

Billing period	Provincial GA Costs	LAWSS Class A GA Would Have Paid	Amount LAWSS paid for GA 2017/2018 PDF 0.00000549	Class B Difference Over Class A	kWh (loss adjusted)	kwh (not loss adjusted)
16-Jul	\$981,781,314	\$53,900	\$75,674	\$21,774	911,084	883,108
16-Aug	\$878,654,400	\$48,238	\$65,934	\$17,696	928,263	899,760
16-Sep	\$967,672,875	\$53,125	\$75,582	\$22,457	793,012	768,662
16-Oct	\$1,062,340,170	\$58,322	\$75,055	\$16,733	668,587	648,057
16-Nov	\$1,076,083,176	\$59,077	\$69,441	\$10,364	625,088	605,894
16-Dec	\$965,549,204	\$53,009	\$58,853	\$5,844	675,852	655,099
17-Jan	\$922,743,911	\$50,659	\$65,888	\$15,229	800,881	776,289
17-Feb	\$850,153,156	\$46,673	\$64,892	\$18,219	751,158	728,092
17-Mar	\$770,000,000	\$42,273	\$57,489	\$15,216	805,739	780,998
17-Apr	\$965,700,000	\$53,017	\$72,066	\$19,049	668,646	648,115
17-May						
17-Jun						
<b>Total</b>	<b>\$9,440,678,207</b>	<b>\$518,293</b>	<b>\$680,874</b>	<b>\$162,581</b>	<b>7,628,310</b>	<b>7,394,074</b>

Name	Account	PEAK - In MWh
Ontario Clean Water - LAWSS	1003883	Company Province
2016.08.10	17:00:00	1.496 23,209.01
2016.09.07	16:00:00	1.035 23,162.86
2016.08.11	16:00:00	1.486 23,107.66
2016.07.13	17:00:00	1.099 22,941.62
2016.08.12	16:00:00	1.203 22,669.91
	Sum	6:319 115,091.06
	PDF	0.00005490

\*\* Bluewater Power would not know what LAWSS Peak Demand Factor (PDF) would have been last year.

*Saving with doing nothing estimated \$194,400 per year*

August peaks  
July/Sept peaks

**BLUEWATER POWER REPORT ON LAWSS AS A CLASS A CUSTOMER (First 6 Months)**

LAWSS Class A v Class B Comparison 2017

Global Adjustment Costs

<b>Month</b>	Uplifted kWh	Class A GA Costs	Class B Actual Rate (\$/MWh)
July	810,028.1	\$ 60,287.09	112.8
August	827,078.1	\$ 56,619.15	101.09
September	688,370.9	\$ 45,162.63	88.64
October	623,038.4	\$ 60,457.72	125.63
November	667,309.8	\$ 50,317.14	97.04
December	793,072.3	\$ 56,281.74	92.07
<b>TOTAL</b>		<b>\$ 329,125.47</b>	
<b>Difference (Savings)</b>			<b>\$ 122,918.44</b>

Class B GA Costs

\$	91,371.17
\$	83,609.33
\$	61,017.20
\$	78,272.31
\$	64,755.74
\$	73,018.16
\$	452,043.91

