

# 2014 WATER WASTEWATER STORM RATE BUDGET

**December 6, 2013** 





- Rate Revenue
- Forecast Consumption
- Rates Increase
- Capital Plan

#### RATE REVENUE TREND

#### 4 Year Actual vs. Budget Revenue Variance

REVENUES (\$000's)
Residential
ICI/Multi-Res
Haldimand/Halton
Non-metered
RATE REVENUES
Surplus/(Deficit)

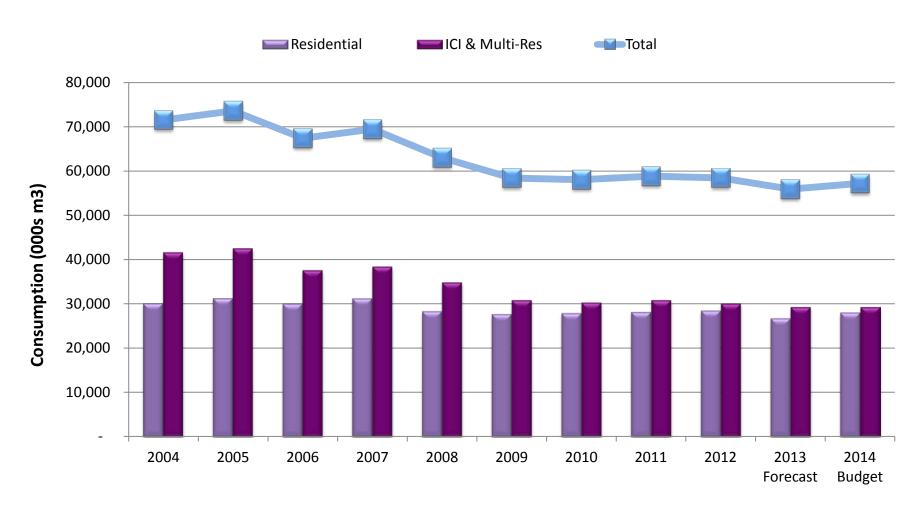
2011		20	2012		RECAST	2014 PROPOSED	
Budget	Actual	Budget	Actual	Budget	Actual	Budget	
68,660	70,837	72,418	72,546	77,367	72,752	79,430	
80,355	74,179	81,569	76,805	82,941	78,295	86,288	
2,447	2,436	2,565	2,603	2,644	2,406	2,459	
570	518	594	612	594	543	600	
152,032	147,970	157,145	152,567	163,546	153,996	168,777	
	(4,062)		(4,579)		(9,550)		

Overall Rate Position Surplus/(Deficit)

8,880	12,274	(3,924)

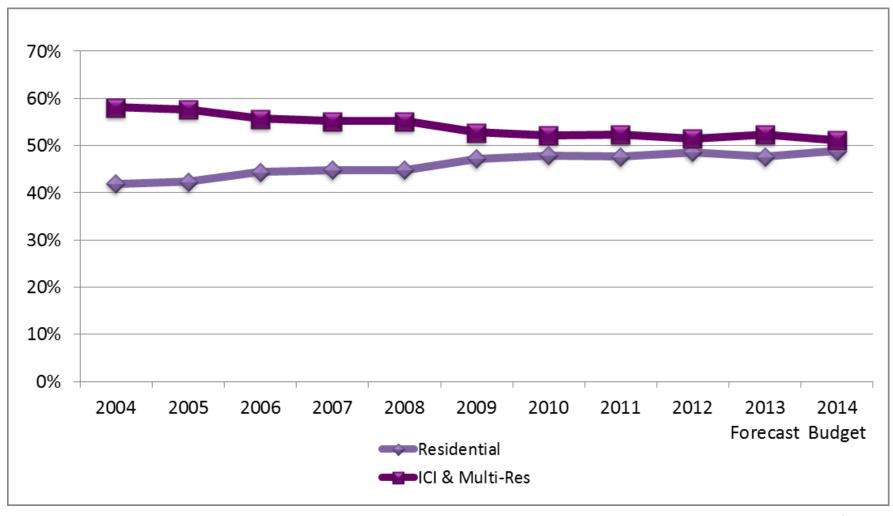


# RESIDENTIAL – ICI/MULTI-RES CONSUMPTION COMPARISON



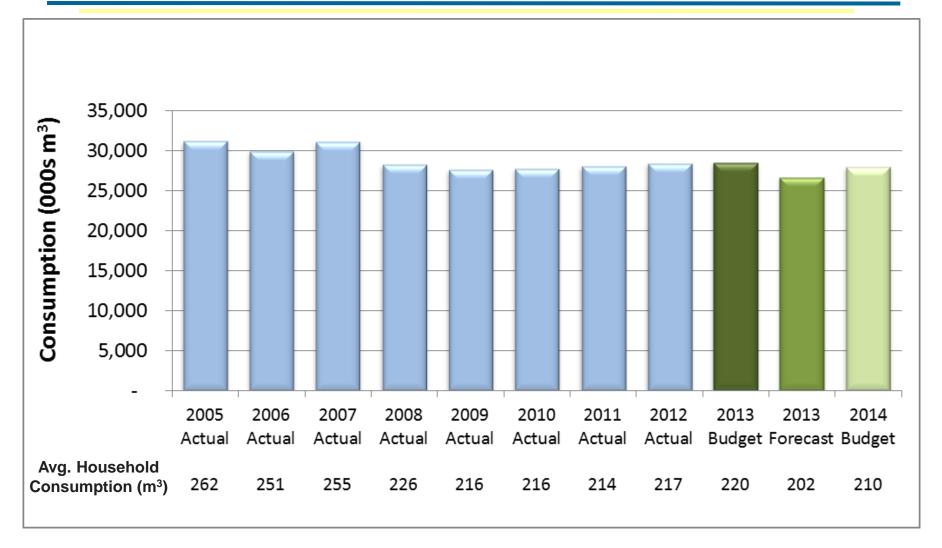


### RESIDENTIAL – ICI /MULTI-RES CONSUMPTION COMPARISON



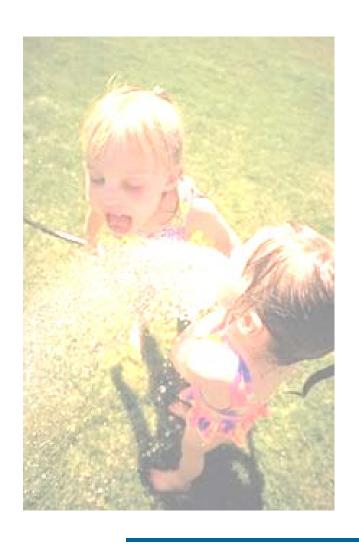


# RESIDENTIAL WATER CONSUMPTION (m<sup>3</sup>)





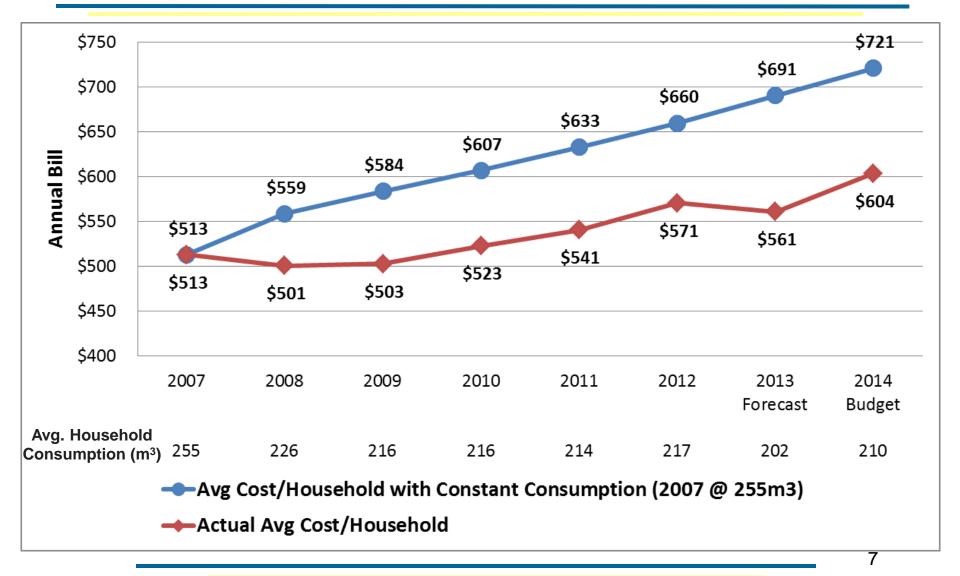
# RESIDENTIAL WATER CONSUMPTION



- This year, Hamilton's residential average usage is forecast to be 202m<sup>3</sup> of water.
- For 2014, average residential water/wastewater/stormwater annual billing of \$604 based on budgeted average usage of 210m<sup>3</sup> of water.



