

# Responses to City Council Questions on the 2013 Proposed Utility Budget

**The following report is sorted  
alphabetically by branch.**

# 2013 Utility Budget Questions By Branch

**Branch:** *Drainage Services*

**Asked By:** *Councillor Leibovici*

**Question #:** *13-014U*

**Budget Page #:**

*Both sanitary and stormwater utility services indicate a requirement for more FTEs due to growth of systems, environmental and OHS training needs.*

*Can you provide more details on the drivers for the increased FTEs? The response to the Utility Advisor did not provide details.*

**Question Answer:**

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Drainage Services requires an additional 9.5 FTE's to maintain required service levels (5.5 FTE's for system growth, 3.0 FTE's for environmental needs, and 1.0 FTE for OH&S training).

## System Growth

Over the years, Drainage Services has successfully managed the operations and maintenance of the drainage infrastructure system as it has grown with incremental FTE requests. As can be seen by the chart below, the system is anticipated to grow by another 83 km in 2013 (please note that the number of FTE's reflects the FTE complement within the Operations and Development Services areas related to system growth).

	2010 Actual	2011 Actual	2012 Forecast	2013 Without FTE Adds	2013 Budget
Number of FTE's	248.4	251.4	257.4	257.4	262.9
Increase in FTE's		3.0	6.0	-	5.5
<b>Size of System (km)</b>					
Sanitary	2,366	2,201	2,249	2,289	2,289
Stormwater	2,169	2,408	2,465	2,508	2,508
Combined	943	944	944	944	944
<b>Total System</b>	<b>5,478</b>	<b>5,553</b>	<b>5,658</b>	<b>5,741</b>	<b>5,741</b>
Annual Increase (km)		75	105	83	83
Km of System per FTE	22.1	22.1	22.0	22.3	21.8

To maintain the level of service necessary to meet customer needs, it is requested that 5.5 FTE's be added in Operations and Development Services to address this incremental growth in the system. As can be seen above, the addition of the 5.5 FTE's allows Drainage Services to maintain the allocation of approximately 22 km of system per FTE. This along with the increases in actual service area coverage (due to City expansion and to address increase in developer activity), increased issues due to weather incidents, and growing customer demands as a result of aging infrastructure necessitate the FTE requests to maintain service levels.

# 2013 Utility Budget Questions By Branch

## Environmental Needs

The implementation of the Storm Water Control Strategy is a requirement of Drainage Services Approval to Operate, issued by Alberta Environment. As such, Environmental Services requires 3.0 additional FTE's (one additional crew) to maintain environmental requirements.

One driver of the FTE requests are the large number of drainage environmental facilities that have come on line in the past few years (e.g. Groat Filter Facility, Morris Pond Wetland/Pollutant Removal Facility, Kennedale Wetland, Pylypow Wetland, Kennedale Yard Bioswale, and a number of low impact development facilities and close to two dozen oil/grit separators). The maintenance and operation of these facilities can be both labour intensive and time consuming with tasks such as the monitoring and assessment of facility performance for water quality and quantity control

The other main driver is the increase in the number of stormwater wet ponds. Since 2007, when the first 2 crews (6.0 FTE's) were hired, the City of Edmonton had 88 ponds that were maintained. This resulted in each crew on average being responsible for maintaining 44 ponds. Over the next 5 years the number of ponds rose to 128 ponds in 2012 which resulted in now 64 ponds being maintained by each crew. Please see the table below for more details.

<u>Year</u>	<u># of Ponds</u>	<u># of Crews</u>	<u>Ponds/Crew</u>
2007	88	2	44
2008	98	2	49
2009	109	2	55
2010	111	2	56
2011	119	2	60
2012	128	2	64
2013	134	3	45

As no additional FTE's were requested over the period above, Environmental Services were able to manage with the current complement. The cumulative increase over the years, however, has resulted in almost a 50% increase in system demand per crew. This combined with a larger service area, due to the expansion of the City, as well as increased weather demands and environmental requirements has made it necessary to hire one additional crew to maintain service levels and allow crews to be able to monitor a more reasonable number of ponds and facilities.

## OH&S Training

Please see attached Business Case.

## Business Case

### 2013 Operations Administration FTEs

September 14, 2012

#### Table of Contents

- 1. Executive Summary:** Drainage Operations is recommending 1.0 FTE to be approved for funding in the 2013 Drainage Services Operating Budget. A breakdown of the positions requested is as follows:

#### Administration

1 – Training and Safety Instructor C

- 2. Program Scope:** In the past Drainage Services has managed growth and efficiencies but has resulted in a very lean staffing complement. The position requested will be used to address city wide issues which will help meet service level standards, meet environmental regulatory obligations and maintain a safe work environment in the most effective manner. This position will be hired in the first quarter of 2013 if funded.

- 3. Business Drivers**

- 3.1. Growth/Demand Implications

- 3.1.1.

- Administration :
  - Drainage Services currently has 1 full time Trainer. An additional 1 Trainer position is required to address training needs for new staffing consisting of approximately 10 full-time employees and 25 temporary or seasonal positions, within a reasonable time to ensure a safe and productive work force. A change to a proactive approach to training requirement will create the need for an additional resource. Safe Start is a new City Safety program which will require considerable support and resources from the training staff to implement it successfully and renewal of existing training protocol require an additional training staff.
  - Orientation training for new staff in 2012 took 1.5 weeks to accomplish and should be done on the first day.

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- In 2012 staff waited up to 8 weeks for driver training, a new training requirement not previously delivered by Drainage training. A new employee is not permitted to operate a City vehicle without first receiving City driver training. With this additional trainer, we can deliver driver training within the first week on the job and staff can become immediately productive.
- New staff hired in 2012 waited up to 8 weeks for confined space training to allow them to enter the sewers. With the addition of a new Trainer, the goal is to train staff within one week of starting on the job so that they can become immediately productive.
- Drainage Services staff are required to enter confined spaces as part of their work. Confined space refresher training is meant to be done annually. Due to lack of training resources, most staff have gone many years without this training.
- New safety requirements for new facilities (CSO Control gates) require the use of supplied air systems. Twenty-four Pumpwell staff have been waiting for over 6 months to get the equipment and training to maintain these facilities safely. This training would involve approximately 2 days per employee.

## 3.2. Changes to Policy

The current training standard in the Drainage Services Business Plan indicates the overall Operations staff of 172 require approximately 6900 hours of training annually or 40 hours per person.

