



Strengthening Our Foundation

City of Regina

Water & Sewer Utility

2015 Operating Budget and 2015-19 Capital Budget



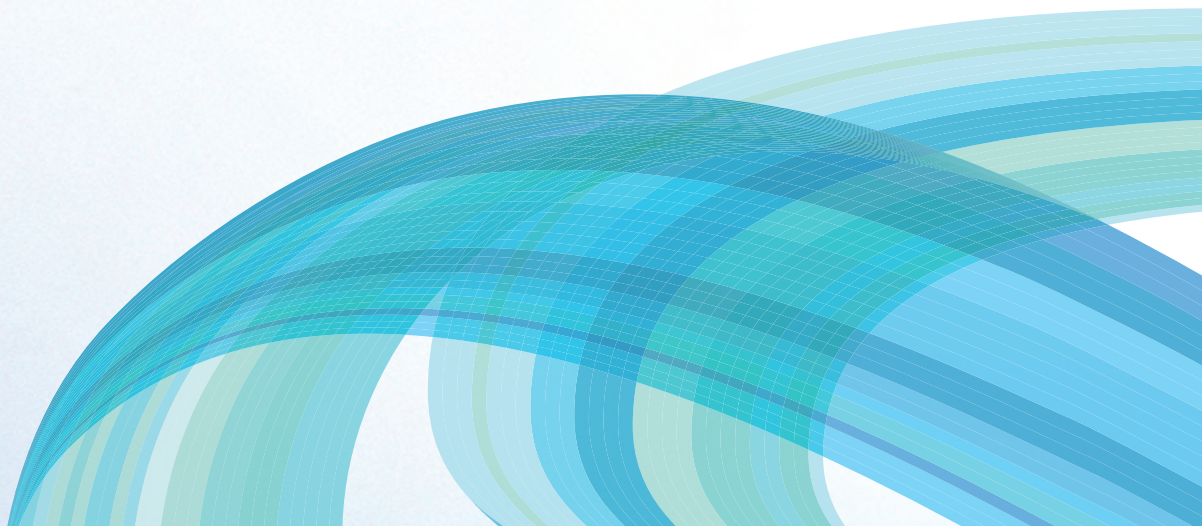
City of Regina



REGINA
Infinite Horizons

City of Regina
Water & Sewer Utility
2015 Operating Budget and 2015-19 Capital Budget

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November 7, 2015

To: His Worship the Mayor,
and Members of City Council

Re: 2015 Water and Sewer Utility Budget

Each year City Council is required to adopt operating and capital budgets including the General Operating and Capital Budget and the Water and Sewer Utility Budget. This document is the Water and Sewer Utility Budget, which includes the 2015 Utility Operating Budget and the 2015 – 2019 Utility Capital Budget.

Budget Highlights

- The overall revenue increase for 2015 is 8.1%. The increase in revenue is made up of a combination of the rate increase approved in 2014 and the growth in the number of service connections. These increases are partially offset by some reductions in revenues, most notably the end of the Saskatchewan Infrastructure Growth Initiative (SIGI) and a reduction in interest on investments (resulting from the repayment of the SIGI loan).
- The Utility will launch its effort to develop a Wastewater Master Plan and Trunk Relief Initiative to focus on long-term issues with sewer and drainage capacity while simultaneously addressing specific localized issues
- The City's successful P3 procurement of the Wastewater Treatment Plant, saving \$43.5 million in construction costs and a total of \$247.5 million (including construction and operation) over the 30-year life of the project, will result in benefits to residents of Regina:
 - Much needed investment in sewer and drainage infrastructure, which had been deferred for as much as 10 years in the 20 year capital plan has been advanced to begin in 2015 without requiring changes to Utility rates approved in 2014.
 - The need for future Utility rate increases of the kind Utility customers have recently faced to cover the cost of infrastructure renewal (pump stations, underground infrastructure, etc.) will be moderated

Details of the rates for 2015 are provided beginning on page 17 of this document

- The 2015 Utility Operating Budget provides the funding necessary to meet legislative requirements and Council's service objectives for water, wastewater and drainage. The total 2015 Operating budget for the Utility, excluding debt, access fee, and the transfer to the general operating fund, is \$63.4 million, which is an increase of 7.2% from 2014. The Utility Operating Budget provides for the continued development of asset management, business planning and performance metrics to achieve sustainable infrastructure investment strategies.

- In 2015, debt servicing costs have decreased from \$45.9 million to \$1.4 million. This is due to the repayment 2014 of the \$43.1 million provincial loan taken through the SIGI program.
- The 2015 – 2019 Utility Capital Program totals \$355.6 million, with 2015 totaling \$57.5 million. This is exclusive of the work proceeding on the Wastewater Treatment Plant, the financial model of which was approved in 2014. In addition to the broader Utility Capital Program the Wastewater Treatment Plant project will expend \$47.8 million from 2015 – 2019, none of which is forecast for 2015.
- Each year, a Utility Administration Charge is transferred to the General Utility Fund, representing an approximate measure of corporate costs that are attributable to the utility. This amount is calculated as 5% of the budgeted utility revenues for the prior year. In 2015 is \$5.4 million.
- As well, each year an amount is transferred to the General Operating Fund, representing a payment in lieu of taxes and access fees. Any organization or utility operating in a municipality would be required to pay the municipality either property taxes or an access fee for operating rights. Regina's transfer is the total of 7.5% of the previous year's budgeted revenues for billed water consumption, wastewater charges and drainage infrastructure levy plus an amount (\$675,000) estimated to be 3/7ths of the GST rebate received by the Utility. This amount is the additional rebate provided by the Federal Government starting in 2004. For 2015, these budgeted amounts total \$8.5 million.

Public Reporting

In 2005, the Province adopted new regulations in Part V.1 of *The Cities Regulations* regarding Public Reporting on Municipal Waterworks. The regulations apply only to waterworks, however since the Utility includes water, wastewater and drainage services, the information required by the regulations is provided for the entire utility. The information requirements include:

- Information on the rate policy and capital investment strategy as adopted pursuant to sections 22.3 and 22.4 of the regulations. The information required with respect to the City's rate policy is provided on pages 15 through 17 of this document. Information on the capital investment strategy is included in the Asset Management Section of this document beginning on page 5 and in particular, the 2015 – 2019 Utility Capital Plan starting on page 25.
- The regulations also require a financial overview. The data outlined in the regulations is included in the Revenue section of this document on page 15 and the Expenditure section on page 27. The regulations also require a comparison of the Utility revenues to expenditures and debt payments, expressed as a ratio in accordance with the following formula:

$$\frac{\text{Revenues}}{\text{(Expenditures + Debt Payments)}}$$

For 2015, based on the definitions in the regulations, the ratio for the Water and Sewer Utility is 2.07, based on revenues of \$116,451,600, expenditures of \$55,405,100 and debt repayments of \$906,000. In accordance with the definition in the regulations, expenditures include the interest cost on the debt, while debt payments are the principal repayments on the debt.

For 2015, the ratio indicates that revenues exceed expenditures and debt repayments by 110%. This result shows that the Utility is recovering its operating costs as well as providing investment for future capital requirements. It is anticipated that the ratio will continue to remain in the range of 2.0 over the next several years as additional funding is generated to finance large capital projects such as the Wastewater Treatment Plant Expansion and the Wastewater Master Plan and Trunk Relief Initiative, along with on-going requirements such as infrastructure investment.