# COMPARISON OF AVERAGE COST PER HOUSEHOLD



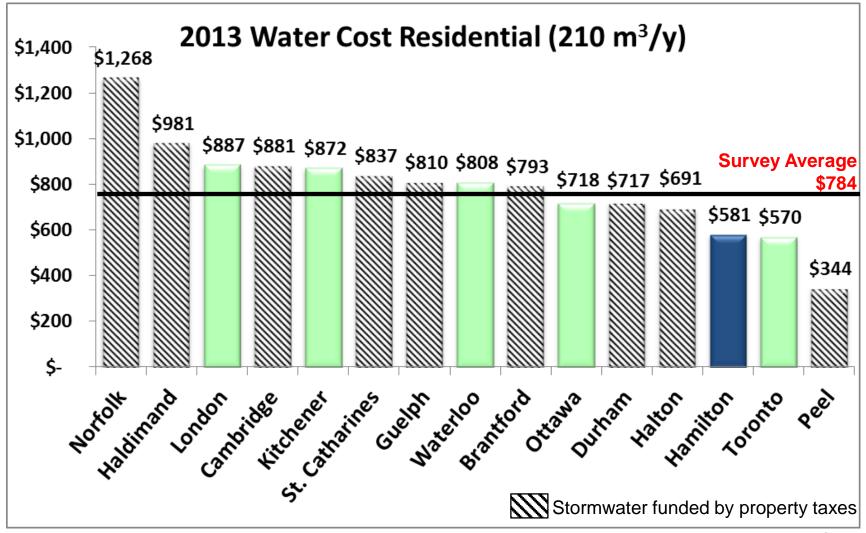


### RATE INCREASE MITIGATION

	RATE \$/ m <sup>3</sup>	Avg Act Res Usage m³/yr	Avg. Actual Res Billing
2007	\$ 0.913	255	\$513
2013	\$ 1.223	202 forecast	\$561
Change $\Delta$	<b>1</b> 34%	<b>↓ 26%</b>	<b>9</b> %



### HOW DOES HAMILTON COMPARE?





# MUNICIPAL COMPARISION COMBINED RATE INCREASES

MUNICIPALITY								2008-14
	2008	2009	2010	2011	2012	2013	2014	Avg
Guelph	8.9%	15.5%	10.0%	10.0%	8.5%	8.0%	3.5%	9.2%
Halton	6.5%	6.7%	0.0%	4.1%	3.5%	4.8%	4.3% (P)	4.3%
London	8.5%	7.2%	8.5%	0.0%	7.5%	7.5%	7.5%	6.7%
Norfolk	8.9%	6.6%	5.6%	6.2%	6.8%	7.2%	0.4%	6.0%
Ottawa	9.0%	9.0%	9.0%	3.9%	6.0%	7.0%	7.0% (P)	7.3%
Toronto	9.4%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.1%
Hamilton	8.9%	4.5%	4.0%	4.25%	4.25%	4.25%	4.0% (P)	4.9%
Average	8.6%	8.4%	6.6%	5.4%	6.5%	6.8%	5.1%	6.8%

(P) = proposed



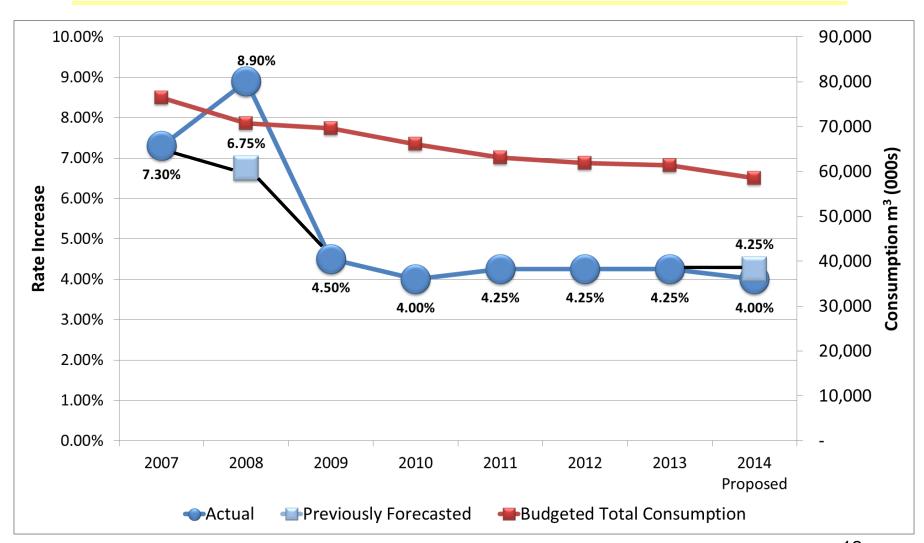
## 2014 RATE INCREASE COMPARISIONS

2014 Combined Rate				
Increase % *	Avg	Res\$		
9.00%	\$	67		
7.50%	\$	55		
4.30%	\$	35		
3.50%	\$	27		
4.00%	\$	23		
0.40%	\$	6		
	9.00% 7.50% 4.30% 3.50% 4.00%	Increase % *       Avg         9.00%       \$         7.50%       \$         4.30%       \$         3.50%       \$         4.00%       \$		

