges paid; and
  - (iii) report on financial options to accelerate the District Sewer/Water Replacement Program; and
- (2) the Chief Financial Officer and Treasurer report to the Budget Advisory Committee on the costs of the water program per customer invoice issued, in consultation with the Strategic Planning Office of the Chief Administrator’s Office with respect to their investigation of the administrative process for Water and Wastewater.

Background:

The Works Committee at its meeting on March 28, 2001, had before it the 2001 Operating Budget submission for the Water and Wastewater programs.

The General Manager, Water and Wastewater Services, Works and Emergency Services, gave a presentation to the Committee on the 2001 Water and Wastewater Operating Budget submission and the Water and Wastewater Capital Program 2001-2005, and submitted a copy of his presentation.

The following persons appeared before the Works Committee in connection with the foregoing matter:

- Mr. Bill Guthrie, Vice-President, Toronto Civic Employees’ Union – CUPE Local 416; and
- Ms. Shelley Petrie, Toronto Environmental Alliance.

(Report dated March 30, 2001, addressed to the Budget Advisory Committee from the Chief Financial Officer and Treasurer, entitled “Water Rate and Financing Options for the 2002 Operating and 2001-2005 Capital Budgets of the Water and Wastewater Program”)

Purpose:

The purpose of this report is to set the context for the 2001 operating and 2001-2005 capital budget requests for the water and wastewater programs by providing an overview of the requests and various funding scenarios in response to these requests including their potential financial impacts, while addressing overall funding issues arising therefrom.

Financial Implications and Impact Statement:

The Water Supply capital request of \$739 million for 2001-2005 is \$112 million or 18 percent greater than the capital request of \$627 million for 2000-2004. The Water Pollution Control/Wastewater request of \$1,142 million for 2001-2005 is \$397 million or 53 percent greater than the capital request of \$745 million for 2000-2004. Overall, the capital requests for 2001-2005 represent a 37 percent increase over the capital requests for 2000-2004.

The total capital request for 2001 is \$272.6 million. It is anticipated, based on historical under-spending each year against the budget for the year that the amount requested would not be fully expended during the year, thereby requiring lower-than-request amount of capital funds. The 2.1 percent rate increase effective January 1, 2001 approved in 2000 would be sufficient to fund \$204.6 million or 75 percent of total capital needs. Therefore, no further rate increase in 2001 is recommended.

However, if the total amount of \$272.6 million were to be fully expended, debt financing of \$68 million will be required, resulting in the existing total outstanding gross debt of \$129.6 million in 2001 increasing to \$197.6 million. The sources of total capital funds are summarized as follows:

Drawdown of capital financing reserve balance	\$101.0 million
In-year contribution from Operations for capital projects	\$103.6 m
Debt financing (if necessary)	<u>\$ 68.0 m</u>
Total	\$272.6 m

The Chief Financial Officer and Treasurer, in accordance with the requirements of provincial regulations, certifies that the expenditures in the amount of \$68 million for projected borrowing requirements for projects contained and detailed in ‘Water and Wastewater Capital Program 2001-2005’ Report can be financed by the issuance of debentures and is within the City’s updated Debt and Financial Obligation Limit.

The 2001-2005 preliminary capital plan can be accommodated within the existing rate setting criteria (limited to inflationary increases of 2.1 percent each year) if the overall capital expenditure request of \$1,880.6 million is reduced by \$1,016.2 million or 56 percent to the sustainable level of \$864.4 million. To fund the requested capital projects fully, with the

2.1 percent rate increase each year, debt financing in the amount of \$1.4 billion would have to be issued over the five year period (\$68 million in 2001), resulting in increased debt service costs of \$376.9 million and a commensurate reduction in operating contributions to capital.

Alternatively, to fund all capital projects under pay-as-you-go approach with no debenture financing, a series of rate increases (18.3 percent in 2001, further 48 percent in 2002, 2.2 percent in 2003, 2.8 percent in 2004 and 0 percent in 2005) would be required.

Finally, a combination of reduced expenditures, debt financing and rate increases can be used to address the conflicting requirements for expenditures, debt avoidance and price moderation. For example, with a capital expenditure reduction of 20 percent from the requested amount for each year (cumulative reduction of \$376 million over five years), a rate increase of 5 percent each year, a debt financing of \$633.9 million issued over the period (none in 2001) would be required, resulting in increased debt service costs of \$173.8 million.

#### Recommendations:

It is recommended that:

- (1) the Budget Advisory Committee recommend option(s) for review by the Works Committee in their deliberation on the 2002-2005 capital program of Water and Wastewater program and that the Works Committee report back by July 2001 to the Budget Advisory Committee;
- (2) the Budget Advisory Committee approve the 2001 capital financing strategy, including financing an amount not to exceed \$68 million to be debentured, if required, for a term up to, but not exceeding 30 years; and
- (3) the Chief Financial Officer and Treasurer be directed to prepare a formal rate report recommending 2002 rate and a multiyear rate strategy by no later than July 2001.

#### Background:

The Council approved at its meeting of April 26, 2000 a 2.1 percent increase effective January 1, 2001 in the water rate, sewer (wastewater) service rate and the rate charged to flat-rate customers.

The 2001-2005 capital plan for the Water and Wastewater (WWW) Division was presented to the Works Committee on March 28, 2001.

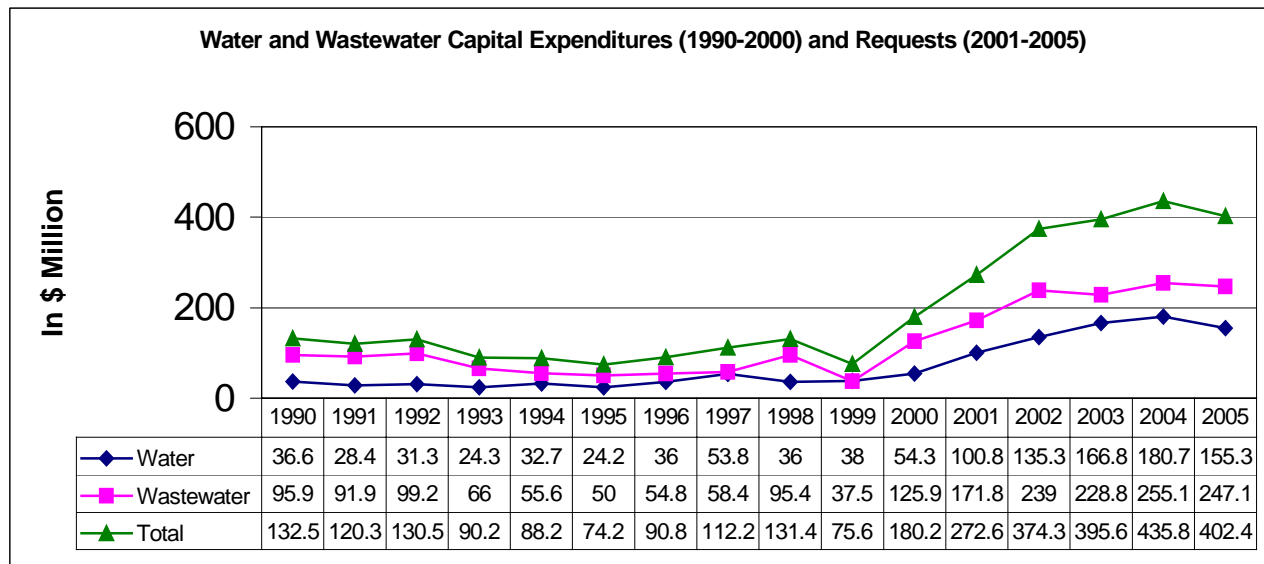
This report presents the water rate implications of the requested water and wastewater capital and operating programs from the standpoint of (a) financial options (e.g. pay-as-you-go versus debenture financing) and (b) impact of constraining capital spending. Several options are presented.

A formal rate report recommending 2002 rate and a multiyear rate strategy will be prepared after capital and operating budget approval, no later than July 2001.

Discussion:

History of Expenditures, Debt and Rate Increases:

- (a) Capital Expenditures (1990-2000) and Budget Requests (2001-2005):  
 For a reconciliation of pre-amalgamation data (1990 to 1997), see Appendix 'C'



The Water and Wastewater programs have been operating on a pay-as-you-go basis, for most of the last seven years since 1994, except for one debt issuance of \$9.7 million for wastewater in 1996 and another issuance of \$3.0 million for water in 1998. The total gross outstanding debt for water and wastewater has been steadily declining as debts mature. The total debt is at \$129.6 million as at December 31, 2001 and, if no additional debt issued, it would reduce to zero at the end of 2005.

The combined water and sewer rate, and the rate charged to the flat-rate customers have been increased as follows:

July 1, 1998	2.0 percent;
November 1, 1999	2.5 percent;
January 1, 2000	2.0 percent;
January 1, 2001	2.1 percent.

- (b) Assumptions for Rate Increases

A number of funding options has been presented, with varying rate increases under pay-as-you go and debenture financing approaches. The following assumptions have been incorporated in these options:



- (i) Total Best Practices expenditure reduction of \$51 million, of which a total of \$37 million remains to be achieved during 2002 to 2004 (estimated distribution: 2002 -\$8 million; 2003 -\$10 million and 2004 -\$19 million);
- (ii) the WWW Operating expenditure request for 2001 is \$309 million; estimate for each subsequent year incorporates a 2.1 percent inflation increase.
- (iii) net operating expenditure incorporates several adjustments including Best Practices expenditure reductions, operating revenues such as revenues from York Region for water and capital, costs such as sewer rebate, uncollectible accounts, recreation water rebates;
- (iv) Capital financing package includes capital financing reserve, capital-from-current, development charge contributions and interest earnings;
- (v) Capital financing reserve (water and wastewater) as at December 31, 2000 was \$108.2 million. This excludes the Water and Wastewater Rate Stabilization reserve of \$45.6 million which is subject to a later report (to be incorporated in 2002 Rate report);
- (vi) on-going capital financing reserve of approximately \$15 million at the end of each fiscal year is maintained as contingency;
- (vii) current level of total gross outstanding debt for water and wastewater is at \$129.6 million; if no additional debenture were issued, the outstanding debt would reduce to zero in 2005; the current level of Capital-From-Current (CFC) is at \$108.2 million (Scenario 1); as the debt level goes down, so does the existing debt charge, thereby increasing the CFC.

It is worth noting that the size of the Operating budget has impact on the size of the resulting Capital-From-Current that is directed towards Capital funding. The Operating budget is fully funded out of the water and wastewater rate-based revenues. Any significant growth in the operating budget would adversely affect the size of the CFC. The operating and capital budget and request for 2000 and 2001 are summarized as follows:

Program	2000	2001 Request
Water and Wastewater:		
Operating (excludes contributions to Capital)	\$332.2 million	\$334.2 million
Capital	\$240.8	\$272.6

Summary of Options (\$ Million):

-

Based on the foregoing assumptions, nine scenarios have been presented on a continuation of pay-as-you-go (zero new debt) versus debt financing approaches at varying levels of capital expenditures (please refer to Appendix 'B' for a description of the scenarios):

Annual Average (2001 – 2005) Capital Funding	Pay-as-you-go Approach	Debt Financing Approach
\$173 million	Scenario 1: - Rate increase 2.1 percent each year - Av. annual exp. reduction of 56 percent or \$203 million from request. - Total debt balance in 2005: Nil	
\$209 million	Scenario 2: - Rate increase 5 percent each year. - Av. Annual exp. reduction of 47 percent or \$167 million from request. - Total debt balance in 2005: Nil	
\$228 million		Scenario 8: - Rate increase of 5 percent each year. - Av. Annual exp. Reduction of 39 percent or \$148 million from request. - Total debt in 2005: retained at 2000 level of \$166 million.
\$233 million		Scenario 9: - Rate increase of 5 percent each year. - Av. Annual exp. reduction of 38 percent or \$142 million from request - Total debt in 2005: \$185 million.
\$301 million		Scenario 6: - Rate increase of 2.1 percent each year. - Av. Annual exp. Reduction of 20 percent or \$75 million from request. - Total debt in 2005: \$867 million. Scenario 7: - Rate increase of 5 percent each year. - Av. Annual exp. reduction of 20 percent or \$75 million from request. - Total debt in 2005: \$634 million.
\$376 million (Total Request)	Scenario 3: - Rate increases: 18.3 percent in 2001; 48 percent in 2002; 2.2 percent in 2003; 2.8 percent in 2004 and 0 percent in 2005. - Total debt in 2005: Nil	Scenario 4: - Rate increase of 2.1 percent each year. - Total debt in 2005: \$1,393 million  Scenario 5: - Rate increase of 5 percent each year. - Total debt in 2005: \$1,160 million

Analysis:

Funding Sources:

Both the Operating budget and the Capital budget for Water and Wastewater are funded out of rate-based (variable and flat) revenues for water consumption and wastewater treatment. After accommodating various costs for such items as the Operations, debt servicing (for new and/or existing debt), rebates and taking into account the operating revenues, the Capital-From-Current amount is established, which is added to the capital financing amount. If the total capital budget

request exceeds the program’s capacity to fund the capital projects from CFC and reserve, four options are available at this juncture:

- (i) reduce the capital budget request;
- (ii) seek additional debenture financing;
- (iii) increase the rates; and
- (iv) any combination of the above.

