THE CORPORATION OF THE MUNICIPALITY OF LAMBTON SHORES

Special Council Meeting

Date of Meeting: Monday, January 30, 2012

Time: 1:00 p.m.

Place of Meeting: Village Complex, Thedford

AGENDA

Pages

1. Call to Order

2. Declaration of Pecuniary or Conflict of Interest

3. Consideration of Committee Minutes and Staff Reports

3.1 C.A.O. Report No. 08-2012 – Re: The Proposed Grand Bend Area Sewage Treatment Facility – Review of Financing Options 1 - 22

4. Adjourn

THE MUNICIPALITY OF LAMBTON SHORES

C.A.O. Report No. 08-2012 **Thursday, January 26, 2012**

TO: Mayor Weber and Members of Council

FROM: John Byrne, Chief Administrative Officer

RE: The proposed Grand Bend Area Sewage Treatment Facility - Review of Financing Options

RECOMMENDATION:

For Council review and direction.

REPORT

Pursuant to Council's request I have attempted to prepare a report that would provide the information it needs to deal with the proposed Grand Bend Area Sewage Treatment Facility project. I see no need in covering some of the background issues that have previously been reported on, as Council understands the process that got us to this point. In summary those issues are: the existing lagoon capacity has been fully committed to existing and proposed future development (PL Report No. 16-2011), the existing lagoons are over 30 years old and not capable of being expanded to add additional capacity to meet projected future needs and effluent quality standards.

The Joint Board overseeing the development of a sewage treatment solution capable of meeting the long term needs of the three partner municipalities has selected a preferred treatment solution and obtained a firm tender cost for the construction of a new facility that includes a phased and full build approach. The process undertaken by the Joint Board was a long and exhaustive one, entailing a review of a wide range of alternatives, including the development of a Natural Wetland, a New Hamburg system and numerous variations of mechanical treatment solutions including membrane technology, sequencing batch reactor, orbal technology and combinations of some of these. At the end of the day the Joint Board agreed that the Orbal Technology solution was the best solution to our long term needs. One of the deciding factors in selecting the Orbal Technology was its ability to adapt to the high seasonal fluctuations in flows experienced in this area. The Orbal Technology also provides for a phased approach to treatment capacity by being able to operate on a single treatment train during low flow periods.

The decision left to Council at this point in time is to fully understand what the cost of this proposed treatment facility will be on the sewer system users of Lambton Shores. To assist with the development of an answer to this issue, staff have been working with Watson & Associates to analyse the costs and various financing scenarios. Regardless

of what some critics have implied about the time it has taken to develop this analysis, this is an extremely important and complex process and we wanted to make sure Council is provided with the best estimates possible upon which to base their decision. Although we began this process in November, it must be remembered that many of the variables related to this project were still unresolved and until they were, it would have been reckless and foolish to put out numbers that were not as accurate as possible. We now believe those issues are sufficiently resolved to enable us to provide that information to Council and the public.

The Proposed Sewage Treatment Options

Option #1

Council's current position is that it supports the ***"Full Build-Double Treatment Train"*** option. This option would cost **$25,463,969.00** to build but would be eligible for the full Canada Build Grant of $14,209,631.00 and $1,000,000.00 Green Municipal Fund Grant, reducing the cost to **$10,254,338.00**. If the terms of the agreement were adhered to and our partners assumed their full share of the project costs Lambton Shores' share of this project would be $4,963,100.00. This cost is further reduced as a result of Lambton Shores partnering with the Pinery Provincial Park on this project. The Pinery would be contributing $2,568,403.00, making Lambton Shores net cost **$2,394,697.00** for 2255 m3 of treatment capacity.

However, Bluewater has indicated it will not be participating at this time in the project and South Huron has indicated it will only contribute its share of a "***Full Build-Single Train"*** option, which to date is $1,701,700.00 therefore, if Lambton Shores wishes to continue with the ***"Full Build-Double Treatment Train"*** option it will have to fund Bluewater's full share of the project and South Huron's cost of the project beyond the "***Full Build-Single Train"*** cost. Lambton Shores cost for the "***Full Build-Double Treatment Train"*** option is **$5,984,235.00** for 3955 m^3 of sewage capacity.

Option #2

Our partner South Huron would prefer the ***"Full Build-Single Treatment Train"*** option and Bluewater has opted out of the project for the time being. The "Full Build-Single Treatment Train" option is estimated to cost $20,062,948.00. If the smaller project is eligible for Build Canada Funding in the amount of $13,670,034.00, and a $1,000,000.00 grant from the Green Municipal Fund, the net cost of the project will be reduced to $5,392,914.00. Again, if the terms of the agreement were adhered to and our partners assumed their full share of the project costs Lambton Shores share of the project amounts to $3,691,214.00 The Pinery Provincial Park share would be $2,023,980.00. This contribution reduces the Lambton Shores share of the cost of this new facility down to **$1,667,234.00** but would only provide the municipality with 1128 m3 of capacity, which is less than we currently, have in the Lagoons.

However, Bluewater has indicated it will not be participating at this time in the project and South Huron has indicated it will only contribute its share of a "***Full Build-Single Train"*** option which is currently $1,701,700. Therefore, in order to make this option viable for Lambton Shores, We would have fund Bluewater's full share of the ***Full Build-Single Train"*** option, and have the right to their capacity of 498 m^3. If so, Lambton Shores cost for the "***Full Build-Single Treatment Train"*** option is **$1,667,234.00** for 1626 m^3 of sewage capacity. Bluewater's participation in the sewage treatment plant would have to be tied to the construction of the second train. We do not know what the cost of the additional treatment train would be down the road but we do know that it would not be eligible for funding.

Watson & Associates Analysis of Sewer Rate Funded Options

Attached to this report is the analysis done by Watson & Associates that addresses the long range (10 year) cost projection for Lambton Shores Wastewater system. These cost projections are taken from the Municipality's 10 Year Capital Forecast and includes all projected capital projects for the municipality over that period of time. These projections not only include the proposed Grand Bend Area STF "Full Build-Single Treatment Train" option but also the development of the West Bosanquet Trunk Main and Collection systems, valued at approximately $15,000,000.00.