## 3.3. Regulatory Drivers

## 3.4. Operational Efficiencies

The target to have new staff trained and qualified is 1 week. The current reality is that staff remains unqualified for periods up to 8 weeks which results salaries being paid while staff is unable to be assigned to activities. Hiring the additional Trainer will allow training time target to be achieved and more work can be achieved as staff will no longer be idle or under-utilized while waiting for training. The use of overtime to maintain service levels while new staff are unqualified to be assigned to work activities will also be reduced. The additional Trainer will also support existing employees more effectively in the field, in terms of equipment use and best practices.

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## 3.5. Safety Implications

Drainage Services maintains workplace safety as the most important value when conducting activities. New permanent or temporary staff will only be assigned to activities when they are qualified following training.

## 4. Business Benefits

### 4.1. Tangible Benefits

#### Administration:

- New staffing will be trained in a reasonable time to ensure a safe and productive work force.
- Measurable results will be seen in increased productivity measures such as reduced overtime, total meters of pipes flushed and the percentage of customer inquiries investigated within 24 hours.

### 4.2. Intangible Benefits

Drainage Services also has the reputation of providing a safe workplace and having well trained staff. This additional position will enable us to maintain and enhance this reputation. Also, an understaffed workplace brings extra stress into the workplace, so the addition of this position will result in higher employee satisfaction of the Training staff and the new employees.

## 5.

## 6. Impacts and Challenges

### 6.1. Impacts

#### Administration:

- **Salary**, benefits, overhead and safety equipment required. (\$104,000)
- Office exists but computer, software licenses and blackberry required. (\$10,000)

### 6.2. Challenges

6.2.1. Finding a qualified trainer in such a competitive economic environment is challenging.

### 6.3. Key Risks

6.3.1. Not funding this position may result in failure to meet regulatory obligations, possible customer and employee dissatisfaction, increased overtime costs, and potential impacts on the environment due to inability to properly maintain and operate key environmental drainage infrastructure. An additional risk is the possible loss of

# 2013 Utility Budget Questions By Branch

Drainage Services ISO 14001 registration due to failure to adequately control environmental risk in Drainage Services.

## 7. Program Alternatives

### 7.1. Alternative Strategies

7.1.1. Do nothing and increase risk of environmental fines, loss of environmental reputation and possible loss of ISO 14001 registration.

### 7.2. Technical Solutions and Alternatives within the Program

7.2.1. No alternatives within the program have been identified.

## 8. Financial Analysis and Assumptions

### 8.1. Program Costs

Administration:

- Salary, benefits, overhead and safety equipment required. (\$104,000)
- Office exists but computer, software licenses and blackberry required. (\$10,000)

8.1.1. Impacts to other areas include impacts to Corporate Services and the resulting shared services costs.

### 8.2. Financing Alternatives

8.2.1. Must be funded through operating budget and no opportunity exists to recover costs through additional revenue.

### 8.3. Financial Assumptions Used

8.3.1. City guidelines and assumptions used.

## 9. Resource Requirements

### 9.1. Internal

Administration

1 - Training and Safety Instructor C, \$104,000

### 9.2. External

9.2.1. None Identified

## 10. Recommendation

10.1. Drainage Operations recommends the approval of 1FTE as identified in 8.1 above.



# 2013 Utility Budget Questions By Branch

**Branch:** Drainage Services

**Asked By:** Councillor Leibovici

**Question #:** 13-015U

**Budget Page #:**

*It is interesting to note that fleet service costs have gone down as Drainage Services are now purchasing instead of leasing through Fleet services. Should we be investigating this as a method to reduce costs throughout the corporation?*

**Question Answer:**

As Drainage Services purchases their own vehicles, the applicable capital costs are depreciated to spread the burden over the life of the vehicles. This will essentially over time offset the reduction in costs from Fleet Services.

**Branch:** Drainage Services

**Asked By:** Councillor Leibovici

**Question #:** 13-016U

**Budget Page #:**

*With regards to retained earnings would this be an appropriate source of funding for providing sanitary sewer to industrial and residential areas that are currently on septic or field systems?*

**Question Answer:**

Yes, cash and available debt capacity of the Utility may be used subject to Council's direction.

Report 2012TS7654 Southeast Industrial Land Options and Costs was presented to City Council on October 3, 2012. The report discussed funding mechanisms for new roads and drainage infrastructure. Council motion directed Administration to return to the Utility Committee in March 2013 with a policy of paying industrial development costs of drainage upfront and later recovering these costs through the development levy.

Administration will be preparing a policy for Committee and Council consideration in the first quarter of 2013. It is important to note that the policy must address the equity issue of costs to existing versus new utility customers, the risks and return to be borne by existing customers in providing upfront funding on the infrastructure, and the overall City economic factors that must be present for the policy to be applied. Assuming that such policy is developed and adopted by Committee and Council, the source of funding would be from available cash and/or borrowing capacity of the Utility.

# 2013 Utility Budget Questions By Branch

**Branch:** *Waste Management  
Services*

**Asked By:** *Councillor Leibovici*

**Question #:** *13-001U*

**Budget Page #:** *4*

*Proposed 2013 Budget-Summary by Area chart ( pg 4)*

*Can you provide the 2011 budget so I can compare re actual for 2011? As well the 2010 Budget and Actual.*

**Question Answer:**

# 2013 Utility Budget Questions By Branch

(000's)	2010			2011			2012			
	Budget	Actual	Variance	Budget	Actual	Variance	Budget	2013 Budget	\$ Change '12-'13	% Change '12-'13
<b>Revenue</b>										
Rate Revenue	\$98,825	\$97,916	\$ (709)	\$104,143	\$104,586	\$ 424	\$112,434	\$121,938	\$ 9,504	8.5
Operations Revenue	24,471	19,743	(4,728)	23,090	24,883	1,792	24,555	24,393	(162)	(0.7)
Grants	-	75	75	13,400	11	(13,389)	6,000	6,000	-	-
<b>Total Revenue</b>	<b>123,096</b>	<b>117,735</b>	<b>(5,362)</b>	<b>140,633</b>	<b>129,480</b>	<b>(11,173)</b>	<b>142,989</b>	<b>152,331</b>	<b>9,342</b>	<b>6.5</b>
<b>Expenditure</b>										
Collection Services	52,245	48,431	3,814	54,431	50,389	4,042	57,657	60,892	3,235	5.6
Processing & Disposal Services	77,344	77,803	(459)	76,202	80,650	(4,448)	79,332	85,439	6,107	7.7
Biofuels Grant	-	-	-	13,400	-	13,400	6,000	6,000	-	-
<b>Total Expenditure</b>	<b>129,590</b>	<b>126,235</b>	<b>3,355</b>	<b>144,033</b>	<b>131,039</b>	<b>12,994</b>	<b>142,989</b>	<b>152,331</b>	<b>9,342</b>	<b>6.5</b>
<b>Net Income (Loss)</b>	<b>\$ (6,493)</b>	<b>\$ (8,500)</b>	<b>\$ (2,007)</b>	<b>\$ (3,400)</b>	<b>\$ (1,579)</b>	<b>\$ 1,821</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
Full-time Equivalents	413.7	413.7		424.5	424.5		448.0	465.8	17.8	

