

## SOLID WASTE MANAGEMENT FUND

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The Solid Waste Facility (SWF) is responsible for the disposal of waste in accordance with regulations and facilitates recycling.

#### 2014 Highlights

Public Works & Engineering, in conjunction with Communications & Economic Development, and Ecology North, completed the first phase of the city-wide composting program. This included:

- Design and construction of the compost pad and collection pond at the Solid Waste Facility
- Selection of the neighbourhood phase-in schedule for the entire City
- Specification and purchase of green (compost) and black (garbage) carts and small “kitchen catcher” containers for the first neighbourhood, and black bins for the remainder of the City. The black carts were implemented city-wide due to Kavanaugh Waste Removal Services’ collection logistics and equipment modifications
- Information packages were included with all green and black carts, with information also being customized for individual neighbourhoods. Public information sessions were held in the composting neighbourhoods and at City Hall for the remainder of City residents to attend
- Carts were distributed during the week of October 14<sup>th</sup>; compost and new black carts use started on November 3<sup>rd</sup>
- Design of a new landfill cell was awarded to Dillon Consulting and will progress through 2015, with construction tentatively scheduled to begin in 2016
- The City continues to take steps toward final closure of the oldest, main landfill area. The addition of the compost pad was a large contribution and spin-off benefit to closure, as it provides a protective liner membrane that eliminates infiltration of snow and rainwater into the old landfill, which would produce leachate
- One aspect of the landfill closure was the submission of an Interim Landfill Closure Plan to the Mackenzie Valley Land and Water Board. This plan was originally rejected by the Water Board; however, the City has plans in place to address concerns from the Board and other regulatory authorities
- Fencing was installed around all recycling depots in the city using the budget allocated for only two; City staff found that the budget approved was enough to complete all six depots.
- Construction waste is still being landfilled in the existing landfill, not the new cell. This dramatically improves the lifespan of the new cell
- Internal resources from other departments have assisted with site

work to lower contracted costs

- More than 200 students toured the SWF in 2014
- Proposed changes to the facility’s winter hours were submitted to Council for approval in 2013, but were not approved. The opening and closing times were adjusted by 30 minutes in 2014. This allows for better coordination with the City’s collection contractor, and creates an easier means of scheduling employees, thereby providing better staff coverage at the facility
- A new office building was purchased and put in place; it creates a clean environment for staff to enjoy their breaks, as well as for administrative work at the facility to be completed
- Measuring of internal tipping fees has been implemented to help track costs, especially for Capital projects

#### 2015/2016/2017 Goals

- Efficiently and effectively collect, handle, and dispose of solid waste.
- Continue to improve the City’s recycling program by issuing the City Commitment for Public Education, and improving the recycling page on the City website.
- Continue to work with other municipalities and levels of government on recycling initiatives.

#### 2015/2016/2017 Objectives

- A private contractor will provide garbage collection once per week to residential customers. Multi-family units and commercial premises will also be serviced by a private contractor
- Continue to implement goals and objectives laid out in the Community Waste Management Strategic Plan adopted by Council in August 2001 and revised in 2006
- Implement recommendations in the External Review of the Solid Waste Facility Operations and Processes, adopted for information by Council in August 2006
- Reduce solid waste landfill volumes by both bailing waste and operating feasible waste diversion programs
- Increase public awareness, education, and participation in waste diversion through annual publications, weekly flyer inserts and public forums
- Carry out the orderly closure of the existing landfill site
- Increase the percentage of waste diversion through smart recycling initiatives
- Move forward with phased implementation of a city-wide composting program