<sup>\*</sup> Blended water & wastewater increase

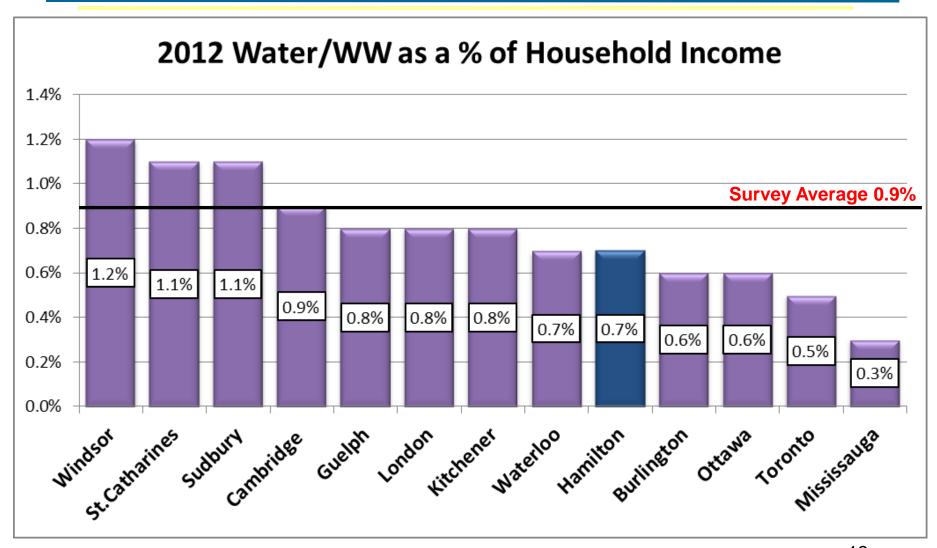


#### FINANCING STRATEGY



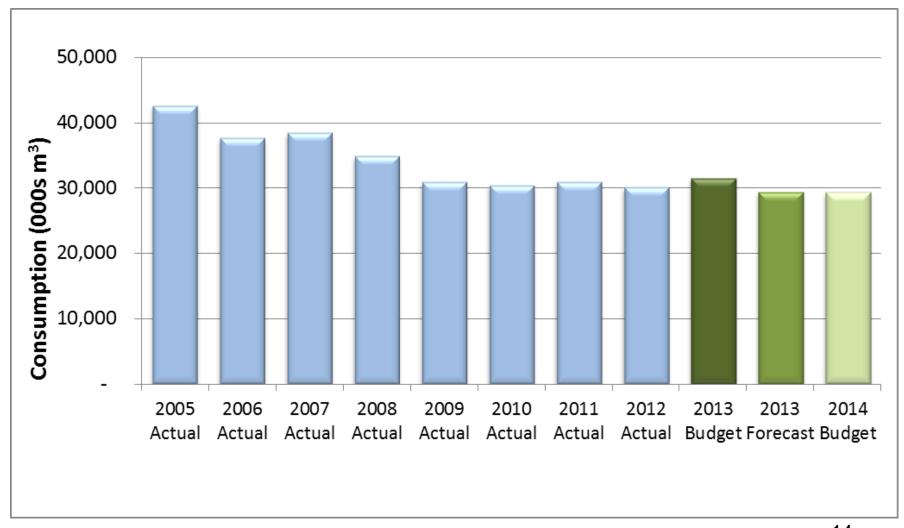


#### **AFFORDABILITY**



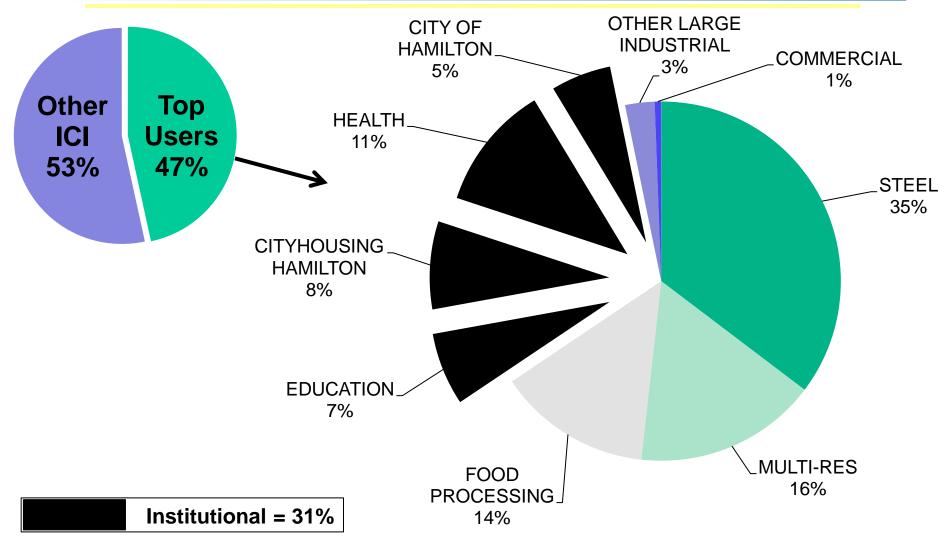


### ICI/MULTI-RES CONSUMPTION (m3)





# ICI/MULTI-RES COMPOSITION





### ICI COST COMPARISON (2013 \$)

2013 COMBINED METERED WATER/WASTEWATER CHARGE COMPARISON WITH	
OTHER MUNICIPALITIES	

MIINICIPALITY I		OMM/IND M <sup>3</sup>	MID-SIZE COMM/IND 2,272 M <sup>3</sup>		LARGE COMM/IND 22,727 M <sup>3</sup>		E fe	
	Annual Charge	Ranking	Annual Charge	Ranking	Annual Charge	Ranking		
Norfolk	\$1,716	1	\$7,643	4	\$65,826	8	]	
London**	\$1,444	2	\$5,460	12	\$41,548	14	][	
Cambridge	\$1,276	3	\$8,201	1	\$79,376	2	]	
Haldimand	\$1,240	4	\$5,172	13	\$51,438	11	]	
Brantford	\$1,170	5	\$7,541	5	\$74,448	4	]	
St. Catharines	\$1,169	6	\$6,883	8	\$66,283	7	]	
Kitchener**	\$1,166	7	\$8,151	2	\$81,540	1	]	
Waterloo**	\$1,158	8	\$7,928	3	\$79,030	3	]	
Guelph	\$1,143	9	\$6,892	7	\$67,682	6	]	
Ottawa*	\$1,119	10	\$7,483	6	\$74,269	5	]	
Durham	\$981	11	\$5,099	14	\$47,099	13	][	
Halton	\$918	12	\$5,736	11	\$48,496	12	][	
Toronto*	\$882	13	\$6,166	10	\$61,674	9	]	
Hamilton*	\$862	14	\$6,247	9	\$56,643	10		
Peel	\$533	15	\$3,724	15	\$37,253	15	]	
Average	\$1,119		\$6,555		\$62,174			

<sup>\*</sup> Include stormwater management in their rates.

D − DecliningBlock structurefor largest users

<sup>\*\*</sup> Have dedicated stormwater management user fee that is excluded in above table. Note: All other municipalities fund stormwater from property taxes.



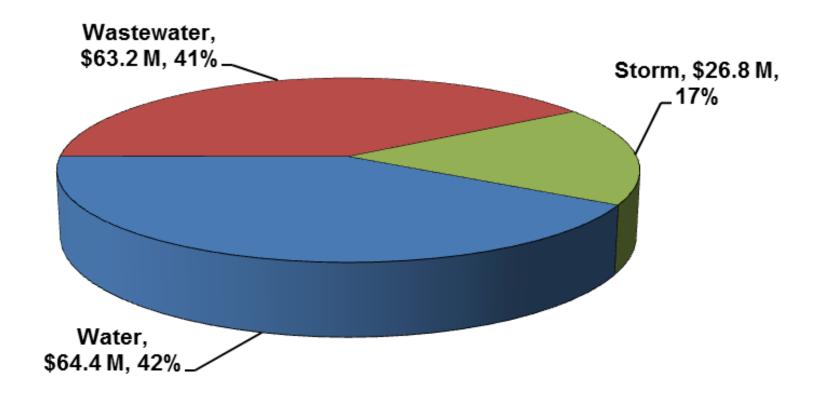
#### 2014 BUDGET SUMMARY

Summary of the	2014 Operatir	ng Budget		
(\$ millions)	2013 Restated Budget	2014 Requested Budget	2014 Requeste 2013 Restated Cl	
			\$	%
Expenditures Program Expenditures	\$ 74.67	\$ 74.88	\$ 0.21	0.3%
Capital/Debt Financing	\$ 97.33	\$ 103.52	\$ 6.19	6.4%
Total Expenditures	\$ 172.00	\$ 178.40	\$ 6.40	3.7%
Revenues Rate Revenue	\$ 169.35	\$ 175.88	\$ 6.53	3.9%
Non-Rate Revenue	\$ 2.65	\$ 2.52	-\$ 0.13	-4.8%
Total Revenue	\$ 172.00	\$ 178.40	\$ 6.40	3.7%



