



Seguin Township Report to Council

Prepared for: Council

Department: Waste Department

Agenda Date: March 6, 2017

Report No: PW-WD-2017-002

Subject: Waste and Recycling Management, 2016 Year End Report

Recommendation:

THAT the Council of the Township of Seguin receives the following report for information.

Background:

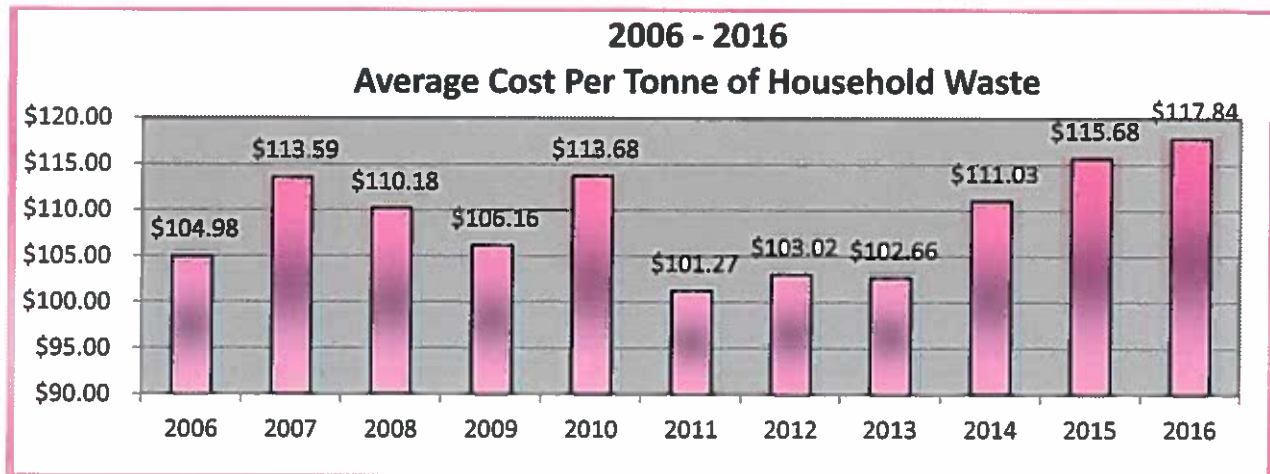
The purpose of the report is to update Council on Waste and Recycling Management activities including statistics for 2016.

Analysis and Discussion

1. HOUSEHOLD WASTE STATISTICS (January to December)



The 2016 household waste data shows a 10% increase in tonnage over 2015. This increase was also evident in our own landfill. There appears to be an increased volume of users trending. No loads were classified as contaminated by the receiving landfill sites again in 2016.



Year	Cost per tonnes	Percentage change
2010	\$ 113.68	
2011	\$ 101.27	-10.9%
2012	\$ 103.02	+1.7%
2013	\$ 102.66	-0.4%
2014	\$ 111.12	+9.2%
2015	\$ 115.68	+4.0
2016	\$ 117.84	+1.9%

The 2016 cost per tonne rose to \$117.84 per tonne. This is primarily due to COLA increases from both our destination landfill sites. Ongoing emphasis on cost controls and efficient operation will continue in 2017.

The McDougall landfill allows staff the ability to quickly clean out transfer sites on Fridays and Mondays before and after busy weekends. This is a major positive to the operations. Even if the waste trailers are not packed to capacity, a trip to empty all the bins in preparation for a weekend ensures staff do not encounter Code RED conditions.

RECYCLING STATISTICS (January to December)



Please note that in 2016, recycling tonnage collected was proportionately higher than 2015 when compared to waste tonnages.



Annual Recycling cost per tonne Summary

Year	Tonnes	Lifts	Cost per Tonne	Change%
2010	540	499	\$ 285.73	
2011	562	492	\$ 281.15	-1.60%
2012	566.1	538	\$ 310.29	10.04%
2013	576.78	564	\$ 268.37	-13.51%
2014	573.53	507	\$ 250.41	-6.70%
2015	564.03	266	\$ 135.00	-52.4%
2016	593	318	156.98	16.2

Recycling tonnage by site 2016			
Site	total tonnage	Average tonnage per pick up	Count
Humphrey Site	113.24	3.77	30
Turtle Lake Site	78.18	3.72	21
Christie Landfill	81.94	3.56	23
Brooks Site	165.57	4.36	38
Bon Echo	23.8	0.7	34
Stanley House	62.76	0.77	82
Airport Site	67.19	0.75	90
TOTAL	593	1.86	318

The compacting recycling bins have been very successful. The average compacted tonnage per pickup is 3.94 tonnes vs. uncompact at 0.73 or a consistent 5.4 times increase in compacted loads. This is well within the expected compaction results when the project was initiated.

