AMPW - Drainage Services
2010 Operating Budget

Table of Contents

Branch Overview tab

1.0 BRANCH OVERVIEW

1.1 Branch Profile

Drainage Services is one of four branches in the Asset Management and Public Works Department. It operates the Sanitary Utility (collection and transmission of wastewater) as well as the Land Drainage Utility (collection and transmission of storm water), with an asset replacement value of over $13 Billion at the end of 2008, not including the Gold Bar Wastewater Treatment Plant. The Branch operates the Utilities under a full cost recovery model without subsidy from property tax. The two Utilities are operated under a public utility model with the exception of payment of an annual dividend and local access fee to the City in accordance with the Utility Fiscal Policy (C304B). The Land Drainage Utility is exempt from paying a dividend and local access fee until 2014.

Drainage Services operates within the framework of the Council approved Drainage Master Plan (2004), ISO9001, ISO14001 and the 10-year Approval-to-Operate (2005-2015) issued and regulated by the Province of Alberta.

Before 2009, revenues and expenditures for the Design & Construction Section (D&C) were included in the Sanitary Utility financial statements. This budget process will financially segregate D&C from the utility model as it is a nonregulated service and can be treated as a potential future source of income for the City of Edmonton. The transition will occur over the next few years under the direction of City Council.

For ease of presentation, this budget document is divided into the following sections:

- Utility Operations
  - Sanitary Utility
  - Land Drainage Utility
- Design & Construction

1.2 Description Of Operations

Sanitary Utility

The Sanitary Utility serves over 780,000 residents and 15,000 commercial and industrial customers. In addition, services are provided to neighbouring municipalities through agreements with the Alberta Capital Region Wastewater Commission and Strathcona County.

In order to serve these customers, the Sanitary Utility has made average annual capital investments of $80 million per year for rehabilitation, upgrades, and expansion of the sanitary and combined sewer network from 2004 to 2008. Capital projects were mainly constructed using in-house resources. Furthermore, Drainage Services provides regulation of, and support to, the development and building industry. This industry contributed about $19 million of sanitary infrastructure per year on average during the same five year period.

During 2004 to 2008, an average of $10 million per year has been spent on operational and maintenance activities which include cleaning, inspecting and minor repairs for a system consisting of roughly 3,000 km of sanitary and combined sewers, 225,000 service connections and 70 pump stations.

Mission

To protect the environment and public health for customers in the Edmonton region by collecting and conveying wastewater and storm water for treatment, resource recovery and safe disposal.

Under the Gold Bar Master Agreement, the assets and responsibilities for the wastewater treatment plant were transferred to EPCOR on March 31, 2009. The Sanitary Utility expects to pay EPCOR approximately 44% of the 2010 budgeted rate revenues collected.

Land Drainage Utility

The Land Drainage Utility serves residential, commercial and industrial customers with a service area of approximately 270 square kilometres.

From 2004 to 2008, the Land Drainage Utility invested $25 million per year, on average, in capital rehabilitation, upgrades, and expansion of the storm system. The development and building industry contributed in excess of $33 million per year of storm sewers and related facilities during the same period.

Over the same 5-year period, an average of $5 million per year has been spent on operational and maintenance activities which include cleaning, inspecting and minor repairs for a system consisting of roughly 2,300 km of sewers, 118,000 service connections, 50,000 catchbasins and 150 storm water management facilities.

Design and Construction

D&C provides engineering, project, contract management, design and construction services (trenchless and open cut) to the Drainage Utilities, other City departments and external customers such as land developers, EPCOR, private contractors and other municipalities. Its tunneling construction expertise is recognized as one of the best in Canada.

During the period from 2004 to 2008, the volume of D&C work has increased from $31 Million to $136 Million. At the same time, the number of permanent and temporary staff has also grown from 199 to 243. D&C owns and operates 6 large diameter tunnel boring machines. As a result of this significant growth and the finding of the recent Utilities Regulatory Review, the budget for D&C is presented independently of the Sanitary Utility operations. There will still be a subsidization of the Sanitary Utility rates from D&C's net income; however, it will be phased out over three years to manage the impact on the rates.

1.3 Major Services And Activities

Drainage Utilities (Sanitary and Land Drainage)

Asset and Environmental Management

- Strategic Planning
- Business Planning
- Environmental Management
- Asset Management
- Biosolids Management
- Public Education
- Liaison with EPCOR
- Sanitary Servicing Strategy Fund Management

Development Support and Regulatory Services

- Land Development Review and Approval
- Sewer and Water Service Connection
- Lot Grading and Flood Proofing
- Regulatory Compliance
- Environmental Monitoring/ Reporting
- Infrastructure Recording

Operations and Maintenance

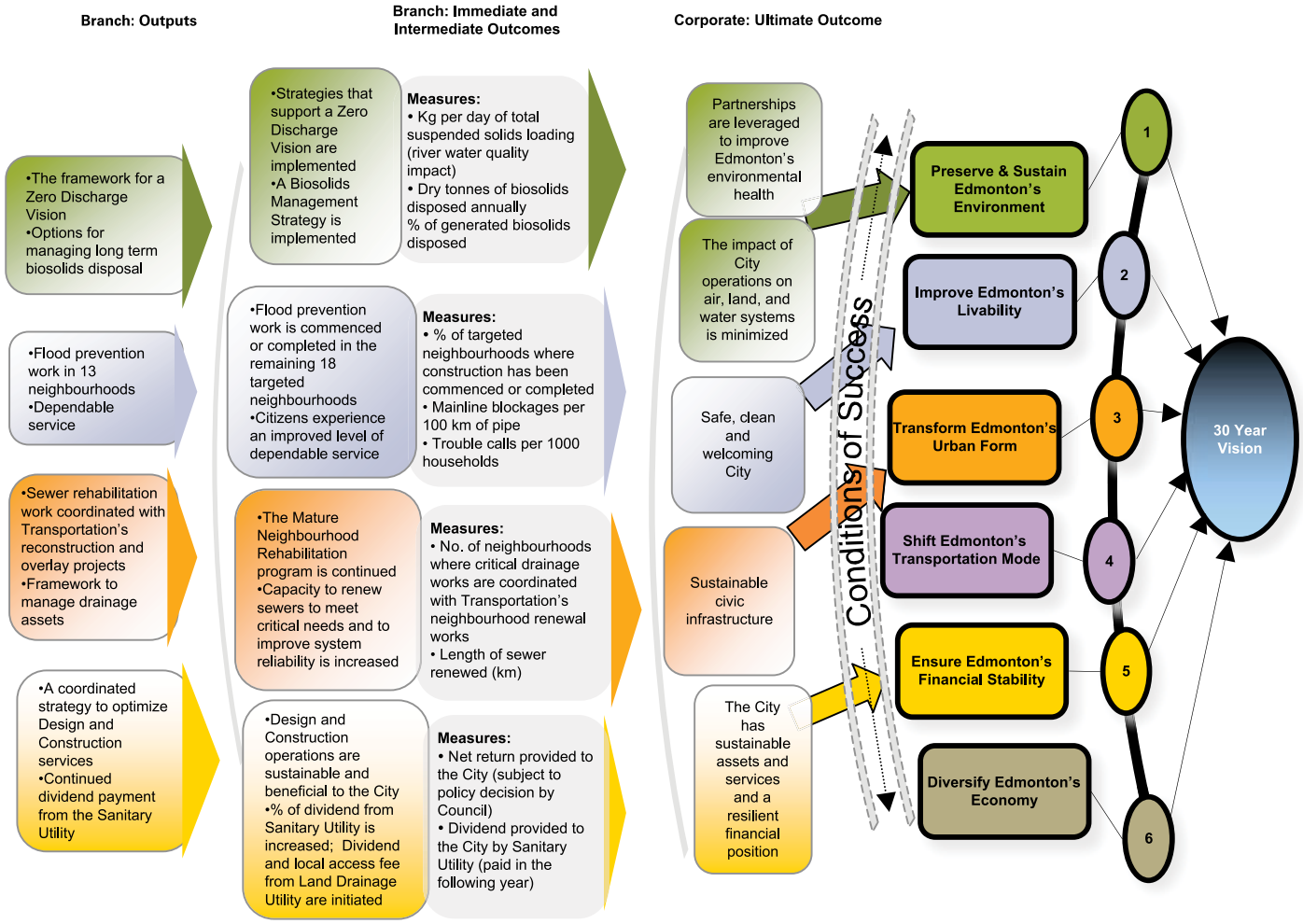
- Preventive Maintenance of Sewers, Manholes and Catch Basins (e.g. inspections, cleaning, minor repairs)
- Pump Station Maintenance
- Environmental Services (e.g. wet pond/dry pond maintenance, public complaint investigations)
- Basement Flooding and Service Blockage Response

Design and Construction

Infrastructure Construction, Renewal and Upgrading

- Tunnel Construction
- Trenchless Construction
- Open-Cut Construction
- Engineering, Project Management and Contract Administration

1.4 Strategic Road Map



1.5 Outcomes And Measures

Immediate Outcome	Intermediate Outcome	Ultimate Outcome	Measure	2008 Results	Projected 2009 Results	2010 Targets
The framework for a Zero Discharge Vision is completed	Strategies that support a Zero Discharge Vision are implemented	Partnerships are leveraged to improve Edmonton's environmental health	Kg per day of total suspended solids loading (river water quality impact)	30,865	30,000	29,000
Options for managing long term biosolids disposal are identified	A Biosolids Management Strategy is implemented	The impact of City operations on air, land, and water systems is minimized	Dry tonnes of biosolids disposed annually	19,400	20,000	20,000
			% of generated biosolids disposed	72%	74%	74%
Flood prevention work continues in targeted neighbourhoods	Flood prevention work completed in all 31 targeted neighbourhoods (by 2017)	Safe, clean and welcoming City	Number of neighbourhoods complete as part of city-wide, multi year program	0/31, or 0% completion (17 neigh's underway this year	5/31, or 16% completion	7/31, or 23% completion
Citizens experience a dependable service	Citizens experience an improved level of dependable service		Mainline blockages per 100 km of pipe	3.5	3.0	2.8
			Trouble calls per 1000 households	26	26	25
Sewer rehabilitation work is completed in coordination with Transportation's reconstruction and overlay work	The Mature Neighbourhood Rehabilitation program is continued	Sustainable civic infrastructure	No. of neighbourhoods where critical drainage works are coordinated with Transportation's neighbourhood renewal works	2	7	15
Framework to manage drainage assets is developed	Capacity to renew sewers to meet critical needs and to improve system reliability is increased.		Length of sewer renewed (km)	48	62	70
A coordinated strategy to optimize Design and Construction services is developed	Design and Construction operations are sustainable and beneficial to the City	The City has sustainable assets and services and a resilient financial position	Net return provided to the City (subject to policy decision by Council)	Included in Sanitary Utility	Included in Sanitary Utility	Pending results of D&C Financial Policy Review
Dividend payment from the Sanitary Utility is continued	% of dividend from Sanitary Utility is increased; Dividend and local access fee from Land Drainage Utility are initiated		Dividend provided to the City by Sanitary Utility (paid in the following year)	$4.5 M(excl. Gold Bar)	$2.8 M (excl. Gold Bar)	$2.6 M (excl. Gold Bar)

The following is the proposed 2010 Operating Budgets for the Sanitary and Land Drainage Utilities, which include a proposed 8% rate increase for both.