**SCHEDULE G**  
At December 31, 2017

Commodity	Unit	Flow (M <sup>3</sup> )		Baseline Consumption /M <sup>3</sup>	Actual Consumption /M <sup>3</sup>	Usage based on measured Actual Flow		Baseline Unit Price	Actual Unit Price	Efficiency						Flow			Price								
		Baseline	Measured Actual			Usage at Baseline Consumption Rate	Measured Actual Usage			Measured Actual Flow X Baseline Rate X Actual Price	Measured Actual Usage minus Usage at Baseline Consumption Rate	Efficiency/ (Inefficiency)	Measured Actual Flow at Actual Rate and Actual Price	Efficiency/ (Inefficiency)	Billing/Credit	Baseline Flow X Baseline Rate X Actual Price	Actual Flow X Baseline Rate X Actual Price	Flow Variance	Baseline Flow X Baseline Rate X Actual Price	Baseline Flow X Baseline Rate X Actual Price	Actual Flow X Baseline Rate X Actual Price	Value of Less/ (additional) usage due to efficiency/ (inefficiency)	Total Cost	Bill/(Credit)			
Fluorosilicic Acid	kg	17,619,313	17,588,091	0.0026634	0.0027972	46,844	49,197	\$ 1.62288	\$ 0.90882	\$ 76,022	\$ 42,572.82	(2,353)	(\$3,818)	\$ 1,679.92	(\$2,138)	44710.93	(\$2,138)	(\$2,138)	\$ 42,648.39	\$ 42,572.82	(\$76)	\$76,157	\$ 42,648.39	\$42,573	(\$2,138)	\$44,711	(\$33,509)
Alum	kg	17,619,313	17,588,091	0.0331388	0.0252623	582,848	444,315	\$ 0.17295	\$ 0.20882	\$ 100,804	\$ 121,712.80	138,533	\$23,959	\$ 4,969.77	\$28,929	92783.78	\$28,929	(\$14,465)	\$ 121,928.86	\$ 121,712.80	(\$216)	\$100,982	\$ 121,928.86	\$121,713	\$28,929	\$92,784	\$20,946
Sodium Hypochlorite	L	17,619,313	17,588,091	0.0254556	0.0230597	447,715	405,576	\$ 0.16295	\$ 0.18051	\$ 72,985	\$ 80,816.60	42,139	\$6,867	\$ 739.92	\$7,607	73210.09	\$7,607	(\$3,803)	\$ 80,960.06	\$ 80,816.60	(\$143)	\$73,085	\$ 80,960.06	\$80,817	\$7,607	\$73,210	\$7,875
Sodium Bisulphite	kg	17,619,313	17,588,091	0.0005628	0.0002843	9,898	5,000	\$ 0.81440	\$ 0.99725	\$ 8,061	\$ 9,871.23	4,898	\$3,989	\$ 895.68	\$4,885	4986.25	\$4,885	(\$2,442)	\$ 9,888.75	\$ 9,871.23	(\$18)	\$8,076	\$ 9,888.75	\$9,871	\$4,885	\$4,986	\$1,813
PAC	kg	17,619,313	17,588,091	0.0001571	0.0000853	2,762	1,500	\$ 2.13763	\$ 2.57933	\$ 5,905	\$ 7,124.84	1,262	\$2,698	\$ 557.55	\$3,256	3869	\$3,256	(\$1,628)	\$ 7,137.49	\$ 7,124.84	(\$13)	\$5,915	\$ 7,137.49	\$7,125	\$3,256	\$3,869	\$1,222
Silica Sand	lbs	17,619,313	17,588,091	0.0010177	0.0014783	17,899	26,000	\$ 0.25409	\$ 0.25389	\$ 4,548	\$ 4,544.48	(8,101)	(\$2,058)	\$ 1.62	(\$2,057)	6601.14	(\$2,057)	(\$2,057)	\$ 4,552.55	\$ 4,544.48	(\$8)	\$4,556	\$ 4,552.55	\$4,544	(\$2,057)	\$6,601	(\$4)
Polymer- Nalco	kg	17,619,313	17,588,091	0.0000067	0.0000061	119	108	\$ 9.22308	\$ 9.92157	\$ 1,093	\$ 1,176.15	11	\$97	\$ 7.37	\$105	1071.53	\$105	(\$52)	\$ 1,178.23	\$ 1,176.15	(\$2)	\$1,095	\$ 1,178.23	\$1,176	\$105	\$1,072	\$83
Polymer RMS, CIBA, BASF	kg	17,619,313	17,588,091	0.0000362	0.0000341	637	600	\$ 4.81514	\$ 5.18977	\$ 3,098	\$ 3,306.79	37	\$179	\$ 13.93	\$193	3113.86	\$193	(\$96)	\$ 3,312.66	\$ 3,306.79	(\$6)	\$3,074	\$ 3,312.66	\$3,307	\$193	\$3,114	\$239
<b>Subtotal excluding Sludge</b>											\$271,126	-	\$31,913	\$8,866	\$40,779	\$230,347	\$40,779	(\$26,682)	\$271,607	\$271,126	(\$481)	\$272,940	\$271,607	\$271,126	\$40,779	\$230,347	(\$1,333)
<b>Grand Total</b>											\$271,126	\$0	\$31,913	\$8,866	\$40,779	\$230,347	\$40,779	(\$26,682)	\$271,607	\$271,126	(\$481)	\$272,940	\$271,607	\$271,126	\$40,779	\$230,347	(\$1,333)