Respectfully submitted,



Glen B. Davies
City Manager & Chief Administrative Officer



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Budget Highlights

2015 Water & Sewer Utility Budget Highlights

Our community's water, sewer and drainage systems are valuable, and we need them to support our quality of life. These systems provide clean and safe water, take away sewage and manage flooding.

Our City's water, sewer and drainage systems are worth over \$2 billion and many of our assets are reaching the end of their service lives as most of them have been in service since the 50s, 60s and 70s. These aging assets will require replacement or major repairs.

The City's water and sewer budget is funded through utility rates rather than through the City's operating and capital budgets. Customers will see an 8% increase to their water and sewer bill, as was approved in the 2014 budget. This is an investment in the safe operations of our water and sewer system. The 2015 water and sewer operating and capital budget is \$174 million.

Key Investments in 2015

In 2015, the average customer will see an increase of just over \$10.50 per month which will allow:

- Continuation of construction of the new Wastewater Treatment Plant.
- Development of a long-term sewer trunk relief strategy.
- Drainage area work to address issues in the South Albert Park neighbourhood and the Cathedral neighbourhood, including Edward Street.
- Continued emphasis on efficient ways to renew underground infrastructure such as relining of sewer and drainage pipes.

Investment in a Key Community Project

Wastewater Treatment Plant Upgrade Project (WWTP)

Through an innovative public-private partnership model (P3), EPCOR Water Prairies Inc. will design, build, finance, operate and maintain the WWTP, while the City will continue to own the asset and set utility rates.

An upgraded WWTP will better protect public health and the environment, meet new provincial regulations and provide capacity for growth.

- The project has realized a total cost savings of \$247.5 million (including construction and ongoing operational costs) from what was originally budgeted over the 30-year life of the project agreement.
- All capital and operating funding is in place for this important project.
- Financial transactions in 2015 are in accordance with the approved budget and project agreement, namely the payment of a monthly operating costs of approximately \$570,000 to EPCOR to operate the facility while construction is underway.

The City's successful P3 procurement of the Wastewater Treatment Plant provides a savings of \$43.5 million in construction costs, which will result in benefits for residents of Regina:

- Much needed investment in sewer and drainage infrastructure. Some of these projects had been deferred for nearly 10 years in the 20-year capital plan and have now been advanced to begin in 2015 without requiring changes to utility rates approved in 2014.
- The need for future utility rate increases similar to those recently faced by customers to cover the cost of infrastructure renewal (pump stations, underground infrastructure, etc.) will be moderated.

Introduction

Water and Sewer Utility Profile

The Water and Sewer Utility provides water, wastewater and drainage services primarily to customers in Regina. It has operated on a full cost-recovery, user-pay basis for many years now. This model is based on users paying for the service rather than having the costs borne exclusively by property owners. Services can be charged by volume, which provides an incentive to conserve valuable resources.

The Utility is responsible for diverse infrastructure including water mains, storage reservoirs, pumping stations, building service connections, a wastewater treatment plant, wastewater and storm drainage sewers as well as drainage channels and creeks. The City of Regina is also a joint owner of the Buffalo Pound Water Treatment Plant with the City of Moose Jaw.

The Utility relies on technical and professional support from other City of Regina departments to ensure work is planned and managed efficiently. For example, underground work for the Utility is frequently coordinated with roadway improvements in a cost effective manner.

This structure has contributed to improved planning, management and oversight of Utility Services. (Figure 1)

The Water and Sewer Utility operates in unique circumstances when compared to other similar services in Canada. Most notably, Regina is not located on a river capable of being a reliable water source. Water must be pumped in from a significant distance. Despite these challenges, Regina's total cost per household is comparable to most other western Canadian cities. (Figure 2)

Achievements in 2014

- The City of Regina awarded the contract to design, build, finance, operate and maintain the City of Regina's new Wastewater Treatment Plant (WWTP) to EPCOR Water Prairies Inc. It's estimated this will save the City \$43.5 million of construction costs. Over the 30-year life of the project, the agreement with EPCOR will save \$247.5 million from the original budget.
- The City of Regina and EPCOR Water Prairies Inc. were named winners of the Chuck Wills Award by the Canadian Council for Public-Private Partnerships in 2014 for innovation and excellence in public-private partnerships.
- Buffalo Pound Water Treatment Plant, which supplies Regina's water, won the "Waterville Taste Test" at the 66th annual Western Canada Water Conference and Exhibition.
- Extreme low temperatures in early 2014 resulted in deep frost and a record number of frozen service connections. While the Water Works Department repairs five frozen connections in a typical year, it restored service to more than 170 customers last winter.
- In the fall of 2014, the City used cost savings from one project to build two new berms to reduce the flooding risk along Wascana Creek in Les Sherman Park along 17th Ave and in Rotary Park. This will improve service levels to residents, and to help avoid costs in 2015 and every year thereafter by reducing the need for sandbagging during the spring melt.