In 2016, there have been more pickups and hence a slightly lower tonnes per lift. Instead of waiting until the bins are absolutely full, staff have been calling for pickups somewhat earlier in order to have bins emptied before a summer weekend to prevent overflowing during premium time. The biggest increase in pickups has come from the uncompact bins, where staff have placed additional units to prevent a weekend overflow. In addition, bins have been picked up earlier to prevent overflow which attracts bears and other animals. Staff feels this method of operation justifies the small increase in operating costs.

Breakdown of Recycled Commodities collected

<u>Material</u>	2016 Breakdown of Materials Collected	2015 Breakdown of Commodity Collected Tonnes	Increase/ decrease in commodity over previous year	
Total	592.68	564.0		5%
Fibres	335.16	325.3	-3.04%	
PET	37.93	32.4	17.16%	
Mixed Plastics	22.76	19.7	-15.29%	
Film	32.06	24.6	30.09%	
HDPE	13.04	12.9	-0.95%	
Aluminum	12.45	13.8	-9.56%	
Steel	26.49	24.4	8.73%	
Clear Glass	21.57	24.7	-12.67%	
Colour Glass	14.52	18.6	-21.75%	
Residue	76.69	67.7	13.31%	

Review of the recycling commodity breakdown shows continued changes in mix of materials. This year, PET, film and steel increased, which reflects ongoing changes in packaging methods. Glass, costly aluminum and mixed plastics have dropped. Glass is too heavy and difficult to recycle, aluminum is being diverted to charities and cans are getting thinner, and mixed plastics are being less and less recycled, as the new legislation of packaging producer responsibility starts to kick in. This is evident in the increase in residual plastics shown in the chart above.

There will be an ongoing decrease of material types that will be accepted from Blue Box recycling, as producers rationalize the lowest cost and easiest to recycle materials in the future. The trend appears to be towards the simplest, lightest and generic materials for packaging materials.

YEAR	DIVERSION RATE
2006	29%
2007	22%
2008	19%
2009	24%
2010	20%
2011	25 %
2012	20%
2013	26%
2014	21%
2015	26%

Diversion rate is essentially a comparison of the household waste disposal tonnage and the recycled material tonnage sent to market or diverted to reuse, calculated by WDO (Waste Diversion Ontario). This published ratio is always one year behind, so 2015 is the current value. This reflects on staff efforts to educate the public in recycling, and provide opportunities to encourage recycling.

2015 showed an increase in diversion rate to 26%. This is directly attributed to the fact that in 2015, a large amount of scrap metal was sold (281 metric tonnes!). Staff held onto the material until late 2016, when a better price was available. The fluctuation of diversion rates since 2010 are directly correlated to the amount of scrap metal sold. This is because scrap metal is such a large tonnage.

2. REVENUE

Landfill revenue generated by the daily receipts has increased in 2016, which is directly related to an observed increase use of landfill.

YEAR	LANDFILL REVENUE
2005	\$25,730
2006	\$37,887
2007	\$43,647
2008	\$46,880
2009	\$55,867
2010	\$50,460
2011	\$39,210
2012	\$38,885
2013	\$35,361
2014	\$41,420
2015	\$45,160
2016	\$54,260

Diversion Programs

Scrap Metal

Scrap metal continues to be collected free of charge at both the Seguin Landfill and the summer Free Events. We observe and monitor the commodity patterns peaks and lows and the intent is to capitalize on high scrap values. In 2016, staff waited the entire year until late November and sold it for \$135 per metric tonne plus tax. The price all summer was \$90 and lower.

Year	Scrap metal revenue
2005	\$ -
2006	\$ -
2007	\$7,998
2008	\$37,607
2009	\$19,678
2010	\$19,777
2011	\$67,806
2012	\$11,095
2013	\$46,385
2014	\$16,220
2015	\$28,843
2016	\$42,928

