

Minutes of a Public Meeting held on May 4, 2006 at 7 p.m. at the Verdi Club. The meeting was to review the Water Rate Study.

PRESENT

Mayor Wayne Hurst
Deputy Mayor Anthony Leardi
Councillor Robert Bailey
Councillor Gord Freeman
Councillor Carl Gibb
Councillor Paul Renaud
Councillor Rosa White

ALSO PRESENT

Frank Pizzuto, CAO
David Mailloux, Clerk
Paul Beneteau, Treasurer
Lou Zarlenga, PWM
Corrie Gabriel, PWOM
Kevin Atkinson, Water & Sewer Sup't.
Terry Hearn, CH2M Hill
Gary Scanlan, CN Watson & Assoc.
See list attached –

Mayor Hurst opened the meeting and welcomed those present. Terry Hearn introduced Gary Scanlan of CN Watson & Associates.

Mr. Scanlan and Mr. Hearn had been commissioned by the Town of Amherstburg to complete a Water Rate Review and are now presenting their study report to the Public.

Mr. Scanlan by way of a power point presentation reviewed the report. See attached report.

Following the presentation, Mayor Hurst opened the meeting for comments and questions from those present.

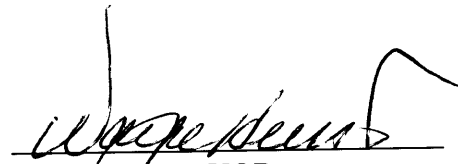
Mr. Van Bekkum of 1816 Erie Ave. stated that he was on a fixed income and that an increase in water rates meant that there was a decrease in ability to purchase other necessities. Industries in the area are shutting down. The increase in water rates is to accommodate subdivisions and developers.

Denise Otoupal of 1818 Erie Ave. asked if the Malden area rates were higher. Terry Hearn responded that they were not.


David Bailey of 1040 Front Road N. asked if the sewage rate was tied to the water rate. Terry Hearn advised that there are 7 sewage rates in the Town and that these will be studied. The water rates will be the same.

Mr. Bailey also asked about cost recovery. Mr. Bailey confirmed that the water rate will be harmonized and the sewage rates are not. Mr. Hearn agreed.

Being there were no more questions, Mayor Hurst adjourned the formal part of the meeting but stated that the Council, Staff and Consultants would be available for individual discussions.



MAYOR



CLERK

Town of Amherstburg

Water Rate Public Meeting

May 4, 2005

CH2M Hill and
C. N. Watson and Associates Ltd.

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Study Purpose

- Identify all current and future water system capital needs – consider Demand Management impacts on capital costs
- Identify cost recovery options for capital
- Estimate future operating costs over next 10 years
- Recommend new rates to recover the cost of the water system

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Areas of Discussion

- Legislation for Water/Wastewater
- Consumption and Growth Forecast
- Water Use and Efficiency – Managing Demand
- Capital Needs and Financing
- Lifecycle Costs (Existing Infrastructure)
- Operating Expenditures
- Rates
- Policy Matters

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New Legislation - Bill 175 Sustainable Water and Sewage Systems Act

- Act passed Dec. 2002
- In August 2004, Province established Expert Water Panel - appear to be considering matters regarding ensuring infrastructure replacement, financial sustainability and affordability – recommendations by Dec. 2004 (behind schedule)
- Province has retained consultants to assist in development of Regulations – target 2005 for completion

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**New Legislation - Bill 175
Sustainable Water and Sewage
Systems Act**

Implementation to proceed in two stages

- Stage 1 - undertake full cost pricing
- Stage 2 - undertake full cost accounting

*Note that this staging is not identified
within the Act however it was noted in
the provincial news release*

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**Bill 175
Sustainable Water and Sewage
Systems Act**

Full Cost defined as:

“source protection, operating costs, financing costs, renewal and replacement costs and improvement costs associated with extracting, treating or distributing water to the public and collecting treating or discharging waste water, and such other costs which may be specified by regulation.”

