WATER, WASTEWATER & STORM
RATE BOOK & SERVICES OVERVIEW

Hamilton
Water is Life

THOMAS C. KEEFER
Chief Engineer and Designer
Hamilton Water Supply • 1856 - 1859

JAMES McFARLANE
Chief Engineer in Charge
Hamilton Water Supply • 1860 - 1910

Celebrating 150 Years of Municipal Drinking Water
December 2009

Mayor Eisenberger and Members of Council,

For your consideration, enclosed is the 2010 Water, Wastewater and Storm Rate Budget and Services Overview.

As Hamilton endeavors to initiate a new phase in Water, Wastewater and Storm infrastructure investments, it is imperative that the approach considers and balances the financial ability of the community to continue to support safe and reliable services. Hamilton continues to proactively plan for the provision of water, wastewater and storm services, in an effort to facilitate economic prosperity, environmental stewardship, financial sustainability, and effective inter-governmental relationships.

This budget supports principles such as protecting key services, implementing efficiencies and cost avoidance, developing new revenue sources, and investing in infrastructure. In 2009, staff made efforts to manage a series of risks that continue to potentially impact the ability of the financing strategy to support the water, wastewater and storm programs.

These risks, and the mitigating measures taken to date, will be further identified throughout this report, and under separate cover through Report PW09099, Stormwater Rate Feasibility Study.

The forecast 2009 actual water and wastewater revenues reflect negative trends that have been reported to Council for the second consecutive year. Similar to 2008, 2009 represented one of the wettest years in decades; thus a sharp decline in revenues was experienced. Projected 2009 metered and non-metered water and wastewater revenues are forecast to be approximately $18 (which represents 9 million m3) below budget. Similarly, 2008 symbolized the impact of seasonal and economic influences resulting in actual water and wastewater revenues of approximately $18 million lower than previously budgeted.

Today's economic crisis contributes to a series of risks in general. For instance, with respect to the pace of development in the short and medium term, Hamilton's current population growth is slower than projected in the Places to Grow Act. This may contribute to development charge shortfalls over the short term until such time as the development reaches budgeted levels.

The City of Hamilton has been proactively working towards implementing reliable systems for future generations. The 2010 Rate Budget continues to support the priority of investing in capital improvements.
The remediation of Hamilton Harbour is crucial to the economic, environmental and social well-being of Hamilton. In 2010, we will be reinforcing our request for both levels of government to join us again and show their continued support and commitment to the wastewater system upgrades required to de-list the Harbour.

The 2010 Water, Wastewater and Storm Budget reflects Council's ongoing commitment and dedication over the past decade to implement a sustainable financing plan while bridging the divide between the funding shortfalls for necessary infrastructure with affordable water rates. This budget calls for a continued commitment through the adoption of a recommended rate increase of 4 per cent. As well, staff are recommending through Report PW09099 that a Stormwater Rate Program be implemented effective in 2011.

The Rate Budget and Services Overview is being distributed today to Council, the media and to the public. On Friday, December 4th, staff will provide Committee and the public with an information session including presentations from both Corporate Services and Public Works. First and foremost, this session will provide Committee members with the opportunity to ask questions concerning the 2010 Rate Budget and Services Overview.

We anticipate the budget presentations and deliberations will culminate in the approval of the 2010 Rate Budget by Council.

Chris Murray  
City Manager

Gerry Davis  
General Manager, CMA

Roberto Rossini  
General Manager  
Finance & Corporate Service
# INTRODUCTION

**Message from:**

Gerry Davis,  
General Manager, Public Works  
Rob Rossini,  
General Manager, Finance & Corporate Services

## 2010 RATE BUDGET & SERVICE OVERVIEW

<table>
<thead>
<tr>
<th>Page</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Water &amp; Wastewater Overview</td>
</tr>
<tr>
<td>37</td>
<td>Fiscally Responsible</td>
</tr>
</tbody>
</table>
| 81   | Historical Highlights  
Celebrating 150 Years of Municipal Drinking Water |
| 123  | Projects Forthcoming |
| 153  | Financial Reports  
& User Fee Index |