## Variance Explanations:

### 2010

**Revenue-** Reduced operational revenue primarily from delayed implementation of the mixed construction and demolition operation (pending outcome of proposed Provincial legislative changes) and less commercial waste volume to the Edmonton Waste Management Centre.

**Expenditure-** Savings from delayed implementation of Construction and Demolition operations, partially offset by increased allocation of shared service costs.

### 2011

**Revenue-** Primarily because expected disbursement of grant revenue for construction of Enerkem Biofuels Facility did not occur. Also increase in program revenues and user fee revenue due to more than expected waste volume to the Edmonton Waste Management Centre.

**Expenditure-** Primarily because less than expected grant distribution for construction of Enerkem Biofuels Facility. Also, lower utility costs due to a combination of plant upgrades resulting in operating efficiencies in utility costs and warmer than expected temperatures late in the year, and lower borrowing requirement in 2011 due to delayed capital projects.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-002U

**Budget Page #:**

*Also can you provide info as to how many customers ( or quantity of materials ) will be required for the commercial collection program to break even. How significant is the West Edmonton Mall contract in achieving this goal?*

**Question Answer:**

Progress is ahead of schedule in both account volume and revenue compared to projections reported in June 2011 Business Plan. All indications are that the break even position of 2,700 bins in service will be achieved no later than 2015 as projected. The WEM service contract helps us achieve this financial goal and could allow us to achieve it in 2014 by acquiring new accounts with our demonstrated ability to service this very large contract. This WEM contract is equivalent to signing 275 bins/year or 10% of our breakeven goal. Equally as important, this contract will help to encourage development of diversion opportunities in the private sector.

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-003U

**Budget Page #:**

*With regards to increased FTEs for residential collection what are any other costs associated with this increase.*

**Question Answer:**

There will also be fuel costs of \$103,000 and equipment charges of \$207,000.

The FTE request is to provide labour for the growth and primarily collection from 9,000 homes which the City has taken back to maintain a 50/50 split between City and Contract services. Because of location of these homes and contractor bid prices for this area, the City is able to service these homes at a net savings of \$513,335/yr.

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-004U

**Budget Page #:**

*What was the budget allocated to operation of Enerkem? As Enerkem did not become operational in 2012, is that budget being reallocated for hauling and disposal at Ryley? If that is the case it would seem that there should be little or no increase for this budget item in 2013.*

**Question Answer:**

Until Enerkem advised of the delay, the operating budget allocated to pay them for processing at the Biofuels Facility in 2013 was \$2.5 million. An additional \$ 0.75 million was included in the operating budget to produce the feedstock for the facility. With the delay, we have reduced the budget to \$0.25 million for Enerkem, so the net reduction relating to the delay is \$3M. However, the material that would have been processed now has to be hauled to Ryley for disposal and the per tonne cost of that is essentially the same as would have been the cost of processing the feedstock and fees to Enerkem. The net effect of the Edmonton Biofuels Facility delay is essentially budget-neutral.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management  
Services

**Asked By:** Councillor Leibovici

**Question #:** 13-005U

**Budget Page #:**

*The 1.5 FTEs requested for high volume users and outreach will have what ROI to the Utility?*

**Question Answer:**

0.5 FTEs are needed to support the waste reduction program and 1 FTE is needed to meet the established demand for overall public education programming.

The impact of these positions can best be ascertained in terms of their contribution to incrementally lower volumes of waste to be collected as a result of higher rates of participation in grasscycling and composting, and in practicing reuse. The 1.5 FTEs is expected to contribute to avoiding about 11,000 to 12,000 tonnes from being set out for collection when the program has been fully established in two to three years.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-006U

**Budget Page #:**

*The reclassification of disposal charges from revenue to intra-municipal recovery is an accounting change. Is there an offset to this so that there is no increased cost to residents.*

**Question Answer:**

This accounting change does not result in increased costs to residents. The disposal costs are recovered from other departments, and are included in their expenditure budgets for 2013. An illustration of the how the change has no impact is provided below:

(\$000's)	2012 Budget	2013 Budget
<b>Revenue</b>		
Operations Revenue	430	-
<b>Expenditures</b>		
Disposal Service to City Departments	430	430
Cost Recovery from Other City Departments	-	(430)
<b>Net Income</b>	-	-

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-007U

**Budget Page #:**

*Re the downturn in recyclables.*

*We have known for some time that the demand for recycled newsprint/ paper market is very low. What is occurring in the other recyclable markets that we process i.e. plastics, glass?*

*What strategies are we taking to maximize the return on the recyclables we process? What is the impact on our materials recovery facility as there is an anticipated reduction in paper, newsprint material that will be handled at the Facility ? Any impact on Grey's recycling business model?*

**Question Answer:**

Paper products typically represent 80% by volume and over 90% by dollar value of the recycled commodities that we sell. Most of the reduction in revenues seen in 2012 is due to reduced prices for paper. (eg. in 2008, #8 newsprint sold for as high as \$130/t; right now it's value is about \$30). While there is a general perception of a global trend towards reduced print media, we have not yet observed a stable declining trend in newsprint entering our recycling system. While some local newspapers have cut production over this past summer, observable impact so far is not significantly consistent to establish a trend. Also, in terms of net impact, any reduction in volume will also result in reduced payment to the MRF operating contractor.

Other commodities follow quite different price trending and have not dropped to the same extent, but as they are a smaller fraction of our revenue material stream this does little to reduce the loss.