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Bill 175 Reporting Requirements

Two Reports to be prepared:

1. "Full Cost of Service" report
 - Must inventory all infrastructure
 - Prepare Infrastructure Management Plan
 - Identify all costs of providing the service(s) along with revenue to providing them
 - Engineer must certify first two items
 - Municipal Auditor must provide written opinion

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Bill 175 Reporting Requirements

2. "Cost Recovery Plan" report
 - Will identify how the municipality intends to pay for full costs of service(s)
 - Reg.s may limit revenues
 - Reg.s may limit increases to any customer or class (municipality may apply for higher increases)
 - Municipal Auditor must provide written opinion prior to Council adoption of report

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Bill 175 Ministerial Powers

Minister may:

- Approve or not approve plans
- Commission another report
- Direct two or more municipalities to prepare a plan
- Order a municipality to generate revenue from a specific source or in a specified manner
- To do or refrain from things the Minister considers advisable to ensure the entity pays for the full cost of providing services

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Bill 195 Safe Drinking Water Act

- Introduced Oct. 29, 2002
- Provides for 50 of the 93 Walkerton Part II Recommendations
- Underwent public submission process with Provincial Standing Committee on General Government in late November
- Bill given Royal Assent on Dec. 13, 2002
- Full cost implications will have to be assessed as the regulations are introduced

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**Bill 195
Safe Drinking Water Act**

Highlights

- Mandatory licensing & accreditation of testing labs
- New standards for treatment, distribution quality and testing
- Mandatory operator training
- Mandatory licensing of municipal water providers

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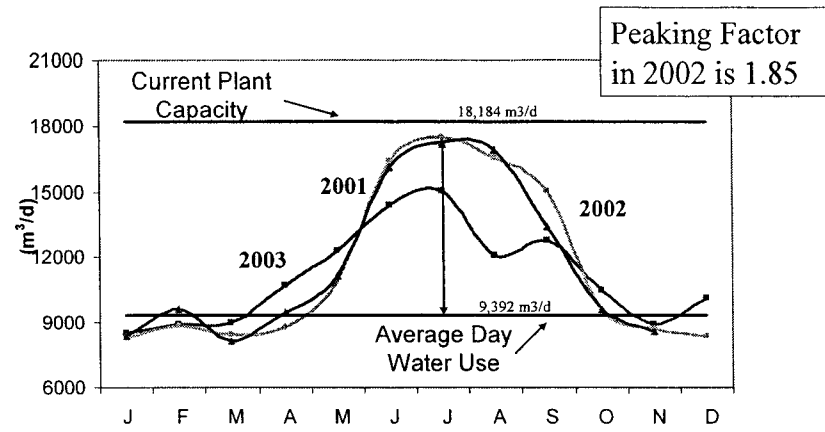
**Bill 195
Safe Drinking Water Act**

Highlights (cont'd)

- Stronger enforcement and compliance provisions
- “Standard of care” requirements for municipalities

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Water Treatment Plant Capacity



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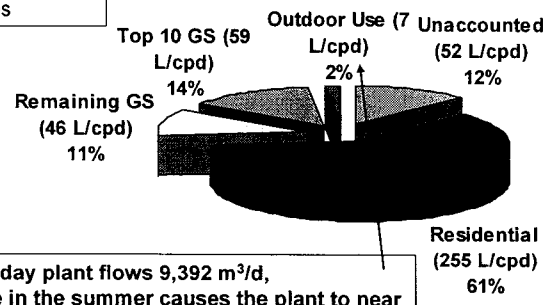
Water Use & Capacity Facts

- Current plant capacity is 18,184 m³/d
- Highest peaking factor in past three years was 1.85 in 2002.
- Average flow from the plant is 9,392 m³/d
- Average peak flow for the past three years is 16,610 m³/d.
- Proposed plant expansion to 22,400 m³/d is based on meeting current water use and rate of growth.

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Water Use in Amherstburg 2003

GS Includes
Industrial,
Commercial and
Institutional
Buildings



Unaccounted for
Water includes fire
fighting & leaks 10-
15% is typical

Average day plant flows 9,392 m³/d,
Peak use in the summer causes the plant to near
capacity. This is only 2% of the total flow in
2003.