---

**CITY OF HAMILTON**

---

**CITY GOVERNMENT, 1868.**

Hamilton was incorporated as a City on the 1st January, 1847. It is divided into five wards, which are bounded as follows:—St. Lawrence ward is bounded on the north by Burlington Bay, on the east by city limits, on the south by King street, and on the west by John Street; St. Patrick's ward on the north by King Street, on the east by city limits, on the south by the mountain, and on the west by John Street; St. George's Ward on the north by King Street, on the east by John Street, on the south by the mountain, and on the west by city limits; St. Andrew's Ward on the north by Burlington Bay, on the east by John Street, on the south by King Street, and on the west by Mc Nab street; St. Mary's Ward on the north by Burlington Bay, on the east by McNab street, on the south by King street, and on the west by city limits.

The Common Council, which is elected annually on the first Monday in January, is composed of fifteen members, three aldermen for each ward.

**COUNCIL, 1868.**

Council meets once in two weeks, on Mondays, at 7½ p.m.  
Hutchinson Clark, Mayor.  
St. Andrew’s Ward.—Robert Chisholm, Hutchinson Clark, William Farmer.  
St. George’s Ward.—George Munroe, Joseph Lawton, John Mitchell.  
St. Lawrence Ward.—Robert Kelly, William Turnbull, Patrick Crawford.  
St. Mary’s Ward.—Kenny Fitzpatrick, William Edgar, George Sharpe.  
St. Patrick’s Ward.—James B. O’Reilly, James Mullin, Joseph Kendall.

**STANDING COMMITTEES.**

Board of Works, Board of Health and Parks—Chairman, Ald. Murben;  
Ald. Mullin, Chisholm, Fitzpatrick, Turnbull.  
Markets, Fire, License and Police—Chairman, Ald. Edgar;  
Ald. Mullin, Chisholm, Munroe and Kelly.  
Hospital, House of Refuge, Crystal Palace—Chairman, Ald. Fitzpatrick;  
Waste Works—Chairman, Ald. O’Reilly;  
Ald. Farmer, Edgar, Crawford and Mitchell.
HAMILTON'S CIVIC GOVERNMENT

The popular trend in municipal circles is towards government by Commission. Hamilton has been moving this way for some years, but with this difference that while other cities have been concentrating power in the hands of a small Commission, Hamilton has distributed the power to a number of Commissioners, mostly appointed by the City Council. The School Board, Parks Board, Library Board, Hospital Board, Cemetery Board, Board of Health, Hydro Electric Light & Power Commission, and Harbor Commission, are practically independent Boards, in full control of their departments, so far as their management and expenditures are concerned, while the general policy of the city, the amount of money appropriations made to the various boards, the fixing of the rate of taxation, and the collection of taxes, are in the hands of the City Council, a representative body, consisting of Mayor, four Controllers, and sixteen Aldermen, elected annually by the people. The Mayor and Controllers form a Board of Control, and no money appropriation or Council expenditure can be made without their approval, except by a two-thirds vote of the Council. So that Hamilton practically enjoys the advantages of both an independent and representative government, graft and extravagant expenditures being almost unknown.
Since 1859, residents of Hamilton have been able to enjoy municipal drinking water. Hamilton was among the first cities in Canada to provide its residents with clean municipal drinking water and this year marks the beginning of our 150th anniversary. I am very proud to be part of Hamilton's heritage and humbled that we are creating history as we shape our future.

Leadership is woven into the fabric of Hamilton's community. We have always been an industrious city and among the forefront when providing our residents with services. Hamilton continues to use proactive, forward thinking when planning strategic investments to ensure continuous improvements to the water and wastewater systems. Hamilton’s ability to provide clean, safe drinking water to its residents as well as protect the natural environment through wastewater collection and treatment is a fundamental task of the City.
Similarities abound as we are celebrating the 150th anniversary of municipal drinking water in Hamilton, which was a huge undertaking, and financial burden using advanced technology for the time. Ironically, 150 years later, we are currently responsible for a huge expansion at the wastewater treatment plant that will make us leaders in technology and is a tremendous financial liability. Of equal importance we are embarking upon much needed capital upgrades to our water treatment facilities.