#### 2014 CAPITAL PROGRAM

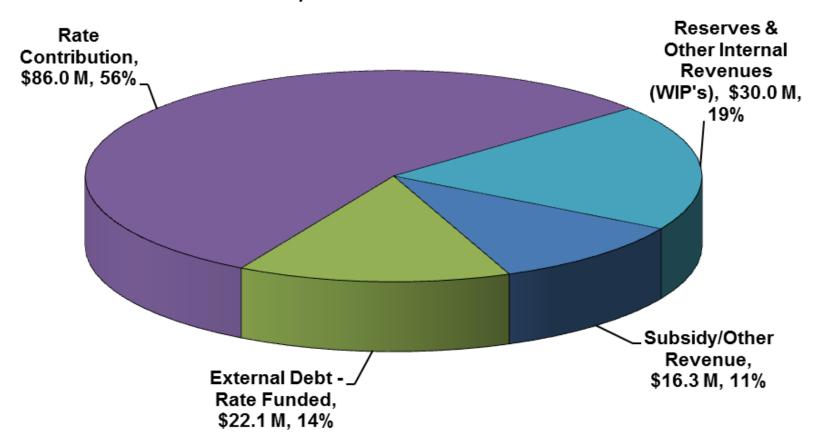
#### **\$154.4 Million**





#### 2014 CAPITAL FUNDING

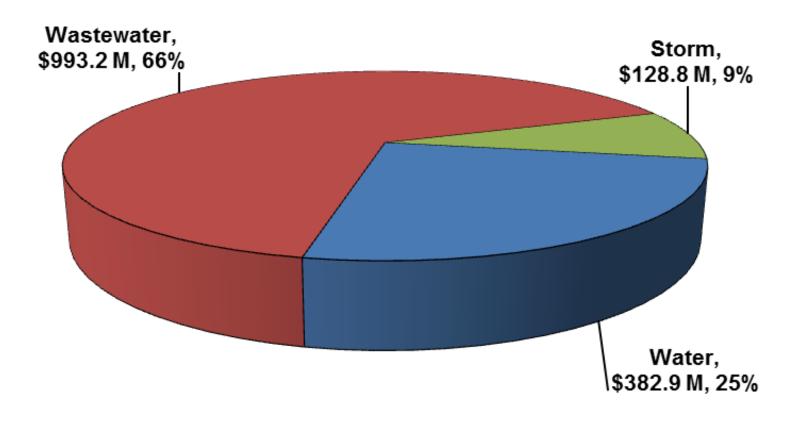
#### \$154.4 Million





# 2014–2023 CAPITAL BY PROGRAM

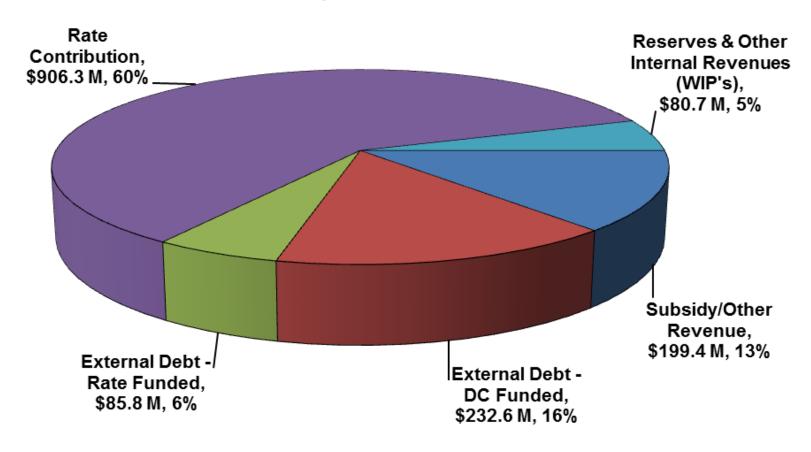
#### \$1.5 Billion





#### 2014-2023 CAPITAL FUNDING

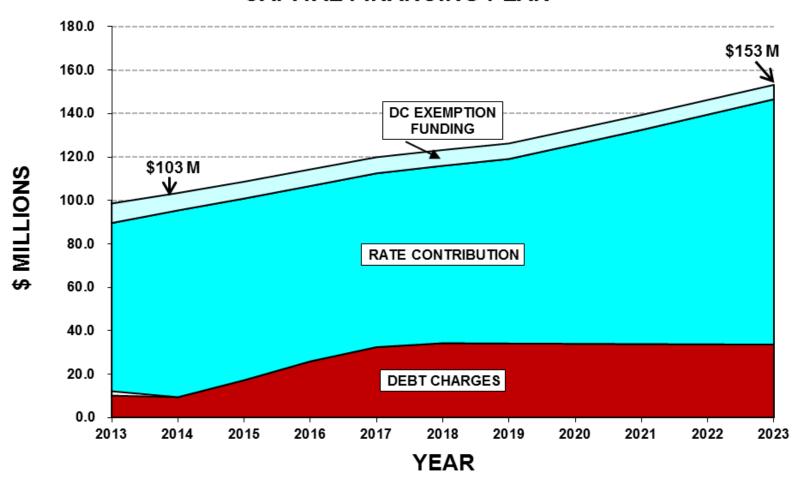
#### \$1.5 Billion





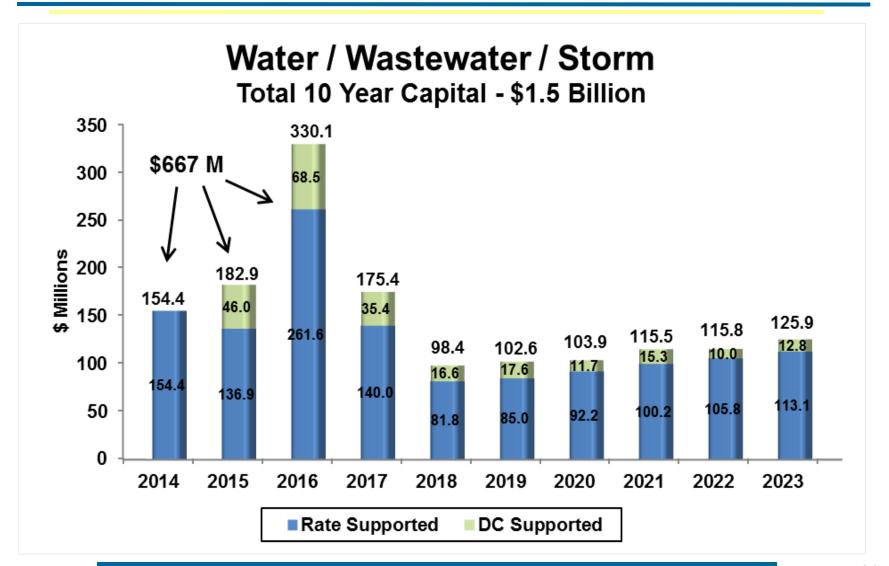
# CAPITAL FINANCING OPERATING IMPACT

#### CAPITAL FINANCING PLAN





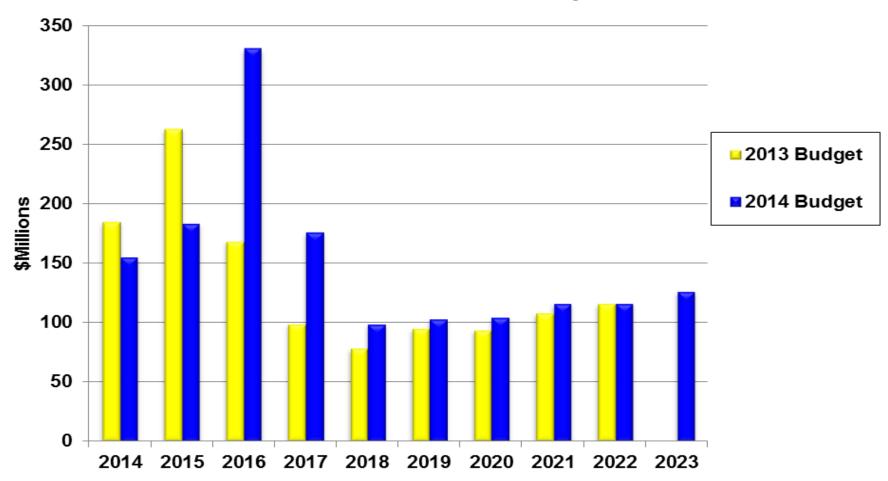
#### CAPITAL BUDGET FORECAST





## 10 YEAR CAPITAL FORECAST 2013 vs 2014

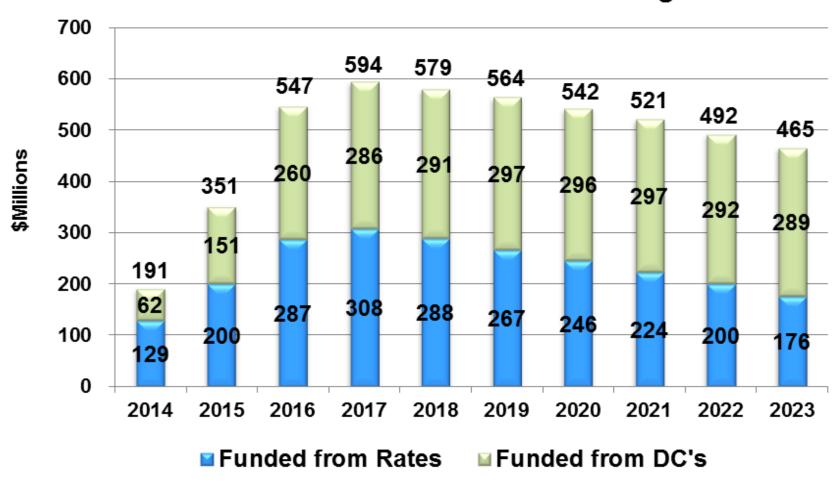
#### Water / Wastewater / Storm Capital Forecast





#### **DEBT FORECAST**

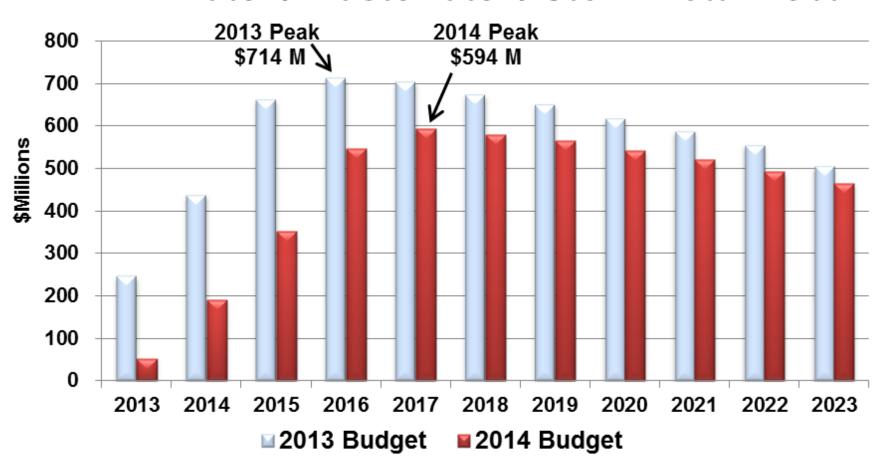
#### Water / Wastewater / Storm Outstanding Debt





#### DEBT FORECAST 2013 vs 2014

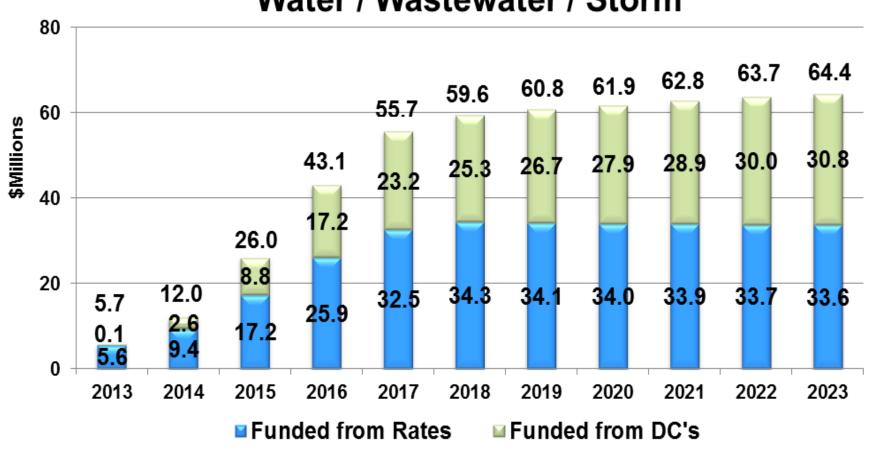
#### Water / Wastewater / Storm Total Debt





#### PROJECTED DEBT CHARGES

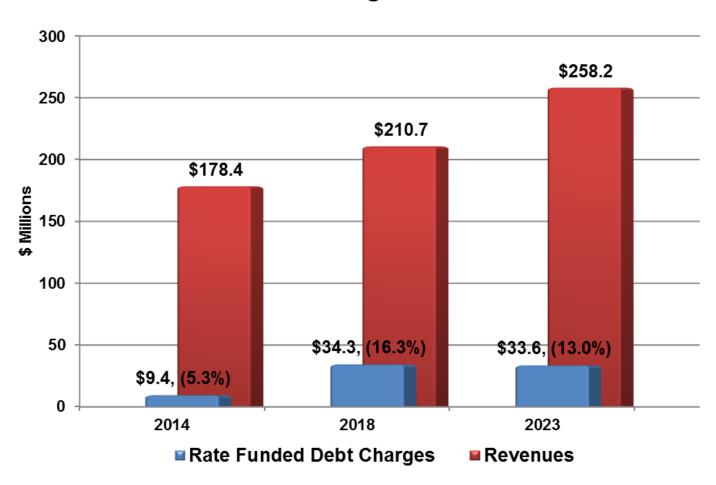
### Projected Debt Charges Water / Wastewater / Storm





## DEBT CHARGES AS % OF TOTAL REVENUES

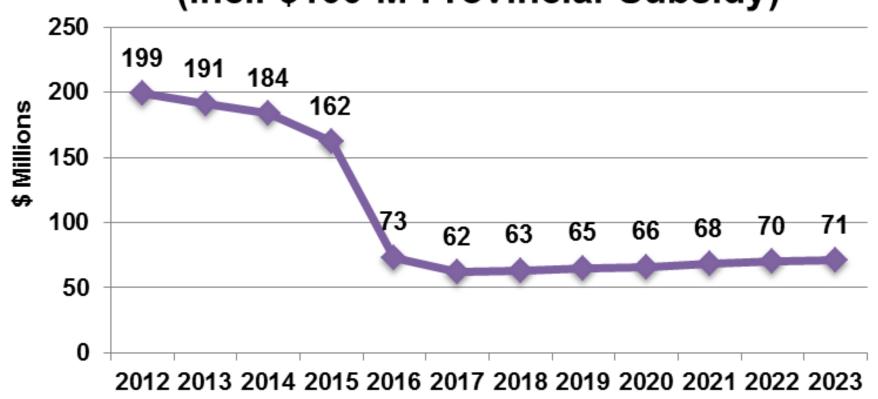
#### Rate Funded Debt Charges to Total Revenues