In terms of mitigation strategies and impact on the materials recovery facility, there will be continuing impact on the revenue stream from the MRF, as there has been in 2012. As stated above, the largest impact to date and for the near future will be due to global forces that are driving down the paper prices. This is reflected in our budgeted revenue figures. However, the contracted marketer of our commodities from the MRF is Recycle America, the largest broker of such commodities in the world. They handle very large volumes and have the influence to access the best possible markets globally. They also provide forward-looking projections to assist us in our budgeting. This notwithstanding, we are preparing to commission a study which will include a review of trends and provide the kind of information which will help us to plan the evolution of our recycling programs, including the MRF upgrades planned over the next three years.

The Greys business model is based on access to used office paper (not newsprint) and to a lesser extend used white cotton fabric. Greys' has confirmed that they do not anticipate any impact on their business plan.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-008U

**Budget Page #:**

*We know that there are increased costs to haul to Ryley. What are the projections for the next 5 years taking into account the goal to divert 90% by 2015. Given that this is only 2 years away it would seem that we should be reducing our staff and truck capacity to Ryley not increasing it.*

**Question Answer:**

The projected volumes hauled to landfill from 2013 to 2017 are provided in the table below. The figures show that volume to landfill is expected to drop as the Biofuels Facility is brought on stream in keeping with the current plans provided by Enerkem for commissioning of the Edmonton Biofuels Facility. Anticipated growth in population and economic activity is expected to result in increased volumes of non-residential waste to be handled at the Edmonton Waste Management Centre starting in 2017.

2013	2014	2015	2016	2017
250,000	233,000	197,000	171,000	176,000

The utility has planned for the reduction in hauling to Ryley with provisions in the hauling contracts that provide flexibility to decrease services as needed. Approximately 35 % of the utility's hauling capacity is contracted. As well, several of the Utility's Truck Driver positions are temporary and are only filled as needed. For example, the 1.6 FTEs requested for long haul drivers are temporary positions.

With respect to the equipment fleet, trucks and trailers will be reaching end of service life during the period that the volumes drop and will be replaced as needed.



# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-009U

**Budget Page #:**

*If we are not on target for this goal it would be prudent to revise it now. Are we diverting 60% from the landfill?*

**Question Answer:**

We project diversion in 2012 to be approximately 55%. The main reason for the shortfall was the loss of processing capacity due to the need to replace equipment. With the Composter's mechanical equipment 13 years old, there is the operational need to replace equipment or repair equipment that cannot be done without closing areas of the facility. Another challenge we face is the impact of growth in Edmonton. The Composter is now at capacity during peak periods and this has prompted an evaluation of the provision of future organic processing capacity for both biosolids and organic solid waste. The Utility will provide the recommended action arising from the evaluation to the Utility Committee early 2013. As the utility advisor has indicated; it is unclear why the increases requested are required.

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-010U

**Budget Page #:**

*What strategies are being employed to reduce the production of waste and how is this integrated within the Way We Green and the Way We Finance?*

**Question Answer:**

The Waste Management Utility uses social marketing to reduce the production of waste among residents. These strategies have enabled us to increase rates of grasscycling from 20% in 2002 to 60% in 2012 for those who grasscycle every or most of the time. Backyard composting and reuse are also promoted.

Actual volume of waste collected per capita has decreased from 305 kg/capita in 2006 to 285 kg/capita in 2011. The WMU is focused on fostering waste reduction, which is directly tied to The Way we Green. Waste reduction is one of the two waste management objectives in The Way we Green. (Objective 8.1: The amount of waste generated per capita is continually decreasing)

The strategies as described above are fully funded by the Waste Management Utility in keeping with Council's approved Waste Management Utility Fiscal Policy. Diversion will not be specifically addressed in The Way We Finance but it is expected that the Utility Fiscal Policy that facilitates its financing will be reflected in The Way We Finance.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management  
Services

**Asked By:** Councillor Leibovici

**Question #:** 13-011U

**Budget Page #:**

*One of our liabilities( and financing sources) is the landfill closure and post closure. Is the final capping on schedule for 2016? Is there a way that we can satisfy our liability earlier and investigate the impact on available funding before 2016?(pg 88 Waste Rate Filing report).*

**Question Answer:**

Under legislation, the City has a liability for closure and post-closure care costs for its landfill. The landfill reached full capacity and was closed in August 2009. The period for post-closure care is estimated to be 25 years from the time of closure.

The final capping is on schedule for completion in 2016. However, the post-closure fund is not only for capping. It is intended to remain in place as security to guarantee the proper management of the closed landfill (leachate collection and treatment, gas management, groundwater diversion and monitoring etc.) and deal with unexpected events such as a groundwater contamination event. As such, there is no option to use the fund for other purposes.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-012U

**Budget Page #:**

*Can you indicate whether the departmental measures were met for 2010/2011 and 2012?*

**Question Answer:**

Percentage of homeowners recycling (%)

2010 - Target 90%, Actual 89%

2011 - Target 90%, Actual 90%

2012 - Projected target 91% expected to be met.

Number of users of Eco Stations and Big Bin Events (#) - Target 5% increase per year at Eco Stations

2010 - Target 201,000, Actual 220,000

2011 - Target 211,000, Actual 231,000

2012 - Projected target 241,000, that includes the impact of Ambleside, is expected to be met.

Proportion of waste diverted from landfill (%)

2010 - Target 60%, Actual 44%

2011 - Target 60%, Actual 53.3%

2012 - Target 60%, Projected 55%

Tonnes of non-residential waste diverted from landfill (Tonnes)

2010 - Target 47,000

2011 - Target 54,000, Actual 58,000

2012 - Projected target 70,000 expected to be met.

Number of missed collection stops per 10,000

2010 - Target 4, Actual 4

2011 - Target 4, Actual 4

2012 - Target 4, Actual 4

Cost per tonne of material processed at Edmonton Waste Management Centre (\$/tonne)

2010 Target \$77, Actual \$77

2011 Target \$68, Actual \$70

2012 Projected target of \$65 not expected to be met.

Cost per tonne for curbside collection of refuse and recyclables

2010 - Target \$115, Actual \$115

2011 - Target \$122, Actual \$120

2012 - Projected Target \$124 expected to be met.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management  
Services

**Asked By:** Councillor Leibovici

**Question #:** 13-013U

**Budget Page #:**

*I agree with the utility advisor recommendations .With regards to recommendations 1 and 3 can you provide this information as part of our budget discussions? Will you be able to indicate what the required FTE's are as a result of increased population or increased volume of collection. ie 1,000 customers = 1 FTE?*

**Question Answer:**

## 2013 Utility Budget Questions By Branch

Several factors are used to calculate required growth FTEs such as number of new single family units and multifamily units, distance and access to new areas to be serviced, and type of vehicle required to service the development. We evaluate waste generated/household/year vs. collector productivity/unit type (single family vs. multifamily) to determine when additional FTEs are required. For example, the current guideline used to determine FTEs required for curbside garbage collection is 2,150 tonnes of waste/FTE.