1.6 Proposed 2010 Sanitary Utility Budget - Program Summary ($000)

	2008 [1] Actual	2009 [1] Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Revenues								
Residential Customer - City Share	31,084	34,640	2,899	-	562	38,101	10.0	41,811
Non-Residential Customer - City Share	24,578	26,835	2,062	-	260	29,157	8.7	31,773
[2] Gold Bar Share of Rate Revenue	43,735	48,302	3,899	-	645	52,846	9.4	57,816
Program	3,121	2,898	195	-	135	3,228	11.4	3,324
Interest and Other	1,716	1,869	(997)	-	-	872	(53.3)	1,216
[3] Transfer - Design & Construction	4,079	1,898	(398)	-	-	1,500	(21.0)	750
Total Revenues & Transfers	108,313	116,442	7,660	-	1 ,602	125,704	8.0	136,690
Expenditures								
Asset and Environmental Management	8,098	9,620	72	-	490	10,182	5.8	10,885
Development Support & Regulatory Services	7,338	6,674	403	-	303	7,380	10.6	7,667
Operations & Maintenance	11,575	12,683	615	-	-	13,298	4.8	13,956
Program & Financial Support	21,392	28,671	1,145	-	2,285	32,101	12.0	34,430
[2] Gold Bar - Wastewater Treatment	43,735	48,302	3,899	-	645	52,846	9.4	57,816
Total Expenditures & Transfers	92,138	105,950	6,134	-	3,723	115,807	9.3	124,754
Net Income	16,175	10,492	1,526	-	(2,121)	9,897	(5.7)	11,936
Full-time Equivalents	188.0	201.1	1.5	-	-	202.6	-	202.6

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes, the latter have been reflected under Growth for greater clarity.*

[1] *The 2008 and 2009 figures have been restated to remove non-rate driven revenues of Gold Bar for the entire year.*

[2] *Gold Bar Share of Rate Revenue reflects the portion of sanitary rate collected on behalf of Gold Bar operations. This entire amount is remitted to EPCOR under Gold Bar - Wastewater Treatment.*

[3] *Design & Construction is shown as a net figure. The 2009 figure represents the approved budget, the current projection of net income is in the order of $4 million.*

Supplemental Information	2008 Actual	2009 Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Total Sanitary Rate Revenue								
City of Edmonton	55,662	61,475	4,961	-	822	67,258	9.4	73,584
Gold Bar Wastewater Treatment Plant (EPCOR)	43,735	48,302	3,899	-	645	52,846	9.4	57,816
	99,397	109,777	8,860	-	1,467	120,104	-	131,400
Dividends Payable to City (Based on Income from Previous Year)								
[4] Dividend per Utility Fiscal Policy - budget (restated)	3,061	2,675	82	-	-	2,758	3.1	2,579
[4] Additional Dividend Based on Actual Net Income	1,577	1,787	-	-	-	-	(100.0)	-
[5] Dividend relating to Gold Bar	3,951	2,995	-	-	-	5,789	93.3	4,771
Council Directed Dividend	1,711	2,765	-	-	-	-	-	-
	10,300	10,223	82	-	-	8,547	(16.4)	7,350
Actual dividend as a % of Total Net Income	36.0%	41.1%						

[4] *The 2008 and 2009 amounts were paid to the City based on the prior year's operating results of the Collection and Transmission System. The 2010 and 2011 figures represent estimates based on budgeted results from 2009 and Proposed 2010 Budget.*

[5] *Dividend from Gold Bar represents a calculated amount based on the restated net income. The 2010 Budget is based on 2009 Budget pro-rated for the first 3 months at 30% and 9 months at 60%. The portion relating to the 9 months will form part of the 2010 Transfer Fee from EPCOR.*

Explanatory Notes:

Prior to March 31, 2009, the Sanitary Utility included the collection, transmission, and treatment of wastewater. On January 20, 2009, City Council approved the transfer of the Gold Bar Wastewater Treatment Plant (GBWWTP) to EPCOR in return for a transfer fee totaling $75 million over seven years.

As part of the transfer, Council directed that Drainage customers will not experience any change in the way service is being delivered. This includes the billing process whereby customers will only have a single Sanitary Utility rate, despite the Gold Bar Wastewater Treatment Plant being operated and reported separately by EPCOR.

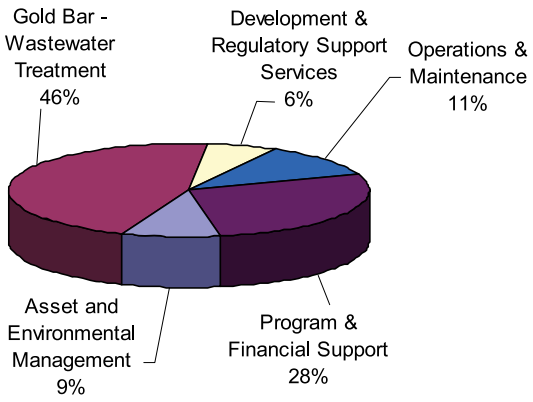
In order to provide a reasonable representation of the Collection & Transmission operations, the 2008 and 2009 figures have been restated to provide comparable information to the Proposed 2010 Budget. Detailed discussion of Revenues and the Major Activities are found under the Utility Operations section.

The proposed Budget reflects total Sanitary Utility Rate Revenue with an 8% rate increase, plus all revenues generated by the City of Edmonton from the Collection and Transmission System.

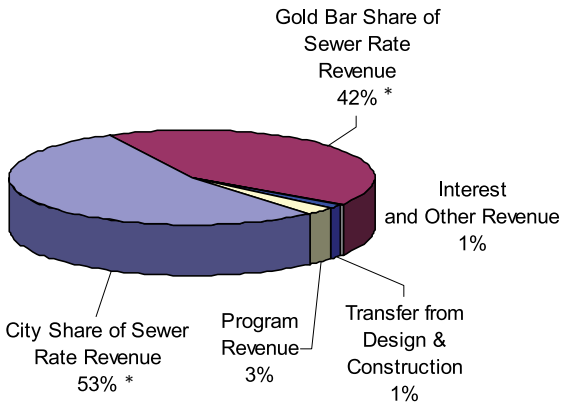
Rate Revenue is broken down into the City's share of Residential and Non-Residential rate revenue with the portion of revenue for Gold Bar operations being reported as a separate revenue line item. This amount has also been reflected under Expenditures as Gold Bar - Wastewater Treatment. The addendum to this budget document provides information from EPCOR regarding the Gold Bar plant operations. Outside of these two figures, the balance represents budgetary requirements of the Collection and Transmission system.

In addition, the 2010 Proposed Budget has reflected the impact of financially segregating D&C from the Sanitary Utility over 2010 and 2011. The net financial impact of this operation has been reflected as a single line item 'Transfer - Design & Construction'.

Where the Budget will be spent



Funding by Source



* Rate Revenue comprises 95% of Sanitary Utility total revenues. Rate Revenue is split 56% City and 44% Gold Bar

1.7 Proposed 2010 Land Drainage Utility Budget - Program Summary ($000)

	2008 Actual	2009 Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Revenues								
Residential Customers	11,697	12,536	1,005	-	197	13,738	9.6	14,985
Non-Residential Customers	10,161	11,117	889	-	(198)	11,808	6.2	12,784
Program	109	491	(2)	-	-	489	(0.4)	504
Interest and Other	945	1,344	(930)	-	-	414	(69.2)	533
Transfer from Reserves	-	-	-	-	-	-	-	-
Net Revenues & Transfers	22,912	25,488	962	-	(1)	26,449	3.8	28,806
Expenditures								
Asset and Environmental Management	1,978	2,469	417	-	-	2,886	16.9	2,973
Development Support & Regulatory Services	2,732	2,479	153	-	194	2,826	14.0	2,954
Operations & Maintenance	5,379	5,554	145	-	-	5,699	2.6	5,981
Program & Financial Support	2,497	5,320	421	-	934	6,675	25.5	6,532
Total Expenditures & Transfers	12,586	15,822	1 ,136	-	1,128	18,086	14.3	18,440
Net Income	10,326	9,666	(174)	-	(1,129)	8,363	(13.5)	10,366
Full-time Equivalents	87.4	94.2	0 .6	-	-	94.8	-	94.8

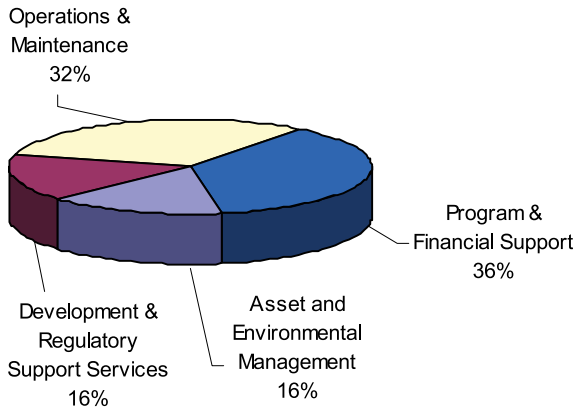
* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes, the latter have been reflected under Growth for greater clarity.*

Explanatory Notes:

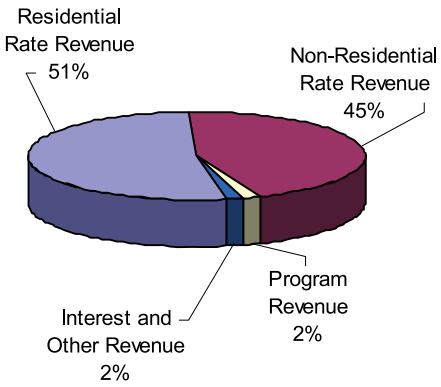
Land Drainage rates contain a proposed increase of 8%. In addition, the projected growth in customer base for residential customers is reflected under Growth. However, this growth is offset by an adjustment to the Non-Residential customers to reflect actual experience to date.

The operating impacts of capital (debt servicing cost) accounts for a significant portion of the expenditure increase required by this utility. This will be discussed in more detail in the Program Support and Financial Costs section of the document.

Where the Budget will be spent



Funding by Source



1.8 Customer Impact & Full Time Equivalents

Impact of Rate Increases on Typical Residential Customers

The Utility Fiscal Policy (C304B) largely drives the parameters upon which the proposed 2010 Operating Budget was prepared. It reflects an 8% rate increase for both the Sanitary Utility and the Land Drainage Utility. The Sanitary Utility rate increase is expected to generate a revenue increase of approximately $5 million to the City and approximately $4 million to EPCOR. The Land Drainage rate increase is expected to generate a revenue increase of approximately $2 million to the City.

The impact of the proposed rate change to a typical residential household is illustrated as follows:

	Average Monthly Usage	2009		Proposed 2010		Increase*
		Rate	Monthly Charge	Rate	Monthly Charge	
Sanitary	17.5 m^3	$5.64 + $1.077/$m^3$	$ 24.49	$6.09 + $1.163/$m^3$	$ 26.44	$ 1.95 (8.0%)
Land Drainage	average residential lot size (592 m^2)	$0.0186/$m^2$ with run-off coefficient of 0.5	$ 5.51	$0.0201/$m^2$ with run-off coefficient of 0.5	$ 5.95	$ 0.44 (8.0%)
Total			$ 30.00		$ 32.39	$ 2.39 (8.0%)

* 1% increase in the Sanitary Utility rate provides approximately $0.6 million to the City while a 1% increase in the Land Drainage Utility rate provides approximately $0.2 million.

Full Time Equivalents for Sanitary and Land Drainage Utilities

	2008 Actual	2009 Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	2011 Forecast
Asset & Environmental Management	32.0	38.0	-	-	-	38.0	38.0
Development Support & Regulatory Services	77.5	80.5	-	-	-	80.5	80.5
Operation and Maintenance	161.9	172.8	2.1	-	-	174.9	174.9
Program Support	4.0	4.0	-	-	-	4.0	4.0
Total FTE for Regulated Utility Services	275.4	295.3	2.1	-	-	297.4	297.4
Design & Construction	243.0	296.0	-	24.0	-	320.0	342.0
Total Drainage Services	518.4	591.3	2.1	24.0	-	617.4	639.4

The 2008 and 2009 figures have been restated to remove the transfer of staff personnel as a result of the transfer of the GBWWTP to EPCOR. The full-time equivalents are reflective of the operations of the Sanitary and Land Drainage Utilities after the transfer. Often, staff work on both systems and it is difficult to definitively assign personnel to one or the other system.