The following chart shows the combined Water and Wastewater Capital Financing Reserve and the combined Water and Wastewater Rate Stabilization Reserve balances as of December 31, 2000 and estimate for 2001:

Reserve	2000 (as of Dec.31/00)	2001 Estimate
Water and Wastewater Capital Financing	\$108.2 million	\$15 million
Water and Wastewater Rate Stabilization	\$45.6	\$45.6

Keeping aside the rate stabilization reserve for that purpose, the capital financing reserve is available for capital projects. However, as a prudent financial practice, it is suggested that an ongoing capital financing reserve of approximately \$15 million at the end of each fiscal year be maintained as contingency. For example, under Scenario 1 (pay-as-you-go and no further rate increase in 2001) about \$93 million out of the opening reserve of \$108.2 million would be utilized for capital projects in 2001, leaving a reserve balance of approximately \$15 million, while anticipating an under-expenditure on capital projects by approximately 23 percent (capital request of \$272.6 million vs. estimated available funding level of \$204.6 million as noted on page 1).

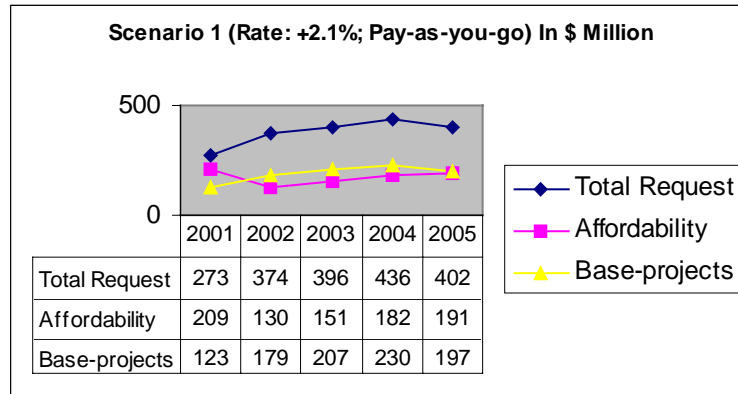
- (a) Comparisons of Total Request, Affordability and “Base”-projects: 2001 to 2005

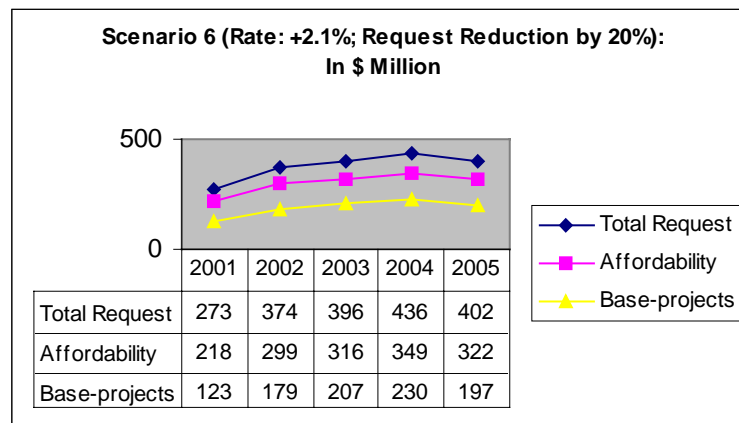
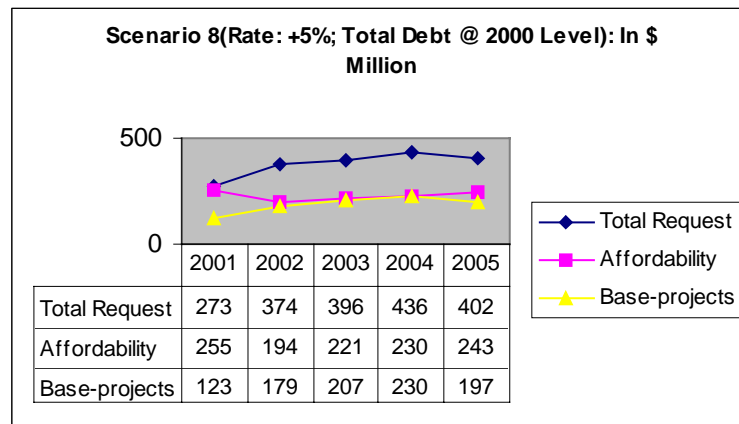
To further assist the analysis of the capital programs, expenditures have been segregated into “Base” projects which consist of ‘State of Good Repair’ and ‘Legislated /City Policy’-directed projects and ‘Total’ capital request which includes ‘Base’ projects, Development /Growth Related projects and Service Improvement projects.

‘Affordability’ in a year consists of the opening capital financing reserve for the year and the Capital-From-Current for the year. This amount may vary each year.

Nine scenarios have been described in Appendix ‘B’, based on pay-as-you-go and additional debt financing approaches, with varying combination of rate increases, capital expenditure plan reduction and increased debt financing. Three scenarios are presented for illustration of the inter-relationships among the ‘total’ request, ‘affordability’ level and the ‘base’ projects:

- Scenario 1: Pay-as-you-go; Rate is increased by 2.1 percent each year,
- Scenario 8: Debenture financing up to the total debt at Year 2000 level; Rate increase each year at 5 percent,
- Scenario 6: Request reduced by 20 percent from each year's amounts; Rate increase by 2.1 percent each year; debenture financing to reduced expenditure level.





(b) Funding Scenarios

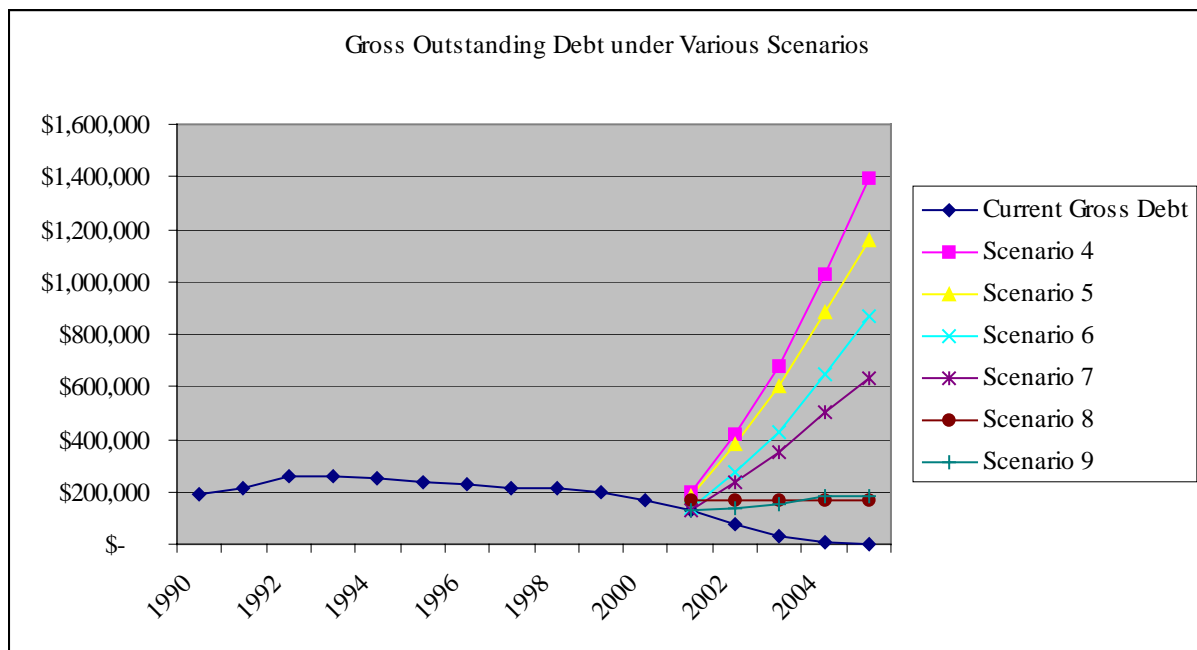
The Charts in Appendix 'B' describe in details the nine funding scenarios, including their financial impact and required reductions in capital project funding requests. The following is a brief outline of the funding scenarios considered:

Funding Requests: 2001: \$272.6 million; 2002: \$374.4 million; 2003: \$395.6 million; 2004: \$435.7 million; 2005: \$402.3 million; Total (2001-2005): \$1,880.6 million; Annual Average: \$376.1 million.

Scenario	2001	2002	2003	2004	2005	Total
<b>Pay-as-you-go</b>						
1. Rate increase @2.1% /yr						
Expenditure reduction(%)	23%	65%	62%	58%	52%	56%
Sustainable funding (\$mil)	\$209.20	\$130.30	\$151.30	\$182.10	\$191.50	\$864.40
Total Debt /Net Exp. Ratio	32%	19%	7%	2%	0%	
2. Rate increase @5% per yr.						
Expenditure reduction (%)	19%	59%	53%	47%	37%	47%
Sustainable funding (\$mil)	\$220.50	\$153.10	\$185.50	\$230.20	\$255.10	\$1,044.5
Total Debt /Net Exp. Ratio	31%	18%	6%	2%	0%	
3. All capital projects funded.						
Required Rate Increase(%)	18.30%	48%	2.20%	2.80%	0%	
Sustainable funding (\$mil)	\$272.60	\$374.40	\$395.60	\$435.80	\$402.30	\$1,880.6
Total Debt /Net Exp. Ratio	27%	12%	4%	1%	0%	
<b>Debenture Financing</b>						
4. All capital projects funded						
Rate Increase @2.1% / yr.						
Sustainable funding (\$mil)	\$272.60	\$374.40	\$395.60	\$435.80	\$402.30	\$1,880.6
Total Debt /Net Exp. Ratio	48%	101%	160%	236%	312%	
5. All capital projects funded						
Rate increase @5% per yr.						
Sustainable funding (\$mil)	\$272.60	\$374.40	\$395.60	\$435.80	\$402.80	\$1,880.6
Total Debt /Net Exp. Ratio	44%	87%	131%	183%	228%	
6. Capital project request reduced by 20%						
Rate increase @2.1% / yr.						
Sustainable funding (\$mil)	\$218.10	\$299.50	\$316.50	\$348.60	\$321.80	\$1,504.5
Total Debt /Net Exp. Ratio	34%	65%	100%	148%	194%	
7. Capital project request reduced by 20%						
Rate increase @5% per year						
Sustainable funding (\$mil)	\$218.10	\$299.50	\$316.50	\$348.60	\$321.80	\$1,504.5
Total Debt /Net Exp. Ratio	31%	53%	76%	104%	124%	

8. Total debt fixed @ Year 2000	\$166.10	\$166.10	\$166.10	\$166.10	\$166.10
Rate increase @5% per year					
Capital Exp. Reduction (%)	7%	48%	44%	47%	40%
Sustainable funding (\$mil)	\$254.60	\$194.30	\$220.70	\$230.30	\$242.60
Total Debt /Net Exp. Ratio	40%	38%	36%	34%	33%
9. Rate increase @5% per year					
Capital Exp. reduction (%)	25%	40%	40%	40%	40%
Sustainable funding (\$mil)	\$204.40	\$224.60	\$237.40	\$261.50	\$241.40
Total Debt /Net Exp. Ratio	31%	32%	33%	38%	36%

The significant impact of the six scenarios (scenario 4 to 9) under debenture financing approach is illustrated by the following graphical presentation (scenarios 1 to 3 issue no new debt, represented by the current gross debt line):



The 2001 – 2005 preliminary capital plan can be accommodated within the existing rate setting criteria (limited to inflationary increases) if overall expenditures are reduced from the program request by the percentages as shown under the Scenario 1 in the above-noted chart.