WDO (Waste Diversion Ontario) Programs

YEAR	LANDFILL REVENUE	SCRAP METAL REVENUE	BLUE BOX	ELECTRONICS	HAZARDOUS & SPECIAL WASTE	USED TIRES	Annual total
2005	\$25,730	\$0	\$40,665	n/a	n/a	n/a	\$66,395
2006	\$37,887	\$0	\$44,631	n/a	n/a	n/a	\$82,518
2007	\$43,647	\$7,998	\$61,649	n/a	n/a	n/a	\$113,294
2008	\$46,456	\$37,607	\$59,693	n/a	n/a	n/a	\$143,756
2009	\$56,198	\$19,678	\$73,818	\$2,964	\$10,137	n/a	\$162,795
2010	\$26,145	\$19,777	\$92,892	\$4,351	\$3,307	\$1,118	\$147,590
2011	\$39,190	\$67,806	\$77,182	\$3,875		\$1,278	\$189,331
2012	\$38,885	\$11,095	\$82,195	\$4,100	\$7,315	\$689	\$144,279
2013	\$35,361	\$46,385	\$92,779	\$5,002	\$10,172	\$460	\$190,159
2014	\$41,420	\$16,220	\$87,540	\$3,826	\$5,760	\$640	\$155,406
2015	\$45,930	\$28,883	\$100,176	\$5,139	\$2,300	\$159	\$182,547
2016	\$54,260.40	\$42,928.79	\$107,772.00	\$1,710.00	\$3,456.16	\$380.98	\$210,508.33

Please note that the year to year variances primarily relate to scrap metal sales and recycled material market prices in a calendar year.

Ontario Electronic Stewardship Program

In 2016, 11.4 tonnes of electronics were diverted from landfill, from 2009 to present, the Township has diverted 177.73 tonnes of electronics from landfill and generated \$30,967 in the process.

Ontario Tire Stewardship Program

In 2016, 433 tires were reclaimed. From 2009 to present, the Township has diverted approximately 6077 tires and generated \$4,720 in the process. Tires are now widely accepted for recycling, so most tires are recycled at the selling point.

Hazardous Waste and Special Waste

Hazardous waste costs came in at \$42,000 for 2016, \$7,000 over 2015 costs. Hazardous waste continues to be a hot button issue in the province. The focus now is Lifecycle responsibility for manufacturers, resulting in increases in recycling costs.

Currently, Seguin residents must use the McFarlane St. Depot in Parry Sound to recycle hazardous materials from mid-April to mid-October. There is no collection point in this district from mid-October to mid-April. All the local municipalities have the same arrangement. Parry Sound charges according to number of drops made per municipality and then they invoice the township. Once the materials have been received by Stewardship Ontario, they send a cheque to Parry Sound, which in turn, redistributes these payments to the townships.

When hazardous waste is collected from illegal dumping, it is sent to our temporary storage site at the Christie Landfill, and when necessary is picked up by our contractor Brendar Environmental. Staff from local municipalities had meetings with the Town of Parry Sound to extend the Hazardous waste to a year round service.

3. CONTRACT RENEWALS

Currently Seguin Township holds a number of contracts for the management of waste and recycling:

CONTRACT NAME	CONTRACTOR	CONTRACT END DATE
Recycling transportation and sorting	Progressive Canada (Formerly BFI, MCS,)	December 31, 2017
Waste Disposal	Niagara Waste Systems Limited (Walker Industries)	Negotiated extension to Dec 31/2026 with only CPI index increases annually
	McDougall Township Landfill	New contract negotiated in March 2015. Extends to 2026 and CPI index only annual increases.
Scrap Metal pickup and disposal	All Ontario Recycling, Huntsville Adams Bros Cons, Parry Sound (depending on best price)	No specific end date
Freon Removal	Shane Warder	No specific end date
Hazardous Waste	Brendar Environmental	No specific end date

4. FREE DISPOSAL

This past summer, residents were offered two options for free dumping of bulky items.

2016 Free dumping summary at Seguin Landfill

Source	2015 visits	2016 visits	Brush	Brown goods	Scrap metal	Tires	Electronics
Christie	624	646	167	429	362	17	21
Foley	199	172	58	72	25	12	4
Humphrey	239	271	59	46	6	9	12
Monteith	114	134	3	103	204	14	26
Rosseau	67	73	12	47	5	15	7
Unknown	9	12	0	2	0	0	0
	1252	1308	299	699	602	67	70

Notes: Unknown - means the source location of the person depositing the goods, did not get recorded
The numbers shown in each row and column represent 'loads or partial loads' of each item

This first chart is a summary of the the Free Dumping at the Seguin Landfill. Since 2007, this has been offered from Canada Day weekend until Labour Day weekend. In 2016 the dates were from June 23, 2016 – September 11, 2016. The total car count to the landfill in 2016 was 1308, an increase from 2015.

2016 Free dumping at transfer site events

Date	Site	2015	2016	Items				
		Visits	Visits	Brush	Brown goods	Scrap Metal	Tires	Electronics
21-May	Brooks	217	200	15	179	142	85	10
11-Jun	Hump	136	85	4	62	48	2	4
23-Jul	Brooks	163	141	8	109	91	7	15
30-Jul	Airport	95	76	4	47	41	3	5
20-Aug	Stanley	54	34	0	24	23	0	2
3-Sep	Brooks	161	167	5	131	77	17	6
	total	826	703	36	552	422	114	42

This second chart summarizes the traffic at the Free Events which continued at select Transfer Stations. Six (6) locations were selected through the months of May – August. The total car count in 2016 was 703, a 10% decrease from 2015. In 2016, six (6) will be scheduled again, at the same locations, some on different weekends dates with historically extreme temperatures.