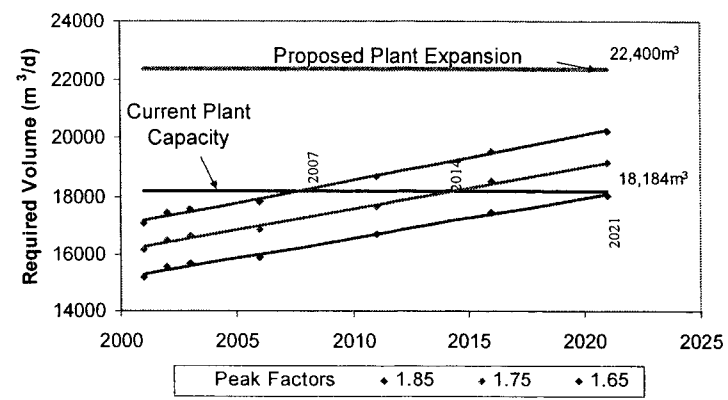
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Forecasted Growth Summary

- At 1.85 peaking factor design of the plant should commence immediately.
- However, 1 year of Cryptosporidium monitoring is required to confirm plant process selection, prior to commencing plant design.
- Based on the process chosen any expansions to the plant would not be online until 2008 at the earliest. (2009 if new process is selected)
- In the interim there is a need to manage water consumption within the existing plant capacity.

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Water Use Based on Forecasted Growth



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Water Use Based on Forecasted Growth

- At current water use and rate of growth the plant expansion should be completed by 2007
- Lowering the peak to 1.75 at current water use and rate of growth the plant expansion should be completed by 2014
- Lowering the peak to 1.65 at current water use and rate of growth the plant expansion should be completed by 2021

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Water Use Efficiency Program

Goals

- Reduce peak day water demands
 - Lower Peaking Factor to 1.75 short term
 - Lower Peaking Factor to 1.65 long term
- Preserve system capacity and defer costs and associated impacts of new supply facilities

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Water Use Efficiency Program

Program Components

- Public Awareness
- Municipal By-Laws
- Water Rate Structure
- Water Billing Frequency
- Inventory Unmetered Water

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Water Use Efficiency Program

Public Awareness

- Pamphlets
- Home Conservation Kits
- Newspaper Articles
- Web Site Information

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Water Use Efficiency Program

Municipal By-Laws

Alternate Day Lawn Watering

- Odd numbered Street Addresses can water on odd number days of the month
- Even numbered Street Addresses can water on even numbered days of the month
- Lawn watering restricted to specific hours of day (i.e. 7:00 to 10:00 A.M. and P.M.)

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Water Use Efficiency Program

Water Rate Structure

Change rate structure from **declining block rate** (the more water used the lower the unit cost)

to

Uniform Rate (constant rate for all water used)

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Water Use Efficiency Program

Water Billing Frequency

Change billing frequency from current system where some customers are billed monthly and others quarterly

to

System where all customers are billed bimonthly to allow all customers to be more aware of their water use

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Water Use Efficiency Program

Inventory Un-metered Water

- Develop systems to measure municipal water used in
 - Street Cleaning
 - Watermain Flushing
 - Hydrant Use
- Review procedures for repairing leaks
- Make improvements where warranted

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Planning Process & Uncommitted Reserve Capacity

- URC is an MOE calculation to ensure building permits are not issued unless the WTP has sufficient reserve capacity. This calculation is based on the average of the last 3 years of flows.

Flow (m ³ /d)	Lots	Plan Approvals at Amherstburg
16,610	7,400	Existing Lots
17,757	8,010	Approved & Serviced but not built "Final Plan Approved"
18,257	8,276	Approved "Draft Plan Approved"
22,676	10,628	"Pending Approval"

Plant is over capacity (18,184 m³/d)

Proposed expansion capacity (22,400 m³/d)

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Planning Process & Uncommitted Reserve Capacity

- Based on URC methodology there is enough capacity to accommodate all draft plan approved lots.
- Based on URC methodology there is enough capacity to accommodate the pending approval lots.
- Amherstburg issues on average 140 residential building permits a year.
- In 2004, there were 180 residential building permits issued.
- At an uptake rate of 180 lots / year there is about 5 years of capacity left.