- (c) Context for Consideration of Water and Wastewater Capital Program Expenditures, Financing and Rates:

It is suggested that the Operating and the Capital expenditure requests be carefully assessed based on several criteria including the following:

- (1) **Affordability:** Can the City afford the requests for Operating and Capital expenditures?
  - (i) if all requested capital projects be fully funded on a pay-as-you-go basis (i.e., with no additional debenture financing), the water and the wastewater rates would have to increase by 18 percent in 2001 and an additional 48 percent in 2002, followed by increases at about the inflation rate for subsequent years.
  - (ii) if the rates were increased by 2.1 percent each year on a pay-as-you-go basis, the capital expenditure requests would have to be reduced by an average of 56 percent per year (or, 23 percent in 2001, 65 percent in 2002, 62 percent in 2003, 58 percent in 2004 and 52 percent in 2005).
  - (iii) on the other hand, if debenture financing is sought to fully fund the requested capital projects with rates increasing by an inflationary increase of 2.1 percent each year, the financial ratio of 'Total Debt /Net Expenditure Ratio' would increase to 48 percent in 2001, 101 percent in 2002, 160 percent in 2003, 236 percent in 2004 and 312 percent in 2005 (Gross debt would rise from \$166 million in 2000 to \$1,393 million in 2005). This compares with current ratio, with no additional debt financing, of 32 percent in 2001, 19 percent in 2002, 7 percent in 2003, 2 percent in 2004 and 0 percent in 2005 under pay-as-you-go basis. Moreover, with increasing debt-load, it would be more difficult to raise capital (at least affordable capital) for the projects. At some point, the market would be saturated.
- (2) **Do-ability:** How feasible is it to actually deliver on all capital projects for which capital funding has been requested?
  - (i) a review of the historical capital budget data in relation to their corresponding actual expenditures suggests that the budget amounts have been overestimated with respect to what - actually could be delivered in those years.
  - (ii) the past experience in the utilization of capital budget demonstrates the needs to more realistically assess the do-ability or feasibility of actually delivering on all capital projects for which capital funding is requested. WWW is moving to correct this situation and the options in this report have taken this into consideration.
- (3) **Attractiveness of the Rates to Large-volume Customers:**
  - (i) the Chart in Appendix 'A' provides comparative data of combined water and wastewater (sewer) rates within various jurisdictions. However, the decision to move in or out of Toronto is obviously not solely dependent on these rates (other economic and social factors would play major role).



(4) Long-term Strategic Capital Planning:

- (i) is prevention now better than cure later? This would require a cost-benefit analysis of carrying out any preventative capital project. The City's water and wastewater infrastructure is ageing at a time when the demand for services is also increasing. What are the adverse consequences of not doing certain preventative capital work (financial as well as meeting customer needs)? How would one establish priorities in a tight financial environment where too many 'good' projects compete for 'too little' funds?

(d) Other Comments:

Detailed discussions on statutory limits and market limits have been provided in the tax-supported capital financing report.

WWW debt requirements are considered in conjunction with provincial debt limits, credit ratings and capital markets.

Statutory Limits:

At the end of each year, the Province sets through regulation the "Annual Repayment Limit", the maximum amount a municipality may increase its expenditure on debt and financial obligations in the following year. It is based on the prior year's financial information return, and is set as 25 percent of a municipality's "net revenue fund revenue". These limits have not been particularly relevant to budget discussions in Toronto in the past because the limits were so far beyond the expenditure intentions of the City.

Market Limits:

In any given year the financial markets have purchased high grade Toronto debt in issues ranging up to \$250 million (1998). However, at some point the market demand is saturated, and either new markets must be accessed (international, for example) or better prices offered (i.e., higher interest rates) if larger issues are to be sold.

Any additional debt required for the water and wastewater programs may act to destabilize the City's credit rating. It can be expected that regardless of the City's credit rating, the interest rate the City must pay will increase compared to previous years, all else equal.

Conclusions:

The preliminary 2001 to 2005 budget request for the Water and Wastewater capital program suggests that the rate increase of 2.1 percent already in effect since January 1, 2001 would be sufficient to fund the anticipated level of capital funding requirements in 2001. The total capital request for 2001 is \$272.6 million. It is anticipated, based on historical under-spending each year

against the budget for the year that the amount requested would not be fully expended during the year, thereby requiring lower-than-request amount of capital funds. However, if the total amount of \$272.6 million to be fully expended, additional debt financing of \$68 million will be required.

The 2002-2005 capital requests are significantly higher than the historical levels. The pay-as-you-go approach with rate increases at the inflation level would not be sufficient to meet these requests. Significant curtailment of capital requests would be required to stay within the affordable level. Alternatively, significant rate increases and/or increases in debt through debt financing would be necessary to fund the requested projects.

Of the total funding requests, on an annual average basis during the five year period, approximately 43 percent is for service improvement and 50 percent is directed towards state of good repair and legislated /city policy requirements, while 7 percent is development/ growth related. For example, on pay-as-you-go basis with rate increase at inflation rate of 2.1 percent , the average annual affordability level during 2001 to 2005 would allow funding of about 44 percent of the requested capital projects (although, the affordability level varies from 35 percent to 77 percent of the requested amounts during this period), which seems to suggest that most of the capital projects related to state of good repair and legislated /city policy requirements could be funded under this scenario.

It should be noted that, from the standpoint of the City's overall credit rating and marketability of its debt, any new debt of WWW must be considered in context of new debt under tax-supported initiatives.

A formal rate report recommending the 2002 rate and a multiyear rate strategy will be submitted no later than July 2001.

Contact Names:

Mr. Len Brittain, Director of Treasury and Financial Services, (416) 392-5380;

Mr. Rob Hatton, Manager of Financial Planning, (416) 392-9149;

Mr. Sam Samanta, Senior Financial Analyst, Financial Planning, (416) 392-8893.

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(Copies of Appendices A to C referred to in the foregoing report were forwarded to all Members of Council with the April 17, 2001, agenda of the Policy and Finance Committee and a copy thereof is also on file in the office of the City Clerk).

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(Report dated March 30, 2001, addressed to the Budget Advisory Committee from the Commissioner of Works and Emergency Services, entitled “2001 Operating Budget Water and Wastewater Services Division Works and Emergency Services Department”)

Purpose:

To provide additional information to the Budget Advisory Committee, in response to a request from the Works Committee following the review of the 2001 Water and Wastewater Operating Budget.

Financial Implications and Impact Statement:

There are no direct financial implications arising from this report other than those already identified within the recommended 2001 Operating budget.

Recommendations:

It is recommended that this report be received for information.

Background:

The Works Committee at its meeting of March 28, 2001, had before it the 2001 Operating Budget Submission for the Water and Wastewater Program. The General Manager, Water and Wastewater Services, Works and Emergency Services gave a presentation to the Committee on the 2001 Water and Wastewater Operating Budget submission and the Water and Wastewater Capital Program 2001-2005, and submitted a copy of his presentation.

This report responds to a request from the Works Committee to the Commissioner of Works and Emergency Services to report to the Budget Advisory Committee, for its wrap-up meeting, on:

- (i) a detailed breakdown of the expenditures in the amount of \$20,448.1 under “Other” in the 2001 Operating Budget request for Water and Wastewater;
- (ii) the value received by water in exchange for the corporate charges paid; and
- (iii) financial options to accelerate the District Sewer/Water Replacement Program.

Discussion:

- (i) Detailed Breakdown for the “Other” Expenditures in the 2001 Operating Budget:

The table below presents the 2001 expenditure request included under “Other” in the Water and Wastewater operating budget and provides a summary of the variance associated with each item in reference to the 2000 Approved Operating Budget.

Description of "Other" Expenditures	Amount (\$1000s)	Variance (\$1000s)	Variance from Approved (%)	Variance as % of Total Approved
Fleet Maintenance	3,061.7	1,125.3	58.1	6.1
Contribution to Insurance Reserve	676.7	676.7	100.0	3.7
IDC-Transportation Cost (Cut and Repair)	5,229.0	(109.1)	(2.0)	(.6)
IDC-Various (Printing and Internal Training)	182.8	23.2	14.4	.1
Contribution to Repair and Replacement Equipment Reserve	2,650.0	0.0	0.0	0.0
Contribution to W and WW Vehicle Reserve	6,380.2	0.0	0.0	0.0
IDC-Solid Waste Management (Haulage Fees)	675.0	60.0	10.0	.3
IDC-Potable Water Backflow Preventors Valve Maintenance	250.0	250.0	100.0	1.4
IDC-Solid Waste Management Household Hazardous Waste	1,344.7	0.0	0.0	0.0
Total	20,450.1	2,026.1		11.0

The most significant increases are in the Fleet Maintenance and the Contribution to the Insurance Reserve. The increase in Fleet Maintenance reflects the additional costs required to maintain the ageing fleet. The Contribution to the Insurance Reserve, is based on the redirection of the budgetting for this expenditure from "Services and Rents" to the Insurance Reserve.

(ii) Value Received in Exchange for the Corporate Charges Paid:

A review of corporate charges assigned to the Water and Wastewater Services is underway. The Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer will report to the Works Committee by July 2001.

(iii) Financial Options to Accelerate the District Sewer/Watermain Replacement Program:

The Water and Wastewater Services Division is developing an infrastructure asset management system for the City's ageing underground piped infrastructure. Once developed, the system will guide the development of the District Water and Wastewater Capital Program. At this time, the Division continues to collect and analyse the condition of this infrastructure and the Capital Program has been planned based on the needs identified. A complete analysis of the system needs is not possible, at this time, because of the lack of pipe condition data. The collection of this data requires a significant level of effort over several years to complete.

However, an initial assessment, based on available data, of the District sewer and watermain system long term renewal needs and the adequacy of existing funding, through the Capital Program, to address these needs is forthcoming. The Commissioner of Works and Emergency Services is expecting to report on this analysis to the Works Committee by July 2001.

A cursory review of the system renewal needs is provided in the following and is based on the assumption that the service life of piped infrastructure is expected to be about 80 to 100 years. For the purposes of this analysis, the 2001 renewal needs are defined as the annual expenditure

required to renew the backlog of 100+ year old pipes over a 10 year time horizon and renew the remainder of the system at a 100 year renewal rate.

A summary of the age of sewer and watermain infrastructure across the City is presented in Figure 1. A summary showing the level of funding requested for infrastructure renewal in the 2001 Water and Wastewater Capital Budget is presented in Figure 2, and compared to the level of funding required to address the 2001 renewal needs.

As illustrated in Figure 1, it is estimated that of a total watermain system length of 5,300 km, about 7 percent of the watermains are now over 100 years old and an additional 13 percent of the watermains are between 80 and 100 years old and should be included in the City's renewal program. However, as shown in Figure 2, the current level of funding requested in the 2001 Capital Budget of \$13 million provides for a renewal of only 20 percent of the estimated 2001 renewal needs. An additional \$45 million (equating to an estimated 11 percent increase in the water rate) would be required, in the 2001 Capital Program, to achieve the 2001 renewal needs.

Similarly, it is estimated that of a total sewer system length of about 10,300 km, about 3 percent of the sewers are now over 100 years old and an additional 7 percent of the sewers are between 80 and 100 years old and should be included in the City's renewal program. However, as shown in Figure 2, the current level of funding requested in the 2001 Capital Budget of \$17 million provides for a renewal of only 29 percent of the estimated 2001 renewal needs. An additional \$41 million (equating to an estimated 10 percent increase in the water rate) would be required, in the 2001 Capital Program, to achieve the 2001 renewal needs.

In summary, it is estimated that an additional \$86 million are required to address the 2001 District sewer and watermain renewal needs. This request would translate to an estimated 21 percent increase in water rates.

#### Conclusions:

The most significant increases under "Other" in the 2001 Water and Wastewater Services Division Operating Budget are in the Fleet Maintenance and the Contribution to the Insurance Reserve. The increase in Fleet Maintenance reflects the additional costs required to maintain the ageing fleet. The Contribution to the Insurance Reserve, is based on the redirection of the budgetting for this expenditure from "Services and Rents" to the Insurance Reserve.

A review of corporate charges assigned to the Water and Wastewater Services is underway. The Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer will report to the Works Committee by July 2001.

A cursory review of the District sewer and watermain renewal needs suggests that an additional estimated \$86 million is required to address the 2001 District sewer and watermain renewal needs, based on renewing the backlog of 100+ year old pipes over a 10 year time horizon and achieving a renewal rate of 100 years for the remainder of the systems. This additional funding request would translate to an estimated 21 percent increase in water rates.

A more detailed analysis of the District sewer and watermain system renewal needs and the adequacy of existing funding, through the Capital Program, to address these needs is

forthcoming. The Commissioner of Works and Emergency Services is expecting to report on this analysis to the Works Committee by July 2001.