NOTE: *For the purpose of the analysis an assumption was made that the West Bosanquet Trunk Main and Collection Systems would be fully funded and offset by other revenues. This was done so as to isolate the cost of the proposed STF project.*

NOTE: *For the purpose of the analysis only the net remaining cost of the STF was used. $1,477,656.00 of the design and engineering costs for the new STF have already been paid over the 2008 to 2011 period, so only the remaining cost is shown in the analysis.*

NOTE: *For the purpose of the analysis the single and double train options made the assumption that Bluewater was not participating, that Zones 3 & 4 were not participating, and that South Huron was only participating at a single train option level.*

Option #1 "Full Build-Double Treatment Train" –(see attached –Schedule A*)* –in brief the net impact on Lambton Shores sewage rates would be an increase by $242.00 annually or $20.17 monthly.

$56.00 of that total is attributable to the Bluewater share of costs and is subject to full recovery. Assuming a full recovery of those costs, the annual impact on Lambton Shores sewer rates would be $186.00 annually or $15.50 monthly.

Option #2 "Full Build-Single Treatment Train" – (see attached Schedule B) – in brief the net impact on Lambton Shores sewage rates would be an increase of $134.00 annually or $11.17 monthly.

$30.00 of that total is attributable to the Bluewater share of costs and is subject to full recovery. Assuming a fill recovery of those costs, the annual impact on Lambton Shores sewer rates would be $104.00 annually or $8.66 monthly.

Operating Budget

The original cost projections for the Full Build-Double Train facility were estimated for the purposes of the Joint Agreement and amounted to $1,414,977.60. The largest component of this estimated budget was $968,000.00 for "Lifecycle Replacement". Watson & Associates recommended that these lifecycle replacement costs not be set aside until such time as the capital debt for the proposed facility have been retired *(approximately 10 years).* This would bring the Operating Budget estimate down to about $446,977.60 annually. The Technical Committee (Staff) are currently reviewing these estimates to determine where further savings could be achieved but that work is still ongoing. The other task of the Technical Committee is to determine what cost savings might be achieved in a "Single Train" option. So at this point in time the estimated budget for the proposed facility is around $450,000.00. This would be shared on the basis of flows between the three partners and ultimately that would be on the basis of their respective share of capacity.

In Lambton Shores case this would amount to $217,800.00 annually. As noted above, the estimated budget is under review and will be reduced. Another component of operating costs that is difficult to estimate is the actual cost of hydro to operate the plant. As Council is aware a significant investment has been made in "Green Technology" to reduce hydro costs and we believe the $68,000.00 current estimate for hydro will be reduced as well. The estimated budget costs above have been factored into the Watson & Associates financial analysis and estimated sewage rate increase.

Build Canada & Green Municipal Fund Grants

Staff has been in regular contact with staff of the Build Canada Fund about the proposed project and the two alternatives under consideration. If the Joint Board ultimately decides to proceed with the "Full Build-Single Treatment Train" option, the approval of Build Canada will be required. Build Canada confirmed that funding is proportional to the actual costs incurred, so if the "Full Build-Single Treatment Train" option is chosen, grant contributions would be reduced accordingly.

I reviewed the "Full Build" terminology with the staff of Build Canada and explained that both options fulfilled the criteria of the grant allocations in all aspects except for the phased approach to the "treatment trains". The Build Canada staff cautioned against making any substantive deviation from the approved grant submission *(tertiary treatment facility)* as it could jeopardize funding. They advised that they would consider the phasing of the second treatment train but could not guarantee it would be approved. If it was approved, they cautioned that the grant money not utilized would not likely be set aside for future use.

During my conversation with the Build Canada staff we discussed of the likelihood of new infrastructure grant funding being made available down the road and while this

remains a political decision, they did not see a great likelihood of this happening. As both the Federal and Provincial governments are in the process of tackling their current deficit positions and this is a priority for them.

Secondly in Ontario's case, the government has moved away from "grant programs" when it comes to municipal infrastructure and introduced a move towards "Full Cost Replacement" financing for municipal water *(and soon wastewater)* systems, whereby municipalities cover the cost of infrastructure repair and replacement through their water *(and wastewater)* charges. In other words municipalities themselves are responsible for infrastructure replacement not upper tier levels of government. My conversation with Build Canada ended on the cautionary note that they have a long list of other municipalities anxious to use these grants if we opt not to utilize them, and again cited the other possibility that the grant funding might simply be put against the deficit itself.

Collateral Issues

During recent discussion several related issues arose and a request was made to try and have staff address these.

Bluewater Share of the STF Costs

From the outset of this project the Municipality of Bluewater wanted to participate in the project as a means of addressing their long range sewage treatment needs for the lakeshore area of their municipality but advised the partners that it would take time for them to develop a collection system capable of sending flows to the proposed STF and at the same time pay for their share of the proposed STF. As a result, provision was made in the Joint Agreement to allow Bluewater time to address the development of their collection system and to pay their share of the STF costs sometime within a projected 10 year time frame. Lambton Shores subsequently agreed to consider financing Bluewater's share of these costs until such time as they did rejoin the project as long as Lambton Shores was reimbursed this capital cost and the carrying (interest) costs of doing this. Bluewater share of the STF costs were projected to be $2,300,000.00.

The Retraction of Capacity

It has been suggest that one way of reducing the pressure for the replacement of the existing lagoons is to retract capacity from developments that have received but have not yet utilized capacity including the Pinery Provincial Park. The Municipal Solicitor has responded to this issue under separate cover as privileged and ***confidential*** legal advice.