When I review the history of Hamilton and its many accomplishments, I’m very proud of our past and excited about our future. Hamilton is a dynamic City willing to make bold financial decisions for the betterment of the community. The City has successfully overcome many challenges over the years, becoming a stronger community and developing a culture of leadership.

With the support of Council, we have continued this legacy. Our cogeneration facility at Woodward Avenue, Hamilton Renewable Power Inc. (HRP Inc.), which creates energy from methane gas, a by-product of the City’s wastewater operations has been awarded both provincially and nationally. Hamilton was the first municipality in Ontario to be accepted by the Ontario Energy Financial Corporation to build a generator for sustainable green energy. Expanding on this success and using European technology, Hamilton is set to become the first Canadian municipality to produce bio-methane by harvesting methane gas from sludge instead of wasting the valuable resource. Our Environmental Laboratory and Operations Control Centre was awarded LEED (Leadership in Energy and Environmental Design) Silver Certification by the Canada Green
Building Council in December of 2008. Hamilton’s Environmental Laboratory and Operations Control Centre is the first in Canada to receive Silver.

Hamilton continuously works to reinvigorate its economy and diversify for the future. We are being recognized in the water and wastewater industry as being proactive and leaders in environmental and innovative excellence. Our strategic business plan is industry leading for the municipal sector. It is the heart of our success and lays the groundwork for our progression. Through strategic planning we are able to make prudent decisions respecting capital investments to ensure the sustainability of our water and wastewater infrastructure and ensure that our staff maintain a focus on our principle objectives to protect public health, property and the environment.

This forward thinking attitude and strategic planning is essential as Hamilton has one of the lowest average household incomes in Ontario. Progressive thinking is required as we continue to face challenges with our aging infrastructure and storm water management; the clean-up of Hamilton Harbour; development pressures; and balancing infrastructure funding levels where they need to be without placing an undue burden on industry, business and residents through acceptable water rates. With this said the City continues to do an admirable job raising water rates to reflect the true cost of operating such a complex system and is approaching a sustainable level of funding for the water and wastewater systems. Our progressive attitudes in protecting and conserving our water resources will ensure continuous safe drinking water for Hamilton residents to enjoy for years to come.

Photo of: Children enjoying Hamilton Beach, Early 1900s
STRATEGIC PLANNING
FOR THE FUTURE

OUR MANDATE:
To Protect Public Health, Property and the Environment

OUR VISION:
To be recognized by our customers, stakeholders and peers as a “Centre of Environmental and Innovative Excellence” in the sustainable management of our water resources

Strategic planning is an integral part of our day to day life when providing water and wastewater services. The sustainability of our water and wastewater infrastructure requires capital investments and with that comes prudent decision making. We strive to make certain our operations are functioning as efficiently and effectively as possible to best serve our customers.

Experience shows that our strategic planning process enhances our ability to ensure our principle objectives are prioritized in a manner consistent with our mission. Guided by our principle objectives we have been able to determine and prioritize our operational objectives. The 2010 Report Card is an achievement of our strategic plan and a result of the monitoring and measurement steps we have taken as we work to improve service quality and strive for excellence.

We endeavor to serve our customers in the most efficient and effective manner by ensuring our resources are managed in the most valuable way. Our mandate and vision are core beliefs that lay the groundwork for our strategic planning. They guide our efforts and determine our path to ensure we achieve future successes.
Objective 1

PROVIDE CLEAN, SAFE, COST-EFFICIENT, DRINKING WATER SERVICES
**INTRODUCTION**

**MUNICIPAL DRINKING WATER LICENCE**

Licence Number: 005-101
Issue Number: 1

Pursuant to the Safe Drinking Water Act, 2002, S.O. 2002, c. 32, and the regulations made thereunder and subject to the limitations thereof, this municipal drinking water licence is issued under Part V of the Safe Drinking Water Act, 2002, S.O. 2002, c. 32 to:

City of Hamilton
700 Woodward Ave
Hamilton, Ontario
L8H 6P4

For the following municipal residential drinking water system:

Hamilton Drinking Water System

This municipal drinking water licence includes the following:

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Drinking Water System Information</td>
</tr>
<tr>
<td>B</td>
<td>General Conditions</td>
</tr>
<tr>
<td>C</td>
<td>System-Specific Conditions</td>
</tr>
<tr>
<td>D</td>
<td>Conditions for Relief from Regulatory Requirements</td>
</tr>
</tbody>
</table>

DATED at TORONTO this 24th day of June, 2009

Signature

Indra Prasad, P.Eng.
Director
Part V, Safe Drinking Water Act, 2002

---

**ONTARIO MUNICIPAL BENCHMARKING INITIATIVE**

**Compare to 15 municipalities in Ontario, efficiency in Hamilton's water treatment facility translates to Hamilton paying the third lowest cost for water treatment**

**CANADIAN GENERAL STANDARDS BOARD**

Certifies that

The Corporation of the City of Hamilton
700 Woodward Avenue
Hamilton, Ontario
L8H 6P4

(ID # OAP 003)

has a documented Quality Management System for the

Hamilton Drinking Water System

that conforms to the requirements of

Ontario’s Drinking Water Quality Management Standard

*Scope of Accreditation: Limited Scope Entire DWQMS*

(Certificate is issued subject to the condition that the operating authority submit an application for Full Scope Accreditation to CGSB within 12 months of the initial issuance date)

**Ontario**

**PROVIDE CLEAN SAFE COST EFFICIENT...**
2010 STRATEGIC OBJECTIVES & EXPECTED OUTCOMES

Objective 2
PROVIDE EFFECTIVE, COST-EFFICIENT, WASTEWATER AND STORM WATER SERVICES

Water & Wastewater host 2009 MP, MPP Breakfast Remedial Action Plan Group, Bay Area Restoration Council, City Staff & Politicians come together to discuss future funding arrangements to ensure the completion of the Wastewater Treatment Facility Expansion

City Presents at Remedial Action Plan Workshop
In-House Operation provides New Service Level
- Improved Effluent and Water Quality
- Improved Maintenance

Private Contractor projected operating budget at $50 million by 2010
In-House operating budget currently at $27.5 million

Ontario Municipal Benchmarking Initiative

Compared to 15 municipalities in Ontario, efficiency in Hamilton’s wastewater treatment facility translates to Hamilton paying:

- The third lowest operating costs for wastewater treatment
- The third lowest operating costs for treatment and disposal of wastewater

This is exceptional as compared to 15 municipalities we treat the most volume of wastewater per capita
Sustainable Green Energy From Cogeneration Facility

- Reduces approximately 6,500 tonnes of Greenhouse Gas annually
- Supplies electricity to the Wastewater Treatment Plant and approximately 1,600 homes
- Engine heat offsets natural gas use
- Revenue source for City
- Expansion to fuel 110 Public Works vehicles
**Asset Management & Financial Plan**

**Business Drivers**
- Customer Expectations
- Corporate Strategic Goals
- Legislative Requirements

**ASSET MANAGEMENT**
- Physical Parameters
- Asset Capacity, Condition and Performance
- Historical Data
- Asset Vulnerability

**Lifecycle Analysis**
- Demand Capacity
- Service Life
- Risk Assessment
- Cost Benefit Assessment

**Lifecycle Management Plans**
- Action and Upgrade Plan
- Requirement and Implementation Plan
- Operation and Maintenance Plan

**Financial Management**
- Report on Tangible Capital Assets
- PSDO 21 06

---

**Storm Water Rate**
- Storm Water rate provides fair system
- Encourages environmental land use and reduces run-off

---

**Biosolids Master Plan**
Overall strategy, from point of generation to incineration process
- Maximize energy recovery
- Minimize greenhouse gas generation
- Maximize sustainability
- Minimize costs and cost risk

---

**Co-generation (existing to be expanded)**
- Digester gas (5%)
- Sludge pre-thickening
- Sludge pre-conditioning
- Anaerobic digestion (existing)
- Biosolids dewatering (existing)
- Fluidized bed incineration

**Gas purification and filling station**
- Ash dewatering and disposal in municipal landfill
Children’s Water Festival 2009
3 Day Festival, educates approximately 3,000 students Focus on Grade 4 curriculum

Photo of:
Ontario Water Operator’s Training Centre

Objective 4
RESEARCH INNOVATION AND EDUCATION WITH RESPECT TO WATER AND THE ENVIRONMENT

INTRODUCTION
If you are thinking one year ahead, sow seeds.