Contact:

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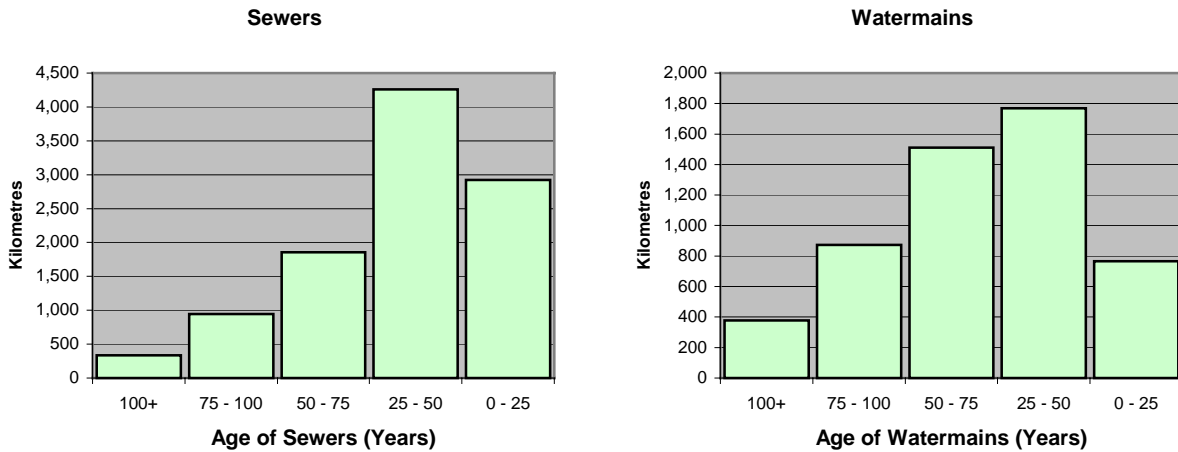


Figure 1: Sewer and Watermain Infrastructure Age

**Sewer and Watermain System Renewal Needs  
 (100 Year Renewal Rate)**

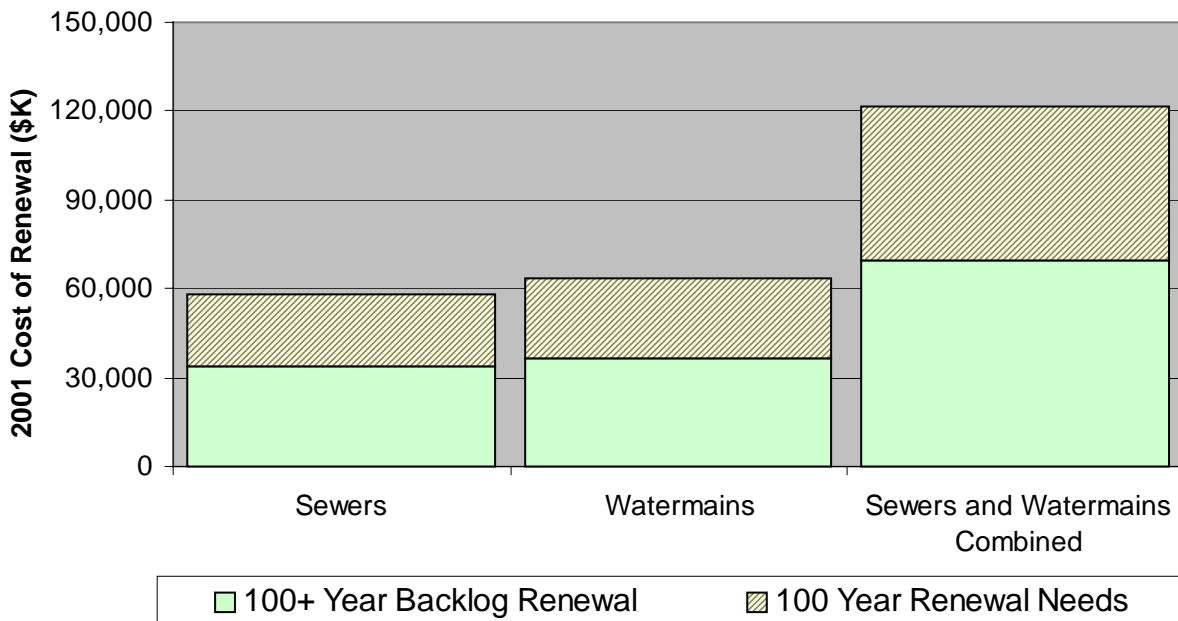


Figure 2: Infrastructure Renewal Needs Versus the 2001 Capital Budget Request



(Report dated February 28, 2001, addressed to the Budget Advisory Committee from the City Clerk, entitled “No-Fault Flood Grant Program: Basement Flooding Damages and Clean-up Cost”)

Recommendation:

The Works Committee recommends the adoption of Recommendations Nos. (1), (2) and (5) embodied in the joint report dated January 24, 2001, from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer.

Background:

The Works Committee at its Special Meeting on February 21 and 28, 2001, again had before it a joint report (January 24, 2001) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer recommending that:

- (1) a City-wide Basement Flood Grant Program not be established for flooded basements, as it would not provide any beneficial effects for the City, the cost of the program is unpredictable and potentially excessive, and the program is not required under the Municipal Act;
- (2) Resolution No. 91-21 of the former North York City Council be repealed, being a public No-Fault Grant Program which provides financial assistance to former City of North York residents for damages caused by sewer back-ups and water main breaks;
- (3) should the Committee wish to implement a City-wide Basement Flood Grant Program, such program shall be in the amount of \$500.00 or \$1,000.00 or \$1,500.00 per flooding incident, the approximate cost to the City, based on a typical year of 1,030 occurrences, being estimated to be \$515,000.00, \$1,030,000.00 or \$1,545,000.00 annually;
- (4) should the Committee adopt Recommendation No. (3) of this report, then it is recommended that the following be approved:
  - (i) an additional annual provision of \$500,000.00 or \$1,000,000.00 or \$1,500,000.00, depending on the grant limit chosen, be credited to the Basement Flood Grant Reserve Fund to stabilize the Reserve Fund in the event of an extraordinary storm;
  - (ii) the administrative guidelines as set out in Appendix “A” of this report will apply;
  - (iii) the Chief Financial Officer and Treasurer report back on the creation of the Basement Flood Grant Reserve Fund By-law and funding plan for the program as part of the rate setting report for the 2001 water rate;
  - (iv) two additional clerical positions be created to administer the Basement Flood Grant Program, at an estimated annual expense of \$100,000 plus related expenses;



- (v) funding for Recommendations Nos. (4)(i) and (iv) be provided from the Water and Wastewater Reserves and that the Water Rate be adjusted accordingly;
  - (vi) the existing North York No-Fault Flood Grant Program remain in place until such time as a City-wide Basement Flood Grant Program is implemented as part of the 2001 budget process; and
- (5) staff be directed to give effect to the foregoing.

The Committee also had before it the following communications:

- (i) (February 5, 2001) from Councillor Howard Moscoe, Ward 15 – Eglinton-Lawrence, respecting the repeal of the public No-Fault Grant Program of the former City of North York; and recommending that Recommendation No. (2) of the staff report be amended by adding thereto the words “at such time as the sewers in flood prone areas have been repaired”;
- (ii) (February 19, 2001) from Councillor Howard Moscoe, Ward 15 – Eglinton-Lawrence, respecting the repeal of the public No-Fault Grant Program of the former City of North York; and recommending that Recommendation No. (2) of the staff report be amended by adding thereto the words “at such time as the sewers in flood prone areas have been repaired”; and
- (iii) (February 20, 2001) from Councillor Anne Johnston, Ward 16 – Eglinton-Lawrence, respecting the repeal of the public No-Fault Grant Program of the former City of North York; and recommending that Recommendation No. (2) of the staff report be amended by adding thereto the words “at such time as the sewers in flood prone areas have been repaired”.

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(Joint Report dated January 24, 2001, addressed to the  
Works Committee from the  
Commissioner of Works and Emergency Services and  
the Chief Financial Officer and Treasurer)

Purpose:

To report on the feasibility of establishing a City-wide No-Fault Flood Grant Program, similar in form to the North York program, with an upset limit of either \$500, \$1,000 or \$1,500.

Financial Implications and Impact Statement:

Were the City to implement a City-wide basement flood grant program, the annual costs could range anywhere between \$500,000 to \$15,000,000 in the case of a catastrophic storm. Funding of such a program would require the average combined water and sewer service rate to be

increased by 0.26 percent to 0.52 percent which equals a rate increase of \$0.0025/m<sup>3</sup> to \$0.0051/m<sup>3</sup>, depending on the grant limit chosen.

Across the new City, the estimated number of watermain breaks, main sewer blockages and main sewer surcharge occurrences which affect homeowners property is estimated to be approximately 1,030 occurrences annually. There may however be extreme storm events, which result in up to a 10-fold increase and generate as many as 10,300 basement-flooding occurrences. On the basis of a flood grant program with optional values of \$500 or \$1,000 or \$1,500 per occurrence, the approximate cost to the City, based on a typical year of 1,030 occurrences, is estimated to be \$515,000, \$1,030,000 or \$1,545,000 annually. As well, the creation of two clerical positions would be needed to process these applications.

### Recommendations:

It is recommended that:

- (1) a City-wide Basement Flood Grant Program not be established for flooded basements, as it would not provide any beneficial effects for the City, the cost of the program is unpredictable and potentially excessive, and the program is not required under the *Municipal Act*;
- (2) Resolution No. 91-21 of the former North York City Council be repealed, being a public No-Fault Grant Program which provides financial assistance to former City of North York residents for damages caused by sewer back-ups and watermain breaks;
- (3) should the Committee wish to implement a City-wide Basement Flood Grant Program, such program shall be in the amount of \$500 or \$1,000 or \$1,500 per flooding incident the approximate cost to the City, based on a typical year of 1,030 occurrences, is estimated to be \$515,000.00, \$1,030,000.00 or \$1,545,000.00 annually;
- (4) should Committee adopt Recommendation No. (3) of this report, then it is recommended that the following be approved:
  - (i) an additional annual provision of \$500,000.00 or \$1,000,000.00 or \$1,500,000.00, depending on the grant limit chosen, be credited to the Basement Flood Grant Reserve Fund to stabilize the Reserve Fund in the event of an extraordinary storm;
  - (ii) the administrative guidelines as set out in Appendix "A" of this report will apply;
  - (iii) the Chief Financial Officer and Treasurer report back on the creation of the Basement Flood Grant Reserve Fund By-law and funding plan for the program as part of the rate setting report for the 2001 water rate;
  - (iv) two additional clerical positions be created to administer the Basement Flood Grant Program, at an estimated annual expense of \$100,000.00 plus related expenses;

- (v) funding for Recommendations Nos. (4)(i) and (iv) be provided from the Water and Wastewater Reserves and that the Water Rate be adjusted accordingly; and
  - (vi) the existing North York No-Fault Flood Grant Program remain in place until such time as a City-wide Basement Flood Grant Program is implemented as part of the 2001 budget process; and
- (5) staff be directed to give effect to the foregoing.

Background:

At its meeting of April 13, 14 and 15, 1999, City Council, in considering a report entitled "Insurance Claims Administration" dated March 11, 1999, from the Chief Financial Officer and Treasurer, adopted a harmonization program for City insurance claim procedures. At that time, Council added a recommendation which asked that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer prepare a joint report to the Works and Utilities Committee and Corporate Services Committee, on the feasibility of creating a no-fault grant program similar to the drain grant program, to cover clean-up costs for homeowners who have experienced a flood as a result of sewer back-ups and water main breaks, on the condition that the homeowner's insurance company has ceased to reimburse the homeowner as a result of repeated claims. In a joint report dated October 22, 1999, to the Works Committee and the Administration Committee, the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer recommended that: (i) the No-Fault Grant Program not be established; and (ii) the former North York City Council resolution concerning this program be repealed (Resolution No. 91-21).

The Administration Committee on November 30, 1999, recommended to the Works Committee the adoption of the joint report (October 22, 1999) from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer.

At its December 1, 1999 meeting, the Works Committee had before it the October 22, 1999 joint report from the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer and the November 30, 1999 communication from the City Clerk advising of the Administration Committee's recommendation to adopt the report. The Works Committee referred back the aforementioned joint report to the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer, for a joint report on the feasibility of continuing a City-wide harmonized No-Fault Flood Grant Program similar in form to the North York program, with an upset limit of either \$500.00, \$1,000.00 or \$1,500.00.

The Works Committee at its July 12, 2000, meeting had before it a June 28, 2000 report which outlined the feasibility of a City-wide No-Fault Basement Flood Grant with an upset limit of either \$500.00, \$1,000.00 or \$1,500.00. The Works Committee deferred consideration of the aforementioned report for consideration during the 2001 Water and Wastewater budget process, with a request that the Commissioner of Works and Emergency Services and the Chief Financial Officer and Treasurer submit a joint report to the Works Committee and the Budget Advisory Committee at that time on:

- (1) the various costs and financing options;
- (2) procedures for approval to avoid duplicate payments to the homeowners by their insurance company and the City; and
- (3) the policy being applicable for claims not covered by the homeowner's insurance company.