Detailed supporting information for the requested 17.8 FTE (11 Permanent and 6.8 Temporary FTEs) follows:

Changes in Personnel Costs 2012 Budget to 2013 Budget (\$000)	\$ Change 2012 to 2013
i. Wage and salary adjustments to existing FTE's	794
ii. Pricing up of existing FTE's to meet operational needs	806
iii. New FTE's - description provided below	958
iv. Adjustment to paid absences / Payroll benefit costs / Overtime	707
<b>Total Change 2012 Budget to 2013 Budget</b>	<b>3,265</b>

The change in the Personnel budget between 2012 and 2013 can be explained as follows:

- i. Wage and salary adjustments to existing FTE's – In accordance with contract settlements
- ii. Pricing up of existing FTE's to meet operational needs - The need for cost-effective operational flexibility has required some existing staff to be reclassified in accordance with the Local 30 Collective Agreement.
- iii. New FTEs - New FTE's are required to meet demand and growth in existing service and to support EWMC operations. See table below for description.
- iv. Adjustment to paid absences / Payroll benefit costs / Overtime - Payroll benefits (CPP, EI, Dental, LAPP etc.) increase based on contribution rates and additional FTE's. The budgeted allowance for vacation and stat holiday pay for hourly staff has been adjusted to better align with actual costs. Reduced overtime requirement with increase in FTEs.

# 2013 Utility Budget Questions By Branch

Detail for the 17.8 FTEs as per (iii) above follows:

Number of FTEs	Function	Cost Recovery
4.4 Collector IV	Growth in residential refuse and recycling collection primarily from estimated 9,000 new households to be collected as a result of 50/50 split.	Recovered through monthly user fee.
2.2 Collector III	Service for new commercial collection accounts such as West Edmonton Mall.	Recovered through contract rates charged directly to customer.
1.6 Truck Driver V	Haul of 7,500 more loads to Ryley than in 2012	Approximate equal split in funding between disposal tip fees and monthly user fee.
0.5 FTE Rec Officer	For new waste reduction program for high volume users	Recovered through monthly user fee
2.0 Equipment Operators 3.2 Labourer II	Improve service efficiency in processing customers and material in IPTF and C&D facilities, and for preventative maintenance with start up of feedstock processing for Biofuels Facility.	Approximate equal split in funding between disposal tip fees and monthly user fee.
1.0 ClerkII	Front line support to operations staff in development and upkeep of Standard Operating Procedures, Hazard Assessments, and Key Performance Indicators reporting.	Recovered through monthly user fee
0.9 Labourer II / Equipment Operator II	Processing composting cure site. Managing feedstock, windrowing, aeration screening, loading Addresses increased organics production through growth and production improvements at ECF plus elevated bio-solids composting	Partially recovered from Bio-solids processing payments by Drainage; balance monthly user fee.
1.0 Eng Tech II	To replace contract resources for biosolids management - Liaison with potential customers, soil testing, application, regulatory reporting.	Approximate equal split in funding between biosolids processing payments and monthly user fee.
1.0 Rec Tech	Community Relations Outreach programs in support of Waste Management programs	Recovered through monthly user fee

# 2013 Utility Budget Questions By Branch

**Branch:** *Waste Management  
Services*

**Asked By:** *Councillor Anderson*

**Question #:** *13-017U*

**Budget Page #:**

*Has there been an opportunity to identify specific actions by the utilities we have control over, to reduce the fees paid by citizens (as opposed to raising revenue for the company)?*

**Question Answer:**

# 2013 Utility Budget Questions By Branch

The City manages and operates the Sanitary Drainage Utility, Stormwater Drainage Utility, and the Waste Management Utility. In preparing the annual budgets, attention is given in ensuring the customer rates remain stable over the long term while maintaining the sustainability of both operating and capital requirements of the Utilities. Council's Utility Fiscal Policies set out targets by which financial sustainability is measured. The proposed budgets reflect forecasted net income required to enable the utilities to make capital investments while slowly moving closer to the target Debt to Net Assets Ratio (neither Stormwater or Waste Management is expected to achieve target until 2022).

## **Drainage Services**

Drainage Services **collaborates** with City departments and other utilities to reduce the financial impact to citizens through many activities and programs. The use of **innovative technologies** and **proactive programs** allow Drainage Services to provide efficient services and ensure long term sustainability of drainage infrastructure at reduced costs.

**Collaborations** include:

- The Drainage Neighbourhood Renewal Program in partnership with the Neighbourhood Renewal Program to renew infrastructure in aging neighbourhoods. Ensuring sewer renewal work is completed prior to the surface work prevents disturbance of new roads and causes less interruption for residents
- The Drainage Neighbourhood Renewal Program also coordinates the renewal work on projects that involve streetscaping, infill developments or LRT, thereby reducing the overall cost impacts to the City and residents
- Early collaboration with other orders of Government and Utilities allow for cost sharing opportunities, that lead to substantial reduction in project costs and a lower impact to the user
- Work with Sustainable Development to integrate sewer upgrading and sewer separation into densification projects that support both sustainable growth and enhance environmental protection by reducing combined sewer overflows
- Work with Sustainable Development and private developers to consider the practicalities of interim drainage servicing in undeveloped areas to support opportunities to attract new and significant employers to the city
- Work with City departments and other associations on special projects such as Growth Coordination Strategy, Inter-municipal Fringe Area Planning and Transit Oriented Development, to integrate drainage planning into such projects



# 2013 Utility Budget Questions By Branch

## **Innovative Technologies** include:

- Cured-in-place relining methods as opposed to open cut repair, which allows for a high level of service at a lower cost with less disruption
- The Biosolids Management Program:
  - Maximizes the existing biosolids composting program by optimizing the existing facilities
  - Maximizes the existing NutriGold Program (Agricultural Land Applications) by utilizing more biosolids in agricultural lands
  - Partners with Alberta Environmental and Sustainable Resource Development (AESRD) and industries/non-agricultural land owners, to develop a non-agricultural land application program that involves one-time mine reclamation for biomass development.
- Low Impact Development (LID) benefits include:
  - Improved water quality through reducing storm runoff volume, early sediment capturing and treating pollutants
  - Urban green spaces that results in reduced urban heat and improved air quality
  - A sustainable and economical strategy for managing stormwater as environmental regulations are becoming more stringent

## **Proactive Programs** include:

- The Drainage Neighbourhood Renewal program allows Drainage Services to assess neighbourhoods across the city and complete renewal using less expensive relining methods before the sewers are damaged and require open cut repairs at a much higher cost. Drainage Services also maximizes usage of in-house expertise to shield from the high fluctuation in market pricing.
- The Asset Management Strategy provides a long term assessment of drainage infrastructure to assist with better investment decisions in the renewal of drainage infrastructure. *This ensures that the right type of drainage asset is renewed at the right time and with the right technology.*
- Updates to the Sanitary Servicing Strategy implementation plan accommodates changes in development priorities which may result in much shorter and less expensive pipelines.

