

TORONTO STAFF REPORT

23

October 23, 2001

To: Policy and Finance Committee
From: Acting Chief Administrative Officer
Subject: Proposed Water and Wastewater Utility Study

Purpose:

To respond to Council's request for comment on the development of a Feasibility Plan for creating a public Water and Wastewater Utility Commission or Corporation, and to recommend a study of governance options for water and wastewater.

Financial Implications and Impact Statement:

Based on the City's experiences with the creation of Toronto Hydro and Enwave, external resources costing in the order of \$250,000.00 will be required for the study for specialized expertise in the legal and financial fields. These funds will be requested in the Corporate Studies Account through the 2002 budget process. Future financial impacts, on the tax base and on the water rates, of any proposed change in governance structure for water and wastewater services will be determined in the course of the analysis.

The Acting Treasurer has reviewed this report and concurs with the financial impact statement.

Recommendations:

It is recommended that:

- (1) the Acting Chief Administrative Officer proceed with a study which assesses governance models for the creation of a publicly-owned water and wastewater utility/corporation, detailing implementation plans for the recommended model;
- (2) the scope and methodology of the study be as set out in this report including:
 - (a) establishing a cross-departmental work team to conduct the review where the technical components are addressed by an Executive Lead in the Works and Emergency Services Department;

surpluses and which acts as a source of funds to stabilize impacts on the water and sewer rate resulting from variations in consumption.

Of the \$451.6 million projected revenue in 2001, approximately \$190 million represents direct operating expenses. An additional \$80 million in operating expenses represents chargebacks for services provided by other divisions and departments and \$20 million represents payments for contracted services. Approximately \$15 million is collected by the City for payments in lieu of taxes. The remainder is allocated to debt charges and contributions to the reserves.

Issues To Be Addressed:

Public health and safety and a clean environment rely on a well-maintained water and sewer infrastructure. The Water and Wastewater Division has long been faced with significant financial pressures relating to infrastructure renewal. In addition to regular maintenance and upgrades of treatment plants and other aboveground facilities, the underground watermain and sewer systems also require ongoing investment in order to continue to ensure security of supply and high quality water.

More than 50% of the water distribution system and about 30% of the sewer system in the City of Toronto is greater than 50 years old, with 8% of the watermain network and 3% of the sewer system being greater than 100 years old. Given that the expected life of underground networks is between 80 and 100 years, it is clear that, after an initial aggressive replacement program to deal with a backlog of system renewal needs, an ongoing replacement rate of 1% per annum is optimal. Capital budgets from 1999 to 2001 have only allowed for replacement at the average rate of 0.5% for watermains and 0.35% for the sewer system. The approved 2001 capital expenditure of \$47 million on water and sewer mains would need to be increased three-fold to achieve the appropriate replacement rate.

In addition, the Division has identified as a priority a Wet Weather Flow Management Master Plan, a long-term stormwater system improvement program to address degraded water quality conditions along the waterfront and area watercourses. This will put even greater pressure on the Division's Program.

The rate structures have not kept pace with these increasing demands. In addition, the chargebacks are in need of a comprehensive review to determine appropriateness. Reserves are currently at a minimal level. The program needs focussed attention in order to meet future challenges.

Strategies to Address Financial Pressures:

The Division has embarked on several cost-saving programs to reduce its direct operating costs. The Works Best Practices Program, currently in Phase 2, will see the implementation of new technologies, work practices and organizational structures in the operation of the treatment plants.

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 - (a) establishing a cross-departmental work team to conduct the review where the technical components are addressed by an Executive Lead in the Works and Emergency Services Department;

- (b) consultation with affected bargaining units, the general public and other stakeholders;
 - (c) mechanisms for addressing long-term capital requirements;
 - (d) assessment of safety, security and environmental issues;
 - (e) determination of the longer term impacts on the tax base, water rates, and the effects of disentanglement on other City departments and services;
 - (f) cost and mechanics of implementation;
- (3) appropriate funding for external expertise be identified in the Corporate Studies Account through the 2002 budget process;
 - (4) the Acting Chief Administrative Officer report back to a joint meeting of the Policy and Finance and Works Committees by June 2002 on the results of the study; and
 - (5) the appropriate City Officials be authorized and directed to take the necessary action to give effect thereto.