Commodity	Unit	Efficiency Variance	Flow Variance	Price Variance	Total
Fluorosilicic Acid	kg	(\$2,138)	(\$76)	(\$33,509)	(\$35,723)
Alum	kg	(\$14,465)	(\$216)	\$20,946	\$6,266
Sodium Hypochlorite	L	(\$3,803)	(\$143)	\$7,875	\$3,929
Sodium Bisulphite	kg	(\$2,442)	(\$18)	\$1,813	(\$647)
PAC	kg	(\$1,628)	(\$13)	\$1,222	(\$418)
Silica Sand	lbs	(\$2,057)	(\$8)	(\$4)	(\$2,068)
Polymer- Nalco	kg	(\$52)	(\$2)	\$83	\$29
Polymer RMS, CIBA, BASF	kg	(\$96)	(\$6)	\$239	\$137
<b>Subtotal excluding Sludge</b>		(\$26,682)	(\$481)	(\$1,333)	(\$28,496)
<b>Chemical Total</b>		(\$26,682)	(\$481)	(\$1,333)	(\$28,496)

Reimbursable costs	Annual Budget	Annual Budget YTD	Annual Cost YTD	Variance YTD	Annual Budget Balance Remaining
Sludge - HD	\$32,670.00	\$32,670.00	\$ 36,056.54	\$ 3,386.54	(\$3,386.54)
Sludge - City of Sarnia	\$98,010.00	\$98,010.00	\$ 116,311.68	\$ 18,301.68	(\$18,301.68)
<b>Sludge Totals</b>	<b>\$130,680.00</b>	<b>\$130,680.00</b>	<b>\$ 152,368.22</b>	<b>\$ 21,688.22</b>	<b>(\$21,688.22)</b>

Reimbursable costs	Annual Budget	Annual Budget YTD	Annual Cost YTD	Variance YTD	Annual Budget Balance Remaining
Electricity	\$1,700,000.48	\$1,700,000.48	\$ 1,616,607.22	\$ (83,393.26)	\$83,393.26
Diesel	\$7,500.00	\$7,500.00	\$5,062.80	\$ (2,437.20)	\$2,437.20
Insurance	\$101,385.00	\$101,385.00	\$101,385.00	\$ -	\$0.00
Point Edward Sewage	\$73,830.00	\$73,830.00	\$81,984.42	\$ 8,154.42	(\$8,154.42)
<b>Subtotal</b>	<b>\$1,882,715.48</b>	<b>\$1,882,715.48</b>	<b>\$ 1,805,039.44</b>	<b>\$ (77,676.04)</b>	<b>\$ 77,676.04</b>

Overall Totals:	Billing/(Credit) to Client
Schedule G	(\$28,496.36)
Reimbursables - Sludge	\$21,688.22
Reimbursables	(\$77,676.04)
<b>Total Billing/(Credit) to Client</b>	<b>(\$84,484.18)</b>