#### RESERVE FORECAST

## Water / Wastewater / Storm Reserves (incl. \$100 M Provincial Subsidy)

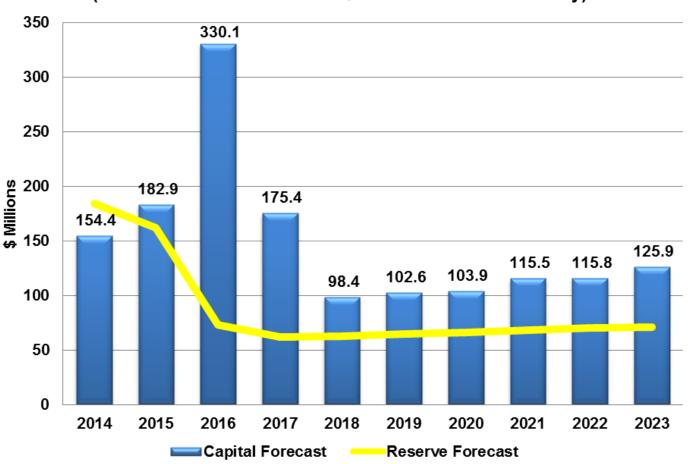




#### CAPITAL & RESERVE FORECAST

#### Water / Wastewater / Storm

(Reserve Forecast includes \$100 M Provincial Subsidy)





#### FORECAST RISKS

### 1. Consumption

### 2. Pace of Development

Continue to monitor relative to "Places to Grow"

#### 3. Senior Government Grants

Substantial completion deadlines for WWTP upgrade



### A&Q



### General Issues Committee December 6, 2013 Item 3.2



**Public Works Hamilton Water** 

**2014 Operating and Capital Budget** 

December 6, 2013

Providing services that bring our City to life!

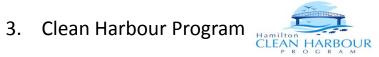


#### **Hamilton Water**

#### **Presentation Overview**

- **Program Overview**
- Sectional Update





SERG



**Hamilton Water Priority Programs** 



**Operating Budget** 







→ Community

→ Processes

→ Finance

→ People





### **Program Overview**









#### **Program Overview**

- Serves 490,000 residents and businesses in Hamilton
- Over \$9.2 billion in infrastructure (replacement value)
- Operates 170 different facilities, many of them 24 hours per day, 365 days per year
- Infrastructure renewal and level of service supported by multi-year business plan
- Program is 100% rate-supported and no reliance on the property tax base to support Hamilton Water operating and capital budgets



**Low Lift Pumping Station** 



**Main Pump House** 



→ Community

- → Processes
- → Finance





- → People
- → Processes

→ Finance



#### Inventory of Assets (2013 Values)

#### Wastewater \$4,419 Million

- 2 wastewater treatment plants
- 9 CSO tanks
- 72 pumping stations
- 20 wastewater control gates
- 22,177 maintenance holes
- 1,270 km of sewer lines
- 488 km of interceptors + trunk
- 139,588 sewer laterals

## Water \$2,771 Million

- 1 water treatment plant
- 21 storage facilities
- 2,013 km of mains
- 25 water pumping stations
- 4 communal systems
- 2 surge tanks
- 12,118 hydrants
- 19,885 valves and chambers
- 143,826 water meters

#### Stormwater \$1,996 Million

- 185 storm ponds
- 16,665 manholes

- 1,113 km of storm sewers
- 910 inlet / outfall structures





# Sectional Update











#### **Organizational Chart & Complement - 2013**

**Dan McKinnon Director, Hamilton Water Rosa Gonzalez** Michele Braun QMR - Manager AA Dan Chauvin, Shane Udo Bert lan McCauley Routledge Director, Water and Ehrenberg Posedowski Wastewater Manager Manager Manager Manager **Engineering** Stuart Mark Leitch Bainbridge Manager Manager



→ Community

→ Processes

→ People

→ Finance

Complement (F.T.E.)	Management	lanagement Other		# of Staff / Management	
2013	10	278.6	288.6	27.9	



- → People
- → Processes
- → Finance



#### **Compliance and Regulations**



Rosa Gonzalez

Manager, Compliance and

Regulations (QMR)

45.33 FTE \$5.23M Annual Operating Budget

- Compliance Support
- Environmental Laboratory
- Environmental Monitoring & Enforcement

#### 2013 Accomplishments

- Successful completion of the 2013 DWQMS Surveillance Audit for the Operating Authority's five Drinking Water Systems
- Increases in monitoring and enforcement within EME has seen significant reductions of contaminants entering the WWTPs.
- A new streamlined Sewer Use By-law has been prepared for public consultation.

- Communicate and implement the changes to the new Sewer Use By-law
- Roll out of the learning management system (staff training, general awareness)



- → People
- → Processes
- → Finance



#### **Customer Service & Community Outreach**



Shane McCauley
Manager, Customer Service &
Community Outreach

38.94 FTE \$4.3M Annual Operating Budget

- Conservation & Education
- Hansen / GIS
- Service Coordination
- Service & Dispatch
- Meter Operations & Cross
   Connection Control

#### 2013 Accomplishments

- Awarded a new 6 year meter supply and install contract and meter maintenance contract
- Completed phase 1 of the Hansen 8 implementation – Phase 2 completed January 2014
- Processed 8,000 work orders and 30,000 calls

- Phase 3 Hansen 8 implementation (work orders)
- Business case development for Automated Meter Reading
- Web Redevelopment Project



- → People
- → Processes
- → Finance



#### **Plant Operations**



lan Routledge, P. Eng. Manager, Plant Operations

76.65 FTE \$33.8M Annual Operating Budget

- Process Improvements
- SCADA
- Plant Maintenance
- Electrical
- Instrumentation
- Quality Assurance

#### 2013 Accomplishments

- 2013 Drinking Water production estimated to be 75,103.3 ML
- Wastewater influent volume increased from 103,600 ML in 2012 to 111,950ML for last 12 months. 95 consecutive months of compliance. Forecast to be at 73% capacity
- Installation of Woodward Wastewater
   Treatment Plant Primary Clarifier upgrades
   and new Chorine Contact tank.
- Completed phase 3 of SCADA

- Drinking water production predicted to remain stable and at an annual amount of 75,000 to 78,000ML.
- Implementation of the SCADA master plan project - Phases 4 and 5



#### **Water Distribution & Wastewater Collection**



- Bert Posedowski, P. Eng. MBA Manager, Water Distribution & Wastewater Collection
- \$6.68 FTE \$15.8M Annual Operating Budget
- Water Distribution
- Wastewater Collection
- Contract Services
- Quality Assurance

#### 2013 Accomplishments

- Repaired 279 watermain break (Break volumes are stable over the last 2 years )
- 538 sewer lateral repairs or replacements (lateral repairs and replacement are stable over the last 2 years.)
- 780 water service replacements (Volume has increased 7% since 2012 (16% decline over 2011)
- 284 sewer manhole adjustments (\$300,966)
- 97 valve chamber adjustments (\$161,469)

#### **2013 Special Projects**

- Sewer Cross Connection Pilot Identified 100 sewer cross connections and repaired 94.
- Iona Trunk Odour Reduction



→ Community

→ Processes

→ Finance

→ People



- → Community
- → People
- → Processes
- → Finance



#### **Water & Wastewater Engineering**



Dan Chauvin, C.E.T., PMP
Director, Water & Wastewater
Engineering

5 FTE \$5.4M Annual Operating Budget

- Clean Harbour Program
- Woodward Upgrade Project
- PMO

#### 2013 Accomplishments

- Led the team that successfully secured the Federal \$100M Green Infrastructure Fund (GIF) commitment for the Woodward Upgrade Project
- Led the team that successfully completed the P3 Canada funding agreement that will secure up to \$23 Million towards the Biosolids Management Project
- Further developed formal contract management procedures, protocols and reporting under the Project Management Office (PMO)
- Overseen the Divisions delivery of approximately 40 Complex, multidiscipline capital projects at various stages valued at \$300 million

#### 2014 Outlook

 Seconded to Director, Woodward Upgrade where Dan will lead the team responsible for the delivery of this key project under the Clean Harbour Program.