Background:

At its meeting on October 3, 4, 5, 6, 10, 11 and 12, 2000, Council had before it a Motion recommending that:

- “(1) the Chief Administrative Officer form a staff group comprised of senior representatives from Corporate Services, Finance, Audit, and Works and Emergency Services, and a representative of the Union, to develop a Feasibility Plan for the creation of a publicly-owned Water and Wastewater Utility/Corporation;
- (2) the Commissioner of Works and Emergency Services, or his designate, be the Corporate lead for the staff group, with responsibility for reporting to the Works Committee in 2002 on this initiative, consistent with the Phase 1 reporting timeline under the District Service Improvement Project;
- (3) the feasibility plan shall include, among other matters, an overview of the issues concerning governance, risk analysis, legal requirements, Corporate service agreements, human resource plan, financial plan and a physical and financial audit of assets; and
- (4) the assignment to Earth Tech Canada Inc. for the supply of professional services to undertake the District Service Improvement Project, at a cost not to exceed \$2,500,000.00, inclusive of GST, be amended by an additional amount not to exceed \$250,000.00, representing 10 per cent of the original contract award, to provide professional services as required to develop a Feasibility Plan that addresses the pros and cons for the creation of a publicly-owned Water and Wastewater Utility/Corporation.”

The motion was not adopted by Council, but rather was referred to the Policy and Finance Committee. It was also directed that the Chief Administrative Officer and CUPE Local 416 comment on this motion. On January 18, 2001, the Policy and Finance Committee received

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communications from CUPE Local 416 and Local 79 on this matter, and referred the issue to the Chief Administrative Officer for a report thereon.

Comments:

This report describes the current service organization and financial situation, highlights the issues which need to be addressed, discusses the initiatives planned or in progress which may help address some of these issues, and proposes a process to review governance options as suggested in the Notice of Motion referred to staff. Staff of Works and Emergency Services and Finance have participated in the development of this report.

Current Situation:

The Water and Wastewater Services Division of Works and Emergency Services supplies potable (drinkable) water to all Toronto residences and businesses and collects and treats all wastewater, both sewage and stormwater. In addition to providing service within the City of Toronto, the Division supplies water on a wholesale basis to the Region of York and also treats wastewater from a portion of the Region of Peel and the Greater Toronto Airport Authority. The operations of the Division are subject to the quality control standards and guidelines issued by the Province of Ontario. The City of Toronto's water supply consistently meets or exceeds the Provincial water quality guidelines.

The Division operates four water treatment plants, four wastewater treatment plants, two central laboratories, seven plant-specific laboratories, 18 water-pumping stations and 45 wastewater-pumping stations. There are over 5,000 kilometres of watermains in the City's water distribution system, and about 10,000 kilometres for wastewater collection. The Division employs over 1,650 workers, represented by CUPE Locals 416 and 79.

The Water and Wastewater service is fully integrated into the Works and Emergency Services Department and receives technical services and support services from other divisions of the Department. The Finance Department is responsible for meter reading and billing, financial analysis for rate determination, maintains the call centre and provides centralized financial services as it does for all departments. Services such as Legal, Human Resources, Facilities, and Fleet Management are provided by the Corporate Services Department. The Water and Wastewater program is charged for all intra- and inter-departmental services and these charges are in turn reflected in consumer rates.

The Division's revenues are derived from user fees for water consumption and sewage treatment, rather than through tax assessment. In 2001, the projected revenue from water rates and other user fees is \$451.6 million. Revenue not allocated to operating expenditures is applied to Council-approved capital programs. The City maintains a Water and Wastewater Capital Reserve Fund in which funds are held for the purpose of moderating the program's capital pressures from one year to the next. When capital requirements exceed available capital allocations from revenues, funds are drawn from the reserve and similarly, when surplus revenues are available, or under-expenditures occur, a net contribution is made to the reserve. Similarly, there is a Rate Stabilization Reserve for the purpose of receiving water revenue

surpluses and which acts as a source of funds to stabilize impacts on the water and sewer rate resulting from variations in consumption.

Of the \$451.6 million projected revenue in 2001, approximately \$190 million represents direct operating expenses. An additional \$80 million in operating expenses represents chargebacks for services provided by other divisions and departments and \$20 million represents payments for contracted services. Approximately \$15 million is collected by the City for payments in lieu of taxes. The remainder is allocated to debt charges and contributions to the reserves.

Issues To Be Addressed:

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In addition, the Division has identified as a priority a Wet Weather Flow Management Master Plan, a long-term stormwater system improvement program to address degraded water quality conditions along the waterfront and area watercourses. This will put even greater pressure on the Division's Program.

The rate structures have not kept pace with these increasing demands. In addition, the chargebacks are in need of a comprehensive review to determine appropriateness. Reserves are currently at a minimal level. The program needs focussed attention in order to meet future challenges.

Strategies to Address Financial Pressures:

The Division has embarked on several cost-saving programs to reduce its direct operating costs. The Works Best Practices Program, currently in Phase 2, will see the implementation of new technologies, work practices and organizational structures in the operation of the treatment plants.

Through its District Service Improvement Project, begun in 2000, the Division will assess work practices and technology upgrades to achieve further efficiencies in the Division's non-plant operations, i.e., district operations and administrative and technical support areas.

Both programs are scheduled to be complete by the end of 2003. The Division estimates that these two programs combined will generate annual operating savings of \$50 million.