For budget presentation purposes, planning staff are allocated 60% to Sanitary and 40% to Land Drainage. Operational staff are allocated 70% to Sanitary and 30% to Land Drainage. This is reflective of the relative resource demands associated with the two operations.

1.9 Service And Rate Comparators

The basic provision of sanitary and land drainage does not differ significantly across major Prairie municipalities. In general, rate payers do not experience a marked difference in service.

Across the country, however, there can be significant differences in the quality of sewage treatment, sewer infrastructure and funding. Some major cities, such as Victoria, provide only primary treatment for sanitary flows. Edmonton is one of the cities that provide tertiary treatment. The depth and age of infrastructure also varies. Prairie municipalities, for example, tend to have deeper infrastructure than those located in the coastal provinces in order to protect against frost damage. Construction and rehabilitation costs therefore, are generally higher in the Prairies. In addition, funding and other financial factors can vary. The magnitude of capital programs at a given point in time, as well as the existence of any outside (grant) funding will impact the cost to rate payers.

The following data is for five Prairie municipalities that operate both Sanitary and Land Drainage Utilities and include tertiary treatment. Each of these municipalities run their operations as separate utilities. For ease of comparison, the charges shown in the table are calculated based on a consumption of 17.5 cubic metres per month, which is the typical household usage in the City of Edmonton.

Municipality	Population (2009 rounded)	Typical Single Family House - Monthly Sanitary Charge (2009)	Typical Single Family House - Monthly Land Drainage Charge (2009)	Typical Single Family House - Total Monthly Drainage Charge (2009)
Calgary	1,043,000	$21.19	$7.30	$28.49
Edmonton	782,439	$24.49	$5.51	$30.00
Leduc	22.000	$23.50	$5.00	$28.50
Regina	205,000	$26.62	$8.82	$35.44
St. Albert	58,000	$28.24	$9.05	$37.29
Average		$24.81	$7.14	$31.94

Through the Seasonal Sewer Pricing Program, Edmonton customers have the impact of lawn watering removed from their sanitary utility bill, which is not the case for the other municipalities.

As a result, the monthly water usage, and thus the sanitary charge, for a typical household in the other municipalities is likely to be higher than what is shown in this table.

1.10 Issues And Challenges

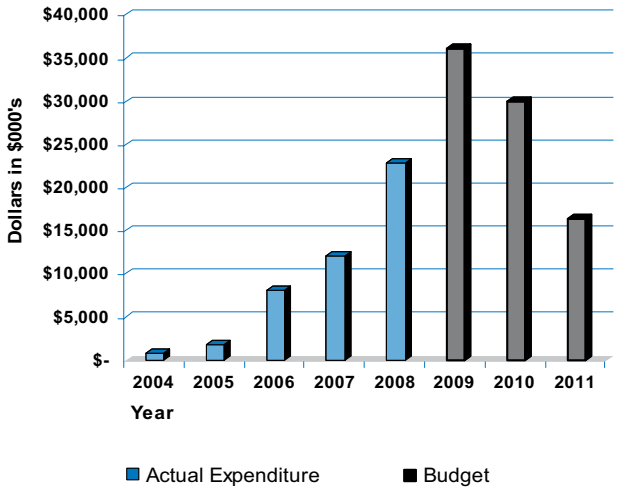
The Sanitary and Land Drainage Utilities are facing a number of issues and challenges. The most critical challenges are identified below:

Expansion of the capital investment plan to meet the Neighbourhood Renewal Initiative (09-23-9510)

In the 2009-2011 Capital Budget approved by City Council in December 2008, $60 million was allocated to undertake rehabilitation of deteriorated sewers in an estimated 20 neighbourhoods in co-ordination with Transportation Department's neighbourhood roadway renewal program. The key objective is to schedule any open-cut sewer works ahead of pavement reconstruction in order to avoid disturbing newly constructed roadway pavements. Trenchless repair work to sewers was also planned for neighbourhoods where reconstruction or overlays were scheduled.

Since the City's capital budget was approved by Council, the Transportation Department benefited from a significant reduction in construction costs as a result of the economic slowdown and have therefore increased the number of neighbourhoods receiving pavement overlays. It is now expected

Mature Neighbourhood Sewer Rehabilitation



the total number of reconstruction and overlay neighbourhoods for the same period (2009-2011) will be increased to 40. Drainage Services has not experienced corresponding decreases in construction costs as the majority of drainage construction activity is undertaken by City personnel and existing long term contracts, and was already cost effective. Therefore,

KEY CONSIDERATION

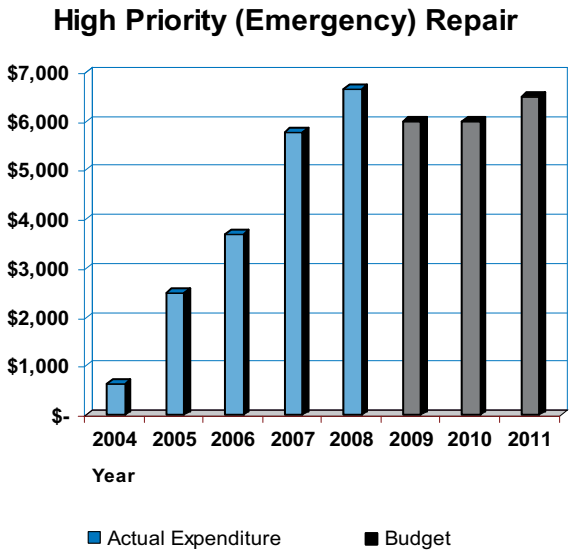
The 2009-2011 budget for Project 09-23-9510 (Mature Neighbourhood Rehabilitation) should be revised from $98.1 million to $82.6 million. This will allow Drainage Services to coordinate with Transportation Department for sewer rehabilitation works in identified neighbourhoods. Any further increase in the Transportation Department's neighbourhood roadway renewal program will have additional financial impact to the Drainage Utilities. The impact on operating from a reduction in debenture borrowing is estimated at 0.5% of combined Sanitary Utility and Land Drainage rates for 2010, which is reflected in the Proposed Budget.

in order to match the increase in the work to be done by Transportation, Drainage Services required additional funding. To accommodate the increase in mature neighbourhood renewal work planned by Transportation, Drainage Services requested a supplementary capital budget adjustment in May 2009 that Council approved. The adjustment increased the capital project for sewer rehabilitation from $60M to $98M. Since then, Drainage Services and Transportation have been working together to develop a strategy to optimize the capital infrastructure investment for Mature Neighbourhood Renewal, with the expectation of completing drainage work in 28 neighbourhoods. The other 12 neighbourhoods do not require any extensive drainage rehabilitation at this time. As a result, Drainage Services will be requesting a reduction to this program from the $98M approved in supplementary capital budget adjustment to $83M. This level of expenditure is considered reasonable based on pipe deterioration studies conducted by Drainage Services and will be reassessed prior to preparation of the 2012-2014 Capital Budget.

It should be noted that the above capital budget does not include renewal of sewers in alleys. If it is decided the Transportation Department is to increase the reconstruction program for alleys or other roadway infrastructure, there will be additional financial impacts to the Drainage Utilities.

Growing High Priority (Emergency) Repair Needs Throughout the City

During the last three years (2006 to 2008), an average of $7 million each year was budgeted for the Sewer Rehabilitation Program (09-23-9504) which includes high priority (emergency) repairs, proactive local sewer rehabilitation and rehabilitation of sewers underneath arterial and collector roadways. Out of this amount, $2.6 million was targeted for high priority (emergency) repairs identified during regular operation and maintenance activities. However during the same period, the actual amount spent on such repair work has increased to an average of $5.4 million per year as a result of increased numbers of repairs to collapsed sewer service connections and catchbasin leads. These increased failures can be attributed to the age of the infrastructure, and in some cases, shortlength construction that, over time, impact the overall integrity of the sewer in an area. In the May 2009 Supplementary Capital Budget Adjustment, the high priority repair budget was increased from $4.5 million to $8.5 million per year for 2009-2011 based on a worst case scenario. A less aggressive forecast however has resulted in a reduction from $8.5 million to $6.0 million being proposed in the Capital Budget for 2010. This reduction has been reflected in the proposed utility rates. As part of the Asset Management Strategy, the need for high priority repairs in future years will be carefully analyzed to ensure that this funding level is sufficient.



KEY CONSIDERATION

The 2009-2011 budget for Project 09-23-9504 (Sewer Rehabilitation) should be revised from $39.1 million to $30.4 million. This will provide $18.5 million for emergency response with the remainder allocated to rehabilitation of local sewers and sewers related to Transportation's arterial/collector roadways program. The imapct on operating from a reduction in debenture borrowing is estimated at 1.0% of combined Sanitary Utility and Land Drainage rates for 2010, which is reflected in the Proposed Budget.

Biosolids Management Strategy

Historically, biosolids disposal has been accomplished by paying a fee to Waste Management for the handling of the material, which also acts as a feedstock to the City's co-composter. The City of Edmonton manages about 27,000 dry tonnes of biosolids generated by the Gold Bar Wastewater Treatment Plant (GBWWTP) and the Alberta Capital Region Wastewater Commission (ACRWC) each year in compliance with the Approval-to-Operate issued by Alberta Environment. Annual disposal rates have not kept pace with biosolids production and has resulted in an accumulation of biosolids at the Clover Bar lagoons. It is estimated that the accumulated solids inventory will exceed 190,000 dry tonnes by 2010.

With the completion of the Enhanced Primary Treatment Project, wet weather flows will now be treated by enhanced primary treatment. This will further increase the annual biosolids production. It is anticipated that after 2010, expenditures for biosolids disposal will have to be increased significantly to begin reducing the inventory. The amount of funding dedicated to biosolids disposal has increased steadily, from $4.4 million in 2008, to a budget of $4.8 million in 2009 and a proposed $5.3 million in 2010. Even at this rate of funding increase, the amount of biosolids in the lagoons will continue to increase.

Current biosolids disposal activities (such as sludge to farmland and use of co-composter) are utilizing the most cost effective means to their maximum capacity. Increased disposal costs are expected as new methods of disposal are utilized to reduce the back log. A Biosolids Management Strategy is currently being jointly developed with GBWWTP, Waste Management Branch and ACRWC. This strategy will identify new technology and regional opportunities to increase the capacity for disposal of biosolids in a cost-effective, socially and environmentally acceptable manner. The strategy will also explore the potential for revenue generation to partially offset costs.

KEY CONSIDERATION

To support the current methods of biosolids disposal, $5.3 million has been allocated in the 2010 Operating Budget. This is the maximum limit that the program can be increased while maintaining an 8% Sanitary Utility rate increase. The 2010 Operating Budget will not address backlog. A comprehensive long term solution and associated costs will be proposed during the 2011 budget process. Bringing the biosolids disposal to $5.3 million has added 0.8% to the Sanitary Utility rate, which is reflected in the Proposed Budget.

KEY CONSIDERATION

The 2009-2011 budget for Project 07-23-9511 (Flood Prevention) should be revised from $36.5 million to $33.9 million. This level of investment will maintain the overall objective of the Flood Prevention Program. The impact on operating from a reduction in debenture borrowing is estimated at 0.1% of combined Sanitary Utility and Land Drainage rates for 2010, which is reflected in the Proposed Budget.