If you are thinking ten years ahead, plant a tree.

If you are thinking 100 years ahead, educate your children.

Chinese Proverb

Enhancement of Windermere Basin

Accredited Silver LEED – Leadership in Energy and Environmental Design

Hamilton’s Environmental Laboratory & Operations Control Centre

GreenZone Sustainability Speaker Series
School environmental pep rally followed by grade specific interaction between Hamilton Tiger Cat and students on the topic of water, Focus on Grade 5 curriculum
2010 STRATEGIC OBJECTIVES & EXPECTED OUTCOMES

Objective 5
MAINTAIN A HIGHLY MOTIVATED, WELL-TRAINED CUSTOMER FOCUSED STAFF

Photo to right from:
Water & Wastewater Staff Recognition Luncheon

Staff BBQ - Fundraising for United Way
Staff quote:
"Training is always an opportunity for me and I feel that I always have the backing of the division to move forward, learn more skills and become a more well rounded employee and individual."

Employee Survey
I feel the work I do is important for the overall success of operations at the City of Hamilton

Employee Survey
The Water & Wastewater Group of the City of Hamilton is a better employer than most others
WINTER FUN ON THE Waterfront

Ice boating on Hamilton Harbour, Photographer J Morris

Ice Harvesting 1890 to 1900

Skating Princess Point, Photographer Katherine Greenfield
Strategic planning is the key to our success. It is the foundation for our decision making, guides strategic investments and ensures that staff maintain a focus on principle objectives.

We are pleased to present you our Second Annual Report Card, showing our stakeholders and the community our level of service. While some objectives have not received the grade that we would prefer, we are very pleased to be moving forward in this proactive manner as we strive for excellence in all categories.
Throughout 2009, we have achieved successes and have been presented with challenges. True to the spirit of Hamilton throughout history, we continue to meet our challenges head-on, determine solutions, and turn challenges into opportunities.

While aging infrastructure continues to be a problem both in the water and wastewater systems, both locally and nationally, we secured $116 million in funding early this year from the Infrastructure Stimulus Fund. The funding aided to initiate a Biogas Project that will pre-treat and refine methane gas as a fuel source for the water and wastewater fleet. This is an innovative project leading the way in environmental technology and is a first of its kind in Canada. The water treatment facility is currently receiving a structural rehabilitation and exterior architectural facelift that maintains the historical and architectural elements of the building.

This year proved to surpass the record rainfall of 2008. Extreme weather conditions due to climate change have created various storm water management situations which we are working aggressively to address. Some short-term solutions such as compensation grants and the Protective Plumbing Program were implemented quickly while the expansion at the wastewater treatment facility is a long-term solution.
Restoring Hamilton Harbour is vital to our social, environmental and economic well-being. We have continued to meet initial Remedial Action Plan targets and anticipate reaching final RAP targets as we complete the expansion of the wastewater treatment facility. Efforts continue to entice the provincial and federal levels of government to enter into a funding agreement for $300 million from the Building Canada Fund.

The expected reduction in revenues this year is over $15 million. Declining revenues are due to increased rainfall and decreased consumption by industry, commercial, institutional and residential customers. This places significant pressure on the City’s operating budget. Forward thinking to find additional revenue sources and cost-cutting measures are ongoing. Showcasing this is the Cogeneration Facility, a sustainable green energy that supplies a revenue source with the ability to cut electricity, natural gas, and fuel costs.

Our success in overcoming issues is directly related to the profession attitude and dedicated mindset of our staff. An employee survey earlier this year showed that 90 percent of our staff are committed to their careers, feeling that the work they complete contributes to the overall success of our operations. 73 percent felt that Hamilton was a better place to work than most. Staff morale is directly related to productivity. It is easy to see why Hamilton is an industrious city.
ACHIEVEMENTS & HIGHLIGHTS

Hamilton is leading the way in environmental technology as it is set to become the first Canadian municipality to produce bio-methane to run its fleet of vehicles by March of 2011. Infrastructure Stimulus Funding is being used for this project.