In addition to pursuing savings in its operations, the Division plans to work with the City's corporate departments to review the chargebacks for internally provided services. These have not been reviewed in a comprehensive way since amalgamation.

On the revenue side, Council reviews the water rates each fall and approves any increases for the upcoming year. Both the rate and the block structure used to differentiate between average and large-volume consumers are the responsibility of Council. Jurisdictions around the world are experiencing intense pressure to raise water rates for the same reasons cited in this report: there is increased concern over ageing infrastructures in the context of water quality and water safety issues, with a move towards full, life-cycle costing. This is defined as charging rates that are sufficient to cover the costs of day-to-day operations and maintenance, system rehabilitation costs, and replacement costs for each component of the system.

These initiatives are being addressed through the normal business planning and budgeting processes. The City has committed to reviewing all of its services to ensure best value for the taxpayer, and in this case, the water consumer. Part of such a review should include exploration of other structures and mechanisms of delivering the services.

Other Jurisdictions:

There is increased interest in restructuring water and wastewater services throughout the world. The City's current structure, of a Water and Wastewater Division residing within a larger department, is a common arrangement among municipalities, though each municipality has organized its functions in a unique manner. For example, Ottawa has a Transportation, Utilities and Public Works Department, while Winnipeg has a Water and Waste Department.

The Public Utilities Act allows municipalities to delegate authority for the operation of water, sewer, or water and sewer systems to a Public Utility Commission. Examples of Ontario municipalities with Public Utility Commissions include Peterborough (water only) and Windsor (water, district energy and telecommunication).

Canadian examples of publicly-owned utility corporations delivering water and wastewater services include Utilities Kingston (water and wastewater, natural gas, electricity, and telecommunications networks) and Edmonton's EPCOR Utilities Inc. (water and electricity in Edmonton, and water, wastewater and electricity services provided under contract to other municipalities). Under the current Ontario Municipal Act, establishment of a Water (or Water and Wastewater) Utility Corporation would require specific legislative approval. Anticipated upcoming changes to the Municipal Act, however, may allow the City greater flexibility in the creation of corporate entities. In Australia, Sydney Water is a state-owned corporation with an

operating license to undertake water, wastewater and stormwater activities in the Sydney, Illawarra and Blue Mountains region.

Some municipalities in Ontario have entered into long-term operations and maintenance contracts with companies specializing in providing complete water and wastewater services. These opportunities and restructuring options need to be fully explored and analyzed to assess how "best value" can be achieved.

Scope and Methodology of Recommended Study:

Any consideration of a change in governance of a City service must assess certain fundamental issues. In the case of water and wastewater services, the key questions are:

- What is the essential City role in the delivery of this service?
- How can quality control, both of potable water and of water returned to Lake Ontario, be guaranteed?
- How will the tax base be impacted?
- How will the water rates be impacted?
- How will employees be affected?

A restructuring could conceivably alleviate some of the challenges faced in the delivery of water and wastewater services by creating an environment which supports more focused, informed decision-making and provides opportunities to adjust business practices to be more cost-efficient.

In brief, possible governance options for water and wastewater services are:

1) Utility Commission

- appointed or elected commission
- options for degree of delegation of authority to set rates, manage finances
- options respecting provision of support services

2) Utility Corporation

- discrete entity
- subsidiary of City's Hydro Corporation
- other affiliations

An evaluation of structural options must provide an assessment in 5 key areas:

- water quality assurances
- security of supply (ensuring adequate supply of water is maintained)
- environmental implications (motivation towards conservation)
- accountability (to whom, for what, and what sanctions available)
- degree of public involvement

The study will encompass governance issues, risk analysis, legal requirements, corporate service agreements, human resource issues, infrastructure funding and state of good repair, and impacts on the tax base, the water rates and other City departments and services. In addition to recommending the most appropriate governance model, the study will outline an implementation plan for the recommended model.

The Chief Administrator's Office will lead a cross-departmental workgroup to produce the core work of the study. This will involve staff resources from the CAO Department, Works and Emergency Services, Corporate Services and Finance. The bargaining units will be consulted, as will the general public, and other stakeholders.

Based on previous experience in the restructuring of Toronto Hydro and Enwave, required outside expertise in the legal and financial fields is estimated to cost in the order of \$250,000.00. It is expected that this review will take up to June 2002 to complete.

Conclusions:

Safety issues are paramount in any consideration of the City's water and wastewater services. In order to guarantee safe drinking water and environmentally sound wastewater treatment, a serious financial burden must be borne. It is proposed that these and other issues be assessed within the study of governance models for the creation of a publicly-owned water and wastewater utility/corporation.

A handwritten signature in black ink, appearing to read 'Shirley Hoy', with a stylized flourish at the end.

Shirley Hoy
Acting Chief Administrative Officer