The use of "Blue Frog" & Bio-Digestion Systems

Late last month an engineering firm got wind of the Grand Bend Area Sewage Board discussions and a report I made to Council on the issue of lagoon performance and the

cost of addressing the loss of capacity due to the build up of the sludge blanket in the lagoons over the past 30 years. The estimate from our engineer was that a little over 100 m3 of capacity is used up because of the sludge blanket and that early estimates on the cost of removing and disposing of this material were in the range of $1.5 to $2.5 million. This firm proposed a “Blue Frog” system as a solution to that issue. Dillon Consulting was asked to comment on the proposal and their review was sent under separate cover. This said, decisions related to this type of bio-digesion technology really falls to the Joint Board for consideration.

Financial Implications of Not Constructing the GB STF

It is speculative at best to try and quantify or project the impact of not constructing the STF. In discussing this issue with the Planner, we believe that there would be an immediate but gradual impact felt, as there are still developments and vacant lots yet to be fully utilized or “built out”, but these will dry up over time and pressure for new lots will grow steadily. One of the immediate impacts would be putting a hold on a development proposal like the 100 unit assisted living retirement complex presented to Council this past Monday evening.

It is the long term implications that cause the most concern as the development industry requires the knowledge that sewage treatment capacity is available for the long term, so that can phase in their developments and financing. Without a guarantee of treatment capacity, developers will likely look elsewhere to invest.

As Council is aware the Provincial Policy Statement preferred method for servicing new development is municipal sanitary and water services. It places strict limitation on development on partial services, so again growth and development prospects become limited and more challenging.

The Grand Bend area is experiencing a greater growth rate than the rest of Lambton Shores. Continued growth in the Grand Bend area is essential to growth in the Municipality. Generally speaking growth correlates to increased assessment and with increased assessment through growth, tax levels trend to lower and slower increases

Growth and development also means jobs for all associated with development. It supports our local home builders who hire local people. Increased growth is also beneficial to existing local businesses and key to economic sustainability and in attracting new commercial investment in our community.

It is highly possible that, the lack of sewage capacity and resulting lack of growth could drive up the price of existing vacant serviced lots, (low supply, high demand) making living in the Grand Bend area unattainable for many. This can affect the vibrancy of a community by precluding a mix of people of varying ages and backgrounds

Finally, the lack of adequate sewage capacity for growth sends a message that Lambton Shores and particularly the Grand Bend area is closed for development. This

is certainly contrary to the stated goals of this Council to promote economic development.

Options for Council consideration:

Options #1 "The Full Build –Single Treatment Train" financed by Sewer Rate

As noted in a previous report to Council the "Full Build-Single Treatment Train" option does not provide Lambton Shores the capacity it needs to meet anticipated long term needs. In fact Lambton Shores share would be less that it previously has with the existing lagoon system.

It has been proposed that Lambton Shores could, subject to an agreement being worked out with the Municipality of Bluewater get "temporary access" to Bluewater's share of capacity until such time as Bluewater exercises its right to opt back into the project. We as staff have concerns with this approach as it leaves Lambton Shores with an unsecured commitment to capacity to meet its long term needs. It also subjects Lambton Shores to uncertain capital costs when the second "Treatment Train" of the STF is required. It also means that Lambton Shores would not be able to benefit from the grant funding now available for that capital cost.

Option #2 "The Full Build-Double Treatment Train" financed by Sewer Rate

Staff believes that the "Full Build-Double Treatment Train" option is the most financially wise investment for the municipality. It provides and secures the full amount of treatment capacity needed to meet anticipated long term needs and makes optimum use of Federal and Provincial funding. That said our partners only support the "Full Build-Single Treatment Train" option at this time.

Option #3 "The Full Build –Double Treatment Train" financing alternatives

Municipalities have several means of funding their capital undertakings, utility rates being only one; others include the Local Improvement Act *(direct assessment of cost to benefiting property owners),* Deferred Benefit Assessment *(direct charge through utility rates or taxes to property owners with potential future benefit)* and Direct Charge to Taxes *(like The Shores & Legacy Centres, Grand Bend Beach Enhancement etc.).* only in the case of Water Capital is the municipality restricted to a "user pay" utility rate.

I believe that placing the full cost of the proposed project on the shoulders of sewage system users only is too burdensome and that the a fairer approach would be to place the debt cost for the proposed STF on the whole tax base of Lambton Shores. The rationale for this is that the proposed STF provides a wider benefit to the municipality than just sewage treatment for those connected to the system. The proposed STF like the Forest, Arkona and Thedford STF's are a fundamental component of municipal infrastructure and are key to ensuring the future growth and economic viability of our municipality.

Placing the STF debt only on the taxes does not mean that all of the costs associated with sewage treatment should be placed on taxes, all costs associated with the operation *(treatment)* of the sewage facility itself should be borne by those utilizing the facility including lifecycle replacement.

Option #4 Withdraw from this STF Project and pursue Alternative Solutions

If Council is not satisfied with the proposed treatment solution or the costs associated with it, it can withdraw from the project and seek alternative solutions. As noted above there is a strong likelihood that the current grant funding might not be available and that the solution would have to be self funded. If an alternative solution strategy is chosen, Council must keep in mind that that solution would require the participation of the Municipality of South Huron, and an Environmental Assessment and design process etc. to determine what that solution might be. The Municipality would then need to seek (with South Huron's consent) Build Canada funding. The Municipality of Bluewater would not need to be a part of such a solution option. Lambton Shores share of the costs incurred to date, 48.4% of approximately $1,447,656.00, or $715,185.50, would not be eligible for Build Canada funding.