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Capital Infrastructure

- Reviewed capital needs with Town staff
- Works identified based on Capital Budget, engineering assessments and capital infrastructure replacement
- Capital works were identified by
 - Need
 - Timing
 - Costs

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10 Year Capital Infrastructure (Inflated \$)

Description	Total	Budget			Forecast		
		2005	2006	2007	2008	2009	2010 - 2014
Capital Expenditures							
Water Treatment Plant Upgrades	8,059,991	0	0	0	0	0	8,059,991
Distribution System Upgrades	5,474,860	500,000	510,000	520,200	530,604	541,216	2,872,840
Scheduled Inspections & Reports	223,050	61,710	7,803	11,143	56,828	85,566	0
Water Conservation Program	145,365	97,793	47,572	0	0	0	0
Cryptosporidium Monitoring & Contingency Planning	40,800	40,800	0	0	0	0	0
Watermain Replacements	1,326,143	798,660	421,362	106,121	0	0	0
Water Meter Replacements	526,617	140,687	93,636	95,509	97,419	99,367	0
Miscellaneous Improvements	102,010	102,010	0	0	0	0	0
Water Tower	1,656,121	0	0	0	0	1,656,121	0
Water Reservoir	3,222,063	0	0	0	0	0	3,222,063
Total Capital Expenditures	20,777,021	1,741,659	1,080,373	732,972	684,851	2,382,271	14,154,895

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Capital Financing Options

- Development Charges
- Municipal Act
- Local Improvement Act
- Grants
- Reserves
- Debt

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COMRIF Grant

- Announced mid-November, 2004
- For municipalities less than 250,000
- Canada/Ontario grant – up to 2/3 funding
- Program Objectives
 - Enhance/renew aging infrastructure
 - Improve quality of environment
 - Protect health & safety of citizens
 - Support long term economic growth
 - Build strong municipalities

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COMRIF Grant

- Application dates – Jan. 2005, spring 2005 & spring 2006
- Projects over \$15 million need cabinet approval
- Funding based on need, value for money and quality of project
- For water/wastewater projects, need to be moving towards full cost pricing
- Amherstburg made a Jan. 2005 application for 2/3 grant funding of \$3.75 million to improve the sanitary sewer system – was approved April 25th

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Development Charges

- Existing Policy – impose charge on residential only
- Charges for water include \$483 for Supply & Treatment and \$233 for Watermains (total of \$716 per single detached unit)
- DC Calculation considered in light of CH2M Hills data

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Water DC's

- DC's focus on incremental capital cost to service growth
- Reducing the peaking factor, makes more capacity in plant and reduces the DC
- DC's include cost for plant (based on lower peaking factor) and for \$500,000 annually in system upgrades
- For financial analysis, have assumed the new DC's for residential – initial calculations indicated the need for a residential charge of approx. \$2,000

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Capital Funding

Description	Total
Capital Financing	
Provincial/Federal Grants	0
Development Charges	723,451
Debenture Requirements Non-Growth	0
Debenture Requirements Growth	12,811,401
Operating Contributions	0
Reserves and Reserve Funds	7,242,169
Total Capital Financing	20,777,021

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Lifecycle Infrastructure Costs

- Areas of Amherstburg have infrastructure which dates back to the early 1950's

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Lifecycle Costs

- Evaluation of water system inventories will need to be undertaken commensurate with Bill 175

	Quantity	Replacement Costs (1,000 \$)	Annual Lifecycle Contribution (1,000 \$)
Watermains	296 km	\$ 101,004.6	\$ 905.7
Hydrants	950 each	\$ 3,325.0	\$ 29.5
Valves	565 each	\$ 847.5	\$ 8.2
Water Services	7,700 each	\$ 17,300.0	\$ 153.6
Sub-Total		\$ 122,477.1	\$ 1,097.0
Plant & Tower		\$ 20,550	\$ 1,276
Total		\$ 143,027.1	\$ 2,372.7