Water and Wastewater received approximately $80 million from Federal and Provincial funding towards upgrades to infrastructure.
The Water and Wastewater Group:
- Awarded the $40 million contract for the engineering assignment to oversee the Water and Wastewater Treatment Facility expansion.
- Delivered over $100M in infrastructure projects

Achieved 46 continuous months of effluent compliance and operations at the Woodward Avenue Wastewater Treatment Plant.

Initiated the Protective Plumbing Program within a 4 week timeframe to provide financial aid to property owners for household plumbing improvements needed to address storm water flooding from extreme rain events.

Photo to right of: Hamilton Beach, The Moorings Hotel, Brant Inlet Early 1900s
The Water and Wastewater Group:
• Acquired 5 portable diesel generator units and installed transfer switches to provide emergency backup power to over 16 outstations, to provide permanent standby power capabilities and enable continued operations during adverse conditions.

The Water and Wastewater Group continue to move forward with the introduction of web based training for staff. Later this year, 25 training modules will be complete and ready for distribution. Each module covers a different topic and is an assembly of text slides, video clips, audio dialogue and testing modules.
Awards

George Burwash Langford Memorial Award
• Jim Harnum, Senior Director of Environment & Sustainable Infrastructure was recognized by the Ontario Association of Certified Engineering Technicians and Technologists at the 2009 Provincial Honours & Awards Gala. This Award is presented to members who have distinguished themselves in their career and have brought recognition to the profession of engineering and applied science technology.

Recognition

Bay Area Restoration Council
• Thanks given to the Water and Wastewater group for their involvement with the Bay Area Restoration Council’s annual fundraising Dragonboat Racing event. Staff participated in the day’s events, not racing so well but being among the top fundraisers.

Hamilton Waterfront Trust
• Thanks given to the Water and Wastewater group for their involvement with the Hamilton Harbour Fishing Derby. This event gets residents involved in Waterfront activities and provides demonstrations and education programs on source water protection, conservation and the sport of fishing.

Presentations

Water Environment Association of Ontario
• Jim Harnum and Chris Shrive presented on energy and revenues that can be recovered from Wastewater Sludge and Biosolids

Remedial Action Plan
• Mark Bainbridge presented on the Woodward Avenue Wastewater Treatment Plant Progress

Water Environment Association of Ontario, 38th Annual Technical Symposium and Exhibition
• Chris Gainham and Paul Marsh presented on “High Energy Cost Forecasting for Servicing Option Analysis, a Comparison of Gravity vs. Pressurized Solutions”

Canadian Association on Water Quality
• Tony Robles presented on the performance of Cationic Silica Polymer as coagulant aid

GeoSpatial World 2009
• Jeff Sherriff presented on managing Public Works infrastructure data with Geomedia

Canadian National Wastewater Conference on Wastewater Management September 10-12, 2009
• Dave Alberton presented on Hamilton’s, Fats, Oils and Grease Pollution Prevention Program
• Dali Wang presented on the Microscopic Examination of Activated Sludge as a Tool in the Monitoring of Wastewater Treatment

Canadian Water Works Association, National Water Efficiency Network Conference
• Colleen Clark & Janet Vandehaar presented on Hamilton’s Youth Education Program and the need to educate children on the value of water
The City of Hamilton's Water and Wastewater Treatment Facilities have played a critical role in allowing Hamilton to grow and prosper throughout the years. Reminiscent of the huge investment that was required to build the original waterworks in the mid-1800s in order to protect public health from water borne disease, and the environment and property from the damage of fires and dust, we again see the need for large capital expenditures to rehabilitate Hamilton’s water and wastewater systems.