Respectfully submitted,

John Byrne
Chief Administrative Officer

Schedule A

Analysis of
Full Build – Single Treatment Train

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 1
Municipality of Lambton Shores
Wastewater Service
Capital Budget Forecast
Uninflated $

Description	Total 2012 - 2020	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures										
Road Related Replacements	964,234	75,000	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987
Miscellaneous Items										
Arkona STF Replacements	100,000	0	0	0	0	25,000	25,000	25,000	25,000	0
Forest PCP Pump Impellers	24,000	24,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps Impellers (2)	20,000	20,000	0	0	0	0	0	0	0	0
Forest PCP Replacements	100,000	0	0	0	25,000	25,000	25,000	25,000	0	0
Forest PCP Compressor Replacement	20,000	20,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps VFD (1)	10,000	10,000	0	0	0	0	0	0	0	0
Thedford Generator Replacement	50,000	50,000	0	0	0	0	0	0	0	0
Electrical Systems PLC Replacements	50,000	0	50,000	0	0	0	0	0	0	0
SCADA Upgrades	40,000	0	0	40,000	0	0	0	0	0	0
New Systems										
North Sewage Treatment Facility (GBSTP) **	20,062,948	10,031,474	10,031,474	0	0	0	0	0	0	0
SW- Lakeshore Trunk Main	1,600,000	0	0	800,000	800,000	0	0	0	0	0
SW - Subdivision Collection Systems	13,500,000	0	0	0	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000	0
Admin Allocation	94,444	14,444	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Capital Expenditures	36,635,626	10,244,918	10,191,474	953,000	3,641,090	2,869,273	2,872,551	2,875,927	2,854,405	132,987
Funding for North Sewage Treatment Facility										
Provincial	13,670,034	6,687,649	6,982,385	0	0	0	0	0		
Green Municipal Fund (GMF) - Grant	1,000,000	500,000	500,000	0	0	0	0	0		
Pinery Provincial Park - STP	2,023,980	1,011,990	1,011,990	0	0	0	0	0		
South Huron Municipality - STP	1,701,700	850,850	850,850	0	0	0	0	0		
Bluewater - STP	0	0	0	0	0	0	0	0		
Lambton Shores - STP	1,667,234	980,985	686,249	0	0	0	0	0		
Total Funding for North Sewage Treatment Facility	20,062,948	10,031,474	10,031,474	0	0	0	0	0	0	0
Total Other Funding Required	16,572,678	213,444	660,000	10,253,000	12,941,090	12,169,273	12,172,551	12,175,927	2,854,405	132,987

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 2
Municipality of Lambton Shores
Wastewater Service
Capital Budget Forecast
Inflated $

Description	Total 2012 - 2020	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures										
Road Related Replacements	1,073,000	77,000	104,000	109,000	115,000	121,000	127,000	133,000	140,000	147,000
Miscellaneous Items										
Arkona STF Replacements	114,000	0	0	0	0	28,000	28,000	29,000	29,000	0
Forest PCP Pump Impellers	24,000	24,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps Impellers (2)	20,000	20,000	0	0	0	0	0	0	0	0
Forest PCP Replacements	112,000	0	0	0	27,000	28,000	28,000	29,000	0	0
Forest PCP Compressor Replacement	20,000	20,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps VFD (1)	10,000	10,000	0	0	0	0	0	0	0	0
Thedford Generator Replacement	51,000	51,000	0	0	0	0	0	0	0	0
Electrical Systems PLC Replacements	52,000	0	52,000	0	0	0	0	0	0	0
SCADA Upgrades	42,000	0	0	42,000	0	0	0	0	0	0
New Systems										
North Sewage Treatment Facility (GBSTP) **	20,062,948	10,031,474	10,031,474	0	0	0	0	0	0	0
Admin Allocation	104,000	15,000	10,000	11,000	11,000	11,000	11,000	11,000	12,000	12,000
Total Capital Expenditures	38,608,948	10,248,474	10,197,474	1,011,000	3,942,000	3,169,000	3,235,000	3,303,000	3,344,000	159,000
Capital Financing										
Provincial	13,670,034	6,687,649	6,982,385	0	0	0	0	0	0	0
Green Municipal Fund (GMF) - Grant	1,000,000	500,000	500,000	0	0	0	0	0	0	0
Green Municipal Fund (GMF) - Loan	2,287,422	1,601,173	686,249							
Interim Funding Pending Loan Receipt	(620,189)	(620,189)								
Developer/Property Owner Contributions										
Pinery Provincial Park (STP)	2,023,980	1,011,990	1,011,990	0	0	0	0	0	0	0
South Huron (STP)	1,701,700	850,850	850,850	0	0	0	0	0	0	0
Lifecycle Reserve Fund	202,000	202,000	0	0	0	0	0	0	0	0
Wastewater Reserve Fund	1,420,000	15,000	166,000	162,000	153,000	188,000	194,000	202,000	181,000	159,000
Total Capital Financing	38,608,948	10,248,474	10,197,474	1,011,000	3,942,000	3,169,000	3,235,000	3,303,000	3,344,000	159,000

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table
Municipality of Lambton Shores
Wastewater Service
Schedule of Growth Related Debenture Repayments
Inflated $

Debenture Year	Principal (Inflated)	Forecast											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2008	67,720	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393			6,393
2009	1,080,905		102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036
2010	87,973			8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305
2011	13,047				1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232
2012	0					0	0	0	0	0	0	0	0
2013	0						0	0	0	0	0	0	0
2014	0							0	0	0	0	0	0
2015	0								0	0	0	0	0
2016	0									0			0
2017	0												0
2018	0												
2019	0												
2020	0												
Total Annual Debt Charges	**1,249,646**	6,393	108,429	116,733	117,965	117,965	117,965	117,965	117,965	117,965	111,572	111,572	117,965
Financing Rate	4.7%												
Financing Term	15												

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 4
Municipality of Lambton Shores
Wastewater Service
Green Municipal Fund Loan
Inflated $

Debenture Year	Principal (Inflated)	Forecast											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2008	0	0											
2009	0		0	0	0	0	0	0	0	0	0	0	0
2010	0			0	0	0	0	0	0	0	0	0	0
2011	0				0	0	0	0	0	0	0	0	0
2012	1,601,173					101,743	101,743	101,743	101,743	101,743	101,743	101,743	101,743
2013	686,249						43,606	43,606	43,606	43,606	43,606	43,606	43,606
2014	0							0	0	0	0	0	0
2015	0								0	0	0	0	0
2016	0									0	0	0	0
2017	0										0	0	0
2018	0											0	0
2019	0												0
2020	0												
Total Annual Debt Charges	**2,287,422**	0	0	0	0	101,743	145,349	145,349	145,349	145,349	145,349	145,349	145,349
Financing Rate	2.40%												
Financing Term	20												