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Lifecycle Reserves

- An emerging trend in municipal finance is to establish long term lifecycle reserves for replacement of the aging infrastructure
- Consideration would be given to undertaking a sinking fund calculation for the long term replacement of the infrastructure
- It is suggested that a provision be made at this time, which should be refined once the Bill 175 engineering reports are prepared

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Infrastructure Costing Approach to Bill 175

- Some of the capital program does provide for water main replacement for first 5 years of capital plan
- It is suggested that the lifecycle amounts be phased-in over next 5-6 years to address the requirements of the Bill
- (note that contributions for post 6 year period are slightly higher than lifecycle calculations to recover phase-in amounts)

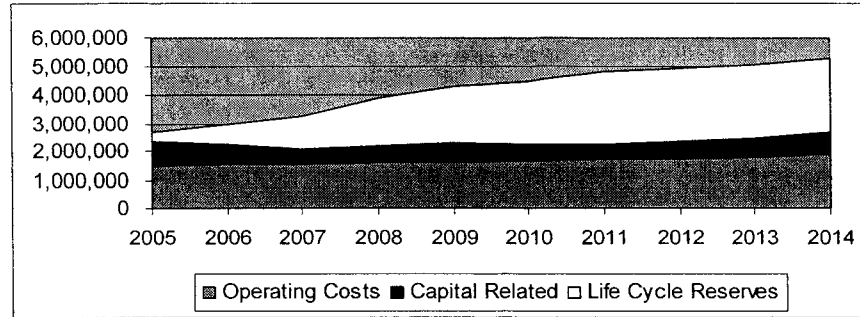
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Operating Budget - Water Overview of Components

Description	Inflation	Other
SALARIES AND BENEFITS	x	
TRAINING	x	
CONVENTIONS & SEMINARS	x	
CLOTHING	x	
MEMBERSHIPS	x	
HEALTH AND SAFETY	x	
OFFICE SUPPLIES	x	
ADVERTISING	x	
INTERNET ACCESS	x	
GENERAL INSURANCE	x	
TELEPHONE	x	
UTILITIES	x	
BUILDING MAINTENANCE	x	
GENERAL SUPPLIES	x	
GENERAL MAINTENANCE	x	
AUDIT FEES	x	
PROFESSIONAL FEES	x	
ENGINEERING FEES	x	
INSURANCE DEDUCTIBLE	x	
MISCELLANEOUS	x	
VEHICLE & EQUIPMENT MTCE.	x	
GASOLINE	x	
VEHICLE & RADIO LICENCES	x	
VEHICLE MTCE - TIRES	x	
EQUIPMENT MAINTENANCE	x	
RADIO MAINTENANCE	x	
COLLECTION EXPENSE	x	growth
STONE	x	
TRAFFIC & WARNING SIGN REPLACEMENT	x	
VALVE MAINTENANCE (Ministry requirement)	x	
EQUIPMENT & EQUIPMENT REPLACEMENT	x	
CONTRACT O.C.W.A.	x	growth
CONTRACT WITH HYDRO	x	
WATER - MAIN MAINTENANCE	x	
HYDRANTS	x	
WATER - METER READING	x	growth
WATER - METER REPAIRS	x	growth
Additional Expenses due to Plant Expansion	x	\$100,000

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Water Operating Expenditure Forecast



Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Operating Costs	1,498,157	1,528,120	1,558,682	1,589,856	1,621,653	1,654,086	1,687,168	1,720,911	1,755,329	1,912,335
Capital Related	852,751	705,908	493,781	567,262	643,388	546,054	546,064	626,234	708,008	791,417
Life Cycle Reserves	313,600	721,000	1,228,600	1,736,500	1,994,500	2,252,800	2,560,000	2,560,000	2,580,000	2,580,000
Total	2,664,507	2,955,028	3,281,063	3,893,618	4,259,541	4,452,940	4,793,232	4,907,145	5,043,337	5,283,752

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Rate Structures

- Rates in their simplest form, can be defined as total costs to maintain the utility divided by the expected volume to be generated for the period

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Rate Structures – Different Types