ITEM	EXPENSES	Actual Money Spent as of December 31, 2017	Net Money for Transfer to Reserve
<b>2017 LAWSS Operating</b>			
Emergency Repairs	\$200,000.00	\$109,080.50	-\$90,919.50
General and Administrative Expenses	\$275,000.00	\$253,417.47	-\$21,582.53
Staff Salary and Benefits	\$250,000.00	\$193,707.30	-\$56,292.70
Schedule G Reconciliation Estimate	\$50,000.00	-\$84,484.18	-\$134,484.18
<b>Subtotal</b>	<b>\$775,000.00</b>	<b>\$471,721.09</b>	<b>-\$303,278.91</b>
<b>LAWSS Capital Projects</b>			
Main Plant HVAC*	\$587,383.00	\$616,071.65	\$28,688.65
Warranty Holdback for VFD at WTP Project	\$32,092.00	\$36,370.04	\$4,278.04
Parking Lot Upgrades for Accessibility	\$20,000.00	\$2,011.26	-\$17,988.74
Forest Tower Repaint (complete repaint)*	\$1,400,000.00	\$971,300.00	-\$428,700.00
Engineering Studies (Asset Assessment, Electrical and ELBS Capacity Assessments)*	\$100,000.00	\$99,000.00	-\$1,000.00
SCADA - Radio Upgrade Project at LAWSS Tender Preparation and Installation*	\$150,000.00	\$150,000.00	\$0.00
<b>Engineering and Tender Document Preparation For Generator Replacement Project</b>	<b>\$300,000.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
RESERVE Generator Replacement Project	\$13,200.00	\$13,200.00	\$0.00
Board Approved Reserve 24" Watermain Replacement	\$320,093.63	\$293,998.62	\$293,998.62
Board Approved Reserve Electrical Room Cooling	\$50,000.00	\$38,187.41	\$38,187.41
Board Approved Reserve Zion Line Hydrant Replacement	\$26,882.00	\$32,317.41	\$32,317.41
Board Approved Reserve Purchase of Chevrolet Silverado	\$40,000.00	\$43,372.91	\$43,372.91
Board Approved Reserve Maher Drain Watermain Offset	\$50,488.36	\$50,488.36	\$50,488.36
<b>TOTAL 2016 and 2017 CAPITAL</b>	<b>\$2,602,675.00</b>	<b>\$1,887,952.95</b>	<b>\$43,642.66</b>
<b>2017 LAWSS Major Maintenance Projects</b>			
New meters for surface water water and backwash water	\$10,000.00	\$4,236.35	-\$5,763.65
Replace Panel Relays on 600V in Motor Control Centre	\$17,000.00	\$13,228.80	-\$3,771.20
HLP3 Rebuild and Trim Impeller	\$48,000.00	\$0.00	-\$48,000.00
HLP3 Motor Refurbishment	\$3,800.00	\$6,904.42	\$3,104.42
HLP3 Ross Valve Rebuild	\$16,000.00	\$9,590.63	-\$6,409.37
P2 Ross Valve Rebuild at WLBS	\$10,000.00	\$12,620.28	\$2,620.28
Retrofit Panelboard L and LC including engineering required*	\$38,000.00	\$17,685.10	-\$20,314.90
Retrofit Panelboard LD and HA including engineering required	\$38,000.00	\$16,663.88	-\$21,336.12
Retrofit Panelboard HC and HC including engineering required	\$38,000.00	\$27,792.26	-\$10,207.74
Arc Flash Short Circuit Protection Transformer Fuses	\$10,000.00	\$4,812.23	-\$5,187.77
Maintenance on Limatorque Valves at WTP Reservoir	\$2,000.00	\$1,772.28	-\$227.72
SCADA Migration at WLBS	\$15,000.00	\$0.00	-\$15,000.00
Low Lift Clean Out and Inspection of Structure	\$25,000.00	\$8,586.51	-\$16,413.49
Electrical Inspections ELBS and WLBS (half of the cost)	\$15,000.00	\$6,176.84	-\$8,823.16
New Hydrant in Sombra	\$6,000.00	\$9,086.15	\$3,086.15
Forest Mag Meter Chamber Repair using a Sealant	\$20,000.00	\$16,973.57	-\$3,026.43
New Isolation Valve on Distribution System at Reeces Corners	\$10,000.00	\$10,488.98	\$488.98
Refurbish External Gear Operation on Valve at Front and Maxwell*	\$10,000.00	\$5,744.07	-\$4,255.93
<b>Repair Control System for Diesel Tanks</b>	<b>\$7,500.00</b>	<b>\$0.00</b>	<b>\$0.00</b>