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 5
Municipality of Lambton Shores
Wastewater Service
Wastewater Reserves/ Reserve Funds Continuity
Inflated $

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	498,690	611,605	791,758	865,444	838,078	815,545	804,695	784,154	750,729	705,462
Transfer from Operating	139,500	164,700	206,400	102,400	99,100	146,200	143,300	139,700	108,600	77,900
Transfer to Capital	50,108	15,000	166,000	162,000	153,000	188,000	194,000	202,000	181,000	159,000
Transfer to Operating										
Closing Balance	588,082	761,305	832,158	805,844	784,178	773,745	753,995	721,854	678,329	624,362
Interest	23,523	30,452	33,286	32,234	31,367	30,950	30,160	28,874	27,133	24,974

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 6
Municipality of Lambton Shores
Wastewater Service
Development Charge and Existing Residents New to the System Fund Continuity
Inflated $

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	102,930	1,166	200,008	340,444	479,620	624,596	765,798	849,504	854,272	863,327
Existing Residents New to System - Proceeds	0	0	0	0	0	58,120	59,280	0	0	0
Development Charge Proceeds	93,191	311,150	252,342	295,729	295,953	278,629	216,752	196,911	200,851	204,859
Transfer to Capital	0	0	0	0	0	0	0	0	0	0
Transfer to Operating	195,000	120,000	125,000	175,000	175,000	225,000	225,000	225,000	225,000	225,000
Closing Balance	1,121	192,316	327,350	461,173	600,573	736,344	816,831	821,415	830,122	843,186
Interest	45	7,693	13,094	18,447	24,023	29,454	32,673	32,857	33,205	33,727

No Growth related funding has been moved out for projects that have taken place in past years (growth related debt charges).

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 7
Municipality of Lambton Shores
Wastewater Service
Wastewater Lifecycle Reserve Fund Continuity
Inflated $

Description	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	337,293	338,513	141,973	147,652	153,558	159,701	166,089	172,732	179,642	186,827
Transfer from Operating	23,200	0	0	0	0	0	0	0	0	0
Transfer to Capital	35,000	202,000								
Transfer to Operating	0	0	0	0	0	0	0			0
Closing Balance	325,493	136,513	141,973	147,652	153,558	159,701	166,089	172,732	179,642	186,827
Interest	13,020	5,461	5,679	5,906	6,142	6,388	6,644	6,909	7,186	7,473

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 8
Municipality of Lambton Shores
Wastewater Service
Operating Budget Forecast
Inflated $

Description	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures									
Operating Costs									
Salary, Wages, Ben & Oh Exp	2,664	2,720	2,770	2,830	2,890	2,950	3,010	3,070	3,130
Contracted Services	9,270	9,460	9,650	9,840	10,040	10,240	10,440	10,650	10,860
Omi - Contracted Services	758,880	781,600	805,048	829,199	854,075	879,697	906,088	933,271	961,269
Operating Costs	4,973	5,070	5,170	5,270	5,380	5,490	5,600	5,710	5,820
Plant Maintenance	3,319	3,390	223,489	227,960	232,520	237,170	241,910	246,750	251,690
Lagoon Maintenance	27,597	28,150							
General Mtc & Repair	49,679	50,670	51,680	52,710	53,760	54,840	55,940	57,060	58,200
GB-STP Lagoon	20,749								
Realty Tax	25,795	26,310	26,840	27,380	27,930	28,490	29,060	29,640	30,230
Vehicle & Equipment	2,487	2,540	2,590	2,640	2,690	2,740	2,790	2,850	2,910
Administration Allocation	252,506	257,560	262,710	267,960	273,320	278,790	284,370	290,060	295,860
Insurance	28,988	29,570	30,160	30,760	31,380	32,010	32,650	33,300	33,970
Sub Total Operating	1,186,907	1,197,040	1,420,107	1,456,549	1,493,985	1,532,417	1,571,858	1,612,361	1,653,939
Capital-Related									
Existing Debt :									
Ltd - Pri Payment - Non-Growth Related	57,422	44,594	0	0	0	0	0	0	0
Ltd - Int. Payment - Non-Growth Related	4,315	1,085	0	0	0	0	0	0	0
Green Municipal Fund Loan	0	101,743	145,349	145,349	145,349	145,349	145,349	145,349	145,349
New Growth Related Debt	117,965	117,965	117,965	117,965	117,965	117,965	111,572	111,572	117,965
Transfer to Reserves and Reserve Funds	164,700	206,400	102,400	99,100	146,200	143,300	139,700	108,600	77,900
Sub Total Capital Related	344,402	471,787	365,714	362,414	409,514	406,614	396,621	365,521	341,214
Total Expenditures	1,531,309	1,668,827	1,785,821	1,818,963	1,903,499	1,939,031	1,968,479	1,977,882	1,995,153
Revenues									
Base Charge-No Zone 3 & 4	445,250	461,620	477,170	493,150	510,220	526,960	542,310	553,000	566,090
Property Owners Share	75,039								
Wastewater Billing to South Huron	49,173	50,648							
Contributions from Development Charges Reserve Fund	120,000	125,000	175,000	175,000	225,000	225,000	225,000	225,000	225,000
Total Operating Revenue	689,462	637,268	652,170	668,150	735,220	751,960	767,310	778,000	791,090
Wastewater Billing Recovery - Operating	841,847	1,031,559	1,133,651	1,150,813	1,168,279	1,187,071	1,201,169	1,199,882	1,204,063
Lifecycle Reserve Contribution ($)									
Wastewater Billing Recovery - Total	**841,847**	**1,031,559**	**1,133,651**	**1,150,813**	**1,168,279**	**1,187,071**	**1,201,169**	**1,199,882**	**1,204,063**