Comments:

During periods of peak rainstorms, basements may become flooded for a variety of reasons: foundation cracks, blocked connection pipes, inoperable sump pumps, poorly sloped landscaping, blocked downspouts, below grade window wells or sewer system back-ups. This report deals with flooding damage caused by main sewer back-ups as well as by water main breaks.

Former City of North York No-Fault Flood Grant Program:

The former City of North York established a No-Fault Flood Grant Program to assist homeowners with the cost of repairing damages to private property as a result of watermain breaks or main sewer back-ups in the City's systems. This program was established on April 17, 1991, at a time when North York was experiencing extremely heavy rainstorms which resulted in widespread basement flooding across the City.

North York No-Fault Flood Grant's Eligibility Criteria:

- (1) The occurrence of a sewer back-up or watermain break must be after January 1, 1991. There is no grant allowed for back-up due to blocked connections.
- (2) The grant applicant must not have caused or contributed to the damage.
- (3) The applicants' damages, both building and contents, are to be assessed based on depreciated values and not on replacement costs to a maximum of \$3,000.
- (4) If the applicant has Homeowners Insurance, which provides coverage, it is required that they present a claim against their policy where greater benefits may be available.
- (5) Claims by the tenant and owner of the same premises will be considered jointly, and both must be identified. If the combined property damages exceed \$3,000 then the maximum amount of the grant will be pro-rated in proportion to their respective damages.
- (6) Acceptance of the grant does not preclude an action for greater damages. In those cases, liability would have to be established against the City and the amount of the damage proven.

The North York No-Fault Grant Program was established with a \$3,000 limit.

Municipal Liability for Watermain Breaks and Sewer Back-ups:

*The Municipal Act* was amended in 1996 to specifically preclude any claim against a municipality based on nuisance in connection with the escape of water or sewage from sewage works or waterworks. Currently, the only claims that may be pursued against the City are those where the City has committed a negligent act or omission which results in property damage. Accordingly, the City is no longer automatically responsible for damages related to water or sewage escape from its systems and must be adjudicated negligent before any payment would be required. The amendments to *the Municipal Act* have greatly reduced the number of claims that municipalities are required to make payments on.

#### Annual Service Calls Received for Main Sewer Back-ups and Watermain Breaks:

Across the City, on an average year, there are approximately 1,030 service calls for main sewer back-ups and watermain breaks which may affect a homeowner's property. This number represents an average year, however, extremes in weather conditions may significantly increase this number by up to 10-fold or approximately 10,000 occurrences. These service calls may result from unusually cold winter conditions where frost penetration increases the frequency of watermain breaks, root infiltration into sewers which may cause blockage and sewer back-ups, and the general weakening of the infrastructure due to ageing may result in an increased frequency of service calls. Further, these types of service calls are not normally associated with negligence on the City's part but rather emergency repairs associated with ageing and deteriorating infrastructure. The May 12, 2000 rainstorm caused approximately 2,800 basements to flood.

In recent years, Capital Budgets have placed a greater onus on funding to rehabilitate the ageing infrastructure and reduce the frequency of watermain breaks and sewer back-ups. Approximately 63 percent of the Water Capital Program Request for year 2000 relates to funding for maintaining the state of good repair of the water system. Similar percentages will be made in the 2001 Capital Budget request. These programs include the Water Service Repair Program, Drain Grant Program, Sewer Rehabilitation and Watermain Re-lining Programs as well as replacement programs for seriously defective sewer and water systems. A report entitled, "Basement Flooding Investigation and Assessment – Status Report", was adopted at the Works Committee meeting of January 10, 2001, and at the January 18, 2001 Policy and Finance Committee meeting, which recommends financially assisting homeowners with the installation of sewer drain isolation devices under the Home Isolation Program. This program and other long-term funding for sewer upgrades will be included in the 2001 Capital Budget request for consideration, in addition with other system needs as a means of further reducing the risk of basement flooding.

#### Availability of Insurance Coverage:

Insurance companies offering homeowner insurance policies recognize that there will be occasions when property damage may occur due to sewer back-ups or watermain breaks in the municipal systems. Consequently, the insurance companies do provide affordable coverage for these incidents.

Situations will occur where a homeowner has experienced more than one flooding incident and could be in jeopardy of losing the benefit of their insurance. When this occurs, the homeowner/tenant has the option to present a claim to the municipality for consideration. To assist residents with the City's claims process it is recommended that Water and Wastewater staff provide the homeowner with a claim procedure card. Water and Wastewater staff are the first to respond to reports of residential basement flooding and by distributing the claim procedure card upon their attendance, the resident is aware of their options.

A claim submitted to the City will be evaluated on the basis of whether the resultant damage was due to a negligent act or omission of the City. If this is proven, the claim will be paid under the City's insurance arrangements. Adjudication of flooding claims in an insurance context is more beneficial to the homeowner because there is no cap or maximum on the amount of damages they can claim. The average basement flood claim is \$5,000.

A City-wide Basement Flood Grant Program described in this report represents a lower level of service to that offered by the former North York Community, which paid homeowners a maximum of \$3,000 per flooding claim. A City-wide Flood Grant Program, however, represents an increased level of service for all other former municipalities where there was no such program available to homeowners.

In summary, staff recommend not establishing a City-wide Basement Flood Grant and the repeal of the former North York No-Fault Flood Grant programs for the following reasons:

- (1) the City is considering initiating the Home Isolation Program, which will financially assist homeowners with the installation of home isolation devices to prevent sewer back-ups;
- (2) funding for future sewer upgrades continue to assist in reducing the risk of basement flooding;
- (3) property owners and tenants have access to comprehensive insurance products, which provide ample protection;
- (4) the repeal would be in keeping with the harmonization the City's insurance practices and restore fair and consistent claims adjudication;
- (5) a City-wide grant represents a higher level of service for all other former municipalities except North York;
- (6) there is no legal obligation on a municipality to pay residential basement flooding damages, except in the event of negligence on the part of the City; and
- (7) frequency and severity of basement flooding occurrences are extremely volatile making associated expenses unpredictable.

Following the May 12, 2000, rainstorm activity, municipalities across Canada were surveyed to determine which municipalities had a gratuitous payment system for residents who suffer

basement flood damage due to sewer surcharge. A copy of the survey results is attached as Appendix "B".

Alternative: City of Toronto Basement Flood Grant:

(1) The Various Costs and Financing Options:

Should Committee wish to implement a City-wide Basement Flood Grant Program to provide financial assistance for property damage to homeowners or tenants who have experienced a flood as a result of sewer back-ups and watermain breaks, on the condition that the homeowner's insurance company has ceased to reimburse the homeowner as a result of repeated claims, it is recommended that the City follow the administrative and financial guidelines as outlined below:

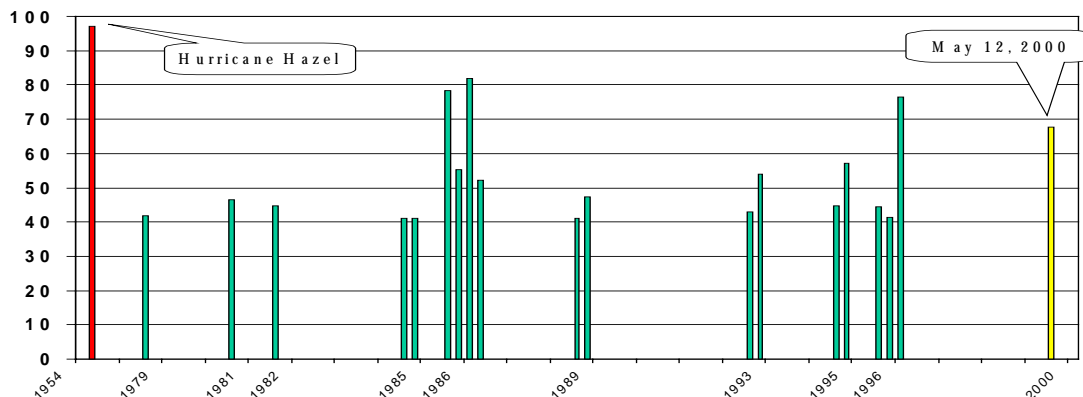
A Basement Flood Grant Reserve Fund would need to be established and funded from annual contributions from the water/sewer rate. It must be noted that currently there is no existing fund from which to pay out eligible grants and a funding plan will have to be developed based on the projected fund balance required. It is recommended that a Reserve Fund By-law be established and a funding plan for the grant program form part of the water rate setting report for the 2001 Operating Budget process.

In contemplating a City-wide Basement Flood Grant, consideration must be given to the possibility of catastrophic rainstorm events affecting the 415,000 residences in the City of Toronto. As noted in the Impact Statement of this report, extreme storm events may result in 10-fold increases in basement flooding and cause as many as 10,000 flooded basements in one rainstorm. The potential impact of a catastrophic storm such as a hurricane, which Toronto has not experienced in many years, must be considered. As an example, should the City receive 10,000 flooding occurrences in one year, at a grant payment of \$1,500.00, the grant payment needed would be \$15,000,000.00.

The May 12, 2000 rainstorm generated approximately 2,800 flooded basement calls across the City, the majority of which were caused by sewer back-ups. At these optional values, a rainstorm of the May 12, 2000 magnitude could cost \$1,400,000.00, \$2,800,000.00 or \$4,200,000.00 respectively, if all homes were to experience a sewer back-up.

To illustrate the frequency of significant rainfalls, the graph below provides a comparison to the May 12, 2000 storm and Hurricane Hazel which occurred in 1954 along with other significant rainfalls over the intervening years.

**Total Daily Rainfall over 40 m m**  
 City of Toronto  
 1979 - 2000



Implementation of a grant program means that the City must be financially prepared to honour its commitment through a sufficiently funded Reserve. Currently, a Basement Flood Grant Reserve Fund does not exist and there are no funds available. On the basis of a flood grant program with optional values of \$500.00 or \$1,000.00 or \$1,500.00 per occurrence, the approximate cost to the City, based on a typical year of 1,030 occurrences, is estimated to be \$515,000.00, \$1,030,000.00 or \$1,545,000.00 annually. It is recommended that an additional annual provision of \$500,000.00, \$1,000,000.00 or \$1,500,000.00, depending on the grant limit chosen, be credited to the Basement Flood Grant Reserve Fund to promote reserve stabilization in the event of an extraordinary storm. It is unknown when the next significant rain storm will occur. Upon reviewing the Rainfall Graph above, it appears that a major rainstorm event could occur within three to five years or this year. If this were to occur, alternative emergency funding would have to be identified and approved by City Council, for grant payment requests which have exceeded the funding available from the reserve.

On the basis of the average annual expected number of basement flooding occurrences of 1,030 at the selected grant limit per occurrence and the additional annual contribution for reserve stabilization, the amount of the reserve fund would require a balance as noted in Table 1 below. The corresponding water/sewer rate increase required to raise the funds is also noted in Table 1.



Table 1  
 Water Rate Increase to Generate Grant Fund

Average No. of Annual Basement Flooding Occurrence	Grant Payment Maximum Amount \$	Annual Grant Payment \$	Annual Reserve Stabilization Contribution \$	Projected Fund Balance Required \$	Increase to Water/Sewer Rate %	Average Water/Sewer Rate Increase \$
1,030	500	515,000	500,000	1,015,000	0.26	0.0025/m3
1,030	1,000	1,030,000	1,000,000	2,030,000	0.39	0.0038/m3
1,030	1,500	1,545,000	1,500,000	3,045,000	0.52	0.0051/m3

The same water/sewer rate surcharge, identified in Table 1, would apply consistently to all users, although only detached, semi-detached and multiple residences would be the beneficiaries of the program. Water Revenue staff have indicated that 80 percent of the water rates collected are from the high-end commercial users. Essentially, the high-end commercial users would be subsidising this program for the residential properties. The above data is based on 460,000 accounts. The average combined water and sewer service rate for the 2000 budget year would increase from \$0.9547/m<sup>3</sup> by the amount noted in the Table 1 column headed, Average Water/Sewer Rate Increase.

Should a Basement Flood Grant Program be established, payments would be made to homeowners on an ex-gratia basis without regard for an assessment of legal liability. Consequently, such payments would be made without regard for the terms and conditions of insurance policy wording. In addition, City staff resources would be required to administer the program. It is estimated that two clerical positions need to be created to process the grant applications, at an estimated annual expense of \$100,000.00 plus related expenses.

- (2) Procedures for approval to avoid duplicate payments to the homeowners by their insurance company and the City; and
- (3) the policy being applicable for claims which are not covered by the homeowner's insurance company.