## **Additionally**, Drainage Services provides the following services free of charge to citizens:

- Home Checkup Inspections that allow homeowners to obtain an evaluation of their property to assist them in providing flood proofing protection for their home and property. Similar Home Checkup Inspections are provided to condominium and multi-family properties.
- Weed, algae control and general cleanup around stormwater management lakes
- Root control foaming program extends the life of service connections and minimize service disruption to homes

# 2013 Utility Budget Questions By Branch

## **Waste Management Services**

### **Efficiency and Effectiveness Measures**

#### **Reflected in Waste Management Utility 2013 Budget**

**1. Change Wood Chip Procurement practice (\$480K avoided cost)**

The Utility needs wood chips each year for processing biosolids. Wood chips can be bought commercially, but staff recognized the opportunity to obtain the amount of clean wood needed by spending less. This was achieved by special, lower rates for wood waste and operating a grinding unit rather than continuing with purchasing wood chips and/or contracting grinding services as had been previously done.

**2. Equipment Rebuilding (\$200K avoided cost)**

Certain pieces of equipment such as some wheel loaders can be refurbished to function near to new state for about one quarter the cost of replacement. The ability to do so depends on the severity of service the unit has experienced and how badly major elements are worn. The Utility re-builds rather than replaces these loaders when viable to do so.

**3. Reduced Bid Prices (\$650K savings)**

By owing bins for servicing the multi-family sector, the Utility provides an opportunity for a wider range of potential contract bidders and reduced bid prices since bins are not written off over the length of three to five year contracts nor have to be moved out and replaced with change in contractors.

**4. Route Optimization (\$250K savings)**

On average, waste collection vehicles travel an additional 5% more annually due to distant new subdivisions and face growing traffic congestion. Implementation of a computer planning tool helps in cost-effective routing of collection vehicles.

**5. Carbon Offsets (\$2.1M revenue).**

The Utility was instrumental in establishing registered saleable carbon offset credits from its composting and landfill gas recovery operations. These credits are independently verified to enable annual sale of these credits to Capital Power.

**6. Non-residential Collection Services (\$300k to 450K revenue)**

Success in obtaining new commercial accounts is expected to generate net revenue to the Utility earlier than anticipated.

**7. Use of In-house Resources (\$170K savings)**

Prior to recycling appliances, ozone depleting Freon must be removed in an environmentally responsible manner. Trained in-house staff has replaced contracted staff to conduct this operation and realize savings.

**8. Volunteer Contribution (\$113K avoided cost)**

In 2013, the Utility will rely on 5,200 volunteer hours to assist in its outreach programs to residents. This time will be provided by volunteers trained by the Utility to meet its specific needs. Volunteer management sector guidelines value this contribution at \$21.79/hr.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Henderson

**Question #:** 13-018U

## Budget Page #:

*At the November 1st Utility Committee meeting, in response to a question from Councillor Henderson, Administration undertook to provide additional information on depreciation of vehicles.*

### Question Answer:

Waste Management Utility vehicles are categorized into 5 year, 8 year or 12 year service lives, as described below. An amount equal to the acquisition value divided by the service life is recorded as depreciation. A half year rule is applied to the first and last years, recognizing that newly acquired or completed vehicles won't end on a calendar period.

- 5 year - vehicles used to transport bins around the Waste Management Centre
- 8 year - collection vehicles and site trucks
- 12 year - Long Haul Trailers

Service life is primarily an engineering and operational assessment based on the use of the equipment, the nature of its use, and the complexity of the equipment. Factors that influence depreciation can include:

- The extent to which the asset is used
- The manner in which the asset is used
- Extended periods of non-utilization
- Physical damage
- Significant technological developments that may result in obsolescence

When considering vehicle replacements, the service life is a guide which provides sufficient funding if the majority of the fleet were to be replaced in the last year of depreciation. This is the guideline, but the factors noted above relative to the use of the vehicle can shorten or extend the period in which the vehicle can be used without incurring significant maintenance costs.

On the specific matter of the need for the long haul trailer fleet once the Biofuels facility is fully functional, the Waste Management Utility has planned for this in advance by not significantly expanding its hauling fleet. Instead, the Utility specifically relies on contractors for approximately half of hauling operations. As the Biofuels facility becomes operational the haul operation will be easily scaled down since the hauling contracts can be terminated on short notice. The increased haul requirement pre and post operation of the Biofuels Facility is also being managed by continuing to use ten, fully depreciated older trailers in service. These units are already fully depreciated and can be sold for surplus when they are no longer required.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-019U