Scenario 1 - Jan 25 - Full Build - Single Train System - Without Bluewater, Without Zones 3 and 4, Adjusted Pinery Allocation (deferred lifecycle) - Table 9

Municipality of Lambton Shores
Wastewater Service
Wastewater Rate Forecast
Inflated $

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Wastewater Billing Recovery	$841,847	$1,031,559	$1,133,651	$1,150,813	$1,168,279	$1,187,071	$1,201,169	$1,199,882	$1,204,063
Total Consumption (m^3)	470,447	479,987	487,727	495,647	504,107	511,847	517,247	517,247	519,407
Constant Rate - Per Calculation Above	**$1.79**	**$2.15**	**$2.32**	**$2.32**	**$2.32**	**$2.32**	**$2.32**	**$2.32**	**$2.32**
Original Project Scope (2009 Update)	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65
Base Rate (2009 Update)	$11.72	$11.95	$12.19	$12.43	$12.68	$12.93	$13.19	$13.45	$13.72
Average Annual Bill - 2009 Update (200 m³)	**$471**	**$473**	**$476**	**$479**	**$482**	**$485**	**$488**	**$491**	**$495**
2011 Calculation	$1.79	$2.15	$2.32	$2.32	$2.32	$2.32	$2.32	$2.32	$2.32
Base Rate (2011 Calculation)	$11.72	$11.95	$12.19	$12.43	$12.68	$12.93	$13.19	$13.45	$13.72
Average Annual Bill - 2011 Calculation (200 m³)	**$499**	**$573**	**$610**	**$613**	**$616**	**$619**	**$622**	**$625**	**$629**
Increase of Constant Rate / m³	$0.14	$0.50	$0.67	$0.67	$0.67	$0.67	$0.67	$0.67	$0.67
Base Rate (no change)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Increase in Average Annual Bill - (200 m³)	**$28**	**$100**	**$134**	**$134**	**$134**	**$134**	**$134**	**$134**	**$134**
Portion of Increase in Bill related to Bluewater	**$0.00**	**$16.00**	**$30.00**	**$30.00**	**$30.00**	**$30.00**	**$30.00**	**$30.00**	**$30.00**

Schedule B

Analysis of
Full Build – Double Treatment Train

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 1
Municipality of Lambton Shores
Wastewater Service
Capital Budget Forecast
Uninflated $

Description	Total 2012 - 2020	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures										
Road Related Replacements	964,234	75,000	100,000	103,000	106,090	109,273	112,551	115,927	119,405	122,987
Miscellaneous Items										
Arkona STF Replacements	100,000	0	0	0	0	25,000	25,000	25,000	25,000	0
Forest PCP Pump Impellers	24,000	24,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps Impellers (2)	20,000	20,000	0	0	0	0	0	0	0	0
Forest PCP Replacements	100,000	0	0	0	25,000	25,000	25,000	25,000	0	0
Forest PCP Compressor Replacement	20,000	20,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps VFD (1)	10,000	10,000	0	0	0	0	0	0	0	0
Thedford Generator Replacement	50,000	50,000	0	0	0	0	0	0	0	0
Electrical Systems PLC Replacements	50,000	0	50,000	0	0	0	0	0	0	0
SCADA Upgrades	40,000	0	0	40,000	0	0	0	0	0	0
New Systems										
North Sewage Treatment Facility (GBSTP) **	25,463,969	12,731,984	12,731,984	0	0	0	0	0	0	0
SW- Lakeshore Trunk Main	1,600,000	0	0	800,000	800,000	0	0	0	0	0
SW - Subdivision Collection Systems	13,500,000	0	0	0	2,700,000	2,700,000	2,700,000	2,700,000	2,700,000	0
Admin Allocation	94,444	14,444	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Total Capital Expenditures	42,036,647	12,945,429	12,891,984	953,000	3,641,090	2,869,273	2,872,551	2,875,927	2,854,405	132,987
Funding for North Sewage Treatment Facility										
Provincial	14,209,631	8,487,990	5,721,642	0	0	0	0	0		
Green Municipal Fund (GMF) - Grant	1,000,000	500,000	500,000	0	0	0	0	0		
Pinery Provincial Park - STP	2,568,403	1,284,201	1,284,201	0	0	0	0	0		
South Huron Municipality - STP	1,701,700	850,850	850,850	0	0	0	0	0		
Bluewater - STP	0	0	0	0	0	0	0	0		
Lambton Shores - STP	5,984,234	1,608,943	4,375,291	0	0	0	0	0		
Total Funding for North Sewage Treatment Facility	25,463,969	12,731,984	12,731,984	0	0	0	0	0	0	0
Total Other Funding Required	16,572,678	213,444	660,000	10,253,000	12,941,090	12,169,273	12,172,551	12,175,927	2,854,405	132,987

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 2
Municipality of Lambton Shores
Wastewater Service
Capital Budget Forecast
Inflated $