As we move forward with the expansion at the wastewater treatment plant, the Primary Clarifier Upgrades are the first of a series of major projects being undertaken. This $700 million wastewater expansion will result in a substantial drop in pollutant loadings (phosphorous, ammonia and solids) and increase the treatment capacity of the plant from an average day flow of 409 million litres per day to 500 million litres per day. The Primary Clarification process will increase peak primary treatment from 614 million litres per day to 1,300 million litres per day and through de-chlorination provide a non-toxic effluent. Throughout 2010, we will intensify efforts to initiate a more aggressive campaign to negotiate a $300 million tripartite agreement through the Canada Builds Fund.

It is more important now than ever that we look for additional sources of revenue to strengthen our financial position. The wastewater treatment plant digesters are being upgraded to accommodate future growth in our waste stream for the
Our bio-methane project will make Hamilton the first Canadian municipality to produce biogas to run its fleet of vehicles. It is anticipated the bio-methane will then be used to fuel 110 water and wastewater vehicles by March of 2011.

Infrastructure funding partnerships are essential if we are to address the needs of Hamilton’s water and wastewater systems. It is with this in mind that we enticed both levels of government to provide funding through the Infrastructure Stimulus Fund. In 2010, this funding will aid in the completion of the construction of a new Ferguson Pumping Station to the east of the current building on Ferguson Avenue. The current 1912 Ferguson Pumping Station is one of the oldest and most critical pumping stations in the Hamilton system. It is a poignant example of aging infrastructure as it is almost 100 years old.

In the past Hamilton has been fortunate that all levels of government have come together in joint funding to aid in revitalizing aspects of the water and wastewater system. While infrastructure needs are infinite, funding is finite. Progressive thinking and strategic planning is essential to look for diversification of revenue resources and reduction in costs for the future.
Extreme wet weather conditions play havoc with the City. Our Storm Water Management programs will continue to address storm water:

- The Asset Management Program inspects wastewater collection pipes
- We implemented a Sewer Lateral Inspection & Rehabilitation Program that proactively inspects sewer laterals through capital improvements
- The Zoom Camera inspections of the sewer system on a wide scale continue. We were the first municipality to undertake wide scale zoom camera inspections and complete more inspections than our 26 surrounding municipalities
- The Protective Plumbing Program provides financial assistance and guidance for household plumbing improvements

Increased rainfall creates a double impact on revenues. Summer water consumption drops and decreases revenues and increased wastewater raises treatment costs. We believe there is an opportunity to turn this negative into a positive. We have an opportunity to offer a fairer method for allocating costs associated with storm water management based on a property owner’s measured area of impervious ground cover (e.g., rooftops, driveways, and parking lots) by initiating a storm water rate similar to water and wastewater rates. This gives property owners control over the rate they pay as they determine their land use practices and development. Permeable surfaces allow water to infiltrate the ground and reduce overland flooding.

We will soon begin construction on a new water and wastewater headquarters located at the water and wastewater treatment facility. This will bring employees from across the City to one location, increasing efficiencies and reducing the cost of operating various locations.

Just as those before us, we will continue to look for innovative, industry leading opportunities to reduce costs as we diversify sources of revenue. We strive to ensure the environmental, social and economic health and well being of this industrious City as we protect public health, property and the environment.
SENIOR MANAGEMENT TEAM
ENJOYING HAMILTON’S
Waterfront

Left and Bottom:
Group Photos by
Mr. Haig Leckie
ENJOYING HAMILTON'S Waterfront

Hamilton Beach, Jim & Mary
May 24, 1911 - Meyers Archives

Group photo by Mr. Haig Leckie

Meyers Archives, May 24, 1911
INTRODUCTION

Water and Wastewater Engineering

• Manage approximately $1 billion in capital investments over the next ten (10) years
• Annual Capital Upgrades are approximately $70-$100 million
• Manage approximately 200 projects and studies annually

Plant Operations

• 84,580 ML of drinking water treated and distributed
• 121,025 ML of wastewater collected and treated
• 40,500 wet tonnes of biosolids produced, digested and land applied
• 7,500 preventative and corrective maintenance work tasks completed
• 37 tours per year of the water and wastewater treatment plants
• 15095 MWH of electricity produced through the methane-powered cogeneration facility