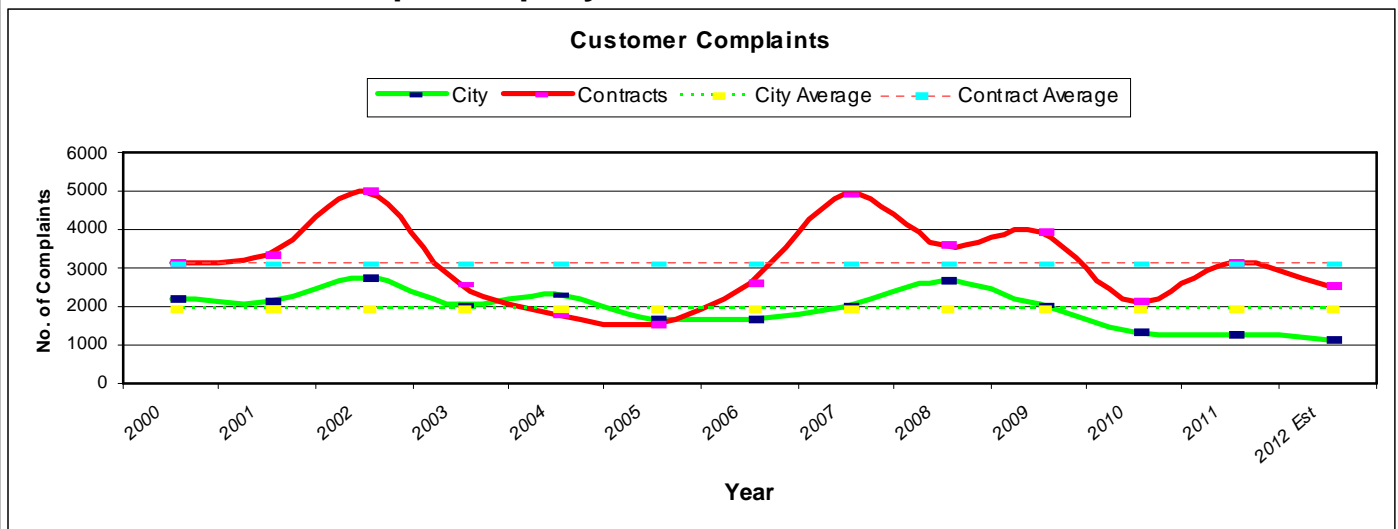
**Budget Page #:**

At the November 1st Utility Committee meeting, in response to a question from Councillor Leibovici, Administration undertook to provide information on the comparison of City waste collections services and those provided under contract.

**Question Answer:**

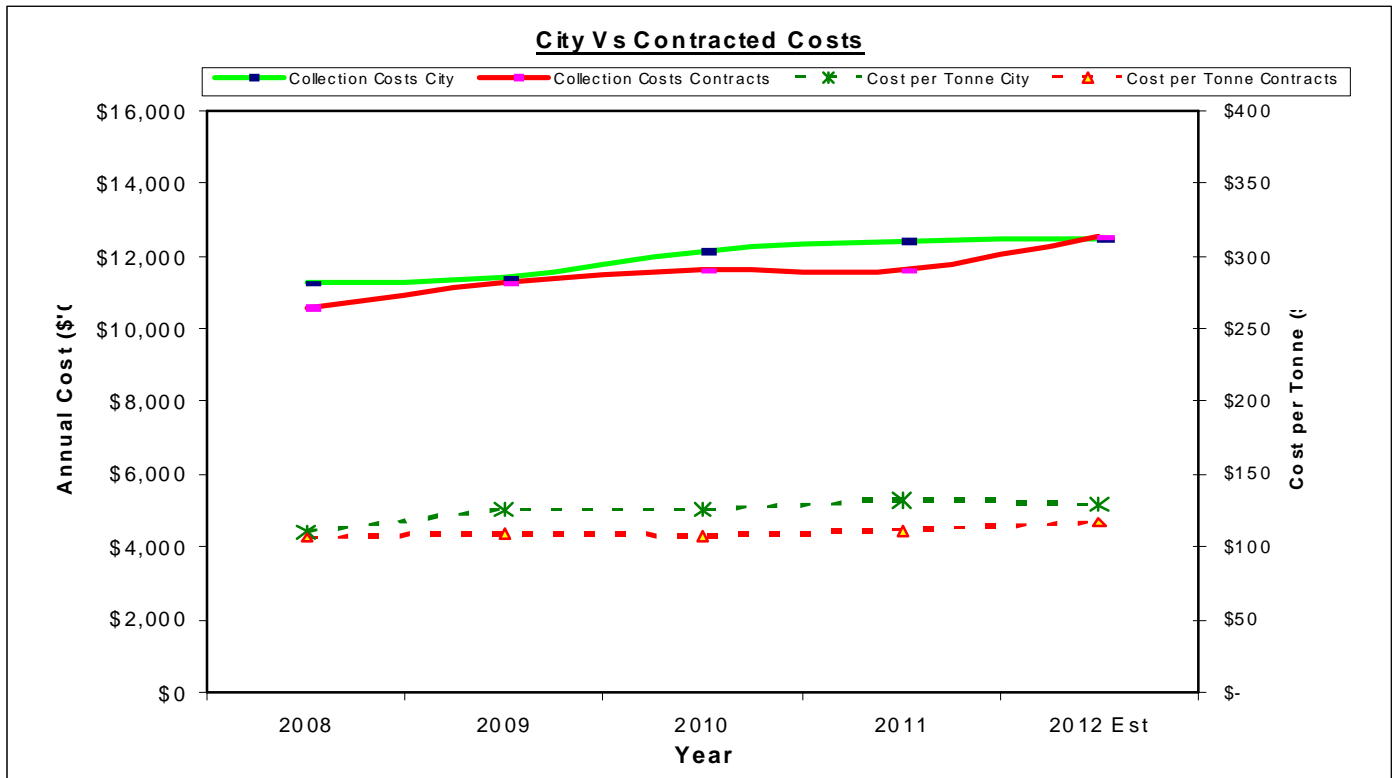
Information is provided below for two separate indicators. The first chart highlights missed collection complaints and compares City to Contracted services. The second chart compares total costs and the cost per tonne over the last 5 year contract period.

**Missed Collection Complaints per year**



# 2013 Utility Budget Questions By Branch

## Cost Comparison:



Total cost of contracted services for recycling and refuse collection over the term was \$57.5M while the total cost of City services was \$59.6M. A difference of \$2.1M or 3.6% increase over contract costs.

The City has taken steps in the 2013 curbside collection contract to improve customer service in the contract areas. Over the last decade the contract has been serviced by one contractor. In 2013, the contract area is divided into three zones and contracts awarded to three different contractors. The smaller contract areas increased the competitive bidding process to help control costs as well as provided manageable service areas. The smaller areas should allow the contractors to provide consistent customer service and allow the City more flexibility in managing the contracts should a contractor not be able to perform the work as specified.

# 2013 Utility Budget Questions By Branch

## City-wide Waste Collection

At the November 1<sup>st</sup> Utility Committee meeting, in response to a question from Councillor Caterina, Administration undertook to provide a high level review of the resources required for the City to deliver curbside collection of waste and recycling across the entire City.

It is opportune that we have capital and operating information that is current and comparable. The required resources for a City-wide service is outlined below.

### Capital:

Southwest Collections facility:       \$25M  
84 additional collection vehicles:     \$23M

### Operating Expenses:

FTE: 98 additional FTE's

Capital financing cost: \$4.56M/year (10 year average of interest and depreciation)

Annual Operating Expense: \$34.31M forecasted for 2018.