Should a City-wide Basement Flood Grant be adopted, the administrative process and eligibility criteria could mirror the North York grant process. The only exception to the proposed

eligibility criteria currently used in the former North York Grant process would be the dollar limit, verification from the homeowner/tenant's insurance company that coverage has ceased and clarifying that the grant will only be paid to the homeowner and tenant of the residence. The recommended administration process and criteria are outlined in Appendix "A".

It should be noted that current statistics indicate that an average basement flooding damage claim is \$5,000.00. Should a City-wide Grant Program be established at the amounts of \$500.00 or \$1,000.00 or \$1,500.00, the homeowner would still need to purchase their own insurance to ensure they have adequate protection.

#### Conclusions:

It is recommended that a City-wide Flood Grant Program not be established for flooded basements, as it would not provide any beneficial effects for the City, the cost of the program is excessive, open-ended and unpredictable, and the program is not consistent with the provisions within *the Municipal Act*.

It is further recommended that the North York No-Fault Grant Program be discontinued and that a funding onus be placed on rehabilitation and maintenance of the sewer and water systems in a state of good repair, thus reducing the number of incidences where damages may occur to private property.

The availability of insurance to a homeowner or tenant through personal lines' of insurance products and coverage available under the City's insurance program negates the need for a no-fault grant program particularly considering the unpredictable City cost associated with extreme storm events.

Should the Committee wish to implement a City-wide Basement Flood Grant Program, the program should be considered as part of the 2001 budget process. A new harmonized City-wide Basement Flood Grant Program, in the amount of either \$500.00 or \$1,000.00 or \$1,500.00 per occurrence would result in an additional pressure on water/sewer rates of \$515,000, \$1,030,000.00, or \$1,545,000.00 for an average year. However, there may be some years where the payouts will exceed these amounts due to extreme storm conditions. It is further recommended that an additional annual provision of \$500,000.00, \$1,000,000.00 or \$1,500,000.00, depending on the grant limit chosen, be credited to the Basement Flood Grant Reserve Fund to promote reserve stabilization in the event of an extraordinary storm.

If such a harmonized City-wide Basement Flood Grant Program is adopted, a new Basement Flood Grant Reserve Fund will be required, funded by contributions from the water/sewer rate sufficient to offset the estimated number of predicted flooding occurrences each year. As well, the creation of two clerical positions would be needed to process these applications.

#### Contact Names:

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Mr. Jeff Madeley, Manager, Insurance and Risk Management, Treasury and Financial Services, Finance, Tel: 392-6301; Fax: 397-4555, E:mail: [jmadeley@city.toronto.on.ca](mailto:jmadeley@city.toronto.on.ca);

Mr. Wayne Green, P. Eng., Director of Quality Control and System Planning, Water and Wastewater, Tel: 392-8242, E:mail: [wgreen@city.toronto.on.ca](mailto:wgreen@city.toronto.on.ca)

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Appendix "A"  
Alternative: City of Toronto Basement Flood Grant  
Administrative and Financial Guidelines

Administrative Process

- Flood Calls are directed to Water and Wastewater staff;
- Water and Wastewater staff record all calls and will attempt to inspect each location;
- Water and Wastewater staff complete a report which indicates where the water entered the premises;
- Water and Wastewater staff provide the homeowner/tenant with a Basement Flood Grant application form, which encourages the homeowner/tenant to first contact their insurance company but also provides information on the Basement Flood Grant, the Grant's Eligibility Criteria and how to submit the application to the City;
- The homeowner/tenant is responsible for the basement clean-up and to carefully document their damages; and
- Once the City has received the application, it will be assigned and assessed by staff for grant compliance, adjudication and payment.

Eligibility Criteria:

- (1) This grant only applies to the homeowner/tenant of the affected residence.
  - (2) The sewer back-up or watermain break must have occurred after (date of grant adoption). There is no grant allowed for back-up due to blocked connections.
  - (3) The grant applicant must not have caused or contributed to the damage.
  - (4) The applicants' damages both building and contents, are to be assessed based on Actual Cash Values, not on replacement costs to a maximum of \$500.00 or \$1,000.00 or \$1,500.00, as determined by City Council.
  - (5) It is required that the applicant present a claim to their insurance company where greater benefits may be available. If the homeowner/tenant's insurance coverage has ceased, written proof from the insurer must be supplied to be eligible for the City's Basement Flood Grant.
  - (6) Claims by the owner and tenant of the same premises will be considered jointly, and both must be identified. If the combined property damages exceed \$500.00 or \$1,000.00 or \$1,500.00, as determined by City Council, then the maximum amount of the grant will be pro-rated in proportion to their respective damages.
  - (7) All grants are subject to an executed release up to \$500.00 or \$1,000.00 or \$1,500.00, as determined by City Council. This does not preclude the homeowner or their insurer from pursuing an action in negligence.
  - (8) Grant assistance will be provided once per flooding incident.
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Appendix "B"  
 Sewer Back-up  
 Claims Payment Survey – June, 2000

Municipality	Automatic Payment?	What system exists?	Cost or Number of claims
London	No	Pay only when negligent	from Jan 1/99; 27 occurrences, 193 claims
Niagara Region	No	Pay only when negligent	n/a
Kitchener	No	Pay only when negligent	n/a
Hamilton	No	Pay only when negligent	n/a
Toronto: except North York	No	Pay only when negligent	n/a
North York suburb	Yes	Pay up to \$3,000.00 upon meeting criteria - Potential cost for to May 12, 2000 exceeds \$3 million.	1997 = \$737,127 1998 = \$55,334
Oakville	No	- considering offering interest free loans to low-income claimants	n/a
Durham Region	Yes	\$250.00 to be used for clean up costs	n/a
York Region	No	predominately septic system claims	n/a
Peel Region	Yes	\$1,500.00 max-excluding storm situations Must claim insurance first, Region will reimburse deductible; Region must be responsible for blockage	350 claims rec'd due to May, 2000 storm
Halton Region	Yes	offers up to \$250.00. For sanitary sewer backups only	104 paid due to May, 2000 storm
St Albert Sask	Yes	When tree roots block City portion of sewer, causing backup - max \$150.00 per incident, upon receipt of release - special fund for these costs	1998 = \$14,704 and 1999 = \$14,479.
Regina, Sask	No	Pay only when negligent	n/a
Lethbridge Ab	No	Pay only when negligent	n/a

Prince George, BC	No	Pay only when negligent	n/a
Surrey, BC	No	Council policy - pay only when legally liable	n/a
Saanich, BC	No	Pay only when negligent; will pay for a plumbers investigation of cause or minor expense up to \$200.00 (no admission of liability)	1999 = \$2,786
Burnaby, BC	No	Pay only when negligent	n/a
Calgary, Ab	No	Pay only when negligent	n/a
Mun Insurance Assoc of BC (155 members)	No	Pay only when negligent - small no. of municipalities will pay up to \$200.00 (e.g., Saanich)	n/a
St John NB	No	Pay only when negligent, but will voluntarily pay for clean up costs as a public relations gesture (no limit, but incl in claim if it exceeds deductible)	n/a

NB: Ontario Municipal Act requires claims for negligence - not nuisance - in response to a 'flood' of claims in late 1990's increasing cost to municipalities. London already offers a sump pump subsidy which is pro-active since it permits owners financial relief in implementing work to prevent future occurrences

(Copies of the communications referred to in the communication dated February 28, 2001, were forwarded to all Members of Council with the April 17, 2001, agenda of the Policy and Finance Committee and copies thereof are also on file in the office of the City Clerk).

(Report dated March 26, 2001, addressed to the Works Committee from the Chief Financial Officer and Treasurer entitled, "Water and Wastewater Capital Program 2001-2005)

Purpose:

To report on the 2001 – 2005 Capital Program for Water and Wastewater and provide optional cash flow levels for the program (2001) for the consideration of the Works Committee.

Financial Implications and Impact Statement:

Approval of the 2001 – 2005 Capital program requires a total cash flow commitment up to a maximum of \$272.5 million in capital expenditures in 2001 (inclusive of pre-approved Council spending authority of \$36.3 million).

Recommendations:

It is recommended that

- (1) the Water and Wastewater capital program for 2001 – 2005, totalling \$1.880 billion, as outlined in Appendix A and Appendix B, be received;
- (2) the Works Committee recommend a level of funding for the Water and Wastewater capital program and request the Commissioner of Works and Emergency Services to report back to the Budget Advisory Committee prior to final wrap up of the Capital Budget with any changes required to meet the cash flow level recommended for 2001; and
- (3) the Chief Financial Officer and Treasurer report to the Budget Advisory Committee prior to the commencement of the 2002 Capital Budget process with a recommended financing strategy and resulting cash flow targets for the Water and Wastewater programs for the years 2002 – 2003.

Program Request:

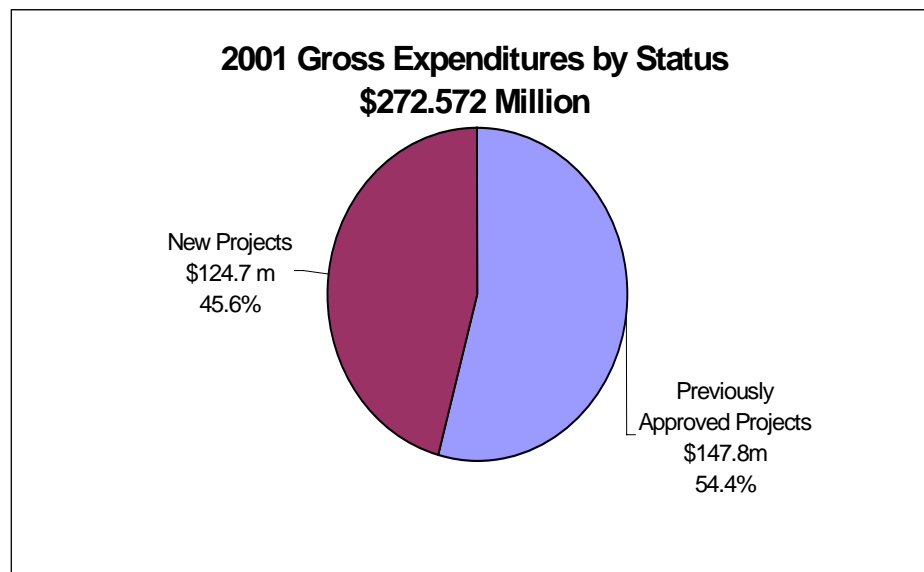
The Water and Wastewater original 2001 – 2005 Capital Program requires a cash flow of \$1.902 billion over the five year term. Following a preliminary administrative review of the request, the program has revised its five year plan, resulting in a revised request totalling \$1.880 billion over the five year term, for a total reduction of \$22.0 million. The revised project listings for the Water and Wastewater Programs are attached as Appendix A and Appendix B, respectively.

The 2001 combined cash flow request for the Water and Wastewater programs was reduced from the original request of \$301.2 million to \$272.5 million. Essentially, the reduced cash flow requirement in 2001 represents the deferral of some sub-projects to future years.

The combined program is summarized below:

Requested 2001 Cash Flow	Wastewater Treatment	Water Production	District Projects	Total
Contract Underway	47,276	8,896	49,550	105,722
Council Direction	3,517	0	6,340	9,857
Council Pre-Approvals	0	0	24,124	24,124
Transportation (Projects in conjunction with)	0	0	14,512	14,512
Council Approved Enhancement Projects	0	0	6,111	6,111
Health & Safety Projects	452	0	3,892	4,344
Comply with Certificates of Approvals	1,193	197	0	1,390
Infrastructure Rehabilitation Projects	1,338	7,280	46,157	54,775
Operations & Maintenance Projects	26,242	14,955	2,619	43,816
New Infrastructure Projects	422	0	2,339	2,761
Other Projects	0	0	5,159	5,159
TOTAL	80,440	31,328	160,803	272,571

The following chart provides a breakdown of the projects that are new and those that were previously approved. Appendix C provides a project by project breakdown of the new and previously approved projects.



The following chart summarizes the historical spending authorizations for the Water and Wastewater Program, along with the revised request for the years 2001 – 2005.



<b>Cash Flow (\$000's)</b>	<b>Gross</b>
Historical Average (3 Years)	209,277
1998 Budget	122,411
1999 Budget	264,671
2000 Budget	240,750
2001 Requested	272,572
2002 Requested	375,714
2003 Requested	397,761
2004 Requested	436,707
2005 Requested	397,911
2001 - 2005 Total	1,880,665
2001 - 2005 Average	376,133

**Water Program:**

The Water 2001 – 2005 Capital Program consists of on-going and new projects for the treatment, pumping, transmission and storage of water and its supply to all industrial, commercial and household water users in the City of Toronto. The Program also supplies water to a major portion of the Region of York under an agreement between the City, the Region of York and the Ministry of the Environment and the program request includes funds to enhance the capacity of the service to this region.