Revenue generated in 2016 by holding Free Events was estimated as follows.

Site	Tires	Electronics	Metal	Total
Brooks - 1	\$74.80	\$146.89	\$600.00	\$821.69
Humphrey	\$1.76	\$24.05	\$200.00	\$225.81
Brooks - 2	\$6.16	\$146.89	\$400.00	\$553.05
Airport	\$2.64	\$83.99	\$200.00	\$286.63
Stanley	\$0.00	\$84.18	\$200.00	\$284.18
Brooks - 3	\$14.96	\$168.17	\$500.00	\$683.13
Total	\$100.32	\$654.17	\$2,100.00	\$2,854.49

Conclusion

- The Waste Management by Seguin staff in 2016 was once again a success. No major technical problems or service delivery issues to report.
- Staff from Seguin and Parry Sound met with North Bay hazardous waste operations people to learn best practices.
- The landfill arrangement with McDougall has worked out very well for operations.
- Compacting recycling bins continue to be a great success in both service deliveries to the public, but also for ease of site maintenance and pest control.
- Landfill hours were extended by one day per week as per Council resolution. This has proven to be very successful providing more convenience to our ratepayers and also in attracting more waste to the landfill. The landfill attendant position has also worked out well for ratepayers.
- The Stanley House transfer site upgrade was started in late August 2016, but inclement weather in early September and a difficult rock shelf postponed the completion of this site until the summer of 2017.
- In 2016, as an annual tradition, there were 6 special event days at Brooks (3), Humphrey (1), Airport (1), and Stanley House (1) were held. Although these events remain popular, less people are coming out because the events are usually very hot. Residents also have more opportunities to visit the landfill with the extended hours.
- In 2016, staff completed the final phase of reshaping the landfill platform before capping off the north side of the landfill in the summer of 2017. The north limit of the landfill is close to final grade, ready for capping with ditching material that has been saved for this purpose. Brush and construction lumber are separately processed and will also be used for landfill cover, as per the Certificate of Approval.

- Once again, the 2016 Annual Performance Monitoring and Site Evaluation report prepared for Seguin by Azimuth Environmental for the MOECC has been received, and indicates no changes to the overall condition of the landfill, and "no significant adverse environmental impact has been detected".
- The remaining capacity for the Landfill site is approx. 17,000 cubic meters, (waste and cover material), which correlates to a lifespan of approximately 4-11 years based upon an estimated average annual fill rate of 1500-4000 cubic meters". Staff prepared a Council report which was accepted by Council to begin the process of landfill expansion by another 20,000 cubic meters.
- In 2016, staff again advertised to recycle boat shrinkwrap. This was a very successful effort, which received cooperation from local marinas, and local residents. Over 350 bundles of shrinkwrap were collected by a plastics company who recycled the plastic. All this was diverted from the landfill. This is another great diversion project success that has become an annual event.

2017 Objectives

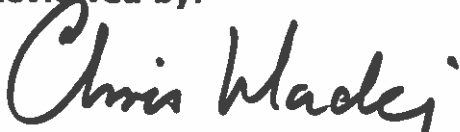
- The Stanley House Transfer site will be completed and in operation in the summer of 2017.
- The Humphrey transfer site design and MTO approvals will be submitted in 2017, and work can begin subject to approvals.
- Council has approved to commence plans to expand the Seguin landfill site to extend the life of the asset by 50%.
- Staff have agreed to install textile recycling bins at all transfer sites in 2017. These bins are supplied and managed by the Canadian Diabetes Association. These will be available in the spring of 2017.
- Staff have discussed Hazardous Waste costs and improvements with other area municipalities in late 2016. Parry Sound did have a staff proposal to extend hazardous waste collection year round at the McFarlane transfer site, but this proposal was not approved by Parry Sound Council. Staff will continue to work with Parry Sound and neighbouring municipalities to continue to investigate options to stabilize hazardous waste costs.
- Staff will continue to offer the Free Waste events at Brooks, Airport, Humphrey and Stanley House and Free Dump days at the Seguin Landfill.
- In 2017 the landfill north face will be covered with earth material to keep in compliance with the Landfill C of A. Trees will also be removed at the lower eastern boundary to accommodate anticipated landfill volume.

Respectfully submitted by:



Peter Koppisch – Director of Public Works

Reviewed by:



Chris Madej – Chief Administrative Officer