### Timeline:

Current curbside collection contracts run from 2013 to 2016 with two, one-year options to extend to 2018.

### Analysis:

The previous 5-year history shows a close correlation of total costs between the City and Contractor and with only a \$2.1M difference over 5 years. For the purpose of this analysis, based on recent bid information, it is reasonable to assume that the operating costs will be similar and the City will have savings due to economies of scale. The most significant issue is the impact of additional capital. The financing costs for the capital will add an additional \$4.56M/year in costs versus the current 50/50 public and private service model.

# 2013 Utility Budget Questions By Branch

**Branch:** Waste Management Services

**Asked By:** Councillor Leibovici

**Question #:** 13-020U

## Budget Page #:

*At the November 1st Utility Committee meeting, in response to a question from Councillor Leibovici, Administration undertook to provide additional information on the 17.8 FTEs required for waste management operations.*

### Question Answer:

#### 1. Curbside Collection - 4.0 Perm FTEs; 0.4 Temp FTE

- These positions are required for the growth in the City serviced area primarily as a result of an additional 9,000 homes taken back by the City from the contracted area to rebalance the 50/50 split in services. During the past five years, residential growth in the south and southwest portions of the city, which are serviced by the contractor, outpaced growth in the City-serviced areas. The opportunity to rebalance the areas occurred when the contract was re-tendered in 2012.

- The 9,000 homes will generate approximately 6,210 tonnes of waste and 1,320 tonnes recycling annually which require 4.4 FTEs for servicing based on metrics applicable to collection activities of both City and contracted forces. The cost of the additional FTEs and equipment are approximately \$500K/year less costly than if the service were delivered by the contractor in 2013.

- The growth over the last three years in the City serviced area has been managed through conversion to more productive vehicles, more efficient routing and effective use of temporary labour followed by permanent labour. Several factors are taken into account in the metric for calculating required growth FTEs for collection of waste and recyclables. These include number of new single family units and multifamily units, waste generated/household/year, distance and access to new areas to be serviced, collector productivity/unit type and type of vehicle required to service the development.

#### 2. Commercial Roll-off - 2.0 Perm FTEs; 0.2 Temp FTE

- Since the program launch in 2010, growth and revenue projections have been exceeded. To manage demands for City service, a competing subcontractor has been retained to meet the current shortage of City equipment and staff: However, this arrangement is not viable for the long term. Maintaining high levels of customer satisfaction and realizing margins require that the City deliver these services using its own resources. The recent signing of the West Edmonton Mall service agreement will require 1.0 permanent FTE to service this account alone.

#### 3. Long Haul to Ryley - 1.6 Temp FTEs

- Twice as many loads will be hauled to Ryley in 2013 vs. 2012 (15,500 vs. 8,000 loads). After factoring in efficiencies derived from a modified shift schedule, it was determined that these positions were required during peak waste generation periods. The request was kept to a minimum by increasing reliance on contracted trucking services which, like these temporary positions, can be released when the Biofuels Facility is fully operational.

#### 4. EWMC Site Operations - 2.0 Perm FTEs; 3.2 Temp FTEs

- These positions are required for the following functions at the EWMC:

- accurate and consistent classification and routing of incoming waste materials
- collection of tip fees as cash or by billing to correct customer accounts
- data collection and entry

# 2013 Utility Budget Questions By Branch

- screening for unacceptable and hazardous materials
- handling / processing of waste materials at various facilities and sites using wheel loaders, trackhoes, bin trucks, shredders, tub grinders, skid steers etc.

- A key objective for 2013 is to reduce wait time for customers who have already been delayed by worsening train traffic across Meridian Street now combined with delays associated with the construction of Anthony Henday Drive NE.

- The number and type of FTEs is determined from experience gained in the evolving operations at the Edmonton Waste Management Centre. There are no industry standards for the integrated waste management operations at the EWMC and a conservative approach is used to first use temporary positions if it is not yet clear in evolving operations that permanent positions are needed.

## 5.Organics Program - 0.9 Temp FTE

- Based on the staffing experience of 2011 and 2012, this FTE is required to operate loaders and screening equipment during peak waste generation periods at the composting and biosolids processing facilities.

## 6.Reporting and Documentation - 1.0 Perm FTE

- Required documentation is falling behind at the EWMC. Clerical support is needed as a result of the growing complexity in operations along with the higher degree of regulatory reporting and documentation and maturation of the environmental management system, OH&S, and staff training programs.

## 7.Biosolids Management - 1.0 Perm FTE

- A technologist is needed to manage the non-composting aspects of the biosolids management program, primarily sludge to farmland and non-farm sludge applications, with the pending end of contracted services. This position will replace the current contracted provider and carry out the service at a lower cost.

## 8.High Volume Generators - 0.5 Temp FTE

- The 0.5 FTE is needed to implement the social marketing strategy for high volume households that was approved by Utility Committee on June 19th. Proven social marketing strategies designed to change behavior will be coordinated by this position, including coordinating community events, creating partnerships with community partners, producing information products, and coordinating staff and volunteers to provide face-to-face interaction with residents. The Utility has been promoting grasscycling, composting, recycling and reuse for many years. What is new in 2013 is a greater focus on waste reduction that includes targeting large volume households. The Utility was able to assess the need for 0.5 FTE based on 15 years experience allocating specific resources to achieve measurable social marketing objectives.

## 9.Public Education - 1.0 Perm FTE

- The 1.0 FTE for public education programming is to meet the requirement to make 2 temporary positions that are almost at full time, into permanent positions. On an annual basis the two positions give approximately 200 tours of the EWMC, make over 300 curriculum-based classroom presentations and make 400 presentations to community groups. The number of requests for all these activities has increased to the extent that since 2010 the two temporary positions have been released for only a very short period each year in order that they not become permanent. The workload has increased by 15% in 2012 and year-round positions are now required.



## 2013 Utility Budget Questions By Branch

These 1.5 FTEs in #8 and #9 above will contribute to a slight downward trend in the amount of waste set out for collection per capita. (The total volume of waste is still increasing due to population growth but the increase would be greater were it not for the Utility's social marketing programs). This reduction in waste/capita is a result of higher rates of participation in grasscycling and composting, and in practicing reuse. The 1.5 FTEs are expected to contribute to avoiding an additional 1,300 tandem loads of waste for collection in two to three years when the waste reduction program has been fully established.