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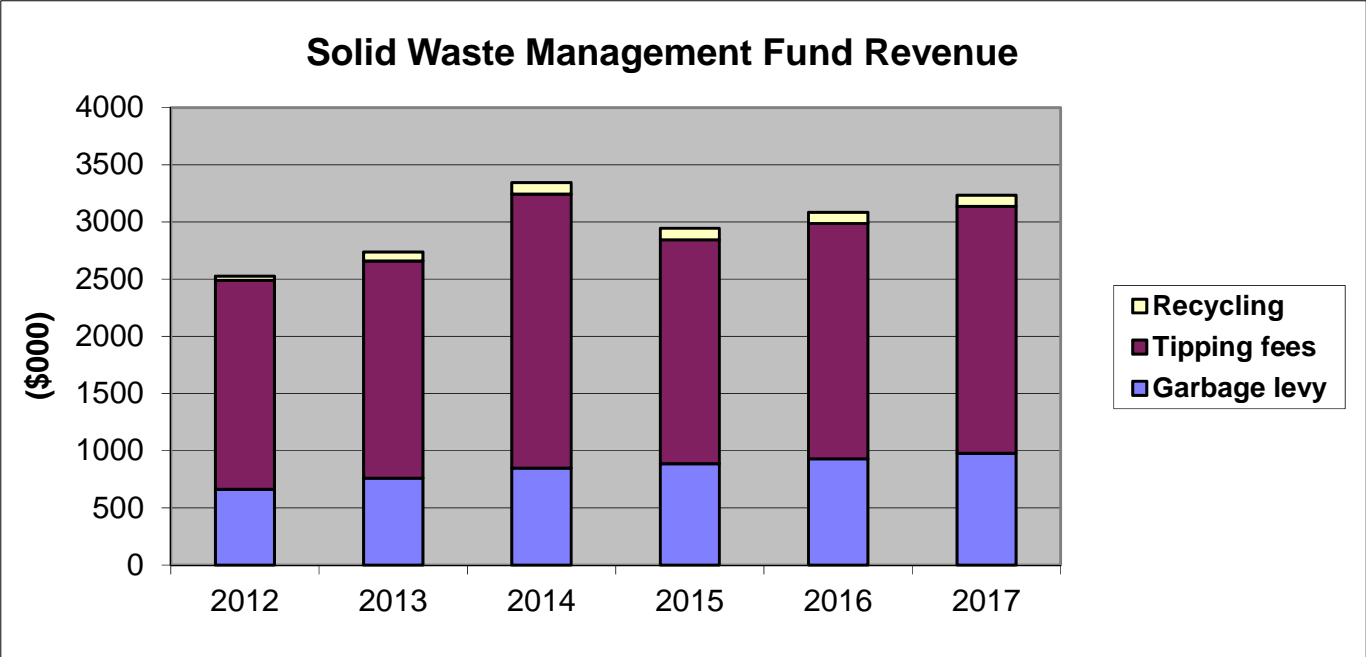
Solid Waste Management Fund Budget				2015	2016	2017	
	2013	2014	2014	Budget	2016	2017	Note
	Actual	Budget	Forecast	Recommended	Budget	Budget	
	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	(\$000's)	
<b>Revenue</b>							
User Charges							
Solid Waste Levy	760	800	847	885	929	976	(1)
Tipping Fees	1,899	2,007	2,397	1,958	2,056	2,159	(1)
Sales of Recyclables	76	100	100	100	100	100	
	2,735	2,907	3,344	2,943	3,085	3,234	
Allocated to Capital	(260)	(230)	(80)	-	(230)	(230)	
	2,475	2,677	3,264	2,943	2,855	3,004	
<b>Expenditures (By Activity)</b>							
Waste Collection	302	342	320	340	362	386	
Waste Processing	1,413	1,293	1,464	1,323	1,359	1,382	
Waste Recycling	443	487	507	501	514	526	
Site Restoration/Closure							
-Annual Accrual	94	-	94	94	94	57	
Amortization	497	377	377	487	550	568	
	2,749	2,499	2,762	2,745	2,880	2,919	
<b>Net Revenue (Expenditures)</b>	(274)	178	502	198	(24)	85	
<b>Interfund Transfers</b>							
(To) From General Fund	(250)	(280)	(324)	(310)	(316)	(323)	(2)
Change in Fund Balance Before Reallocation of Amortization	(524)	(103)	178	(112)	(341)	(237)	
Reallocation of Amortization	497	377	377	487	550	568	
<b>Change in Fund Balance</b>	(27)	274	555	375	209	331	
<b>Opening Balance</b>	(1,677)	(1,677)	(1,704)	(1,149)	(774)	(565)	
<b>Closing Balance</b>	(1,704)	(1,403)	(1,149)	(774)	(565)	(234)	
<b>Expenditures (By Object)</b>							
Wages & Benefits	885	950	900	952	979	990	
Other O&M	1,948	1,549	1,862	1,793	1,901	1,930	
	2,749	2,499	2,762	2,745	2,880	2,919	
<b>Details of Other O&amp;M</b>							
General Services	1,028	819	1,013	830	865	902	
Materials	56	38	38	57	58	59	
Maintenance	39	83	83	80	82	84	
Utility- Fuel	47	54	54	56	57	59	
Utility- Power	72	73	81	82	85	87	
Vehicle O&M & Fuel	116	105	122	108	110	113	
Amortization	497	377	377	487	550	568	
Others (Landfill Closure Accrual)	94	-	94	94	94	57	
	1,948	1,549	1,862	1,793	1,901	1,930	

**Notes:**

(1) Revenues are based on the assumption that the user fee rates will increase at 2.5% in 2015 and 5% in 2016 and 2017.