Flood Prevention Program (07-23-9511)

City Council approved the $146 million Flood Prevention Program in 2006 which involves upgrading and extending storm sewers and installation of new storm water management facilities in 31 neighbourhoods by 2017. To date, works in 18 neighbourhoods are on-going or completed. About $54 million has already been spent up to the end of 2008, placing pressure on Land Drainage financial capacity. An additional $18 million of flood prevention works for 3 neighbourhoods has also been advanced to Drainage Services' Mature Neighbourhood Rehabilitation Program to match Transportation Department's roadway renewal schedule. As will be demonstrated in the Program and Financial Support section of this document, roughly half of the proposed increased expenditure in the 2010 Land Drainage operating budget relates to increased debt servicing costs. In order to maintain a reasonable rate of investment, some of the planned projects in the remaining neighbourhoods have been re-scheduled. The impact of this re-scheduling will be closely monitored.

KEY CONSIDERATION

Plans for certain corporate projects may call for significant drainage infrastructure work in the magnitude of tens of millions of dollars over multiple years. Aside from technical support, capital budget for these corporate initiatives has not been provided. Drainage Services anticipates that sponsoring departments would fund the required drainage infrastructure for corporate initiatives.

Support of Corporate Initiatives

Corporate revitalization and densification initiatives, such as the redevelopment of the Municipal Airport, the Great Neighbourhoods Program, the Affordable Housing Plan, the Quarters Development and the Downtown Densification Plan, will have an impact on the existing drainage infrastructure. Upgrades to the drainage infrastructure are likely required to handle the increase in storm water and wastewater flows. Drainage Services provides support to such initiatives through planning and concept development. However, the Utilities are not structured to fund works that such corporate initiatives may require. Currently, there is insufficient information about these initiatives to estimate costs. The impact is expected to be in the order of tens of millions of dollars of capital investment spent over a period of years to upgrade existing drainage systems.

Utility Operations Tab

2.0 UTILITY OPERATIONS

2.1 Revenues - Sanitary & Land Drainage

This section provides a summary of all revenues generated from the operations of the two Utilities. As a result of the transfer of the GBWWTP in 2009, the budget presentation necessitates a restatement of the prior years' figures in order that the comparative figures provide meaningful information. Explanatory notes have been prepared to provide clarity.

Proposed 2010 Drainage Utility Budget - Revenue Summary ($000)

	2008 [1] Actual	2009 [1] Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Revenues								
[2] Sanitary Utility Rate	55,662	61,475	4,961	-	822	67,258	9.4	73,584
[3] Land Drainage Rate	21,858	23,653	1,894	-	(1)	25,546	8.0	27,769
[4] Gold Bar Share of Rate Revenue	43,735	48,302	3,899	-	645	52,846	9.4	57,816
[5] Program	3,230	3,389	193	-	135	3,717	9.7	3,828
[6] Interest and Other	2,661	3,213	(1,927)	-	-	1,286	(60.0)	1,749
[7] Transfer - Design & Construction	4,079	1,898	(398)	-	-	1,500	(21.0)	750
Total Revenues & Transfers	131,225	141,930	8,622	-	1,601	152,153	-	165,496

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes.*

Budget Changes for 2010 ($000)

Revenues

$ 10,947	Increase revenues from proposed 8% rate increase for Sanitary ($4,961+$3,899), Land Drainage ($1,894), and Program ($193)
1,466	Increase revenues from projected growth in customers for Sanitary and Land Drainage
135	Increase of biosolids revenue from ACRWC
(1,927)	Reduction in interest revenues due to lower cash balance and lower investment rate
(398)	Reduction in revenue from the transfer of Design and Construction operations
$ 10,223	

Explanatory Notes:

[1] The 2008 and 2009 figures have been restated to remove revenues of Gold Bar for the entire year. This is necessary to provide comparable figures.

[2] Sanitary Utility revenue consists of a proposed 8% rate increase to all rate classes. It also includes moderate customer growth projections based on the current economic climate. These inputs were developed in conjunction with EPCOR. The total revenue collected under the Sanitary Utility rate is being shared with EPCOR for wastewater treatment.

[3] Land Drainage revenue also consists of a proposed 8% rate increase to all rate classes. Land Drainage is charged based on the potential run-off generated

by the customer, which is determined by land use and lot size. Revenues collected for Land Drainage are dedicated to the storm system.

[4] Gold Bar Share of Rate Revenue is based upon the negotiated Revenue Allocation Model as part of the transfer of the plant. For 2010, the anticipated payment for wastewater treatment is 44.0%.

[5] Program revenue includes fees paid for biosolids disposal (by the Alberta Capital Region Wastewater Commission), lot grading, service connections, transfer station disposals and wastewater treatment for regional customers.

[6] Interest and Other Revenue consists of investment earnings and late payment charges to customers. The reduction in the Proposed 2010 Budget is the result of lower interest rates and lower cash balances available for investment (increased capital program in 2009).

[7] Transfer from Design & Construction reflects City Council's direction to financially segregate these operations from the Sanitary Utility. The elimination of Design and Construction revenue from the Sanitary Utility is being phased in over a number of years to manage the impacts on the Sanitary Utility rate.

2.2.1 Asset and Environmental Management

Overall Service Objective

To provide long term planning for the management of drainage assets and the protection of the environment in an efficient, effective and financially responsible manner.

Responsibility

The primary responsibility for this service is to identify and address current and emerging issues and needs by developing long range strategies, drainage plans, business plans, budgets and public education programs. Issues currently identified, include total loading to the North Saskatchewan River, new water quality parameters, regional servicing and coordination, infrastructure renewal/upgrading and system expansion.

Day-to-day work includes strategic planning, business planning, asset management, environmental management, public education, biosolids management and joint planning with Alberta Capital Region Wastewater Commission and EPCOR. It also includes the management of the Sanitary Servicing Strategy and its related fund.

Major accomplishments include:

- Combined Sewer Overflow Strategy – This strategy involves construction to reduce untreated combined storm runoff and sewage overflow to the North Saskatchewan River by storage, flow control in the system and wet weather treatment at the Gold Bar Wastewater Treatment Plant. The Enhanced Primary Treatment Facility was commissioned in 2009 and will provide a significant reduction in untreated flow to the river during wet weather events starting in 2010.

- Sanitary Servicing Strategy - This innovative strategy utilizes the financial resources of the land development industry, building industry and the Sanitary Utility for the construction of deep trunk sewers. Over the past 10 years, the completed work facilitated the servicing of land for approximately 75,000 residents in the city.

- Asset Inventory & Condition Rating – Among major Canadian municipalities, Drainage Services is at the leading edge of asset inventory and condition assessment. This is achieved through the use of state-of-the-art software and sewer condition rating methodology, resulting in a comprehensive database of the quantity and condition of the assets.

- Public Education Programs such as the 'Treat It Right' and 'Fats, Oil and Grease' campaigns. Adult public education programs use a variety of communication tools to increase citizens' awareness of their roles in environmental protection. Surveys after recent campaigns have indicated a significant increase in awareness.

- Total Loading Plan— In June 2009, Drainage Services submitted its Total Loading Plan to Alberta Environment. This plan marks a major milestone in the City's efforts to manage its cumulative loadings of total suspended solids (TSS) to the North Saskatchewan River. The Plan sets out a regulatory framework and a costeffective implementation plan that will limit future loadings of TSS to the river to current levels.

Operational Variables

- Changes to population distributions and development patterns (e.g. downtown densification initiatives such as the Quarters and the Municipal Airport Re-development) will require upgrading of existing sewers.
- Changes in Corporate funding policies which will affect the stability of utility rates (e.g. Establishment of Neighbourhood Renewal Reserve for roadway related renewal works)
- Changes in regulatory requirements (e.g. Total loadings for contaminants in addition to TSS) will require additional investments in the drainage system.

Current Service Level

Current Service Level	Key Resource Requirement	Capacity of Service	Risk of Not Doing
16 on-going major strategies, programs and plans in the following areas: • Environmental Management • Asset Management • System Upgrading • Public Education	Personnel Costs – $3.4 million for 38 FTEs Materials and Equipment – Computer hardware and software Contract Services – includes about 20 engineering and service contracts at $3.5 million	Current staffing plan is adequate to handle existing service level Current engineering services contracts are sufficient to cover all planning, financial and environmental studies	• Not meeting Approval-to-Operate conditions • Ineffective investment in assets • Unsustainable rate increases • Delay to land development processes • Inability to support and coordinate with Corporate initiatives • Widening of infrastructure gap • Environmental protection objectives compromised • Services provided to regional customers hampered • Joint environmental stewardship and planning model with EPCOR not achieved

Strategic Initiatives
Initiative #1 - Zero Discharge Vision

Alignment with The Way Ahead	Initiative	Immediate/Intermediate Output	Ultimate Outcome
Preserve and sustain Edmonton's environment Increase and broaden advancement towards zero waste	The Zero Discharge Vision is a long term strategy (20-30 years) that will move the City towards the goal of zero impact on the environment from storm runoff and wastewater discharge in Edmonton.	In 2010, a framework for a Zero Discharge Vision will be completed. In the intermediate term, strategies that support the Vision will be implemented in an integrated fashion in order to achieve the goals set out in the framework.	Edmonton's environment is preserved and sustained through utilization of leading edge practices in utility operations.

2010 Budget Impact	
	Base - Budgets are already in place for current Drainage initiatives. Long term funding requirements and risks will be quantified during the development of this vision. **Incremental** - Budget increase of $200,000 in 2010 for consulting and research

Key Consideration - To support a budget increase of $200,000 in 2010 in order to hire the necessary consulting and research expertise to produce a framework for the Zero Discharge Vision. Technical expertise that is not available in-house must be utilized to identify opportunities to reduce the discharge of contaminants to the river and increase the amount of recycled water (e.g. scavenging plants on sanitary trunks for industrial use or storm water capture for City use). The implementation of this initiative increases the Sanitary Utility rate by 0.3%, which is reflected in the Proposed Budget.

Initiative #2 - Asset Management Strategy

Alignment with The Way Ahead	Initiative	Immediate/ Intermediate Output	Ultimate Outcome
Transforming Edmonton's urban form Strategically invest in select infrastructure as set by Long Range Financial Plan and the Strategic Infrastructure Financial Strategy	This process improvement initiative is designed to increase the efficiency and effectiveness of the drainage utility to meet customers' demands throughout the full life cycle of the asset. By understanding the drivers such as asset condition, capacity and functionality, behind the various programs in the Drainage Master Plan, and working better with various internal and external stakeholders, this initiative answers the question: When is the right time to invest the right amount of resources on the right group of infrastructure?	In 2010, a renewal strategy to manage and optimize the life span of assets will be implemented. In the intermediate term, an increased (accelerated) rehabilitation and relining program for Drainage infrastructure will move ahead.	Excellence in environmental, urban, architectural and landscape design is exemplified by the provision of utilities in an integrated, holistic manner

2010 Budget Impact	
	Base - Budgets are already in place for current Drainage Asset Management projects. **Incremental** - There is no incremental budget required in 2010 for this initiative.

Drainage Services - Asset & Environmental Management ($000)

	2008 Actual	2009 Budget	Revenue & Cost Impacts	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Expenditure & Transfers								
Personnel	2,615	3,435	350	-	-	3,785	10.2	3,935
Materials, Goods & Supplies	415	375	8	-	-	383	2.1	390
External Services	737	1,117	(277)	-	-	840	(24.8)	537
Consulting & Professional Services	2,082	2,366	225	-	200	2,791	18.0	2,847
Fleet Services	25	16	-	-	-	16	-	17
Intra-municipal Services	261	212	5	-	-	217	2.4	221
Biosolids Processing	4,437	4,816	193	-	290	5,299	10.0	6,180
Other Charges	72	112	12	-	-	124	10.7	126
Transfer to Reserves	-	-	-	-	-	-	-	-
Subtotal	10,644	12,449	516	-	490	13,455	8.1	14,253
Intra-municipal Recoveries	(568)	(360)	(27)	-	-	(387)	7.5	(395)
Total Expenditure & Transfers	10,076	12,089	489	-	490	13,068	8.1	13,858
Full-time Equivalents	32.0	38.0	-	-	-	38.0	-	38.0

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, performance. Revenue increases are due to rate and volume changes.*

Budget Changes for 2010 ($000)

Cost Changes

$ 350	Inflation - personnel
139	Inflation - non-personnel
$ 489	Total Cost Changes

Growth

$ 200	Zero Discharge Vision
290	Increase in volume of Bio-solids disposal
$ 490	Total Growth

Explanatory Notes:

The $200,000 in Growth reflects the desire to pursue the goal of Zero Discharge Vision.