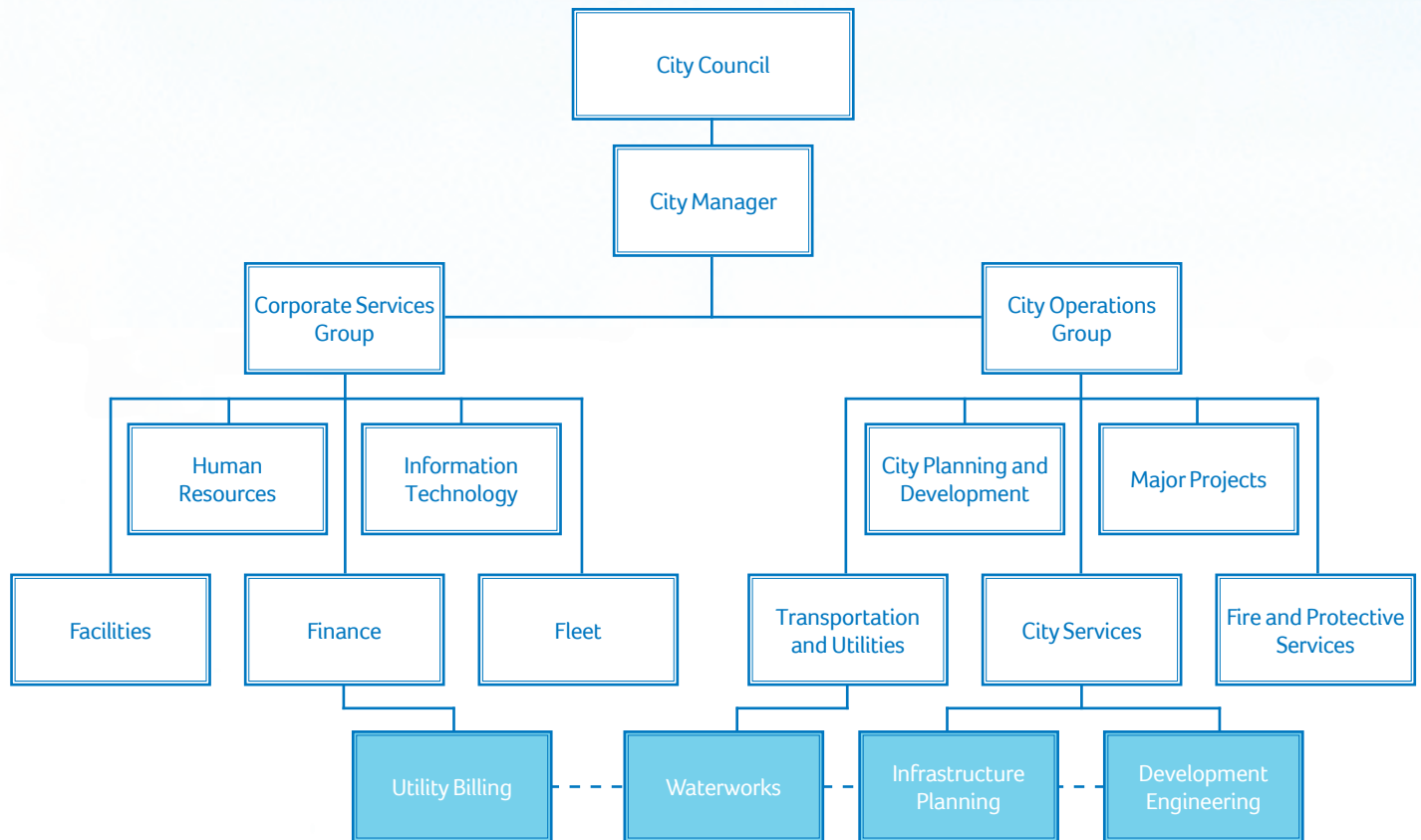


FIGURE 1: REGINA WATER AND SEWER UTILITY ORGANIZATIONAL COMPONENTS SHOWN IN BLUE

Utility Cost Comparisons for the Average Household (2014)					
	Regina	Calgary	Edmonton	Saskatoon	Winnipeg
Water					
Annual Basic Charge	\$ 244.55	\$ 189.00	\$ 84.36	\$ 102.96	\$ 109.50
Annual Volume Charge	572.40	618.30	687.55	368.58	511.20
Total Annual Water	816.95	807.30	771.91	471.54	620.70
Wastewater					
Annual Basic Charge	189.80	193.80	145.32	102.96	-
Annual Volume Charge	422.14	363.38	556.67	211.74	795.60
Total Annual Wastewater	611.94	557.18	701.99	314.70	795.60
Annual Drainage Infrastructure Levy	160.60	110.40	198.09	193.88 ¹	-
Total Annual Utility Charges	\$ 1,589.49	\$ 1,474.88	\$ 1,671.99	\$ 980.12	\$ 1,416.30

FIGURE 2: COMPARISON OF TOTAL UTILITY CHARGES (PER AVERAGE HOUSEHOLD) ACROSS MAJOR WESTERN CITIES.

Note¹: Saskatoon's infrastructure levy is not specific to drainage infrastructure.

Strategic Context (OCP)

General Goals

The City of Regina Water and Sewer Utility has established the following goals:

- Provide safe water that meets legislative and community expectations.
- Collect and treat wastewater to meet legislative requirements.
- Control storm water to minimize danger to the public, property damage and inconvenience.
- Encourage responsible and environmental use of water.
- Be financially self-sufficient.
- Demonstrate operational efficiency through benchmarking and performance reporting.
- Be understanding of customer expectations and satisfaction.

Asset Management

The City's water, sewer and drainage services are delivered through a complex network of assets that include large plants, pump stations and several hundred kilometres of underground pipes.

Regina has adopted a comprehensive approach for the Water and Sewer Utility so it can continue to provide residents and businesses with essential water, wastewater and drainage services.

This approach has begun to give the Utility the processes and structures needed to balance business decisions regarding performance, risk and expenditures to provide the greatest value to customers. The Utility will continue to refine this approach over time.

An asset management approach allows the City to define:

- Inventory and value of assets required to support the delivery of services.
- Condition and expected remaining life of assets.
- Levels of service and what needs to be done to achieve those levels.
- Actions required to sustain services and the timing of such actions.
- Cost to operate, maintain and renew assets while maintaining an acceptable level of risk.
- Level of investment to ensure long-term affordability and service.

The key to best practice asset management is to ensure that the investment balances service levels with the lowest lifetime cost and acceptable risk.

Serviceability Approach and Asset Management Framework

Traditionally, the City of Regina has used an asset-centric approach to water works services management, basing investment solely on the age and condition of assets. Now, like many other Canadian municipalities, such as Calgary and Hamilton, Regina is adopting a serviceability approach. This approach will further the use of strategic solutions, system optimization and cost effective operations to defer work. This serviceability approach is more robust than the asset-centric version by considering the impact on services, the system and operators' ability to deliver those services. The main differences between an asset-centric (asset stewardship) approach and a serviceability approach is illustrated in Figure 3.

The framework in Figure 4 shows the Utility's approach to best practices that links investment to service outcomes through clearly defined levels of service. The framework incorporates a risk-based approach to service. Best practices suggest that managing risk to service levels, rather than being wholly asset-centric, generally results in lower costs over the life of the asset.

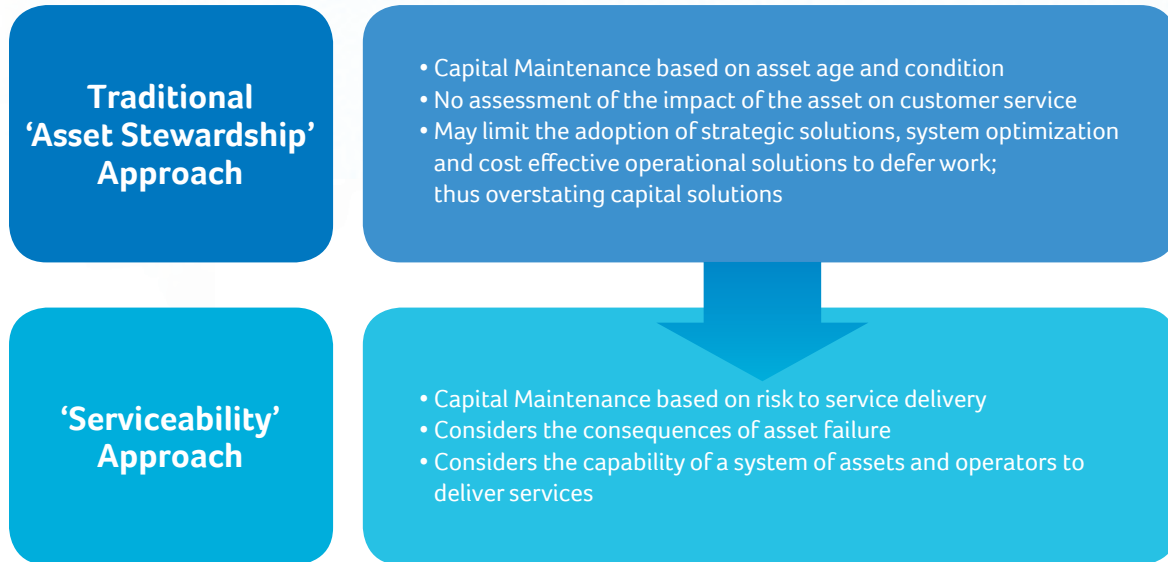


FIGURE 3: ASSET STEWARDSHIP AND SERVICEABILITY APPROACHES TO ASSET MANAGEMENT (ADAPTED FROM CH2M HILL'S UTILITY LEVELS OF SERVICE REPORT FOR CITY OF REGINA (JULY 2012))