Description	Total 2012 - 2020	Forecast								
		2012	2013	2014	2015	2016	2017	2018	2019	2020
Capital Expenditures										
Road Related Replacements	1,073,000	77,000	104,000	109,000	115,000	121,000	127,000	133,000	140,000	147,000
Miscellaneous Items										
Arkona STF Replacements	114,000	0	0	0	0	28,000	28,000	29,000	29,000	0
Forest PCP Pump Impellers	24,000	24,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps Impellers (2)	20,000	20,000	0	0	0	0	0	0	0	0
Forest PCP Replacements	112,000	0	0	0	27,000	28,000	28,000	29,000	0	0
Forest PCP Compressor Replacement	20,000	20,000	0	0	0	0	0	0	0	0
Forest Main Lift Pumps VFD (1)	10,000	10,000	0	0	0	0	0	0	0	0
Thedford Generator Replacement	51,000	51,000	0	0	0	0	0	0	0	0
Electrical Systems PLC Replacements	52,000	0	52,000	0	0	0	0	0	0	0
SCADA Upgrades	42,000	0	0	42,000	0	0	0	0	0	0
New Systems										
North Sewage Treatment Facility (GBSTP) **	25,463,969	12,731,984	12,731,984	0	0	0	0	0	0	0
Admin Allocation	104,000	15,000	10,000	11,000	11,000	11,000	11,000	11,000	12,000	12,000
Total Capital Expenditures	44,009,969	12,948,984	12,897,984	1,011,000	3,942,000	3,169,000	3,235,000	3,303,000	3,344,000	159,000
Capital Financing										
Provincial	14,209,631	8,487,990	5,721,642	0	0	0	0	0	0	0
Green Municipal Fund (GMF) - Grant	1,000,000	500,000	500,000	0	0	0	0	0	0	0
Green Municipal Fund (GMF) - Loan	6,604,423	2,229,132	4,375,291							
Interim Funding Pending Loan Receipt	(620,189)	(620,189)								
Developer/Property Owner Contributions										
Pinery Provincial Park (STP)	2,568,403	1,284,201	1,284,201	0	0	0	0	0	0	0
South Huron (STP)	1,701,700	850,850	850,850	0	0	0	0	0	0	0
Lifecycle Reserve Fund	202,000	202,000	0	0	0	0	0	0	0	0
Wastewater Reserve Fund	1,420,000	15,000	166,000	162,000	153,000	188,000	194,000	202,000	181,000	159,000
Total Capital Financing	44,009,969	12,948,984	12,897,984	1,011,000	3,942,000	3,169,000	3,235,000	3,303,000	3,344,000	159,000

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table :
Municipality of Lambton Shores
Wastewater Service
Schedule of Growth Related Debenture Repayments
Inflated $

Debenture Year	Principal (Inflated)	Forecast											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2008	67,720	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393			6,393
2009	1,080,905		102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036	102,036
2010	87,973			8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305	8,305
2011	13,047				1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232	1,232
2012	0					0	0	0	0	0	0	0	0
2013	0						0	0	0	0	0	0	0
2014	0							0	0	0	0	0	0
2015	0								0	0	0	0	0
2016	0									0			0
2017	0												0
2018	0												
2019	0												
2020	0												
Total Annual Debt Charges	**1,249,646**	6,393	108,429	116,733	117,965	117,965	117,965	117,965	117,965	117,965	111,572	111,572	117,965
Financing Rate	4.7%												
Financing Term	15												

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 4
Municipality of Lambton Shores
Wastewater Service
Green Municipal Fund Loan
Inflated $

Debenture Year	Principal (Inflated)	Forecast											
		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
2008	0	0											
2009	0		0	0	0	0	0	0	0	0	0	0	0
2010	0			0	0	0	0	0	0	0	0	0	0
2011	0				0	0	0	0	0	0	0	0	0
2012	2,229,132					141,645	141,645	141,645	141,645	141,645	141,645	141,645	141,645
2013	4,375,291						278,018	278,018	278,018	278,018	278,018	278,018	278,018
2014	0							0	0	0	0	0	0
2015	0								0	0	0	0	0
2016	0									0	0	0	0
2017	0										0	0	0
2018	0											0	0
2019	0												0
2020	0												
Total Annual Debt Charges	**6,604,423**	0	0	0	0	141,645	419,663	419,663	419,663	419,663	419,663	419,663	419,663
Financing Rate	2.40%												
Financing Term	20												

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 5
Municipality of Lambton Shores
Wastewater Service
Wastewater Reserves/ Reserve Funds Continuity
Inflated $

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	695,520	336,067	349,510	498,690	611,605	791,758	865,444	822,894	789,457	777,564	755,938	726,688	685,867
Transfer from Operating	209,300	27,175	130,000	139,500	164,700	206,400	87,800	89,200	146,200	143,300	144,800	113,800	83,100
Transfer to Capital	85,990	27,175	0	50,108	15,000	166,000	162,000	153,000	188,000	194,000	202,000	181,000	159,000
Transfer to Operating	0	0											
Closing Balance	504,820	336,067	479,510	588,082	761,305	832,158	791,244	759,094	747,657	726,864	698,738	659,488	609,967
Interest	20,193	13,443	19,180	23,523	30,452	33,286	31,650	30,364	29,906	29,075	27,950	26,380	24,399

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 6
Municipality of Lambton Shores
Wastewater Service
Development Charge and Existing Residents New to the System Fund Continuity
Inflated $

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	119,206	211,074	188,250	102,930	1,166	200,008	340,444	479,620	624,596	765,798	849,504	854,272	863,327
Existing Residents New to System - Proceeds	0	0	0	0	0	0	0	0	58,120	59,280	0	0	0
Development Charge Proceeds	200,662	119,936	70,721	93,191	311,150	252,342	295,729	295,953	278,629	216,752	196,911	200,851	204,859
Transfer to Capital	100,000	0	0	0	0	0	0	0	0	0	0	0	0
Transfer to Operating	0	150,000	160,000	195,000	120,000	125,000	175,000	175,000	225,000	225,000	225,000	225,000	225,000
Closing Balance	219,868	181,010	98,972	1,121	192,316	327,350	461,173	600,573	736,344	816,831	821,415	830,122	843,186
Interest	8,795	7,240	3,959	45	7,693	13,094	18,447	24,023	29,454	32,673	32,857	33,205	33,727

No Growth related funding has been moved out for projects that have taken place in past years (growth related debt charges).