Also reflected in this budget is the increased processing of biosolids by $290,000. This could translate into the disposal of an additional 1,000 dry tonnes in the Nutri-Gold Program depending on fuel costs and hauling distances.

2.2.2 Development Support and Regulatory Services

Overall Service Objective

To provide timely and effective service to homeowners, builders, land developers and commercial and industrial lot owners on regulated usage and expansion of the drainage systems.

Responsibility

Development Support and Regulatory Service directly impacts the public and developers through the delivery of programs such as private development approvals, infrastructure recording, sewer and water service connections, flood proofing, lot grading and local improvements. Environmental monitoring, infrastructure recording and regulatory compliance keep both the City and its customers in compliance with environmental laws.

The primary goal is to provide timely and cost effective responses to meet customers' needs and to ensure regulatory compliance.

Major accomplishments include:

- Industry Source Control Programs — This major program reduces mercury discharges from dental offices through bylaw changes requiring the installation of dental amalgam separators. Through an information campaign and subsequent inspection program, over 98% of dental offices now remove over 90% of the mercury released in dental amalgam during filling replacements. This mercury no longer ends up in the natural environment. Similar programs have targeted heavy metal releases from metal finishing operations, hydrocarbon releases from industrial and commercial operations as well as dry cleaning solvents from laundry facilities.

- Erosion and Sedimentation Control Framework - This framework, developed in 2004, culminated in the publishing of the Erosion and Sedimentation Control Guidelines and Field Manual which helps to reduce the impacts of projects requiring ground disturbance on the environment. The success rate for timely installation of Erosion and Sediment Control Plans by developers is 93% in 2008.

- Infrastructure Recording—Drainage Services has a sophisticated system of recording system facility information (e.g. DRAINS, WASS). Implementation of these systems has allowed engineering and operational staff to manage the system in real time.

- Flood Proofing Program – Under this program, subsidy is provided to homeowners who are interested in installing backwater valves to their existing homes as a means to minimize basement flooding from sewer backup. Reimbursement had been provided to 1,613 homeowners for installation of backwater valves during the period from 2004 to 2008.

- Local Improvement—Work undertaken in this program enables benefiting property owners to have sanitary, storm, and water systems and services constructed by the City and financed on the tax roll. Between 2005 and 2009 approximately $20 million of underground utilities were constructed in this manner, resulting in the servicing of approximately 155 hectares of commercial and industrial land.

Operational Variables

- Changes to the economic environment will affect land development and local improvement demands.

- Variations in number of over-strength customers will impact the amount of regulatory testing to be performed.

- Legislative changes will impact the amount and scope of regulatory testing.

Current Service Level

Current Service Level	Key Resource Requirement	Capacity of Service	Risk of Not Doing
Over 15,000 lot grading inspections Over 2,000 single family lots approved 830 planning circular processed Over 100 applications for backwater valve rebate reviewed More than 14,000 water and sewer servicing and local improvement inquiries handled	Personnel Costs – $6.9 million for 80.5 FTEs Materials and Equipment – Computer hardware and software Contract Services – includes about 25 engineering services and data collection contracts at about $1.4 million	Current staff plan is adequate to handle the existing service level Current engineering services contracts are sufficient to cover all development support and regulatory activities 2,250 lot grading inspections per FTE 2,300 water and sewer servicing and local improvement inquiries per FTE	• Delay to land development process • Wastewater treatment process adversely affected • Not meeting Approval to-Operate conditions • Processing time for water and sewer service applications longer • Higher risk for errors in calculating drainage assessments • Unable to support and co-ordinate with Corporate initiatives • Infrastructure damage due to construction with inadequate information (e.g. Alberta One Call)

Drainage Services - Development Support and Regulatory Services ($000)

	2008 Actual	2009 Budget	Revenue & Cost Impacts*	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Expenditure & Transfers								
Personnel	5,540	6,938	448	-	-	7,386	6.5	7,750
Materials, Goods & Supplies	737	790	16	-	-	806	2.0	821
External Services	275	1,258	79	-	-	1,337	6.3	183
Consulting & Professional Services	2,851	177	4	-	-	181	2.3	1,363
Fleet Services	54	48	-	-	-	48	-	49
Intra-municipal Services	2,119	1,305	39	-	50	1,394	6.8	1,421
Utilities	162	237	3	-	-	240	1.3	243
Other	48	-	-	-	-	-	-	-
Restatement for Gold Bar	-	-	-	-	-	-	-	
Transfer to Reserves	-	-	-	-	-	-	-	-
Subtotal	11,786	10,753	589	-	50	11,392	5.9	11,830
Intra-municipal Recoveries	(1,716)	(1,600)	(33)	-	447	(1,186)	(25.9)	(1,209)
Total Expenditure & Transfers	10,070	9,153	556	-	497	10,206	11.5	10,621
Full-time Equivalents	77.5	80.5	-	-	-	80.5	-	80.5

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes.*

Budget Changes for 2010 ($000)

Cost Changes

$ 448	Inflation - personnel
79	Inflation - non-personnel
29	Other cost adjustments
$ 556	Total Cost Changes

Growth

$ 50	Operating impacts from monitoring system
447	Reflects lower recovery from inspection of developer contributed assets
$ 497	Total Growth

Explanatory Notes:

The proposed 2010 Budget generally reflects the inflationary impact of services. Current economic conditions indicate a slower rate of development, hence lower developer contributed assets. The budget reflects the lower recovery from private developers associated with the inspection of contributed assets.

2.2.3 Operations & Maintenance

Overall Service Objective

To provide timely and efficient sewer system maintenance in order to achieve optimal operating conditions of the infrastructure, environmental protection and customer satisfaction.

Responsibility

The primary responsibility of Operations and Maintenance is to operate and maintain a reliable wastewater collection and transmission system (conveying flows to the Gold Bar Wastewater Treatment Plant) and a reliable storm water conveyance and management system (conveying flows to the North Saskatchewan River and its tributaries).

On a day to day basis, this major service provides:

- sewer infrastructure maintenance (including high and low pressure flushing plus tree root and grease control)
- operation and maintenance of pumping stations, remote flow control structures and storm water management facilities
- inspection of mainline and sewer services by closed circuit television (CCTV); visual inspection of trunk sewers and storm outfalls
- customer service calls (including emergencies and complaints).

Recent accomplishments of Operations and Maintenance Section include:

- Achievement of ISO 14001 re-certification in 2008
- Reduced water consumption in operations through changing focus from low to high pressure flushing
- Maintenance of service levels despite significant increase in drainage asset inventory during the past 5 years (10% in sewers, 15% in pumping stations and 26% in storm water management facilities).

Operational Variables

Growing High Priority (Emergency) Repair Needs:

- As mentioned in the Issues and Challenges section, the number of high priority repairs has increased significantly in recent years. Operations and Maintenance is responsible for handling the initial trouble call

in each of these cases (e.g. flood response), before handing it off to Design and Construction to complete the design and repair work. A higher number of emergency calls can delay regular planned maintenance.

Rate of Growth of Drainage System:

- The variation from year to year in system growth is unpredictable, and this makes resource planning difficult.

Changes in Material Costs:

- The high cost of some materials can reduce the purchasing power of the available budget.

New Technology and Equipment:

- New equipment for electronic monitoring and remote control software require a substantial increase in training and support for maintenance crews.
- Hiring and retaining skilled trades people has been, and continues to be difficult.
- Updated code and legal requirements demand a higher level of equipment and materials resulting in higher operational and maintenance costs.

Current Service Level

Current Service Level	Key Resource Requirement	Capacity of Service	Risk of Not Doing
Overall Operations and Maintenance: Maintain over: - 5,300km of sewer pipes - 158 storm water management facilities - 71 pumping stations - 74,000 manholes - 50,000 catchbasins - 43 peak flow storage units	Personnel (largely Preventative Maintenance)– including crew of technical specialist and labourers at $12.8 million for 172.8 FTEs.	Storm water management facility weed and algae control: Annually and as required. River flow control gates: Serviced every 6 months.	Risks to the environment and potentially to our ability to satisfy the Approval to Operate document from the Province. Reduced life span of assets. Damage to properties due to flooding.
Sewer Inspection: Inspection of approximately 100 km of mainlines and over 5,000 service pipes.	Sewer Inspections Equipment - 4 mainline TV inspection units (3 people each) and 10 service TV inspection and rodding crews (2 people each).	River outfalls: Inspected biweekly, sampled as required.	Possible deterioration of service due to pipe failure and the accompanying customer inconvenience.
Preventative Measures: Over 650 km of high pressure flushing and tree root removal from 70 km of pipe.	Sewer Cleaning Equipment – including combination units for high pressure flushing and cleaning catchbasins (14 units @ $500,000 each).	High Pressure Flushing: Routes established for 3 months, 6 months, or 12 months frequencies. Low pressure flushing: Routes established for one year frequency. Mainline tree root removal: Routes established for 3-year frequency. Catchbasin Cleaning: All bus routes completed annually, other areas as required.	Higher risk of pipe blockage due to tree roots or grease in the sewer pipes.

Current Service Level con't

Current Service Level	Key Resource Requirement	Capacity of Service	Risk of Not Doing
Customer Service Calls: Management and field crews on standby to respond to emergencies after normal working hours (Weekends and statutory holidays included).	Emergency Response Materials and Supplies – including operations of specialized vehicles, and other outfitting for outdoor crews.		Inadequate response to emergency situations may impact the City negatively.

Strategic Initiatives

Drainage Operations and Maintenance supports the implementation of the Asset Management Strategy, discussed under the Asset and Environmental Management major service. The support of this initiative is largely by way of inspection of current assets to provide input to condition assessments and prioritization of work.

Drainage Services - Operations and Maintenance ($000)

	2008 Actual	2009 Budget	Revenue & Cost Impacts*	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Expenditure & Transfers								
Personnel	10,382	12,746	287	-	-	13,033	2.3	13,808
Materials, Goods & Supplies	1,746	1,320	469	-	-	1,789	35.5	1,823
External Services	897	925	(21)	-	-	904	(2.3)	922
Fleet Services	2,686	2,794	(142)	-	-	2,652	(5.1)	2,755
Intra-municipal Services	764	693	256	-	-	949	36.9	967
Utilities	718	849	(35)	-	-	814	(4.1)	829
Other Charges	282	241	(27)	-	-	214	(11.2)	218
Transfer to Reserves	-	-	-	-	-	-	-	-
Subtotal	17,475	19,568	787	-	-	20,355	4.0	21,322
Intra-municipal Recoveries	(521)	(1,331)	(27)	-	-	(1,358)	2.0	(1,385)
Total Expenditure & Transfers	16,954	18,237	760	-	-	18,997	4.2	19,937
Full-time Equivalents	161.9	172.8	2 .1	-	-	174.9	-	174.9

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes.*

Budget Changes for 2010 ($000)

Cost Changes

$ 287	Inflation - personnel
473	Inflation - non-personnel
$ 760	Total Cost Changes

Full Time Equivalents

2.1	Annualization of 2009 FTEs

Explanatory Notes:

The Proposed 2010 Budget contains inflationary impacts and annualization of 2009 FTEs.