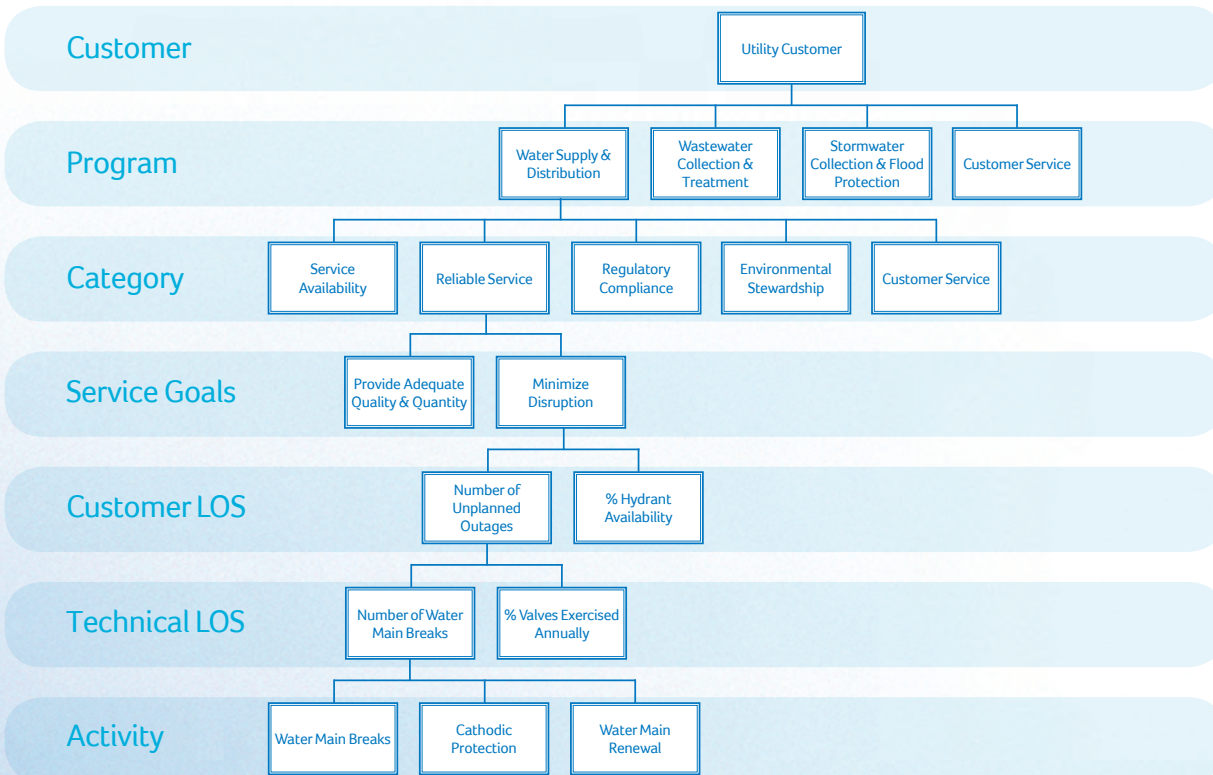


FIGURE 4: FRAMEWORK FOR UNDERSTANDING THE SERVICEABILITY APPROACH TO ASSET MANAGEMENT

Level of Service Framework

The Regina Water and Sewer Utility is working to adopt an integrated Level of Service (LOS) framework to align customer interests with the programs and services it delivers and the daily activities it performs. The framework establishes LOS measures and targets against which performance will be compared.

Programs

The Water and Sewer Utility has three primary services that serve approximately 69,000 residential, institutional, commercial, industrial and recreational properties:

- Water supply and distribution.
- Wastewater collection and treatment.
- Storm water drainage collection, conveyance and flood management.

The water system provides potable drinking water for residential, institutional, commercial and industrial customers as well as water for fire protection and green space management.

The wastewater system collects and treats wastewater from all residential, institutional, commercial and industrial customers in the city as well as some neighbouring commercial and industrial sources.

The drainage system controls water runoff from rainfall and melting snow in and around the city.

Services

Services for each Program are broken into five customer-centric groups, which have been developed in line with customer interests, organizational values and regulatory requirements. These are defined in the table in Figure 5.

Customer Level of Service measures have been developed to evaluate, track and monitor service delivery in each area. The work is preliminary at this stage but will set a strong foundation for future infrastructure planning.

Succession Planning

The Utility is facing challenges with the sustainability of its work force. They include:

- Work force demographics across Canada are rapidly changing as Baby Boomers retire. There are a number of long-serving employees at the Utility who are approaching or have already met retirement eligibility.
- Saskatchewan’s booming economy over the last five years has put pressure on the labour market. The growing construction sector is attracting many of the same skilled tradespeople that the Utility needs.

Service	Definition
Regulatory Compliance	Protecting customer interests by meeting regulatory obligations.
Reliable Service	Providing reliable service of acceptable quality and quantity.
Servicing Development	Accommodate growth and redevelopment by providing access to service when and where it is wanted.
Environmental Stewardship	Doing the right things for our customers and the environment.
Customer Service	Being responsive to customer inquiries and needs.

FIGURE 5: CITY OF REGINA WATER AND SEWER UTILITY SERVICES

Since 2002, many roles in water and sewer operations have been regulated by the province. These roles require significant training and certification. Of particular concern is that many of the employees nearing retirement are the same ones who have the required certifications to deliver water and sewer services. Because of the standards, these positions are also difficult to recruit. While the City is not currently in jeopardy of failing to meeting its regulatory obligations, this issue is the primary focus of training investment for the immediate term to avoid future risk.

Ensuring a successful transition of knowledge, skills and abilities from one generation to the next is essential for continued success. Training is provided as opportunities arise, but skills development is primarily limited to regulatory requirements. Other training is made available where possible.

Ultimately, building the foundation for sustained growth and prosperity means citizens, elected officials and administration must work together on sustainable financial models to ensure both services and the assets that deliver them receive appropriate levels of investment. This work has already begun with the Water and Sewer Utility and provides a model for other City departments.

Regional Setting

Regina is the centre of an economic region comprised of about 40 communities. Initiatives are underway to strengthen partnerships and to collaborate on mutual opportunities and interests. Regina's Utility systems provide some regional services and these may increase in the future. Regina's landlocked status is unique among major Canadian cities and impacts the standards and costs for water supply and wastewater treatment and disposal.

The Utility's water supply and wastewater treatment systems are intended to provide services that are appropriate to the natural setting and minimize the impact on the environment and neighbours downstream.

Regina's water supply originates with melting snow and rainfall in the eastern Rocky Mountains, which feeds the tributaries of the South Saskatchewan River. Buffalo Pound Lake is the source of treated water for Regina, Moose Jaw and several other surrounding communities. Regina's treated wastewater effluent and storm water run-off ultimately end up in Wascana Creek, a seasonal stream that originates to the east and flows through the city. These sources contain the only water that feeds Wascana Creek for much of the year. Without them, the creek would be dry.

Regulatory Environment

Saskatchewan Watershed Authority is responsible for management of Saskatchewan's surface water and ground water resources. The Authority regulates the allocation of water, establishes plans for the province's river basins and is responsible for land drainage as well as wetland preservation and enhancement.