- → People
- → Processes
- → Finance



#### **Infrastructure Planning & Systems Design**



Udo Ehrenberg, P. Eng Manager, Infrastructure Planning & Systems Design

#### **14 FTE**

- Water Planning
- Wastewater Planning
- Stormwater Planning
- Geomatic

#### 2013 Accomplishments

- In-house Mike Urban Sewer and WaterCAD Modeling (~100 / ~20 Locations)
- Sanitary & Combined Pipes model, separated storm pipe computer Model for Stoney Creek
- Class EA for 9 locations

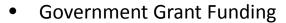
- Citywide Flooding & Drainage Study
- Incorporation/processing of Staging of Development Data for use in reserve capacity assessment and refinement of growth related Infrastructure Implementation Plans



#### **Water & Wastewater Engineering**



- Mark Bainbridge
  Manager, Sustainable Initiatives
  - 6 FTE



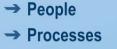
- Sourcewater Protection
- Harbour Remediation
- Facility Asset Management

#### **2013 Accomplishments**

- Completion of Randle Reef Legal Agreements
- Completed 4 Facility Condition Assessments
- Completion of regional Source Protection Plan
- \$12M claimed against the Canadian Strategic Infrastructure Fund

#### 2014 Outlook

- Award RFP and commence Facility Asset
   Management Program
- Develop required policy and approach for source water issues
- Develop an RMO/RMI office to meet source water requirements
- Completion of 4 facility assessments



→ Community

→ Finance





- → People
- → Processes
- → Finance



#### Water & Wastewater Engineering



Stuart Leitch, P. Eng.
Manager, Water & Wastewater
Engineering

**12 FTE** 

#### 2013 Accomplishments

- Managed 40 Complex, multidiscipline capital projects valued at \$300 million
  - Waterdown Wastewater Pump Station
  - Wastewater Outstation Odour Control
  - Twenty Rd Wastewater Pump Station
  - Highland Road Water Pumping Station
  - Hillcrest Water Reservoir Phase 3
  - Kelly Street Water Stand Pipe
  - Old Ancaster Rd Water Pumping Station
  - Woodward WWTP Primary Clarifier

#### 2014 Outlook

- Projected to manage 36 Complex,
   Multidiscipline Capital Projects
  - Decommissioning of Waterdown WWTP
  - Dundas Wastewater Pumping Stations
  - Kenilworth Pumping Station Upgrades
  - Greenhill Reservoir & Valvehouse
  - Water Treatment Plant GAC
  - Greenhill Ave Drop Shaft Odour Control



- → People
- → Processes
- → Finance



#### **Water & Wastewater Engineering**



Biogas Enhancement Project Natural Gas Purification Warranty Period 2013



Biogas Enhancement Project Sludge Thickening Building Warranty Period 2013



New HD012 Pumping Station Rendering (Old Ancaster Road) Construction 2014/2015



Highland Road Reservoir & Pumping Station Upgrades Construction 2013/2014



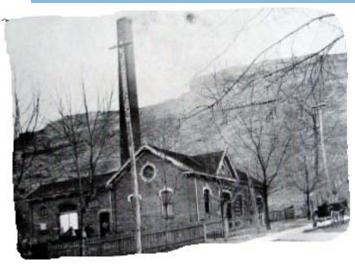
New Highland Gardens Park Pumping Station Rendering Construction 2014/2015



- → People
- → Processes
- → Finance



#### Water & Wastewater Engineering – Ferguson Pumping Station



Ferguson Pumping Station 1912

- Original pumping station opened in 1912 to serve roughly 80,000 people
- "The Heart" of the water distribution system in the lower city
- \$24M ISF Funded Project
- 159 MLD firm capacity



Queen Victoria School Celebrates Cork Town
Park Archway



Ferguson Pumping Station 2013



#### Water & Wastewater Engineering – Windemere Basin



- \$21M CSIF Funded Project
- 13 hectare wetland in East Hamilton
- Canada Ontario Hamilton

  The Enhancement of Windermiere Basin was made possible by a contribution from the Canada Britarejac Infrastructure Fund in Infrastructu
- The basin is used to collect sediments that flows into Hamilton Harbour from the Red Hill Creek.
- In the next three to five years, Windermere Basin will become a lush wetland populated by native trees, migratory birds, and cold water fish species



→ Processes

→ Community

→ People









#### **Water & Wastewater Engineering**

#### **2013** Key Accomplishments and Successes

Phase	Number of Projects	Value
RFP Preparation	13	\$ 9.5M Design
		\$ 71.2M Construction
Roster	5	\$ 280K Design
		\$ 1.3M Construction
Design	12	\$ 5M Design
		\$ 51M Construction
Construction	3	\$ 16M Capital
Substantially Completed	7	\$ 148M Capital

At any given time there is \$300M worth of WIPs managed within the system  $\,$ 

Note: Does not include \$330 Million Clean Harbour – Woodward WWTP Upgrades or Biosolids PPP Canada Project

- → Community
- → People
- → Processes
- → Finance





#### **Water & Wastewater Engineering**

#### **2014 Outlook**

- → Community
- → People
- → Processes
- → Finance



Phase	Number of Projects	Value
RFP Preparation	5	\$ 950K Design \$ 6.4M Construction
Design	9	\$ 8.7M Design \$ 61M Construction
Construction	14	\$ 67M Capital
Reaching Substantial Completion	8	\$ 22.7M Capital

Note: Does not include \$330 Million Clean Harbour – Woodward WWTP Upgrades or Biosolids PPP Canada Project





## Clean Harbour Program





#### **Clean Harbour Program - Branding**

In response to the significant investment the City is making across many projects that contribute to de-listing Hamilton Harbour as an Area of Concern with the International Joint Commission, the Clean Harbour Program was branded to bring recognition to the projects that meet this larger program mandate:

- → Community
- → People
- → Processes

Hamilton

**Public Works** 

→ Finance







WOODWARD UPGRADE PROJECT







#### **Clean Harbour Program**

The Woodward Upgrade Project is composed of 5 sub-projects with a construction budget of \$340 million providing the following benefits:

	Sub-Project	Benefits
•	Tertiary Upgrades	Improved Effluent: Addition of a tertiary treatment process to allow the WWTP to meet stringent HHRAP targets
•	Raw Sewage Pumping Station	<ul> <li>Increased Capacity: Meet future wet weather capacity needs of 1700 MLD</li> <li>Improved Conveyance: Larger and deeper wet well will assists with mitigating system flooding, provide increased system storage, reduces solids buildup during dry weather flows</li> </ul>
•	Electrical Upgrades and Stand-by Power	<ul> <li>Replace aging assets: Reduces risk by replacing critical assets that have reached the end of its useful life</li> <li>Increased Standby Power: Provide for sufficient standby power to all essential loads</li> <li>Energy Efficiencies: Maximize energy efficiencies wherever possible</li> </ul>
•	New Chlorine Contact Tank, Outfall and Upgrades to Red Hill Creek	Maximizes Plant Hydraulics: Dedicated discharge location into Red Hill Creek required for tertiary effluent, and dedicates existing outfall for increased treatment of wet weather flows
•	Collection System Upgrades	Improved Monitoring and Controls: A series of flow monitoring and control devices will be installed at strategic location allowing for better hydraulic management of wet weather flows within the system as to optimize capacity during each wet weather event

- → Community→ People
- → Processes
- → Finance



- GIF Funded Project
  - \$100 M from the Province of Ontario
  - \$100 M from the Government of Canada





#### **Real Time Control**

#### **Successes After 10 Months of Operations**

Captured an estimated 500,000 m3 of CSO

Parameter	Estimated Loadings Reduction		
Total Suspended Solids	44,500 kg		
Total Phosphorous	120 kg		
Ammonium Nitrogen	130 kg		





RTC at Wellington / Burlington

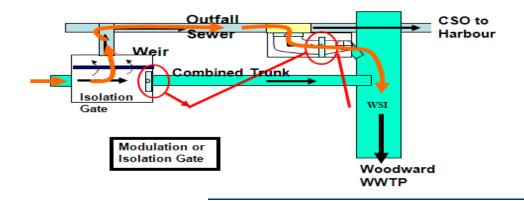


→ Community

→ Processes

→ People

→ Finance







→ Processes

→ People

→ Finance

#### **Primary Clarifiers / Chlorine Contact Tank**

- Management of wet weather flows and eliminate all dry weather overflows
- Increased wet weather treatment capacity
- Allows for minimum treatment standards for all overflows or plant by-passes
- Addition of two new primary clarifiers and a new chlorine contact tank (for chlorination/dechlorination)
- \$48M CSIF funded project
- 145.95 hours of plant by-pass in 2013 (Jan – Nov)



**Primary Clarifiers** 



**Chlorine Contact Tank** 







#### **Randle Reef**

#### **2013** Key Accomplishments and Successes

- All partners committed to a complete funding formula
- Environmental Assessment finalized with Federal approval
- Completion of a City of Hamilton Randle Reef legal agreement
- Finalization of an agreed City of Hamilton cash flow
- Completion of in water sheet pile driving tests

#### 2014 Outlook

- City participation on implementation committees
- Advise project partnership on construction and city issues
- Begin in-water phase of construction (project to be completed in 2022/2023)
- Execute on all terms of the signed Randle Reef agreement

R	Rand	le R	eef
Pro	oject	Fur	nders
_			<b>A40.014</b>

i roject i ar	doio
Environment Canada	\$46.3M
Ministry of Environment	\$46.3M
City of Hamilton	\$14M
City of Burlington/Halton	\$4.3M
Hamilton Port Authority	\$14M
US Steel Canada	\$14M
Total Project Cost	\$138.9 M



→ Community

→ Processes

→ People

→ Finance







### SERG





→ Processes

→ People

→ Finance

#### **SERG**

#### **Infrastructure Enhancements**

- Flood drainage assessments (Binbrook, Old Dundas Road)
- Ongoing Infrastructure Capital Work Enhancements (Fessenden Neighbourhood)
- Stormwater Investigation, Tracking and Coordination (57 Active Individual Flooding and Drainage Incidents)



Rosedale Area - 2009



Sandalwood Ave- 2009

#### **Future Initiatives**

- Flooding & Drainage Study
- Initiate City-wide Climate Change Adaptation Framework
- Infrastructure Capital Work Enhancements
- MRAT







#### **SERG**

#### **Stormwater**

- Insurance
  - "Insured losses from natural disasters in 2013 including the recent Alberta and Toronto floods - were close to \$3 billion, the highest in Canadian history." -IBC November 21, 2013 Media Release
- Citywide Flooding & Drainage Study
- → Community
- → Processes
- → Finance