The 2001 revised cash flow request totals \$100.802 million, and reflects an increase of \$31.4 (45.2 percent) from the 2000 cash flow authorization. This increase is mainly due to increased requests of \$21.8 million for Watermain Construction and Maintenance. This increase is due to an increase for state of good repair expenditures, which have historically averaged at about 1 percent of asset value. In addition, there is an increase in Plant and Equipment Upgrades for Island Plant Winterization (\$3.9 million) in 2001.

**Wastewater Program:**

The Wastewater 2001 – 2005 Capital Program consists of on-going and new project requests to maintain existing plant and equipment, Works Best Practices, District Operations and System Improvements, new sewer construction, and plant environmental and capacity upgrades.

The 2001 revised cash flow request totals \$171.770 million and reflects a slight increase of \$.414 million (0.2 percent) over 2000 levels. The request includes \$57.9 million in carry-forward funding from the 2000 approved program.

Although the requested 2001 cash flow is consistent with the level of funding approved for the year 2000; the program represents a shift in focus; significantly reducing the investment in

Wastewater Treatment facilities, to District Projects (watermain replacement, reconstruction and rehabilitation). The focus is on state of good repair, preventative maintenance and addressing backlog.

Issues to be considered prior to approval of the 2001 capital program for Water and Wastewater:

#### Historic Spending Patterns:

The Water and Wastewater capital programs have been historically underspent against their authorizations. For the former Municipality of Metropolitan Toronto, spending levels for 1990 – 1997 averaged 52 percent. For the amalgamated City, spending levels were at 60.5 percent in 1998 and 55.0 percent in 1999. The current request includes a carryforward request of approximately \$77 million, resulting in estimated spending of \$163 million of their approved budget of \$240 million; or 68 percent spent for 2000. Although the program is optimistic that the percentage of spending against authorizations will increase dramatically, it is unlikely that 100 percent spending will be realized. Based on historical spending patterns, it may be appropriate to assume spending levels in the range of 75 - 80 percent.

#### New Projects and Proposed Categories of Spending:

The original request of \$301.589 million was comprised of 36 percent state of good repair projects; 9 percent legislated/City policy projects; 5 percent Development/Growth Related; and 50 percent Service Improvement. Although the program has not yet provided a sub-project breakdown for analysis; an assumption could be made that the categories originally budgeted are representative of the new mix. A comparison to the corporate category mix indicates that the program's request is considerably lower than the corporate state of good repair percentage of 71.5 percent and considerably higher than the combined other corporate categories of 28.5 percent.

#### Financing Options:

The Water and Wastewater Programs can be financed by a combination of capital from current, rates, reserves and debentures. The spectrum of combinations can range from an approval of the full request of \$272.5 million, funded through rate increases of approximately 18.3 percent, to a significantly reduced capital program with no rate change, financed by capital from current, reserves and/or debentures.

The Treasury Division of the Finance Department has prepared a report 'Water Rate and Financing Options for the 2001 Operating and 2001 – 2005 Capital Budgets of the Water and Wastewater Program', also provided for the consideration of the Works Committee, which outlines various financing options for the Water and Wastewater Capital and Operating Budgets, 2001 – 2005.

A summarized listing of the proposed options, impact on the Water and Wastewater Capital program for 2001 only, rates and debenture levels is provided below. These options reflect the impact on the 2001 Water and Wastewater Capital program only, while the Financing Options Report focuses on the five year projections.

Financing Options	Required Capital Program Reduction
Rate increase 2.1 percent - capital program reduction 23 percent	\$63.3 million
Rate increase 5 percent -capital program reduction 19 percent	\$52.0 million
Rate increase 18.3 percent - capital program reduction 0 percent	\$ 0.0 million
Rate increase 2.1 percent; additional debenture financing \$68 million -capital program reduction 0 percent	\$ 0.0 million
Rate increase 5 percent; additional debenture financing \$55.8 million; - capital program reduction 0 percent	\$ 0.0 million
Rate increase 2.1 percent; additional debenture financing \$9.5 million; - capital program reduction 20 percent	\$54.4 million
Rate increase 5 percent; reduction of \$2.5 million from reserves; - capital program reduction 20 percent	\$54.4 million
Rate increase 5 percent; total debt outstanding is at year 2000 level; (\$36.5 million); - capital program reduction 7 percent	\$17.9 million

Please see the (draft) report dated March 21, 2001, entitled “Water Rate and Financing Options for the 2001 Operating and 2001 – 2005 Capital Budgets of the Water and Wastewater Program”, for impacts on future years of the options summarized above.

It is recommended that the Works Committee review the financing options report, select a financing option and request the Commissioner of Works and Emergency Services to report back to the Budget Advisory Committee prior to final wrap up of the 2001 Capital Program with optional detailed capital programs that would reflect affordable levels of funding as chosen by the Works Committee.

Conclusion:

This report has provided information regarding the 2001 – 2005 Water and Wastewater Capital Program and optional cash flow levels for the program (2001) for the consideration of the Works Committee.

Contact:

Carmine Bruno,, Manager, Budget Services

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(Copies of Appendices A, B, and C referred to in the foregoing report were forwarded to all Members of Council with the April 17, 2001, agenda of the Policy and Finance Committee and copies thereof are also on file in the office of the City Clerk).

**The Policy and Finance Committee also submits the following communication (March 28, 2001) from the City Clerk:**

Recommendation:

The Works Committee at its meeting on March 28, 2001, during consideration of the Water and Wastewater 2001-2005 Capital Program, referred the following motion to the Policy and Finance Committee for consideration:

Moved by Councillor Balkissoon:

“That the City Auditor be requested to conduct a detailed review of all additions to and withdrawals from the Water and Wastewater reserve accounts since amalgamation;

That such review examine all documentation supporting additions to and withdrawals from the reserve accounts;

That the review also include an examination of the appropriate Council authority for all such transactions, including circumstances where the nature of the reserve may have been changed from a reserve fund to a reserve;

That the review also include consultations with Ernst & Young, the City’s external financial auditors, in order to determine the extent of the audit work conducted by them on reserve transactions; and

That the City Auditor also review the rationale and reasons for the fact that the City’s Water and Wastewater reserve accounts are not subject to a separate financial attest audit by the external City Auditors, Ernst & Young, as was the case at the pre-amalgamation municipalities.”

*(City Council at its regular meeting on April 23, 24, 25, 26, 27, and its special meeting held on April 30, May 1 and 2, 2001, had before it, during consideration of the foregoing Clause, the following report (April 26, 2001) from the Commissioner of Works and Emergency Services:*

*I have been requested to submit a report to the Works Committee on the amounts for each project and sub-project included in the recommended capital budget for Water and Wastewater. In response to this request, I have prepared the attached capital summary which revises the project cashflows to be consistent with the total funding level for the 2001 Capital Program as recommended by Policy and Finance Committee.*

*I am requesting that Council approve the list of projects and revised cashflows as part of your Special Council meeting to deal with the Operating and Capital Budgets and that the recommendation to report back to the Works Committee be deleted. This will provide authority*

*to implement the Water and Wastewater Capital Program immediately so that construction projects can be initiated in this construction season.*

*I wish it to be clear that the recommended list of projects remains the same as originally tabled. The project scheduling and cashflows have been adjusted to fit within the funding available.*

**WATER & WASTEWATER PROGRAM**  
**Amounts in \$000s Inflated to Year of Expenditure (Net GST Rebate)**

		Approved 2000	Proj Actual 2000	Estimated Expenditure				
				2001	2002	2003	2004	2005
<b><u>REVISED SUBMISSION</u></b>								
WATER	PLANTS	20,161	12,940	31,328	60,088	91,838	101,701	57,813
	DISTRICTS	49,248	44,848	69,474	76,585	77,110	79,911	93,025
		69,409	57,788	100,802	136,673	168,948	181,612	150,838
WASTEWATER	PLANTS	109,856	96,234	80,440	93,872	101,944	74,751	61,895
	DISTRICTS	61,500	45,862	91,330	145,169	126,869	180,344	185,178
		171,356	142,096	171,770	239,041	228,813	255,095	247,073
TOTALS	PLANTS	130,017	109,174	111,768	153,960	193,782	176,452	119,708
	DISTRICTS	110,748	90,710	160,804	221,754	203,979	260,255	278,203
		240,765	199,884	272,572	375,714	397,761	436,707	397,911
<b><u>FINAL SUBMISSION</u></b>								
WATER	PLANTS	20,161	12,940	25,420	62,359	93,811	101,701	57,813
	DISTRICTS	49,248	43,615	65,210	79,327	77,560	83,432	96,633
		69,409	56,555	90,630	141,686	171,371	185,133	154,446
WASTEWATER	PLANTS	109,856	96,234	58,713	86,614	113,804	89,963	55,138
	DISTRICTS	61,500	45,862	71,864	150,989	128,011	182,054	184,847
		171,356	142,096	130,577	237,603	241,815	272,017	239,985
TOTALS	PLANTS	130,017	109,174	84,133	148,973	207,615	191,664	112,951
	DISTRICTS	110,748	89,477	137,074	230,316	205,571	265,486	281,480
		240,765	198,651	221,207	379,289	413,186	457,150	394,431
<b><u>TOTAL VARIANCE</u></b>								
WATER	PLANTS	0	0	(5,908)	2,271	1,973	0	0
	DISTRICTS	0	(1,233)	(4,264)	2,742	450	3,521	3,608
		0	(1,233)	(10,172)	5,013	2,423	3,521	3,608
WASTEWATER	PLANTS	0	0	(21,727)	(7,258)	11,860	15,212	(6,757)
	DISTRICTS	0	0	(19,466)	5,820	1,142	1,710	(331)
		0	0	(41,193)	(1,438)	13,002	16,922	(7,088)
TOTALS	PLANTS	0	0	(27,635)	(4,987)	13,833	15,212	(6,757)
	DISTRICTS	0	(1,233)	(23,730)	8,562	1,592	5,231	3,277
		0	(1,233)	(51,365)	3,575	15,425	20,443	(3,480)
% Variance			-0.6%	-18.8%	1.0%	3.9%	4.7%	-0.9%

**Capital Budget Variance for 2001-2005  
 Wastewater Program 2001 Final Submission  
 Amounts in \$000s Inflated to Year of Expenditure**

Project #	Description		Expenditure (Net GST Rebate)					Total
			2001	2002	2003	2004	2005	
WW010	Ashbridges Bay TP – III	Revised Budget	27,253	15,964	14,578	10,603	4,901	73,299
		P&F Recommendation	20,488	13,114	22,971	11,464	4,796	72,833
		<b>Variance</b>	<b>-6,765</b>	<b>-2,850</b>	<b>8,393</b>	<b>861</b>	<b>-105</b>	<b>-466</b>
WW019	Ashbridges Bay TP – IV	Revised Budget	1,193	29,942	44,913	38,650	32,535	147,233
		P&F Recommendation	208	18,605	44,572	51,321	26,039	140,745
		<b>Variance</b>	<b>-985</b>	<b>-11,337</b>	<b>-341</b>	<b>12,671</b>	<b>-6,496</b>	<b>-6,488</b>
WW005	Equip Replacement & Rehab	Revised Budget	9,027	14,854	12,573	12,972	10,753	60,179
		P&F Recommendation	6,739	15,594	13,263	13,745	10,597	59,938
		<b>Variance</b>	<b>-2,288</b>	<b>740</b>	<b>690</b>	<b>773</b>	<b>-156</b>	<b>-241</b>
WW007	Highland Creek TP – IV	Revised Budget	18,395	5,473	874	1,197	5,268	31,207
		P&F Recommendation	12,860	9,508	1,856	1,831	5,268	31,323
		<b>Variance</b>	<b>-5,535</b>	<b>4,035</b>	<b>982</b>	<b>634</b>	<b>0</b>	<b>116</b>
WW008	Humber TP – II	Revised Budget	13,007	10,752	12,619	10,743	7,837	54,958
		P&F Recommendation	7,511	13,547	15,060	10,743	7,837	54,698
		<b>Variance</b>	<b>-5,496</b>	<b>2,795</b>	<b>2,441</b>	<b>0</b>	<b>0</b>	<b>-260</b>
WW014	Keele Trunk Relief Sewer	Revised Budget	422	532	321	55	57	1,387
		P&F Recommendation	0	432	545	328	57	1,362
		<b>Variance</b>	<b>-422</b>	<b>-100</b>	<b>224</b>	<b>273</b>	<b>0</b>	<b>-25</b>
WW011	North Toronto TP	Revised Budget	0	0	117	0	0	117
		P&F Recommendation	0	0	117	0	0	117
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW012	Sewer Improvements System	Revised Budget	869	1,129	724	531	544	3,797
		P&F Recommendation	847	1,129	724	531	544	3,775
		<b>Variance</b>	<b>-22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-22</b>
WW001	Works Best Practice Program	Revised Budget	10,274	15,226	15,225	0	0	40,725
		P&F Recommendation	10,060	14,685	14,696	0	0	39,441
		<b>Variance</b>	<b>-214</b>	<b>-541</b>	<b>-529</b>	<b>0</b>	<b>0</b>	<b>-1,284</b>
WW415	Z-Dist New Sewer YR01-2010	Revised Budget	7,976	21,835	14,776	32,143	34,904	111,634
		P&F Recommendation	5,426	20,480	14,776	32,143	34,904	107,729
		<b>Variance</b>	<b>-2,550</b>	<b>-1,355</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3,905</b>
WW411	Z-Dist New Sewer Yr2000	Revised Budget	6,096	0	0	0	0	6,096
		P&F Recommendation	6,062	1,184	0	0	0	7,246
		<b>Variance</b>	<b>-34</b>	<b>1,184</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,150</b>
WW402	Z-Dist Sewer New	Revised Budget	19,753	0				19,753
		P&F Recommendation	14,889	4,771				19,660
		<b>Variance</b>	<b>-4,864</b>	<b>4,771</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-93</b>
WW419	Z-Dist Sewer Rehab OPS YR01-2010	Revised Budget	7,689	10,648	8,992	9,213	9,446	45,988
		P&F Recommendation	5,599	10,327	8,992	9,213	9,446	43,577
		<b>Variance</b>	<b>-2,090</b>	<b>-321</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-2,411</b>
WW403	Z-Dist Sewer Rehab & Repl	Revised Budget	2,361	0	0	0	0	2,361