Saskatchewan's Water Security Agency regulates water supply and distribution and wastewater collection, treatment and disposal. Permits for the construction and operation of water and wastewater systems must meet specific standards to protect the public's health, ensure consistent water quality and minimize the impact on the environment. Requirements outlined in the provincial regulations include mandatory operator certification, routine facility inspections, testing and reporting to ensure compliance.

The federal government's *Fisheries Act* prohibits the discharge of any "deleterious substance" that may impact fish or their habitat. Ammonia is designated a toxic substance and is part of the federal government's proposed standards to regulate municipal wastewater effluents. The Utility's wastewater treatment plant is currently undergoing a capital upgrade to meet the acute toxicity requirement.

Saskatchewan requires the Utility to meet standards beyond the proposed federal standard. The City of Regina and Saskatchewan's Water Security Agency agree that treated effluent standards for the Utility's upgraded wastewater

treatment plant should consider environmental effects on the downstream environment. To address this, the Utility carries out a monitoring program to document current conditions and help predict future conditions in the downstream environment as well as proceeding with upgrades to the Wastewater Treatment Plant. Significant capital would be required should the Province decide to make standards even more stringent. The City of Regina supports shared fiscal responsibility on the protection of the environment. Currently, there is no provincial or federal funding to assist municipalities in meeting increased regulatory standards.

The Utility, particularly pumping and treatment operations, accounts for about half of The City of Regina's greenhouse gas emissions. The feasibility of alternatives and associated costs is being considered to reduce emissions.

Utility Rates

Rates for the Utility are developed using a long-term financial model that balances optimal capital investment and operating expenditures with the use of debt and manageable rate increases. Three years ago, rates were set for 2011, 2012 and 2013. At the time, the 20-year capital plan included an upgrade to the Wastewater Treatment Plant. Since then, substantial changes have been made to the plan as a result of *Design Regina: The Official Community Plan*, the Water System Vulnerability Study and the Regina Drainage Master Plan. The 20-year capital plan now includes these additional projects:

- \$85 million on the Buffalo Pound Water Treatment Plant.
- \$53 million for an Eastern Pressure Zone, which will be funded through Servicing Agreement Fees.
- \$125 million in drainage area upgrades.
- \$24 million in additional wastewater infrastructure renewal.
- \$17 million in initiatives to improve the conveyance of wastewater, including capacity improvements at McCarthy Boulevard Pumping Station and trunk upsizing or twinning.
- \$7 million in pumping station upgrades.

Over the last several years, efforts have been made to pay off the Utility's debt and build up the General Utility Reserve (GUR) to offset the effect of the increased capital demands. The Utility paid down \$44.6 million in debt in 2014 and is projected to finish the year with \$45.9 million in the GUR. New debt will be assumed as part of the Wastewater Treatment Plant Upgrade Project in 2017.

Based on the projections in the long-term Utility model, annual rate increases of 8% were approved for 2014 and 2015.

Strategic Issues

- **Future Growth Demand:** The City's population is expected to continue to grow at a rate of about 2% per year. This is a new trend for Regina, which has seen a relatively flat population growth for many years. As the city continues to grow, new and upgraded infrastructure will be required to supply customers with water, sewer and storm sewer services. This new infrastructure requirements will require significant capital investment, which will further strain the City's financial resources.
- **Increasing Regulatory Requirements:** The City of Regina is committed to protecting the environment and meeting its regulatory requirements. As the obligation to the environment increases, so does the cost of operation. The Utility's immediate challenge comes from the combined changes in provincial and federal regulations. These changes have resulted in significant capital investment in the Wastewater Treatment Plant to meet operating permit requirements and protect downstream water bodies.
- **Levels of Service:** An industry best practice is to establish a long term Utility Business Plan with Level of Service (LOS) measures and targets. The Utility has begun to establish a set of LOS measures but substantial work is required to validate them with customers and measure the effectiveness of the selected measures.
- **Aging Infrastructure:** Municipalities across the country are facing an increasing backlog of infrastructure renewal and investment. Assets are deteriorating at a faster pace than many municipalities can replace or upgrade them. Regina is

no different but it has already made progress in this regard, thanks to a 20-year financial plan, studies to address some short-term issues and upgrades to the Wastewater Treatment Plant.

- **Sustainability of the Work Force:** The Utility is facing workforce pressures because of pending retirements and shortages of required skills.

2015 Priorities

A key element of the 2015 Utility Budget is the successful procurement of a P3 to construct and operate the new Wastewater Treatment Plant in 2014. The P3 approach resulted in an immediate saving of \$43.5 million in construction costs and a saving of \$247.5 million over the 30-year life of the project.

Given that the Utility Capital Plan is based on a 20-year outlook, these savings have allowed the Utility to re-prioritize some work that had previously been deferred, most notably, the development of a Wastewater Master Plan and a Sewage Trunk Relief Initiative to focus on long-term issues with sewer and drainage capacity while simultaneously addressing specific localized issues.

The proposed 2015 Utility Capital and Operating budget also manages risk in a number of other ways, including:

- Continuing the renewal of the most at-risk underground infrastructure through a relining program.
- Continuing to oversee upgrades to the Wastewater Treatment Plant.
- Continuing priority work to renew the Buffalo Pound Water Treatment Plant.
- Developing a new septage receiving station.
- Continuing to use the long-range financial model to ensure that the Utility's financial capacity is able to meet system and service requirements.

Wastewater Treatment Plant

While the budget for the renewal and expansion of Regina's Wastewater Treatment Plant has already been approved, it is worthwhile reviewing the generational capital project.

On July 3, 2014, the City entered into a public-private partnership contract with EPCOR Water Prairies Inc. for the Wastewater Treatment Plant Upgrade Project. The contract will expire on June 30, 2044. The City maintains permit responsibilities for the plant and full ownership of the asset.

This upgrade is required to meet new regulatory requirements as well as provide expanded hydraulic and process capability associated with the City's future growth. The project has been approved for PPP Canada funding for 25% of eligible capital costs.

Project Cash Flow

Capital Funding (\$000s)	Projected 2015 Carry Forward	Proposed 2015	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019
Wastewater Treatment Plant Upgrade Project	19,919.8	0	26,400.0	6,116.7	6,064.0	9,267.7

FIGURE 6: WASTEWATER TREATMENT PLANT PROJECT CASH FLOW

Utility Service Overview

The services provided by the Utility are grouped into four programs:

1. Water Supply and Distribution
2. Wastewater Collection and Treatment
3. Storm Water Collection and Flood Protection
4. Customer Service

The first three programs are managed by focusing on five different services:

- Regulatory Compliance
- Reliable Service
- Servicing Development
- Environmental Stewardship
- Customer Service

The final program, Customer Service, is managed by focusing on utility billing and communications.

These services have established service levels and, while still a work in progress, ultimately, the entire program will be budgeted, planned and managed to achieve them. The following descriptions outline the programs and the services associated with each one.

Water Supply and Distribution Program

The water system provides water for residential, institutional, commercial and industrial customers as well as for fire protection. The system serves a population of approximately 200,000 including some customers outside the City limits. Its service goals include:

• Regulatory Compliance

- Providing water that meets or exceeds provincial quality standards.

• Reliable Service

- Providing water at adequate pressure and in sufficient quality and quantity to satisfy the requirements for domestic and commercial use, irrigation and fire protection.
- Ensuring water will be available with only minimal disruptions for local maintenance and rare large-scale disruptions due to unforeseen catastrophes.