A realignment of budget and actuals was completed, resulting in a reallocation of funds from other cost elements to Materials, Goods, and Supplies. This will properly match actual expenditure to the correct cost element budget.

The change in Intra-municipal Services is a combination of an increase in 311 costs as well as a realignment of budget across the major activities.

2.2.4 Program Support and Financial Costs

Program Support and Financial Costs provide a summary of support costs for the two Utilities, including financial costs and charges, customer billing service, shared services costs charged by various providers and office of the Manager.

Drainage Services - Program Support and Financial Costs

	2008 Actual	2009 Budget	Revenue & Cost Impacts*	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Expenditure & Transfers								
Personnel Costs	618	553	37	-	-	590	6.7	613
Materials, Goods & Supplies	10	24	1	-	-	25	4.2	25
External Services	100	633	14	-	-	647	2.2	660
Customer Billing Service	3,672	4,394	457	-	-	4,851	10.4	4,948
Payment to Intra-Municipal	4,307	4,902	282	-	-	5,184	5.8	5,384
Debt Interest	7,260	9,143	-	-	3,219	12,362	35.2	14,951
Depreciation net of Amortization	6,016	12,285	(926)	-	-	11,359	(7.5)	9,160
Local Access Fee	4,438	5,086	323	-	-	5,409	6.4	5,916
Other Charges	160	259	4	-	-	263	1.5	268
Transfer to Reserves	-	-	-	-	-	-	-	-
Subtotal	26,581	37,279	192	-	3,219	40,690	9.1	41,925
Intra-municipal Recoveries	(2,692)	(3,288)	1,374	-	-	(1,914)	(41.8)	(963)
Total Expenditure & Transfers	23,889	33,991	1 ,566	-	3 ,219	38,776	14.1	40,962
Full-time Equivalents	4.0	4.0	-	-	-	4.0		4.0

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes.*

Budget Changes for 2010 ($000)

Cost Changes

$ 37	Inflation - personnel
19	Inflation - non-personnel
457	Increase cost from customer billing services
282	Other cost adjustments
(926)	Change in depreciation expense
323	Increase in local access fee because of increase in sanitary revenue
1,374	Lower recovery from capital projects because of changes in Tangible Capital Asset Legislation
$ 1,566	Total Cost Changes

Growth

$ 3,219	Increase interest charges from debentures for debt financed capital projects in 2009.

Explanatory Notes:

Interest cost of $3.22 million has been included in 2010 for debentures issued as a result of significant capital expenditures in 2009. The majority of capital is financed by 25-year debentures.

The reduction in Intra-Municipal Recovery of $1.37 million is a result of the required adoption of Tangible Capital Assets (TCA) rules which restrict the eligibility of charges to capital projects.

Customer Billing Service is provided by a division of EPCOR on a contract basis. The increase of $0.46 million for the service provided includes customer data management, billing, and collection. The proposed budget for this service is based upon the current estimate by EPCOR.

Payment to Intra-Municipal consists of Shared Services and Corporate Charges. The net increase of $0.28 million is the result of projected cost increases and a recalculation of the City's corporate overhead allocation. There is an ongoing corporate initiative to provide greater equity and transparency for the charges.

CAPITAL BUDGET UPDATE AND PRO-FORMA STATEMENTS tab

3.0 CAPITAL BUDGET UPDATE

3.1 Capital Budget and Budget Adjustment Requests

The following is a summary of the City Council approved 2009-2011 Capital Budgets for Drainage Services, with the proposed Budget Change Request outlined in the shaded area.

2009-2011 Capital Budget Summary and Update

Project #	Project Name	2009 Budget	2010 Budget	2011 Budget	3-Year Budget Total	Budget Change Request 2009	Budget Change Request 2010	Budget Change Request 2011	Revised 3 Year Total
09-23-0600	Environmental Improvements	1,575	1,610	1,646	4,831				4,831
05-23-2160	Opportunistic Sewer Separation	4,048	3,000	3,000	10,048				10,048
06-31-4210	Mill Creek Storm Improvements	4,036	-	-	4,036				4,036
06-31-4211	N.E. Highwater Table Drainage	266	-	-	266				266
07-31-4304	Wetlands - Kennedale and Pylypow	5,227	5,653	71	10,951				10,951
06-23-5415	CSO Performance Optimization	536	1,583	-	2,119				2,119
09-23-7199	Review/Inspect Developer Built Sewers	960	988	1,028	2,976				2,976
04-23-8100	Double Barrel - West End	105	-	-	105				105
08-23-9202	Mill Woods Double Barrel Replace/SESS SA1	12,723	13,600	12,500	38,823	(4,341)	(1,041)	4,341	37,782
04-23-9302	WESS W12	4,655	3,500	2,372	10,527				10,527
09-23-9503	Structures Rehabilitation	8,806	9,170	8,213	26,189	(910)	(1,452)	(1,455)	22,372
09-23-9504	Sewer Rehabilitation	13,702	12,674	12,760	39,136	(3,802)	(2,774)	(2,210)	30,350
09-23-9510	Mature Neighbourhood Rehabilitation - Dr	38,000	31,500	28,600	98,100	(1,864)	(1,500)	(12,100)	82,636
07-23-9511	Flood Prevention	10,606	16,816	9,059	36,481	(431)	(736)	(1,459)	33,855
09-23-9513	Service Connections Expansion	2,817	2,817	2,818	8,452				8,452
09-31-9604	Stormwater Infrastructure	2,721	636	649	4,006				4,006
09-23-9608	Local Improvement Sewers	17,000	10,547	8,053	35,600	-	11,453	(1,053)	46,000
03-31-9613	Stormwater Management Facilities	1,199	2,959	4,320	8,478				8,478
09-31-9615	Stormwater Quality Enhancement	50	120	216	386				386
09-23-9702	CSO Control Strategy	1,468	1,323	1,762	4,553				4,553
09-23-9703	Infrastructure Upgrading	2,001	590	1,125	3,716				3,716
09-23-9704	Environmental Monitoring	958	813	867	2,638				2,638
Facilities/Equipment Upgrading & Expansion (Consolidated)		16,543	4,070	3,431	24,044				24,044
SSSF Projects (Consolidated)		11,250	20,000	12,050	43,300				43,300
Gold Bar Projects (Consolidated and Transferred)		4,006	-	-	4,006				4,006
Total Capital		**165,258**	**143,969**	**114,540**	**423,767**	**(11,348)**	**3,950**	**(13,936)**	**402,433**
Financing									
Local Improvements		16,980	10,547	8,053	35,580	-	11,453	(1,053)	45,980
Other Misc Financing		16,550	28,000	17,750	62,300	(1,808)	(3,410)	605	57,687
Retained Earnings		21,097	26,382	24,554	72,033	7,524	(6,924)	(6,782)	65,851
Self Liquidating Debentures		81,938	68,638	60,882	211,458	(17,064)	2,831	(6,706)	190,519
Developer/Partner Financing		7,996	2,903	3,287	14,186	-	-	-	14,186
Grants		20,697	7,499	14	28,210	-	-	-	28,210
Total Financing		**165,258**	**143,969**	**114,540**	**423,767**	**(11,348)**	**3,950**	**(13,936)**	**402,433**

CAPITAL BUDGET UPDATE AND PRO-FORMA STATEMENTS

Adjustments Required:

Mill Woods Double Barrel Replace / SESS SA1 (08-23-9202)

Construction for this multi-year (2009-2012) project started in 2009. This cash flow adjustment reflects the latest construction schedule and project cost estimate resulting in a $1 million reduction. As the project progresses, further adjustment may be made in 2010.

Structures Rehabilitation (09-23-9503)

This program is largely centered around trunk sewer and outfall rehabilitation, pump station upgrading and trestle repair. A reduction of $3.8 million for this program, over the next three years (2009 and 2011), reflects a more conservative forecast for individual project costs, but maintains the overall objectives of the consolidated capital profile.

Sewer Rehabilitation (09-23-9504), Mature Neighbourhood Rehabilitation (09-23-9510) and Flood Prevention (07-23-9511)

Reasons for requesting budget reduction are explained in the Issues and Challenges Section.

Local Improvement Sewers (09-23-9608)

An increase of the local improvement (LI) budget of $10.4 million over 2010 and 2011 is to provide funding to potential LI funded projects in Aurum West Industrial, Mistatim North Industrial, and the Bergman residential replot.

2009-2011 Supplemental Budget Adjustment (SBA) - Sanitary Utility

Project #	Project Name	2009 Budget	2010 Budget	2011 Budget	3-Year Budget Total
Approved Totals		**96,076**	**85,934**	**66,367**	**248,377**
Proposed Adjustment:					
08-23-9202	Mill Woods Double Barrel Replac/SESS SA1	(4,341)	(1,041)	4,341	(1,041)
09-23-9503	Structures Rehabilitation	(898)	(1,398)	(1,385)	(3,681)
09-23-9504	Sewer Rehabilitation	(2,811)	(1,898)	(1,507)	(6,216)
09-23-9510	Mature Neighbourhood Rehabilitation - Dr	(1,864)	(750)	(3,630)	(6,244)
07-23-9511	Flood Prevention	(78)	(45)	(568)	(691)
09-23-9608	Local Improvement Sewers	-	5,500	(500)	5,000
Total Proposed Adjustment		**(9,992)**	**368**	**(3,249)**	**(12,873)**
Revised Total Capital		**86,084**	**86,302**	**63,118**	**235,504**
Financing Changes Due to Proposed Adjustment:					
Local Improvements		-	5,500	(500)	5,000
Other Misc Financing		(1,808)	(3,410)	605	(4,613)
Retained Earnings		5,596	(617)	(182)	4,797
Self Liquidating Debentures		(13,780)	(1,105)	(3,172)	(18,057)
Developer/Partner Financing		-	-	-	-
Grants		-	-	-	-
Total Financing for Proposed Adjustment		**(9,992)**	**368**	**(3,249)**	**(12,873)**

2009-2011 Supplemental Budget Adjustment (SBA) - Land Drainage Utility

Project #	Project Name	2009 Budget	2010 Budget	2011 Budget	3-Year Budget Total
Approved Totals		**69,182**	**58,035**	**48,173**	**175,390**
Proposed Adjustment:					
09-31-9503	Structures Rehabilitation	(12)	(54)	(70)	(136)
09-31-9504	Sewer Rehabilitation	(991)	(876)	(703)	(2,570)
09-31-9510	Mature Neighbourhood Rehabilitation - Dr	-	(750)	(8,470)	(9,220)
07-31-9511	Flood Prevention	(353)	(691)	(891)	(1,935)
09-31-9608	Local Improvement Sewers	-	5,953	(553)	5,400
Total Proposed Adjustment		**(1,356)**	**3,582**	**(10,687)**	**(8,461)**
Revised Total Capital		**67,826**	**61,617**	**37,486**	**166,929**
Financing Changes Due to Proposed Adjustment:					
Local Improvements		-	5,953	(553)	5,400
Other Misc Financing		-	-	-	-
Retained Earnings		1,928	(6,307)	(6,600)	(10,979)
Self Liquidating Debentures		(3,284)	3,936	(3,534)	(2,882)
Developer/Partner Financing		-	-	-	-
Grants		-	-	-	-
Total Financing for Proposed Adjustment		**(1,356)**	**3,582**	**(10,687)**	**(8,461)**

Capital Impacts on the Operational Budget

The Budget Change Request to the 2009-2011 Capital Budget will have no impact on the 2010 Operating Budget. The need of additional resources will be reviewed again during the preparation of next year's Operating Budget.