**Capital Budget Variance for 2001-2005  
 Wastewater Program 2001 Final Submission  
 Amounts in \$000s Inflated to Year of Expenditure**

Project #	Description		Expenditure (Net GST Rebate)					Total
			2001	2002	2003	2004	2005	
		P&F Recommendation	2,361	0	0	0	0	2,361
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW412	Z-Dist Sewer Rehab & Repl Yr2000	Revised Budget	2,494	0	0	0	0	2,494
		P&F Recommendation	2,494	0	0	0	0	2,494
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW416	Z-Dist Sewer Replc YR01-2010	Revised Budget	15,705	25,915	20,649	20,659	21,806	104,734
		P&F Recommendation	10,844	25,124	20,649	20,659	21,806	99,082
		<b>Variance</b>	<b>-4,861</b>	<b>-791</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5,652</b>
WW404	Z-Dist Stormwater Mgmt	Revised Budget	2,621	3,318	2,987	0	0	8,926
		P&F Recommendation	2,617	3,318	2,987	0	0	8,922
		<b>Variance</b>	<b>-4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-4</b>
WW417	Z-Dist Stormwater Mgmt YR01-2010	Revised Budget	3,065	9,597	3,409	1,800	1,769	19,640
		P&F Recommendation	1,746	10,191	4,057	1,477	1,438	18,909
		<b>Variance</b>	<b>-1,319</b>	<b>594</b>	<b>648</b>	<b>-323</b>	<b>-331</b>	<b>-731</b>
WW413	Z-Dist Stormwater Mgmt Yr2000	Revised Budget	4,284	1,798	0	0	0	6,082
		P&F Recommendation	4,198	1,712	0	0	0	5,910
		<b>Variance</b>	<b>-86</b>	<b>-86</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-172</b>
WW405	Z-Dist W'Course Improv	Revised Budget	3,287	0	0	0	0	3,287
		P&F Recommendation	2,288	0	0	0	0	2,288
		<b>Variance</b>	<b>-999</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-999</b>
WW418	Z-Dist W'Course Improv YR01-2010	Revised Budget	3,009	8,994	8,909	11,274	12,199	44,385
		P&F Recommendation	2,091	9,056	9,403	11,274	12,199	44,023
		<b>Variance</b>	<b>-918</b>	<b>62</b>	<b>494</b>	<b>0</b>	<b>0</b>	<b>-362</b>
WW414	Z-Dist W'Course Improv Yr2000	Revised Budget	3,047	0	0	0	0	3,047
		P&F Recommendation	2,825	0	0	0	0	2,825
		<b>Variance</b>	<b>-222</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-222</b>
WW912	Z-Districts Ops & Sys Improv	Revised Budget	2,998	18,899	17,087	12,006	0	50,990
		P&F Recommendation	1,614	19,539	17,087	14,039	0	52,279
		<b>Variance</b>	<b>-1,384</b>	<b>640</b>	<b>0</b>	<b>2,033</b>	<b>0</b>	<b>1,289</b>
WW401	Z-Emery Creek Pond	Revised Budget	4,082	0	0	0	0	4,082
		P&F Recommendation	2,960	1,122	0	0	0	4,082
		<b>Variance</b>	<b>-1,122</b>	<b>1,122</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW002	Bayview Storm Sewer	Revised Budget	0	0	0	0	0	0
		P&F Recommendation	0	0	0	0	0	0
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW015	Don Sewer System Improvement	Revised Budget	0	0	0	0	0	0
		P&F Recommendation	0	0	0	0	0	0
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
WW421	Basement Flooding	Revised Budget	2,863	13,653	13,995	14,344	14,703	59,558



**Capital Budget Variance for 2001-2005  
 Wastewater Program 2001 Final Submission  
 Amounts in \$000s Inflated to Year of Expenditure**

Project #	Description	Expenditure (Net GST Rebate)					Total
		2001	2002	2003	2004	2005	
	Relief						
	P&F Recommendation	3,850	13,653	13,995	14,344	14,703	60,545
	<i>Variance</i>	<i>987</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>987</i>
WW422	Dist Sewer Replc Enhancement						
	Revised Budget	0	24,950	25,181	35,872	46,242	132,245
	P&F Recommendation	0	24,950	25,181	35,872	46,242	132,245
	<i>Variance</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
WW420	WWFMMP Implementation						
	Revised Budget	0	5,562	10,884	43,033	44,109	103,588
	P&F Recommendation	0	5,562	10,884	43,033	44,109	103,588
	<i>Variance</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<b>TOTAL</b>	Revised Budget	<b>171,770</b>	<b>239,041</b>	<b>228,813</b>	<b>255,095</b>	<b>247,073</b>	<b>1,141,792</b>
	P&F Recommendation	<b>130,577</b>	<b>237,603</b>	<b>241,815</b>	<b>272,017</b>	<b>239,985</b>	<b>1,121,997</b>
	<i>Variance</i>	<i>-41,193</i>	<i>-1,438</i>	<i>13,002</i>	<i>16,922</i>	<i>-7,088</i>	<i>-19,795</i>



**Capital Budget Variance for 2001-2005  
 Water Program 2001 Final Program  
 Amounts in \$000s Inflated to Year of Expenditure**

Project #	Description		Expenditure (Net GST Rebate)					Total
			2001	2002	2003	2004	2005	
PW008	D/WM Warden- Danforth to Egl	Revised Budget	2,576	5,445	0	0	0	8,021
		P&F Recommendation	2,576	5,445	0	0	0	8,021
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW028	P/Clark Residue Mgmt	Revised Budget	237	1,619	10,891	11,163	0	23,910
		P&F Recommendation	237	1,619	10,891	11,163	0	23,910
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW015	P/Harris Improvements	Revised Budget	0	670	625	0	0	1,295
		P&F Recommendation	0	670	625	0	0	1,295
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW007	P/Harris Residue Mgmt	Revised Budget	430	6,813	17,341	14,803	0	39,387
		P&F Recommendation	430	6,813	17,341	14,803	0	39,387
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW002	P/Horgan Expansion	Revised Budget	308	1,890	17,374	39,053	38,558	97,183
		P&F Recommendation	308	1,890	17,374	39,053	38,558	97,183
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW018	P/Island Winterization	Revised Budget	3,941	5,103	0	0	0	9,044
		P&F Recommendation	933	6,281	1,425	0	0	8,639
		<b>Variance</b>	<b>-3,008</b>	<b>1,178</b>	<b>1,425</b>	<b>0</b>	<b>0</b>	<b>-405</b>
PW022	P/Plant Additons Process	Revised Budget	1,970	1,942	2,844	2,896	2,209	11,861
		P&F Recommendation	1,279	2,651	2,844	2,896	2,209	11,879
		<b>Variance</b>	<b>-691</b>	<b>709</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18</b>
PW003	P/Zebra Mussel Control	Revised Budget	317	0	0	0	0	317
		P&F Recommendation	317	0	0	0	0	317
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW515	Z-Dist Tor Universal Metering	Revised Budget	963	6,500	7,537	5,500	0	20,500
		P&F Recommendation	193	7,270	7,537	5,500	0	20,500
		<b>Variance</b>	<b>-770</b>	<b>770</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW514	Z-Dist W/M Rehab & Repl Yr01-2010	Revised Budget	22,729	25,756	26,928	28,139	29,395	132,947
		P&F Recommendation	23,024	25,756	26,928	28,139	29,395	133,242
		<b>Variance</b>	<b>295</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>295</b>
PW512	Z-Dist W/M Rehab+Repl YR2000	Revised Budget	10,654				0	10,654
		P&F Recommendation	10,924	0	0	0	0	10,924
		<b>Variance</b>	<b>270</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>270</b>
PW516	Z-Dist W/M Replc YR01-2010	Revised Budget	14,695	15,484	12,080	12,249	13,285	67,793
		P&F Recommendation	13,178	15,921	12,069	12,249	13,285	66,702
		<b>Variance</b>	<b>-1,517</b>	<b>437</b>	<b>-11</b>	<b>0</b>	<b>0</b>	<b>-1,091</b>
PW501	Z-Dist W/Mains New	Revised Budget	172				0	172
		P&F Recommendation	167	0	0	0	0	167
		<b>Variance</b>	<b>-5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5</b>
PW513	Z-Dist W/Mains New YR01-2010	Revised Budget	1,555	2,347	1,627	1,456	4,162	11,147
		P&F Recommendation	1,355	2,448	1,627	1,456	4,162	11,048
		<b>Variance</b>	<b>-200</b>	<b>101</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-99</b>

**Capital Budget Variance for 2001-2005  
 Water Program 2001 Final Program  
 Amounts in \$000s Inflated to Year of Expenditure**

Project #	Description		Expenditure (Net GST Rebate)					Total
			2001	2002	2003	2004	2005	
PW502	Z-Dist W/Mains Rehab & Repl	Revised Budget	142	0	0	0	0	142
		P&F Recommendation	138	0	0	0	0	138
		<b>Variance</b>	<b>-4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-4</b>
PW517	Z-Dist Water Service Repair	Revised Budget	15,477	13,461	13,797	14,142	14,496	71,373
		P&F Recommendation	13,997	14,942	13,797	14,142	14,496	71,374
		<b>Variance</b>	<b>-1,480</b>	<b>1,481</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
PW009	Z-Water Program	Revised Budget	3,087	4,147	4,230	2,189	2,244	15,897
		P&F Recommendation	2,234	4,100	4,691	5,710	5,852	22,587
		<b>Variance</b>	<b>-853</b>	<b>-47</b>	<b>461</b>	<b>3,521</b>	<b>3,608</b>	<b>6,690</b>
PW032	GAC Contactors	Revised Budget	0	0	518	1,594	10,891	13,003
		P&F Recommendation	0	0	518	1,594	10,891	13,003
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW519	Z-Dist W/Main Rehab Enhancement	Revised Budget	0	4,592	2,322	2,380	2,440	11,734
		P&F Recommendation	0	4,592	2,322	2,380	2,440	11,734
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
PW518	Z-Dist W/Main Replc Enhancement	Revised Budget	0	4,298	8,071	12,262	16,112	40,743
		P&F Recommendation	0	4,298	8,071	12,262	16,112	40,743
		<b>Variance</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL</b>		<b>Revised Budget</b>	<b>100,802</b>	<b>136,673</b>	<b>168,948</b>	<b>181,612</b>	<b>150,838</b>	<b>738,873</b>
		<b>P&amp;F Recommendation</b>	<b>90,630</b>	<b>141,686</b>	<b>171,371</b>	<b>185,133</b>	<b>154,446</b>	<b>743,266</b>
		<b>Variance</b>	<b>-10,172</b>	<b>5,013</b>	<b>2,423</b>	<b>3,521</b>	<b>3,608</b>	<b>4,393</b>