• Servicing Development

- Accommodating growth and redevelopment within planning policy by providing access to the service when and where it is wanted and planned.

• Environmental Stewardship

- Enhancing water efficiency by reducing water loss, per capita water consumption and the short-term peak water demand.

- **Customer Service**

- Be responsive to customer service requests.
- Minimize length of service disruption.

Wastewater Collection and Treatment Program

The wastewater system collects wastewater from all residential, institutional, commercial and industrial customers in the City and treats wastewater in accordance with provincial and federal environmental regulations and industry standards. Its service goals include:

- **Regulatory Compliance**

- Collecting and delivering wastewater in compliance with the Water Security Agency operating permit.
- Producing and treating wastewater effluent that meets Water Security Agency standards.

- **Reliable Service**

- Collecting and delivering residential, commercial and industrial wastewater with minimal public impact.

- **Servicing Development**

- Accommodating growth and redevelopment within planning policy by providing access to service when and where it is wanted and planned.

- **Environmental Stewardship**

- Ensuring that components that are removed from the wastewater are treated and disposed of appropriately.
- Minimizing the discharge of industrial pollution and hazardous waste to the sewer system.
- Maximizing the efficiency of pumps and treatment system operations.

- **Customer Service**

- Be responsive to customer service requests.
- Minimize length of service disruption

Storm Water Collection and Flood Protection Program

The drainage system controls water runoff from rainfall and melting snow in and around the city. The system serves approximately 69,000 residential, institutional, commercial and industrial properties. Its service goals include:

- **Reliable Service**

- Collecting and controlling drainage water within the City to lower the danger to the public, decrease property damage, and minimize inconvenience.
- Carrying out spring flood control measures as required to prevent property damage and protect public safety.

- **Servicing Development**

- Accommodating growth and redevelopment within planning policy by providing access to service when and where it is wanted and planned.

- **Environmental Stewardship**

- Protecting the environment from storm water-related water quality risks.
- Maximizing the efficiency of pumping system operations.
- Supporting conservation and sustainable storm water management.

- **Customer Service**

- Being responsive to customer service requests.
- Minimizing service disruption.

Customer Service Program

- **Utility Billing**

- Producing and collecting on Utility billings in an efficient, accurate and timely manner.

- **Communications**

- Being responsive to customer inquiries and needs.

Budget Overview

Budget Process

The budget process at the City of Regina is completed in phases, starting with strategic and business planning and ending with a final policy document approved by City Council, which outlines the plan for the coming year.

Early in 2014, the Executive Leadership Team approved and launched a new four-year strategic plan. That plan helped with business planning in numerous departments and branches during the first quarter of 2014 and was used to establish the framework for the 2015 budget.

Executive Leadership Team (ELT) Directions

In May of 2014, ELT issued a call for budget estimates. The Utility plans both its operating and capital budgets on a multi-year basis (20 years) to allow for optimal investment in maintenance and renewal. The Utility was asked to formulate its 2015 budget using Year 2 of the 2014 20-year financial plan as a starting point.

In 2014, Council approved a rate increase for 2015. Administration is not proposing a change to the rates approved at that time.

The Utility, like other City branches, faces two significant pressures on costs:

- Providing the same service to a growing number of people due to population growth.
- Inflation.

By evaluating operating and capital expenditures based on the ELT target, prioritizing and phasing work appropriately, the Utility was able to meet this expectation in the proposed budget.

Council Role

The proposed budget is based on recommendations from various City departments and service partners, scrutiny by the Budget Advisory Group as well as review and refinement by ELT. This budget reflects the administration's best advice on how to achieve Council's policy and service priorities given the City's current resources. Ultimately, Council determines the programs and service levels that will be included in the 2015 budget.

2015 Budget Summary (Gross/Net)

Utility Operating Revenue Summary (\$000s)

Revenue Details (\$000s)	2014 Budget	Forecast	2015 Budget	Budget Change	
				Dollar Change (\$)	Percent Change %
Water Revenue					
Metered Water Charges	53,375.3	53,375.0	58,064.3	4,689.0	8.8
Unmetered Water Charges	50.0	50.0	50.0	-	-
Service Connections (New/Replacement)	345.0	341.2	345.0	-	-
Subtotal	53,770.3	53,766.2	58,459.3	4,689.0	8.7
Wastewater Revenue					
Wastewater Charges	37,970.3	40,000.0	41,195.7	3,225.4	8.5
Wastewater Service Surcharge	100.0	100.0	200.0	100.0	100.0
Subtotal	38,070.3	40,100.0	41,395.7	3,325.4	8.7
Drainage Infrastructure Levy	12,914.1	12,914.1	14,368.6	1,454.5	11.3
Other Revenues					
Provincial Grant - SIGI	732.7	732.7	-	(732.7)	-
Interest Earned on Investments	800.0	800.0	-	(800.0)	(100.0)
Account Service Fees	350.0	375.0	375.0	25.0	7.1
Delinquency & Collection Admin.	267.0	305.0	287.0	20.0	7.5
Meter Administration Fees	25.0	35.0	50.0	25.0	100.0
SAF Administration Fees	764.0	832.0	1,484.0	720.0	-
Other Revenues	32.0	49.0	32.0	-	-
Subtotal	2,970.7	3,128.7	2,228.0	(742.7)	(25.0)
Total Utility Revenues	107,725.4	109,909.0	116,451.6	8,726.2	8.1

2015 Utility Revenue Sources

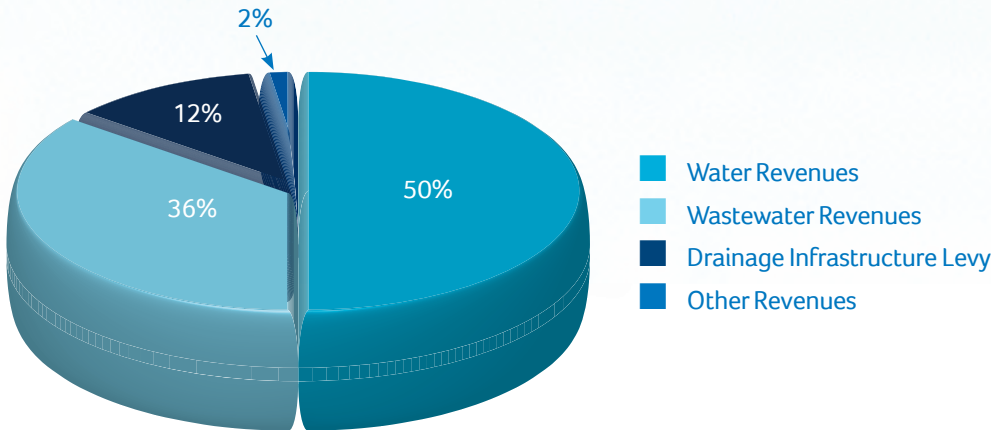


FIGURE 7: 2015 UTILITY REVENUE SOURCES

Utility Rates and Rate Policies

Section 22.3 of *The Cities Regulations* requires Council to adopt a rate policy that sets out the rates or fees that consumers will be charged for the use of water. The policy must include the method used to determine those rates or fees. The following policies have been previously adopted by City Council:

- Utility rates are to be established so that they are sufficient to fully fund operating costs, interest costs, debt repayments, capital requirements and transfer policies, taking into account the operating and infrastructure requirements of the Utility to meet its service goals. The objectives for the Utility’s rate structure are:
 - Financial Self Sufficiency** – utility rates must generate enough revenue to meet all short-term and long-term operating and capital costs.
 - Conservation** – utility rates should encourage customers to use water responsibly.
 - Reduction of Peak Demand** – utility rates should encourage water conservation during summer months, reducing the need for infrastructure investment and higher rates.
 - Equity** – utility rates should result in a charge to customers according to the cost of services used.
- The rate structure for water and wastewater will include a base fee that varies according to the size of the water meter. The variation in the base rate will be based on the schedule recommended by the American Water Works Association (AWWA). The ratios for the base rate based on meter size are shown in the following table.