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 7
Municipality of Lambton Shores
Wastewater Service
Wastewater Lifecycle Reserve Fund Continuity
Inflated $

Description	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Opening Balance	94,931	217,014	267,808	337,293	338,513	141,973	147,652	153,558	159,701	166,089	172,732	179,642	186,827
Transfer from Operating	100,000	130,000	97,200	23,200	0	0	0	0	0	0	0	0	0
Transfer to Capital	130,000	89,506	40,687	35,000	202,000								
Transfer to Operating	0	0	0	0	0	0	0	0	0	0			0
Closing Balance	117,931	257,507	324,320	325,493	136,513	141,973	147,652	153,558	159,701	166,089	172,732	179,642	186,827
Interest	4,717	10,300	12,973	13,020	5,461	5,679	5,906	6,142	6,388	6,644	6,909	7,186	7,473

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 8

Municipality of Lambton Shores
Wastewater Service
Operating Budget Forecast
Inflated $

Description	Forecast								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Expenditures									
Operating Costs									
Salary, Wages, Ben & Oh Exp	2,664	2,720	2,770	2,830	2,890	2,950	3,010	3,070	3,130
Contracted Services	9,270	9,460	9,650	9,840	10,040	10,240	10,440	10,650	10,860
Omi - Contracted Services	758,880	781,600	805,048	829,199	854,075	879,697	906,088	933,271	961,269
Operating Costs	4,973	5,070	5,170	5,270	5,380	5,490	5,600	5,710	5,820
Plant Maintenance	3,319	3,390	223,489	227,960	232,520	237,170	241,910	246,750	251,690
Lagoon Maintenance	27,597	28,150							
General Mtc & Repair	49,679	50,670	51,680	52,710	53,760	54,840	55,940	57,060	58,200
GB-STP Lagoon	20,749								
Realty Tax	25,795	26,310	26,840	27,380	27,930	28,490	29,060	29,640	30,230
Vehicle & Equipment	2,487	2,540	2,590	2,640	2,690	2,740	2,790	2,850	2,910
Administration Allocation	252,506	257,560	262,710	267,960	273,320	278,790	284,370	290,060	295,860
Insurance	28,988	29,570	30,160	30,760	31,380	32,010	32,650	33,300	33,970
Sub Total Operating	1,186,907	1,197,040	1,420,107	1,456,549	1,493,985	1,532,417	1,571,858	1,612,361	1,653,939
Capital-Related									
Existing Debt :									
Ltd - Pri Payment - Non-Growth Related	57,422	44,594	0	0	0	0	0	0	0
Ltd - Int. Payment - Non-Growth Related	4,315	1,085	0	0	0	0	0	0	0
Green Municipal Fund Loan	0	141,645	419,663	419,663	419,663	419,663	419,663	419,663	419,663
New Growth Related Debt	117,965	117,965	117,965	117,965	117,965	117,965	111,572	111,572	117,965
Transfer to Reserves and Reserve Funds	164,700	206,400	87,800	89,200	146,200	143,300	144,800	113,800	83,100
Sub Total Capital Related	344,402	511,689	625,428	626,828	683,828	680,928	676,035	645,035	620,728
Total Expenditures	1,531,309	1,708,729	2,045,535	2,083,377	2,177,813	2,213,345	2,247,893	2,257,396	2,274,667
Revenues									
Base Charge-No Zone 3 & 4	445,250	461,620	477,170	493,150	510,220	526,960	542,310	553,000	566,090
Property Owners Share	75,039								
Wastewater Billing to South Huron	49,173	50,648							
Contributions from Development Charges Reserve Fund	120,000	125,000	175,000	175,000	225,000	225,000	225,000	225,000	225,000
Total Operating Revenue	689,462	637,268	652,170	668,150	735,220	751,960	767,310	778,000	791,090
Wastewater Billing Recovery - Operating	841,847	1,071,461	1,393,365	1,415,227	1,442,593	1,461,385	1,480,583	1,479,396	1,483,577
Lifecycle Reserve Contribution ($)									
Wastewater Billing Recovery - Total	**841,847**	**1,071,461**	**1,393,365**	**1,415,227**	**1,442,593**	**1,461,385**	**1,480,583**	**1,479,396**	**1,483,577**

Scenario 2 - Jan 25 - Full Build - Double Train - w/o Bluewater, SH Single, Without Zones 3 and 4, (deferred lifecycle) - Table 9

Municipality of Lambton Shores

Wastewater Service

Wastewater Rate Forecast

Inflated $

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Wastewater Billing Recovery	$841,847	$1,071,461	$1,393,365	$1,415,227	$1,442,593	$1,461,385	$1,480,583	$1,479,396	$1,483,577
Total Consumption (m^3)	470,447	479,987	487,727	495,647	504,107	511,847	517,247	517,247	519,407
Constant Rate - Per Calculation Above	**$1.79**	**$2.23**	**$2.86**	**$2.86**	**$2.86**	**$2.86**	**$2.86**	**$2.86**	**$2.86**
Original Project Scope (2009 Update)	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65
Base Rate (2009 Update)	$11.72	$11.95	$12.19	$12.43	$12.68	$12.93	$13.19	$13.45	$13.72
Average Annual Bill - 2009 Update (200 m^3)	**$471**	**$473**	**$476**	**$479**	**$482**	**$485**	**$488**	**$491**	**$495**
2011 Calculation	$1.79	$2.23	$2.86	$2.86	$2.86	$2.86	$2.86	$2.86	$2.86
Base Rate (2011 Calculation)	$11.72	$11.95	$12.19	$12.43	$12.68	$12.93	$13.19	$13.45	$13.72
Average Annual Bill - 2011 Calculation (200 m^3)	**$499**	**$589**	**$718**	**$721**	**$724**	**$727**	**$730**	**$733**	**$737**
Increase of Constant Rate / m^3	$0.14	$0.58	$1.21	$1.21	$1.21	$1.21	$1.21	$1.21	$1.21
Base Rate (no change)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Increase in Average Annual Bill - (200 m^3)	**$28**	**$116**	**$242**	**$242**	**$242**	**$242**	**$242**	**$242**	**$242**
Portion of Increase in Bill related to Bluewater	**$0.00**	**$30.00**	**$56.00**	**$56.00**	**$56.00**	**$56.00**	**$56.00**	**$56.00**	**$56.00**