Water Distribution & Wastewater Collection

• 365 watermain breaks repaired
• 184 fire hydrants replaced or repaired
• 11,822 fire hydrants code inspected
• 4,214 fire hydrants flow inspected
• 4,855 water valves turned on
• 1,087 km of sanitary sewers maintained
• 1,007 km of storm sewers maintained
• 500 sewer laterals inspected
• 237 sewer laterals replaced
• 896 water services replaced
• 2,618 water service size and type inspections

Customer Service & Community Outreach

• Received 34,000 customer calls
• Created 14,679 service requests
• Created 10,179 work orders
• Educated over 6,000 students about the importance of water
• Successfully hosted Hamilton’s Second Children’s Water Festival
• Over 1,300 rebated rain barrels sold in a 1 day event
• 12,000 industrial and commercial water meters maintained
• 124,000 residential water meters maintained
• Undertaking the implementation of the City’s water backflow prevention program

Compliance & Regulations

• Maintained Laboratory Accreditation through Canadian Association for Laboratory Accreditation (CALA) for specific water and wastewater analysis
• Maintained MOE Laboratory Licensing for Drinking Water Testing
• Over 160,000 analytical tests completed
• 2,045 water samples collected for field and laboratory analysis
• 140 spill reports received, managed and sites cleaned up
• 90 Notices of Violation issued
• 1,050 samples collected from Industrial sites, Wastehaulers, and other projects
• 184 Facility Inspections for the Pollution Prevention Program
• Uploaded and managed over 8,500 regulatory documents in BCOS database
• Lead the implementation of the Drinking Water Quality Management System
• Granted Partial Scope-Accreditation for all Drinking Water Systems through Canadian General Accreditation Body
• Successfully applied for the new Drinking Water Systems’ Licences and Permits

**Infrastructure & Source Water Planning**

• Responsible for the implementation of the Departmental Asset Management System for all Vertical Infrastructure
• Responsible for Biosolids Master Plan
• City Leaders for Source Water Protection Planning and Implementation, and responsible for representation on the City’s three Source Water Protection Areas Committees under the Provincial Clean Water Act”

• Leaders in water and wastewater infrastructure planning, committed to maintaining the City’s high quality level of service through optimal utilization and renewal of existing linear systems and planning of system expansions to accommodate growth
• Implementation of Real Time Control (RTC) for the Wastewater Collection System for improved wet weather control
• Responsible for management of Capital Grant Funding of $105m in partnership with senior levels of government
• Lead the development and application of the City’s Water Distribution, Wastewater Collection and Groundwater computer modelling applications

Photo of:
Hamilton Photographer’s Store Window
Circa 1880s
HAMILTON'S
Publishing Industry

INTRODUCTION
HAMILTON'S
Publishing Industry

INTRODUCTION

HAMILTON'S ADVERTISEMENTS.

Hamilton Evening Times,
IS PUBLISHED EVERY AFTERNOON,
AT THE OFFICE ON HUGHSON STREET.

THE WEEKLY TIMES,
PUBLISHED ON THURSDAY MORNING,
91 A YEAR IN ADVANCE; OH $1.50 CREDIT.

THE TIMES STEAM BOOK AND JOB PRINTING OFFICE

C. E. STEWART & CO., Proprietors.

DUNDAS ADVERTISEMENTS.

THE DUNDAS "TRUE BANNER,"
A REFORM JOURNAL

JAMES SOMERVILLE, Editor and Proprietor.

DUNDAS, ONT.

HAMILTON ADVERTISEMENTS.

The Canada Christian Advocate
PRINTING ESTABLISHMENT,
JOHN STREET NORTH, NEAR KING.

NEW CYLINDER PRESS,
One of the best printing machines made,
AND THE LARGEST JOB PRESS IN THE CITY,
AND, ALSO,
CORDON'S LIGHTNING CARD PRESS,
We are in a position to supply all samples of work required on as good terms and at comparatively low prices.

The Canada Christian Advocate
is published every WEDNESDAY, on a Double Fold sheet, by the Methodist Synod of Canada, at 86.00 per annum in advance. It is a 16 page, 16 point, octavo, printed on fine China paper.

36