3.2 Sanitary Servicing Strategy Fund (SSSF)

Background

In July 1998, City Council approved the Sanitary Servicing Strategy. The strategy is to put in place a 75-year plan to provide sanitary servicing for new land development within the city. The Sanitary Servicing Strategy Fund gets its revenues from the following sources:

- Sanitary Sewer Trunk Charge (from the builders)
- Expansion Assessment (from the developers)
- Sanitary Utility Contributions (from the Utility)

The SSSF is only used to build sewers which are larger than 1,050mm in diameter and serve areas greater than 1,400 hectares. It is managed by a committee made up of representatives from the Urban Development Institute, Planning & Development Department and Drainage Services.

Current Project and Financial Status

Current projects funded under this strategy include various major pipe segments (such as W1, W14, NL2, NL3, N1, SW3 and SA1b) located in different parts of the City.

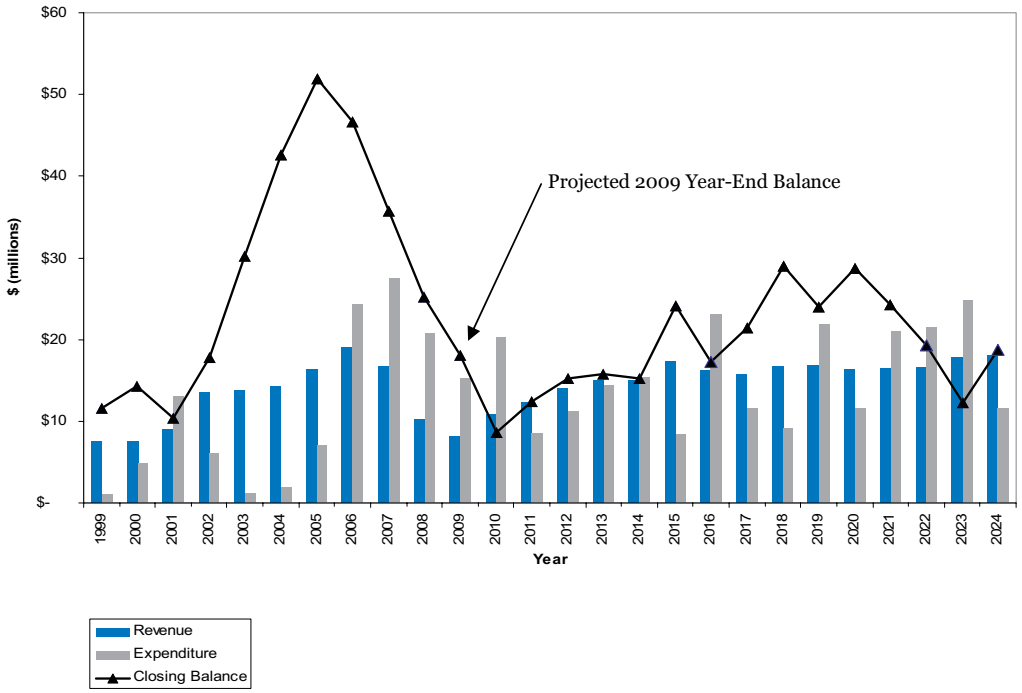
At the end of December 2008, the Sanitary Servicing Strategy Fund had a balance of $25.2 million. With the projects already initiated and the drastic reduction

KEY CONSIDERATION

A major review of the Sanitary Servicing Strategy Program has been conducted in 2009. The review looks into the future needs of the program and proposes funding options to ensure sustainability of the fund. Based on the findings of the review, the SSSF Management Committee recommends Council approve a 5.25% rate increase for 2010. This proposed increase relates to developer contributions and does not affect Drainage rates

in revenue from land development activities experienced in the early part of 2009, the Fund balance at the end of 2009 is projected to drop to $17 million. To ensure sustainability of the program, the estimated revenue and expenditures are constantly reviewed and appropriate adjustments to the rates as well as construction cashflow requirements will be made whenever necessary.

SANITARY SERVICING STRATEGY FUND



3.3 Pro-Forma Statements

3.3.1 Sanitary Utility Pro-forma Balance Sheet For Years 2010 - 2014 ($000)

	2010	2011	2012	2013	2014
Assets					
Cash and deposits	29,362	26,404	23,505 2	2,023	19,729
Current Assets (Receivables & Misc)	14,283	14,283	14,283	14,283	14,283
Investment in Capital Assets					
Financed - net	415,286	444,254	474,903	500,122	535,871
Contributed - net	493,201	505,406	521,181	514,833	531,669
Total Assets	**952,132**	**990,347**	**1,033,872**	**1,051,261**	**1,101,552**
Liabilities					
Current Liabilities (AP & Misc)	26,236	26,236	26,236	26,236	26,236
Current Portion of Long-term Debt	15,711	16,163	17,328	18,614	18,966
Long-term Debt	200,918	218,420	236,283	249,422	270,524
Total Liabilities	**242,865**	**260,819**	**279,847**	**294,272**	**315,726**
Equity					
Equity in Capital Assets					
Contributed Assets	493,201	505,406	521,181	514,833	531,669
Financed Assets	186,704	197,716	209,340	220,133	234,428
Retained earnings - to be invested	29,362	26,406	23,504	22,023	19,729
Total Equity	**709,267**	**729,528**	**754,025**	**756,989**	**785,826**
Total Liabilities & Equity	**952,132**	**990,347**	**1,033,872**	**1,051,261**	**1,101,552**
Utility Fiscal Policy					
Cash Reserve ($M) $17M to $38M	$29.4	$26.4	$23.5	$22.0	$19.7
Debt Service Coverage Ratio not less than 1.2	3.3	2.7	2.5	2.5	2.4
Capital Financing 50% - 70% Debt Financing	77.7%	74.2%	75.0%	75.0%	75.0%

Explanatory Notes:

Cash and Deposits

Cash and deposits are systematically being drawn down as proposed financing of utility financed capital projects are funded, on average 75% debt and 25% retained earnings (cash). As indicated in the Utilities Governance Review of July 2009, care would need to be taken to balance between the use of cash and debt financing to ensure the long term sustainability of the Utility. Administration will be undertaking a review of this issue over the upcoming year as part of the Utility Fiscal Policy review.

CAPITAL BUDGET UPDATE AND PRO-FORMA STATEMENTS

Investment in Capital Assets

Financed assets represent investment in capital assets paid for by the Sanitary Utility either through debt or retained earnings, supported through the utility rate. Contributed assets are capital infrastructure that have been constructed and/or paid for by third parties. This increased investment in capital infrastructure is detailed in the Capital Budget Section of this document.

Long Term Debt

The amount of Long Term Debt is expected to rise as the financing of the proposed capital projects is generally 75% debt and 25% retained earnings for the next 5 years. The total amount of outstanding debt is increasing as the amount of debt being retired is less than the new debt being issued. To determine the optimal financial structure, analysis will be undertaken as part of the Utility Fiscal Policy Review process.

Utility Fiscal Policy Indicators

Cash Reserve—Over the 5 year period, the projected cash reserve balance is within the range identified in the Utility Fiscal Policy. The downward trend in the projected cash balance is reflective of the increased investment in capital infrastructure.

Debt Service Coverage—This reflects the Utility's ability to pay the debt servicing costs (principal and interest) relative to the amount of revenue collected in a given year. The projected 5-year coverage ratio meets the Utility Fiscal Policy target.

Capital Financing—In order to maintain a rate increase of 6% to 8% over the next 5-years, the planned investment in capital infrastructure requires a higher level of debt financing (over 70%) than identified in the Utility Fiscal Policy. As part of the Utility Fiscal Policy Review, the optimal financial structure and the level of capital investment will be reviewed.

3.3.2 Sanitary Utility Pro-forma Income Statement For Years 2010 - 2014 ($000s)

	2010	2011	2012	2013	2014
Revenues					
Rate & Program Revenue	$72,340	$78,029	$82,801	$88,752	$95,132
Interest income	518	846	927	616	577
Total revenue	72,858	78,875	83,728	89,368	95,709
Expenses					
O & M	38,921	41,555	43,707	45,356	46,460
Depreciation*	9,111	8,468	8,565	9,023	9,468
Interest	9,520	11,000	11,894	12,794	13,529
Local Access Fee	5,409	5,916	6,350	6,818	7,320
Total expenses	62,961	66,939	70,516	73,991	76,777
Net Income	9,897	11,936	13,212	15,377	18,932
Rate Increase	8%	8%	6%	6%	6%

*Net of amortization of contributed assets

Utility Fiscal Policy

Average Equity	$211,416	$220,094	$228,483	$237,500	$248,157
Return on Avg. Equity 6% - 10%	4.7%	5.4%	5.8%	6.5%	7.6%
Local Access Fee ($M) 8% of Qualifying Revenue	$5.4	$5.9	$6.4	$6.8	$7.3
Dividend ($M) payable in following year					
30% to 2012	$2.6	$3.2	$3.6	$4.2	$5.3
move to 40% effective 2013				$1.4	$1.8

Explanatory Notes:

The rate revenue shown in the Pro-forma statement reflects the City's portion of revenues based on the projected rate increases. As part of the Master Agreement with EPCOR, there will be a "true-up" process after the completion of the 2009 operations. It is unclear at this point how the process will impact the revenue allocation split.

Utility Fiscal Policy Indicators

Return on Average Equity—There are two key factors that contribute to a lower return on average equity. The most notable is the significant investment in capital infrastructure undertaken in 2009. As a result of new debt issued, expenditures increased by $2.2 million. The requirement to implement Tangible Capital Asset Regulation further increased expenditures by $0.4 million. These increased expenditures lower the 2010 Return on Average Equity.

Local Access Fee—The increase is the result of applying the rate on a larger revenue base. This amount is paid to the City of Edmonton monthly.

Dividend—The amount of dividend is based upon 30% of the actual net income, adjusted for the contribution to the Sanitary Servicing Strategy Fund, payable in the following year. This rate will increase to 40% in 2013 to be payable in 2014.

3.3.3 Land Drainage Utility Pro-forma Balance Sheet For Years 2010 - 2014 ($000)

	2010	2011	2012	2013	2014
Assets					
Cash and Deposits	16,787	13,359	15,143	15,851	10,982
Other Current Assets	5,053	5,053	5,053	5,053	5,053
Investment in Capital Assets					
Financed - net	124,011	155,227	172,900	194,066	217,123
Contributed - net	741,751	732,005	719,917	707,460	694,637
Total Assets	887,602	905,644	913,013	922,430	927,795
Liabilities					
Current Liabilities	4,647	4,647	4,647	4,647	4,647
Current Portion of Long-term Debt	2,369	2,900	3,296	3,754	4,136
Long-term Debt	79,665	96,557	105,330	115,674	126,979
Total liabilities	86,681	104,104	113,273	124,075	135,762
Equity					
Equity in Capital Assets					
Contributed Assets	741,751	732,005	719,917	707,460	694,637
Financed Assets	42,384	56,175	64,681	75,044	86,414
Retained Earnings	16,786	13,360	15,142	15,851	10,982
Total equity	800,921	801,540	799,740	798,355	792,033
Total Liabilities & Equity	887,602	905,644	913,013	922,430	927,795
Utility Fiscal Policy					
Cash Reserve ($M) $6M to $12M	$16.8	$13.4	$15.1	$15.9	$11.0
Debt Service Coverage Ratio not less than 1.2	2.7	2.0	1.7	1.6	1.3
Capital Financing 50% - 60% Debt Financing	58.8%	62.0%	64.7%	63.0%	62.9%

Explanatory Notes:

Cash and Deposits

Cash and deposits are systematically being drawn down as proposed financing of utility financed capital projects are funded, on average 65% debt and 35% retained earnings (cash). As indicated by the Utilities Governance Review of July 2009, care is required to balance between the use of cash and debt financing to ensure the long term sustainability of the utility. Administration will be undertaking a review of this issue over the upcoming year as part of the Utility Fiscal Policy review.