Water and Wastewater Base Fee Ratios	
Meter Size	AWWA Standard Ratio
15 mm	1.0
18 mm	1.0
25 mm	1.4
40 mm	1.8
50 mm	2.9
75 mm	11
100 mm	14
150 mm	21
200 mm	29

FIGURE 8: UTILITY FEE RATIOS

- The rate structure for water and wastewater will include a uniform rate for each cubic metre of water consumed and each cubic metre of deemed wastewater flow. For water, the uniform rate is applied to all consumption. For wastewater, the deemed volume is a percentage of the water consumption.
 - For residential customers, the wastewater volume is 82% of the water consumption.
 - For multiple unit residential properties, the percentage is 95% of the water consumption.
 - For institutional, commercial and industrial properties, the percentage is 98% of the water consumption.

4. The rate structure for the storm drainage infrastructure levy will be based on the size of the property, with larger properties paying a higher levy. The ratios approved by City Council in 2001 (CR01-189) are shown in the following table. The drainage levy applies regardless of whether the property is connected to the water or wastewater systems.

Drainage Infrastructure Rate Ratios	
Area of Property	Rate Ratio
0 to 1,000 m ²	1.0
1,001 to 3,000 m ²	2.0
3,001 to 5,000 m ²	4.0
5,001 to 7,000 m ²	6.0
7,001 to 9,000 m ²	8.0
9,001 to 11,000 m ²	10.0
11,001 to 13,000 m ²	12.0
13,001 to 15,000 m ²	14.0
15,001 to 17,000 m ²	16.0
17,001 to 19,000 m ²	18.0
19,001 to 21,000 m ²	20.0
21,001 to 23,000 m ²	22.0
23,001 to 25,000 m ²	24.0
25,001 to 27,000 m ²	26.0
27,001 to 29,000 m ²	28.0
29,001 to 31,000 m ²	30.0
Over 31,000 m ²	32.0

FIGURE 9: DRAINAGE INFRASTRUCTURE LEVY RATIO

Regardless of actual property size, the rate for properties up to 1,000 m² is applied to all locations designated as “standard residential properties.”

5. In the setting of rates, the Utility must present a balanced budget, with any surplus directed to the following:

- **Transfer to the General Utility Reserve** –The purpose of the reserve is to provide a source of financing for capital projects and funding emergency expenditures. The balance of the Utility’s surplus, after other transfers, is transferred to the General Utility Reserve. The transfer is budgeted at **\$51.6 million for 2015**. An overall requirement for capital funding is set through the Utility Model. Utility rates are set to provide sufficient surpluses to cover the capital costs over the next 20 years.

In the event that the Utility incurs an operating deficit in a given year, the deficit would also be funded from the reserve.

6. The Utility Operating Expenses include an access fee, which is a transfer to the City’s General Operating Fund. Any organization or utility operating in a municipality would be required to pay either property taxes or an access fee for the rights to use or access civic assets. Policies on these types of fees vary from city to city. Calgary’s Utility pays 10% of revenue plus a 10% return on equity. Saskatoon’s Utility pays a franchise fee based on 10% of revenue. Winnipeg’s is also 10%, with dividends paid. Moose Jaw’s rate is 5% of revenue. Regina’s transfer is the total of:

- 7.5% of the previous year’s budgeted revenues for billed water consumption, wastewater charges and drainage infrastructure levy.
- The amount of \$675,000, estimated to be three-sevenths of the Goods and Services Tax (GST) rebate received by the Utility. This amount is the additional rebate provided by the federal government starting in 2004.

For 2015, these amounts total \$8.5 million.

7. The Utility Operating Expenses also include a Utility Administration Charge, which is an approximate measure of corporate administration costs attributable to the Utility. It is calculated as 5% of the budgeted utility revenues for the previous year. Most corporate functions, including City Council, Committees, City Manager, Human Resources,

City Solicitor’s Office, City Clerk’s Office, Accounting, Budgeting, and Purchasing, are involved in activities related to the Water and Sewer Utility. The percentage transfer is used in lieu of a more detailed cost allocation process. A more detailed process would still involve arbitrary decisions and would significantly increase the effort and cost required compared to the current policy. The total charge for 2015 is \$5.4 million.

Approved Utility Rates for 2015

A two-year schedule of rates was approved for 2014 and 2015 in the 2014 Utility Budget. The new rates for 2015 approved with the 2014 Utility Budget will be implemented January 1, 2015.

The Utility rates for 2014 and 2015 are shown in the following tables. Rates are billed monthly and are based on a daily fixed charge plus a charge based on usage.

Water Rates		
	Approved Rate Schedule (\$)	
Daily Base Fee:	2014	2015
15 mm/18 mm water meter	0.67	0.72
25 mm water meter	0.94	1.01
40 mm water meter	1.21	1.30
50 mm water meter	1.94	2.09
75 mm water meter	7.37	7.92
100 mm water meter	9.37	10.08
150 mm water meter	14.06	15.12
200 mm water meter	19.42	20.88
Volume Charge:		
Charge per m ³	1.59	1.72

FIGURE 10: 2015 APPROVED WATER RATES

Wastewater Rates		
	Approved Rate Schedule (\$)	
Daily Base Fee:	2014	2015
15 mm/18 mm water meter	0.52	0.56
25 mm water meter	0.73	0.78
40 mm water meter	0.93	1.01
50 mm water meter	1.50	1.62
75 mm water meter	5.70	6.16
100 mm water meter	7.26	7.84
150 mm water meter	10.89	11.76
200 mm water meter	15.03	16.24
Volume Charge:		
Charge per m ³	1.43	1.54

FIGURE 11: 2015 APPROVED WASTEWATER RATES

Storm Drainage Rates		
	Approved Rate Schedule (\$)	
Daily Base Fee:	2014	2015
0 to 1,000 m ²	.44	.48
1,001 to 3,000 m ²	.89	.96
3,001 to 5,000 m ²	1.77	1.92
5,001 to 7,000 m ²	2.66	2.88
7,001 to 9,000 m ²	3.54	3.84
9,001 to 11,000 m ²	4.43	4.80
11,001 to 13,000 m ²	5.31	5.76
13,001 to 15,000 m ²	6.20	6.72
15,001 to 17,000 m ²	7.08	7.68
17,001 to 19,000 m ²	7.97	8.64
19,001 to 21,000 m ²	8.86	9.60
21,001 to 23,000 m ²	9.74	10.56
23,001 to 25,000 m ²	10.63	11.52
25,001 to 27,000 m ²	11.51	12.48
27,001 to 29,000 m ²	12.40	13.44
29,001 to 31,000 m ²	13.28	14.40
Over 31,000 m ²	14.17	15.36

FIGURE 12: 2015 APPROVED STORM DRAINAGE RATES

Utility Customers

The Utility provides services to a population of approximately 200,000 including service to some customers and communities outside of the City limits. The following tables provide information on the number and categories of Utility customers.