RATE STRUCTURE	COST PER UNIT AS VOLUME CONSUMPTION INCREASES	IMPACT ON CUSTOMER BILL AS VOLUME CONSUMPTION INCREASES
Flat Rate	Cost per unit decreases as more volume consumed	Bill remains the same no matter how much volume is consumed
Constant Rate	Cost per unit remains the same	Bill increases in direct proportion to consumption
Declining Block	Cost per unit decreases as threshold targets are achieved	Bill increases at a slower rate as volumes increase
Increasing (Inverted) Block	Cost per unit increases as threshold targets are achieved	Bill increases at a faster rate as volumes increase

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Rate Structures – Use in Ontario

- Based on CNWA surveys, all types of rates are in use by municipalities
- Constant Rate was the most used type of structure
- Most had a base monthly charge for recovery of billing/collection/administration

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Rate Structures

- Selection of any rate will be based on policy decisions:
 - Cost recovery
 - Administration
 - Equity
 - Conservation
 - Economic Development

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Present Structure

- Presently have a declining block rate structure

	Block 1	Block 2
Per 1,000 (US) gallons	3.14	2.70
Per m ³	0.83	0.71

- No monthly base charge imposed however a minimum of \$8.00 per month is imposed

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Charges Imposed Elsewhere in Essex (2004 rates)

Meter Size	LaSalle Rate/mo.	Tecumseh Rate/mo.	Windsor Rate/mo.	Leamington Rate/mo.	Lakeshore Rate/mo.	Essex Rate/mo.
5/8"	\$12.00	\$9.65	\$9.63	\$13.50	\$12.00	\$13.80
3/4"	\$12.00	\$9.65	\$17.78	\$13.50	\$12.00	\$13.80
1"	\$16.00	\$16.72	\$26.12	\$13.50	\$12.00	\$13.80
1 1/4"-1 1/2"	\$20.00	\$32.82	\$61.19	\$13.50	\$12.00	\$13.80
2"	\$30.00	\$48.92	\$102.15	\$13.50	\$12.00	\$13.80
3"	\$40.00	\$82.13	\$183.58	\$13.50	\$12.00	\$13.80
4"	\$75.00	\$132.56	\$325.09	\$13.50	\$12.00	\$13.80
6"	\$200.00	\$135.62	\$593.58	\$13.50	\$12.00	\$13.80
8"	\$300.00		\$989.03	\$13.50	\$12.00	\$13.80
10"	\$300.00		\$1,629.29	\$13.50	\$12.00	\$13.80

Consumption Charge						
Volume	Rate	Rate	Rate	Rate *	Rate	Rate
0-27 cubic metres	\$0.66/m ³	\$0.41/m ³	\$0.266/m ³	\$0.40/m ³	\$0.66/m ³	\$0.75/m ³
27-45 cubic metres	\$0.77/m ³	\$0.41/m ³	\$0.266/m ³	\$0.40/m ³	\$0.66/m ³	\$0.75/m ³
over 45 cubic metres	\$0.85/m ³	\$0.41/m ³	\$0.266/m ³	\$0.40/m ³	\$0.66/m ³	\$0.75/m ³
Summer Levy (Windsor)			\$ 249/m ³			

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Proposed Rate

- Based on a constant rate
- and
- a base monthly charge (similar to La Salle)

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Forecast Water Charges (with base charge)

Monthly Base Charge										
Meter Size	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
5/8" or 3/4"	\$12.00	\$12.24	\$12.48	\$12.73	\$12.99	\$13.25	\$13.51	\$13.78	\$14.06	\$14.34
1"	\$16.00	\$16.32	\$16.65	\$16.98	\$17.32	\$17.67	\$18.02	\$18.38	\$18.75	\$19.12
1 1/4" - 1 1/2"	\$20.00	\$20.40	\$20.81	\$21.22	\$21.65	\$22.08	\$22.52	\$22.97	\$23.43	\$23.90
2"	\$30.00	\$30.60	\$31.21	\$31.84	\$32.47	\$33.12	\$33.78	\$34.46	\$35.15	\$35.85
3"	\$40.00	\$40.80	\$41.62	\$42.45	\$43.30	\$44.16	\$45.05	\$45.95	\$46.87	\$47.80
4"	\$75.00	\$76.50	\$78.03	\$79.59	\$81.18	\$82.81	\$84.46	\$86.15	\$87.87	\$89.63
6"	\$200.00	\$204.00	\$208.08	\$212.24	\$216.49	\$220.82	\$225.23	\$229.74	\$234.33	\$239.02
8"	\$300.00	\$306.00	\$312.12	\$318.36	\$324.73	\$331.22	\$337.85	\$344.61	\$351.50	\$358.53
10"	\$300.00	\$306.00	\$312.12	\$318.36	\$324.73	\$331.22	\$337.85	\$344.61	\$351.50	\$358.53