(2) The administration fee transferred to the General Fund is based on the estimate cost of admin services provided to the SWM Fund.





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<b>Solid Waste Performance Measures</b>	<b>Projected 2013</b>	<b>Actual 2013</b>	<b>Projected 2014</b>	<b>Forecasted 2015</b>	<b>Forecasted 2016</b>	<b>Forecasted 2017</b>	<b>Notes</b>
<b>Workload Indicators</b>							
Material Incoming (Metric Tonnes):							
Residential	2,000	2,529	2,788	2,800	2,800	2,850	
Municipal	4,000	56,490	40,887	35,000	35,000	36,000	
Commercial	16,000	20,333	16,981	17,000	17,000	17,500	
<b>Total Tonnes Received</b>	<b>22,000</b>	<b>79,352</b>	<b>60,656</b>	<b>54,800</b>	<b>54,800</b>	<b>56,350</b>	
Material diverted from waste stream (Metric Tonne):							
Appliances @ 68 kg each	160	151	167	170	175	175	
Appliances with freon @ 90 kg each	60	52	51	65	67	68	
Newsprint/cardboard/paper/boxboard	2,000	1,866	1,850	1,900	1,950	2,000	(1)
Aluminum cans							
Steel / tin / scrap metal	475	761	525	510	520	520	
Batteries @ 9 kg each	10	9	8	11	12	12	(2)
Mixed recycling (plastics, glass, tin cans)	180	213	185	190	195	195	
Tires @ 19 kg each	125	133	120	129	130	130	
Tires Oversized @ 50 kg each	27	33	40	29	29	29	
E-waste shipped	34	67	58	60	60	60	
Vehicles received to be shipped	200	243	185	210	215	215	
Propane tanks @ 7.7 kg each	9	1	1	1	1	1	
Tree branches / organics	180	350	250	300	350	400	
Additional recycling							
Hazardous waste		55	19	20	20	21	
<b>Total of Material Diverted</b>	<b>3,460</b>	<b>3,934</b>	<b>3,459</b>	<b>3,595</b>	<b>3,724</b>	<b>3,826</b>	
Items reused on-site:							
Wood waste re-used for cover material (Metric Tonne)	500	299	225	250	250	250	(3)
Contaminated soil	3,100	4,932	6,000	1,500	0	0	(4)
Contaminated water	105	51	30	50	0	0	(5)
Asphalt	600	3,518	6,500	3,500	3,500	3,500	(6)
Clean fill	250	44,692	30,000	30,000	30,000	30,000	
<b>Total Re-used</b>	<b>4,555</b>	<b>53,492</b>	<b>42,755</b>	<b>35,300</b>	<b>33,750</b>	<b>33,750</b>	

(cont'd ...)



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### Solid Waste Management Performance Measures (cont'd)

	Projected 2013	Actual 2013	Projected 2014	Forecasted 2015	Forecasted 2016	Forecasted 2017
<b>Efficiency Measures</b>						
Waste collection cost per capita	\$15.12	\$14.88	\$15.67	\$16.55	\$17.55	\$18.56
<b>Effectiveness Measures</b>						
% of materials reused on site	20.7%	70.0%	70.0%	65.0%	61.5%	59.8%
% Diversion	15.7%	5.0%	5.7%	6.6%	6.8%	6.8%

**Notes:**

- (1) Corrugated cardboard is the highest commodity per volume that we ship south to be recycled.
- (2) Commercial customers are now responsible for recycling their own waste batteries. Residents are still permitted to drop off three car batteries a month.
- (3) Wood is now being used as cover material during winter months to aid in bird control. We are no longer chipping wood; we are using our dozer to crush on top of garbage.
- (4) After the contaminated soil is treated and tested, it is used as cover material. The contaminated soil contract is over in 2015.
- (5) After the contaminated water is treated and tested, it is placed back into the ground. The contaminated water site will be done in 2015.
- (6) Asphalt is used for making roadways and working pads in place of blast rock or expensive fill. Approximately 10% of used asphalt is recycled and added to new asphalt.

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