ITEM	EXPENSES	Actual Money Spent as of December 31, 2017	Net Money for Transfer to Reserve
<b>TOTAL 2017 MAJOR MAINTENANCE</b>	<b>\$339,300.00</b>	<b>\$172,362.35</b>	<b>-\$166,937.65</b>
Revenue from sale of water	-\$125,000.00	-\$193,883.14	-\$68,883.14
Revenue from OPA for incentive on Capital Projects	-\$150,000.00	-\$780.00	\$149,220.00
Revenue from Interest and rental fees (Coast Guard, Execulink, Fire Services)	-\$62,000.00	-\$60,171.23	\$1,828.77
Revenue from 2016 HST rebate	-\$170,000.00	-\$20,585.73	\$149,414.27
Revenue transferred from 2016 Budget	-\$619,475.00	-\$619,475.00	\$0.00
<b>TOTAL REVENUE</b>	<b>-\$1,126,475.00</b>	<b>-\$894,895.10</b>	<b>\$231,579.90</b>
<b>NET EXPENDITURES</b>			<b>-\$426,573.90</b>
<b>NET REVENUE</b>			<b>\$231,579.90</b>
<b>Net Money from 2017 Budget</b>			<b>-\$194,994.00</b>
<b>Total to be carried to 2018 Budget</b>			<b>\$307,500.00</b>
<b>Net Money Transferred to Reserve</b>			<b>-\$194,994.00</b>

\* Include Money to be spent in 2018

## Lambton Area Water Supply System

### BY-LAW Number 1 of 2017

#### Being a By-Law to confirm the proceedings of the Lambton Area Water Supply System

**WHEREAS** pursuant to the terms of Municipal Water and Sewage Transfer Act, 1997, as amended, and pursuant to the terms of the Minister's Transfer Order which outlined the provisions governing the Lambton Area Water Supply System (LAWSS) the powers of LAWSS shall be executed by its Joint Board of Management; and

**WHEREAS** pursuant to Part V of the Municipal Act, 2001, S.O. 2001, c.25 as amended, a municipal services board including a joint municipal services board shall be governed by the terms outlined by the member municipalities and the municipal services board's originating documents; and

WHEREAS the Lambton Area Water Supply System is joint municipal services board as defined in the Municipal Act, 2001 c.25 as amended; and

**WHEREAS** it is deemed expedient that a By-law be passed to authorize the execution of agreements and other documents and that the Proceedings of the Joint Board of Management of the Lambton Area Water Supply System at its meetings be confirmed and adopted by By-law; and

**NOW THEREFORE** the Joint Board of Management (Joint Board) of LAWSS enacts as follows:

1. **THAT** all actions of Joint Board in respect of all recommendations in reports and minutes of committees, all motions and resolutions and all actions passed and taken by the Joint Board, documents and transactions entered into during the calendar year of 2016 meetings of the Joint Board are hereby adopted and confirmed, as if the same were expressly contained in this By-law;
2. **THAT** the Chair and the General Manager of the Joint Board are hereby authorized and directed to do all things necessary to give effect to the actions of Joint Board during the said meetings referred to in Section 1 of this By-law;
3. **THAT** the Chair and the General Manager are hereby authorized and directed to execute all documents necessary to the actions taken by this Joint Board as described in Section 1.

By-Law read a first, second and third time and finally passed this 22nd day of February, 2018.

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Susan MacFarlane  
LAWSS General Manager

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Beverly Hand  
Chair of Joint Board

## Lambton Area Water Supply System

### BY-LAW Number 1 of 2018

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3. **THAT** the Chair and the General Manager are hereby authorized and directed to execute all documents necessary to the actions taken by this Joint Board as described in Section 1.

By-Law read a first, second and third time and finally passed this 22nd day of February, 2018.

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Susan MacFarlane  
LAWSS General Manager

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Beverly Hand  
Chair of Joint Board