Consumption Charge (\$/m ³)										
Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Constant Rate	0.56	0.65	0.66	0.87	0.98	1.03	1.13	1.15	1.18	1.24

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The Proposed Rate Includes


1. The implementation of Water Use Efficiency measures to lower the Peaking Factor to 1.75
2. Revision to Development Charges – increased residential charge
3. Inclusion of lifecycle costing within the rates commensurate with Bill 175
4. A base monthly charge – indexed annually with inflation
5. A constant rate structure

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Existing Rate

Declining block rate structure charged based on metered water use

No base charge however a minimum of \$8.00 per month is imposed



Per 1,000 (US) gallons	\$3.15	\$2.70
Per m ³	\$0.83	\$0.71

CORPORATION OF THE TOWN OF AMHERSTBURG BY-LAW NO. 1998-53

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Proposed Rates (2005 and 2006)

A constant rate charge based on metered water use at: \$0.56/m³ in 2005
\$0.65/m³ in 2006

A base monthly charge for recovery of fixed costs associated with billing collection administration base on water meter size as per following table.

Meter Sizes (inches)	Monthly Base Charge \$
5/8	12.00
3/4	12.00
1	16.00
1-1/4 and 1 1/2	20.00
2	30.00
3	40.00
4	75.00
6	200.00
8 and 10	300.00

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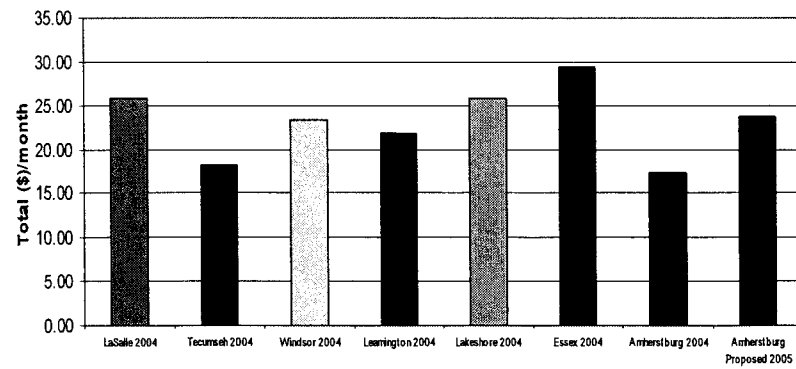
Comparison of Charges Imposed in Other Jurisdictions in Essex County (2004 Rates)

Municipality	Monthly Base Rate (\$)	Monthly Consumption Rate (\$/m ³)	Monthly Volumetric Cost (\$)	Total Monthly Cost (\$)	Total Yearly Cost (\$)
LaSalle 2004	12.00	0.66	13.75	25.75	309.00
Tecumseh 2004	9.65	0.41	8.54	18.19	218.30
Windsor 2004	17.78	0.266	5.54	23.32	279.86
Leamington 2004	13.50	0.40	8.33	21.83	262.00
Lakeshore 2004	12.00	0.66	13.75	25.75	309.00
Essex 2004	13.80	0.75	15.63	29.43	353.10
Amherstburg 2004	-	0.832	17.34	17.34	208.03
Amherstburg Proposed 2005	12.00	0.56	11.67	23.67	284.00

Yearly Cost based Consumption of 250m³/year

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Comparison of Charges Imposed in Other Jurisdictions in Essex County (2004 Rates)



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