→ People



Tindale Court- 2009



Rosedale Area - 2009







# **Hamilton Water Priority Programs**





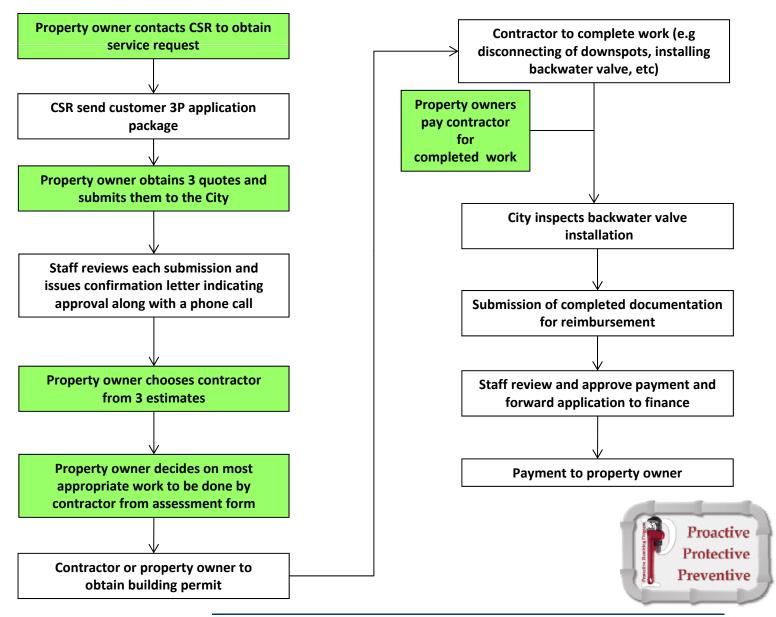




- → Community
- → People
- → Processes
- → Finance



#### **3P Program - Program Flow Chart**





**3P Program** 

#### **2013 Highlights**

Provided \$2.7M in 3P grants (1096 homes - \$2.4M Jan – Nov)

2014 Outlook

\$2.8 M 2014 Budget



#### → Community

- → People
- → Processes
- → Finance



#### 3P Program Highlights (2009 – 2013)

Provided \$11.4M in 3P grants (5929 basements protected and 1918 new homes)



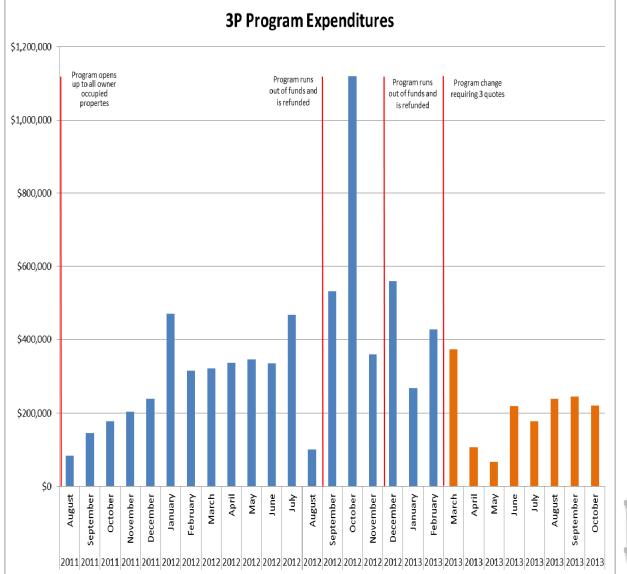




- → Community
- → People
- → Processes
- → Finance



#### **3P Program**







#### **Biosolids**

#### **Biosolids - Land Application Program – 2013 Summary**

**Biosolids Processing** Year Wet Tonnes (WT) 2011 41,128 2012 37,684 2013 (forecast) 35,500

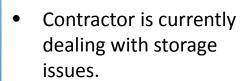
Estimated 5.8% reduction

- → Community
- → People
- → Processes
- → Finance
- Concluding year 3 of optional 5 year contract.

Zero non-compliance

incidents to-date.







Year	Total Methane Gas Production (m3)	Cogen Gas (m3)	Waste Gas (m3)	BPU			
2011	5.9 M	4.9 M	962K	NA			
2012	5.2 M	4.1 M	1.1 M	885K			
2013	*6.5 M	4.9 M	677K	840K			
*Total Methane Gas production forecast							





#### **Water & Wastewater Planning and Capital**

#### **Biosolids PPP Canada Funding Application**

- In 2011 Council directed staff to pursue P3 Funding while at the same time requesting that Enhanced Treatment alternatives be considered.
- The City applied for and were subsequently screened-in for P3 Canada funding, structured as a 30 year Design, Build, Finance, Operate and Maintain (DBFOM) project delivery model.
- To satisfy the P3 Canada funding requirements, a formal Business Case was developed and structured to accommodate a wide range of technology
- Business Case completed and approved by Council and City has re-applied for Round
   4 (procedural) as directed.
- Project team has been working with PPP Canada to help understand the structure and approach of the City's Business Case.
- Recommendation sent to PPP Canada Board for final approval in June 2013.
- Final outcome expected to be announced by the end of 2013.

- → Community
- → People
- → Processes
- → Finance

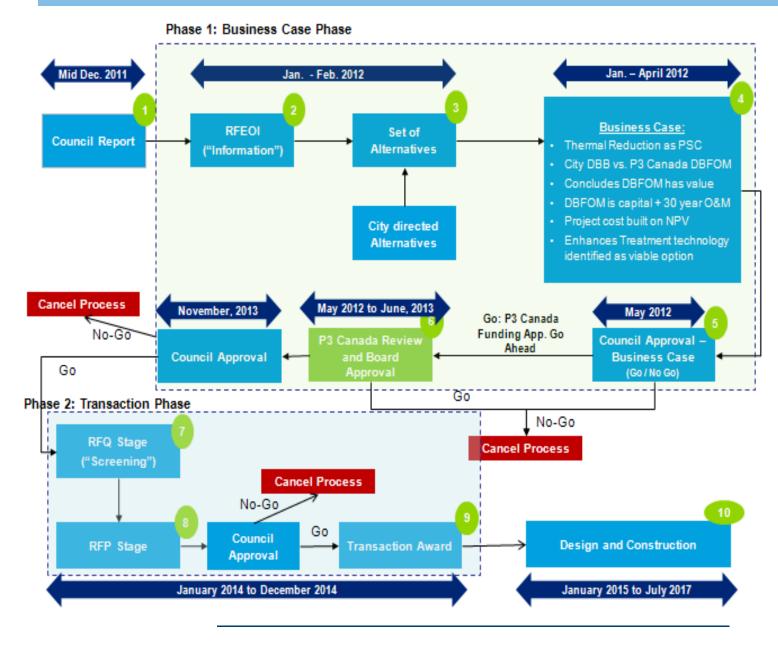


# HAMILTON WATER WATER IS LIFE

- → Community
- → People
- → Processes
- → Finance



#### **Water & Wastewater Planning and Capital**

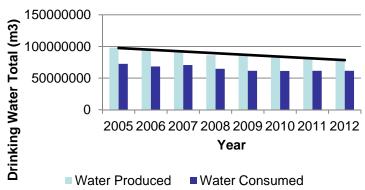




#### **Unaccounted for Water**

# 40% Reduction of unaccounted for water between 2005 - 2012





- → Community
- → People
- → Processes
- → Finance



	2005	2006	2007	2008	2009	2010	2011	2012
Unaccounted for Water (m3)	25,739,045	25,606,540	23,640,022	21,481,476	23,538,985	23,987,156	21,959,326	15,480,363
Value of Unaccounted for Water(@ \$0.06 /m3)	\$1,544,343	\$1,536,392	\$1,418,401	\$1,288,889	\$1,412,339	\$1,439,229	\$1,317,560	\$928,822
% Unaccounted for Water	26.2%	27.2%	25.1%	24.9%	27.7%	28.1%	26.3%	20.1%
Value of Unaccounted for Water at Target (15%) (@ \$0.06 /m3)	\$884,023	\$846,227	\$848,333	\$775,600	\$765,535	\$768,137	\$752,009	\$693,711
Difference between actual and target (\$)	\$660,319.80	\$690,165.20	\$570,068.20	\$513,288.80	\$646,804.40	\$671,091.60	\$565,551.50	\$235,111.00





# **Staff Complement**









#### **Organizational Chart & Complement - 2013**

**Dan McKinnon Director, Hamilton Water Rosa Gonzalez** Michele Braun QMR - Manager AA Udo Dan Chauvin, Shane Bert lan **Ehrenberg** McCauley Routledge Director, Water and Posedowski Manager Manager Wastewater Manager Manager **Engineering** Stuart **Mark Bainbridge** Leitch Manager Manager



→ Community

→ Processes

→ People

→ Finance

Complement (F.T.E.)	Management	Other	Total	# of Staff / Management	
2013	10	278.6	288.6	27.9	

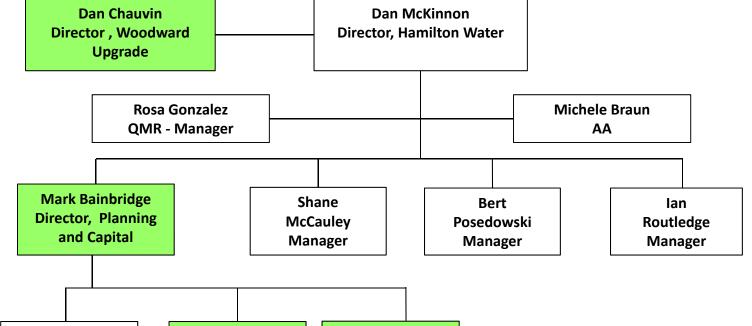


#### **Organizational Chart & Complement - 2014**

Udo

**Ehrenberg** 

Manager



- → Community→ People
- → Processes

Stuart

Leitch

Manager

→ Finance



Complement (F.T.E.)	Management	Other	Total	# of Staff / Management
2013	10	278.6	288.6	27.9
2014	2014 10		288.6	27.9
Change	0	0	0	0