Investment in Capital Assets

Financed assets represent investment in capital assets paid for by the Land Drainage Utility either through debt or retained earnings, supported through the utility rate. Contributed assets are capital infrastructure that have been constructed and/or paid for by third parties. This increased investment in capital infrastructure is detailed in the Capital Budget Section of this document.

Long Term Debt

The amount of Long Term Debt is expected to rise as the financing for the proposed capital projects is generally 65% debt and 35% retained earnings for the next 5 years. The total amount of outstanding debt is increasing as the amount of debt being retired is less than the new debt being issued. To determine the optimal financial structure, analysis will be undertaken as part of the Utility Fiscal Policy Review process.

Utility Fiscal Policy Indicators

Cash Reserve—Over the 5-year period, the projected cash reserve balance is slightly above the range identified in the Utility Fiscal Policy. The cash reserve range was developed in 2005 as part of the update to the Utility Fiscal Policy. Preliminary analysis suggests that the range should be increased to a range of $8 to $17 million. Further review will occur in 2010 as part of the Utility Fiscal Policy Review.

Debt Service Coverage—This reflects the Utility's ability to pay the debt servicing costs (principal and interest) relative to the amount of revenue collected in a given year. The projected 5-year coverage ratio meets the Utility Fiscal Policy target.

Capital Financing—In order to maintain a rate increase of 6% to 8% over the next 5 years, the planned investment in capital infrastructure requires a higher level of debt financing (over 60%) than identified in the Utility Fiscal Policy. As part of the Utility Fiscal Policy Review, the optimal financial structure and the level of capital investment will be reviewed.

3.3.4 Land Drainage Utility Pro-forma Income Statement For Years 2010 - 2014 ($000s)

	2010	2011	2012	2013	2014
Revenues					
Rate & Program Revenue	26,084	28,323	30,197	32,196	34,330
Interest income	364	483	469	397	415
Total revenue	**26,448**	**28,806**	**30,666**	**32,593**	**34,745**
Expenses					
O & M	12,995	13,797	14,587	15,034	15,499
Depreciation*	2,249	692	970	1,206	1,481
Interest	2,842	3,951	4,821	5,280	5,820
Local Access Fee	0	0	0	0	2,659
Total expenses	**18,086**	**18,440**	**20,378**	**21,520**	**25,459**
Net Income	8,362	10,366	10,288	11,073	9,286
Rate Increase	8%	8%	6%	6%	6%

*Net of amortization of contributed assets

Utility Fiscal Policy

Average Equity	54,989	64,353	74,679	85,359	94,146
Return on Avg. Equity up to 25%	15.2%	16.1%	13.8%	13.0%	9.9%
Local Access Fee ($M) to be reviewed in 2014	$0.0	$0.0	$0.0	$0.0	$0.0
Dividend ($M) to be reviewed in 2014	$0.0	$0.0	$0.0	$0.0	$0.0

Explanatory Notes:

The rate revenue shown in the Pro-forma statement reflects the Land Drainage revenue based on the projected rate increases.

Utility Fiscal Policy Indicators

Return on Average Equity—There are two key factors that contribute to a declining return on average equity. The most notable is the significant investment in capital infrastructure undertaken in 2009. As a result of new debt issued, expenditures increased by $1 million. The requirement to implement Tangible Capital Asset Regulation further increased expenditures by $1 million. These increased expenditures lower the 2010 Return on Average Equity.

The Local Access Fee and Dividend payment will be reviewed in 2014 (Policy C304B).

DESIGN AND CONSTRUCTION tab

4.0 DESIGN AND CONSTRUCTION

Overall Service Objective

To optimally leverage the City's construction expertise, particularly tunneling, by maximizing design and construction services to Drainage Services, other City departments, and external organizations while providing a reasonable return back to the City.

Responsibility

The primary responsibility of D&C is to:

- design and construct wastewater and storm drainage system facilities including open cut and tunneling in support of Drainage Services, and
- provide construction and project management services to other City departments and external organizations.

On a day-to-day basis, this major service within Drainage Services primarily provides design, installation, and project management and contract administration services for construction and rehabilitation of sewer pipes using open cut or trenchless methods. This business unit also has the skills, experience, equipment, and capacity to provide broader services within the City of Edmonton as well as to external organizations.

The tunneling expertise within D&C is recognized as being among the best in Canada.

Operational Variables

- Dramatically Increasing Volume of Work
  - Work has more than quadrupled in the last 5 years (from $31 million to $136 million). This is largely a result of an increase in Drainage capital projects associated with flood prevention, mature neighborhood rehabilitation and sanitary servicing of new developments. In addition, the work performed in recent years for the South LRT, and potentially, for the North LRT, increase the construction workload further.
- Sustainable Growth of the Business
  - D&C must balance risk and return when looking at the source of new work. Internal work, particularly for Drainage Services, has lower return, but is reliable and has lower risk. External work may yield a higher rate of return but comes with higher risk and variability.
  - Currently, D&C's equipment has a replacement value of approximately $77 million. Equipment such as tunnel boring machines, drill rigs, and generators, range from 1 to 15 years old. The average life cycle for this equipment is 5 to 10 years. This requires major investment and more earnings must be retained for renewal and replacement.
  - D&C requires reorganization to add expertise, retain key staff, and support succession planning. Sustainability requires growing the skills of office, shop and field staff.
  - D&C will continue to pursue new areas of trenchless technologies to expand its current operations.

DESIGN AND CONSTRUCTION

Current Service Level

Current Service Level	Key Resource Requirement	Capacity of Service	Risk of Not Doing
Service offered to all internal and external clients: **Design** • Conceptual / preliminary / detailed design, modeling, drafting, permitting, estimating, scheduling • Survey, testing, emergency engineering, commissioning **Construction** • Tunneling • Open-cut • Shop • Support services	D&C currently has $25 million for 296 FTEs with nearly 35% working in tunnel construction. Equipment is a significant component of D&C's budget. Currently the operation has 6 tunnel boring machines (TBM), and 17 other pieces of major equipment including cranes, drill rigs, compressors, fans and generators.	Additional FTEs are required for additional construction capacity (General Supervisors are especially needed). Currently, the ratio of inhouse to external design work is 50:50. Resource requirements would need to be considered if this ratio changes. Upgrading current shop and yard services would enable a continued growth in capacity.	• Inability to complete major capital projects • Increased cost to the City, and loss of revenue • Faster deterioration of current assets due to inability to renew them • Loss of in-house expertise

Strategic Initiative

Alignment with The Way Ahead	Initiative	Immediate/ Intermediate Output	Ultimate Outcome
Increase revenue sources and reduce reliance on residential property tax to meet strategic infrastructure and service needs.	Design and Construction Review (from a financial perspective) – increase the financial capacity of the Design and Construction operation through evaluating current practices, both to increase the ability to be self sustaining and to become a formal profit centre for the city.	Drainage Design and Construction activities generate increased revenue.	The Utilities generate significant non-tax revenue to support City plans and the provision of infrastructure and services.
2010 Budget Impact	**Base** - Financial and structural changes resulting from this review should enable a sustainable return to the City. Within the Design and Construction budget, there are anticipated changes to rate of return (mark-up) on projects, as well as changes to direct costs, and an introduction of a formal percentage reinvestment to the business. **Incremental** - None. The review is being conducted within existing resources.		

Drainage Services - Design & Construction ($000)

	2008 Actual	2009 Budget	Revenue & Cost Impacts*	Service & Delivery Changes	Growth	2010 Budget	% Change '09-'10	2011 Forecast
Revenue & Transfers								
Drainage Services	121,286	113,883	-	(2,846)	-	111,037	(2.5)	80,402
Other City of Edmonton Projects	4,925	7,377	-	6,590	-	13,967	89.3	28,354
External Projects	4,594	6,626	-	(1,058)	-	5,568	(16.0)	11,136
Transfer from Reserves	-	-	-	-	-	-	-	-
Total Revenue & Transfers	130,805	127,886	-	2,686	-	130,572	2.1	119,892
Expenditure & Transfers								
Personnel Costs	23,699	24,765	1 ,167	1,663	-	27,595	11.4	30,227
Materials, Goods & Supplies	25,715	24,973	499	-	-	25,472	2.0	23,409
External Services	64,647	64,142	-	(8,694)	-	55,448	(13.6)	45,091
Fleet Services	2,241	2,342	47	-	-	2,389	2.0	2,195
Intra-municipal Services	8,091	8,055	161	-	-	8,216	2.0	7,550
Utilities	666	716	14	-	-	730	2.0	671
Depreciation	1,014	312	195	-	-	507	62.5	508
Other Charges	653	683	13	-	-	696	1.9	640
Transfer to the Sanitary Utility	4,079	1,898	-	(398)	-	1,500	(21.0)	750
Transfer to Equipment Reserve	-	-	-	3,807	-	3,807	100.0	3,840
Subtotal	130,805	127,886	2 ,096	(3,622)	-	126,360	(1.2)	114,881
Intra-municipal Recoveries	-	-	-	-	-	-	-	-
Total Expenditure & Transfers	130,805	127,886	2 ,096	(3,622)	-	126,360	(1.2)	114,881
Net Operating Requirement	**-**	**-**	**2,096**	**(6,308)**	**-**	**(4,212)**	**100.0**	**(5,011)**
Full-time Equivalents	243.0	296.0	-	24.0	-	320.0		342.0

* *Cost Impacts include: inflation on personnel and non-personnel costs, annualization, adjustments based on current performance. Revenue increases are due to rate and volume changes.*

KEY CONSIDERATION

In order to ensure the sustainability of Design & Construction, the net income should be retained in D&C until the review of the financial policies involving the dividend payment is completed.

Budget Changes for 2010 ($000)

Revenue Changes

$ 2,686	Volume and rate changes
$ 2,686	Total volume and rate changes

Cost Changes

$ 1,167	Inflation - personnel
929	Inflation - non-personnel
$ 2,096	Total cost changes

Service & Budget Review

1,663	Bring certain external contracts in-house
(8,694)	Reduced external contracts requirement by performing the work in-house
(398)	Reduced transfer to the Sanitary Utility as per July 2009 Council Report
3,807	Transfer to Equipment Reserve
$(3,622)	Total Service & Budget Reivew

Impact on Full-Time Equivalents

24.0	Additional staff required to bring services in-house

Explanatory Notes:

The Proposed 2010 Budget contains a return in the level of combined activities to what was achieved in 2008. The projected 2010 revenues of $130.6 million is based upon maximizing current work force and equipment capacity.

Total revenue from D&C's two main activities is comprised of the following types of activities:

	$(000)		
	2008	2009	2010
Open Cut	58,613	53,218	56,156
Trenchless Tunneling	72,192	74,668	74,416
Total Revenues	130,805	127,886	130,572

In 2008, $1.7 million was spent in the hiring of temporary staff. A sustainable work volume of roughly $120 million would support bringing certain types of contract work in-house and increasing construction staff by 24.0 FTE. This operational adjustment would lead to a reduction in cost and the reliance on external services.

The Proposed 2010 Budget includes a $3.8 million transfer to Equipment Reserve for renewal and replacement of equipment needed for D&C. During 2010, work will be undertaken to quantify the amount required for equipment renewal and replacement in the future.

Also included in the Proposed 2010 Budget is a transfer of $1.5 million to the Sanitary Utility. The July report from HDR Engineering Inc. recommended the financial segregation of this non-regulated service from the Sanitary Utility from a rate determination perspective. While the 2009 Budget contains a transfer of $1.9 million, the forecasted year end result will be closer to $4 million. The proposed transfer of $1.5 million provides a mechanism by which the elimination of the transfer of D&C net revenue to the Sanitary Utility can take place over a 2-year period.