Vacant

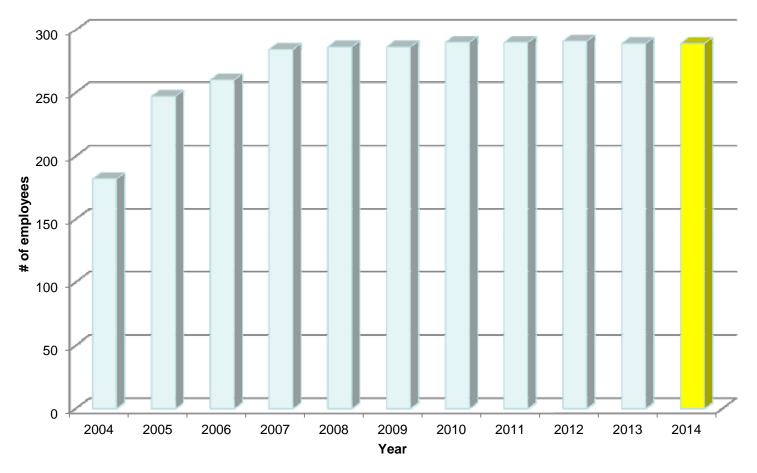
Manager



- → People
- → Processes
- → Finance

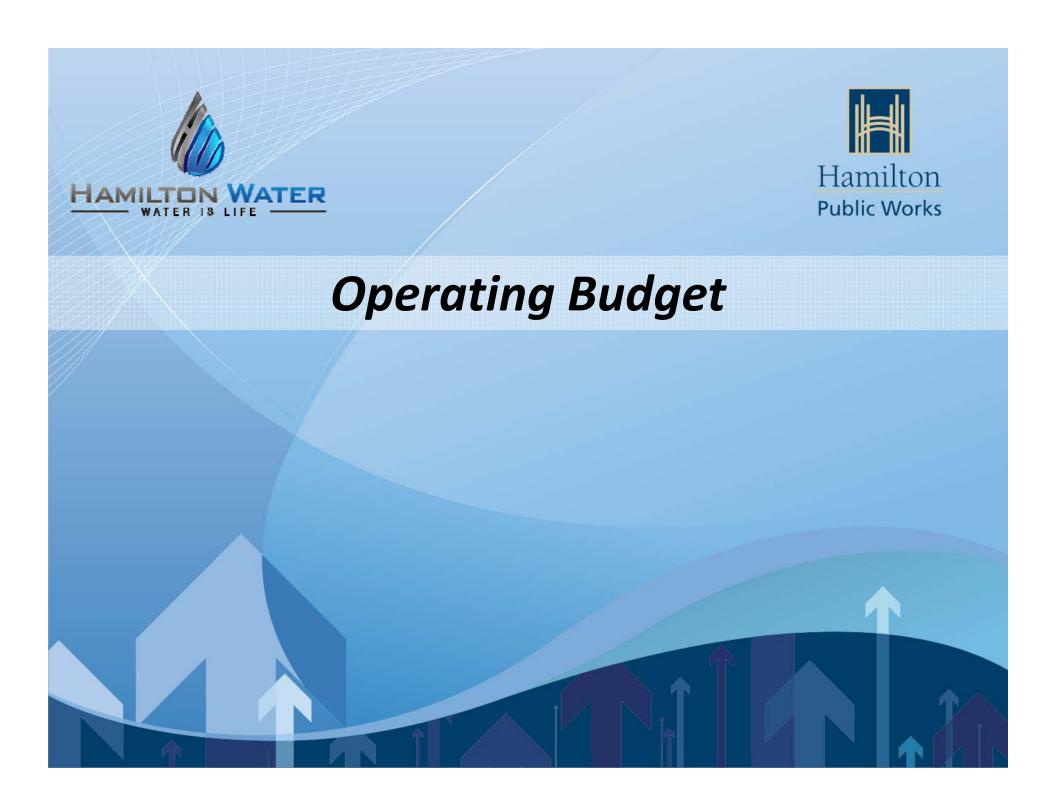


#### **Hamilton Water – Staffing Trends**



Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
# of FTE	182	247	260	284	286	286	289.6	289.6	290.8	288.6	288.6

\* 2014 – Requested FTE



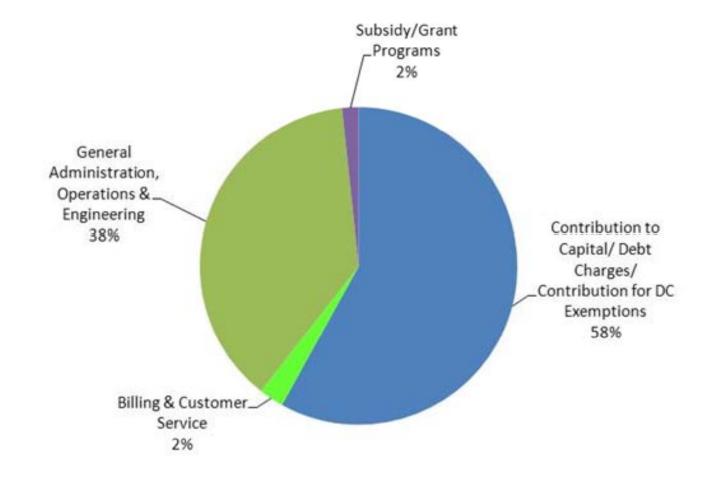


#### **Proposed 2014 Operating Budget**

**Recommendation:** That the 2014 Water, Wastewater and Stormwater Management Rate Supported Operating Budget in the amount of \$178,403,366 be approved as per Appendix "A" to FCS13082/PW13085

- → Community
- → People
- → Processes
- → Finance



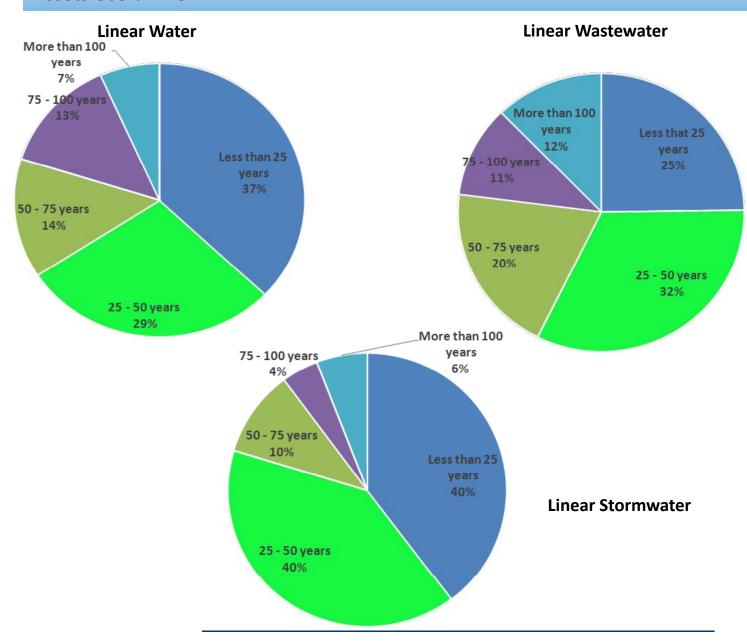




- → Community
- → People
- → Processes
- → Finance



#### **Assets Useful Life**





- → Community
- → People
- → Processes
- → Finance



#### **Total Expenditures**

COST CATEGORY	2013 Restated	2014 Base Budget	\$ Change	% Change
Employee Related Costs	\$30,748,760	\$31,529,770	781,010	2.5%
Material and Supply	8,418,840	7,854,680	(564,160)	(6.7%)
Vehicle Expenses	1,231,390	1,280,080	48,690	4.0%
Building and Ground	13,602,950	13,838,560	235,610	1.7%
Contractual	14,642,610	14,677,700	35,090	0.2%
Agencies and Support Payments	2,716,500	2,716,500	0	0.0%
Reserves / Recoveries	1,451,080	1,410,750	(40,330)	(2.8%)
Cost Allocations	5,132,190	4,716,640	(415,550)	(8.1%)
Financial	2,183,190	2,333,190	150,000	6.9%
Capital Financing	91,869,260	98,045,500	6,176,240	6.7%
TOTAL EXPENDITURES	\$171,996,770	\$178,403,370	\$6,406,600	3.7%



#### **Revenues and Reserves**

- → Community
- → People
- → Processes
- → Finance



REVENUES & RESERVES	2013 Restated	2014 Budget	\$ Change	% Change
Rates - Metered Fees	(164,986,200)	(170,766,760)	(5,780,560)	3.1%
Wastewater Abatement Program Overstrength Agreement Sewer Surcharge Agreements	440,000 (1,600,000) (3,200,000)	440,000 (1,625,000) (3,927,000)	0 (25,000) (727,000)	0% 1.6% 22.7%
General Fees and Permits	(2,650,570)	(2,524,610)	125,960	(4.8%)
TOTAL REVENUES	(171,996,770)	(178,403,370)	(6,406,600)	3.7%



- → People
- → Processes
- → Finance



# Questions?