Water and Sewer Utility Customers			
	Water Customers	Wastewater Customers	Drainage Customers
Residential	64,292	64,282	64,286
Multi-Unit Residential	902	899	883
Commercial	3,333	3,241	3,355
Irrigation	282	35	-
Total	68,809	68,457	68,524
Within City Limits	68,736	68,419	68,524
Outside City Limits	73	38	-
Total	68,809	68,457	68,524

FIGURE 13: REGINA'S UTILITY CUSTOMERS

Water Customers					
Water	Residential	Multi-Unit Residential	Commercial	Irrigation	Total
15 mm - 5/8"	61,386	37	1,290	13	62,726
18 mm - 3/4"	2,744	216	1,054	31	4,045
25 mm - 1"	150	361	439	69	1,019
40 mm - 1.5"	11	153	189	55	408
50 mm - 2"	1	77	215	106	399
75 mm - 3"	-	58	118	6	182
100 mm - 4"	-	-	17	2	19
150 mm - 6"	-	-	8	-	8
200 mm - 8"	-	-	3	-	3
Total	64,292	902	3,333	282	68,809

FIGURE 14: ANALYSIS OF REGINA'S WATER CUSTOMERS

Wastewater Customers					
Wastewater	Residential	Multi-Unit Residential	Commercial	Irrigation	Total
15 mm - 5/8"	61,390	37	1,281	8	62,716
18 mm - 3/4"	2,732	216	1,030	3	3,981
25 mm - 1"	149	361	432	10	952
40 mm - 1.5"	10	151	182	5	348
50 mm - 2"	1	776	184	8	269
75 mm - 3"	-	58	114	1	173
100 mm - 4"	-	-	11	2	11
150 mm - 6"	-	-	5	-	5
200 mm - 8"	-	-	2	-	2
Total	64,282	899	3,241	35	68,457

FIGURE 15: ANALYSIS OF REGINA'S WASTEWATER CUSTOMERS

Drainage Customers					
Drainage	Residential	Multi-Unit Residential	Commercial	Total	
0 to 1,000 m ²	1	64,286	390	1,415	66,091
1,001 to 3,000 m ²	2	-	329	847	1,176
3,001 to 5,000 m ²	3	-	68	344	412
5,001 to 7,000 m ²	4	-	37	167	204
7,001 to 9,000 m ²	5	-	17	124	141
9,001 to 11,000 m ²	6	-	12	86	98
11,001 to 13,000 m ²	7	-	12	52	64
13,001 to 15,000 m ²	8	-	4	52	56
15,001 to 17,000 m ²	9	-	1	45	46
17,001 to 19,000 m ²	10	-	3	24	27
19,001 to 21,000 m ²	11	-	5	32	37
21,001 to 23,000 m ²	12	-	2	19	21
23,001 to 25,000 m ²	13	-	1	12	13
25,001 to 27,000 m ²	14	-	1	8	9
27,001 to 29,000 m ²	15	-	-	12	12
29,001 to 31,000 m ²	16	-	-	6	6
Over 31,000 m ²	17	-	1	110	111
Total Properties	64,286	883	3,355	68,524	

FIGURE 16: ANALYSIS OF REGINA'S DRAINAGE CUSTOMERS

Utility Rate History and Comparisons

The following tables detail the history of Utility rates since 2005 and the annual cost and cost increases for a sample residential customer who consumes 360 cubic metres of water per year.

Water Rate History				
Year	Fixed Annual Charge (\$)	Volume Charge (\$/Cubic Metre)	Cost for Sample Customer	
			Annual Charge for 360 Cubic Metres (\$)	Per Cent Increase (%)
2005	123.00	0.83	421.80	3.2
2006	129.00	0.85	435.00	3.1
2007	135.05	0.88	451.85	3.9
2008	146.00	0.96	491.60	8.8
2009	160.60	1.05	538.60	9.6
2010	175.20	1.14	585.60	8.7
2011	189.80	1.24	636.20	8.6
2012	208.05	1.35	694.05	9.1
2013	226.30	1.47	755.50	8.9
2014	244.55	1.59	816.95	8.1
2015	262.80	1.72	882.00	8.0

FIGURE 17: REGINA'S WATER RATE HISTORY

Wastewater Rate History				
Year	Fixed Annual Charge (\$)	Volume Charge (\$/Cubic Metre)	Cost for Sample Customer	
			Annual Charge for 360 Cubic Metres (\$)	Per Cent Increase (%)
2005	93.00	0.72	305.54	5.1
2006	99.00	0.75	320.40	4.9
2007	102.20	0.78	332.46	3.8
2008	116.80	0.85	364.07	9.5
2009	124.10	0.93	398.64	9.5
2010	135.05	1.01	433.20	8.7
2011	146.00	1.11	473.67	9.3
2012	160.60	1.21	517.79	9.3
2013	175.20	1.32	564.86	9.1
2014	189.80	1.43	611.94	8.3
2015	204.40	1.54	659.01	7.7

FIGURE 18: REGINA'S WASTEWATER RATE HISTORY

Drainage Infrastructure Levy Rate History			
Year	Property Category	Annual Levy (\$)	Percentage Increase (%)
2005	1,000 square metres or less	78.00	8.3
2006	1,000 square metres or less	84.00	7.7
2007	1,000 square metres or less	91.25	8.6
2008	1,000 square metres or less	98.55	8.0
2009	1,000 square metres or less	105.85	7.4
2010	1,000 square metres or less	116.80	10.3
2011	1,000 square metres or less	127.75	9.4
2012	1,000 square metres or less	138.70	8.6
2013	1,000 square metres or less	149.65	7.9
2014	1,000 square metres or less	160.60	7.3
2015	1,000 square metres or less	175.20	9.1

FIGURE 19: REGINA'S DRAINAGE INFRASTRUCTURE LEVY HISTORY

Customer Impact of Utility Rates

New rates for water, wastewater and drainage for 2014 and 2015 were approved during the 2014 budget process. Examples of the impact of the 2015 rates are provided below. (Note: the 2014 rate increase was implemented on April 1, 2014. For comparison purposes, the tables following provide a full year comparison of the 2014 and 2015 rates.)

Average Home Owner

The chart in Figure 20 illustrates the impact of the 2015 rates on a homeowner who uses 360 cubic metres of water per year. That's typical for a family of two adults and two children in a home with two bathrooms, a dishwasher and washing machine sitting on a lot with typical landscaping. The cost increase from the 2015 rates is about \$10.56 per month for the average homeowner.

Sample Commercial Customer

The chart in Figure 21 illustrates the impact of the 2015 rates on a commercial customer with a 40 millimetre meter that uses 3,000 cubic metres of water per year on a property between 3,000 to 5,000 square metres in size. This water consumption would be typical for a strip mall that had a restaurant and a hair salon as tenants with a parking lot and minimal landscaping.

2015 Rate Impact - Sample Home Owner				
	2014 (\$)	2015 (\$)	Dollar Change (\$)	Per Cent Change (%)
Water				
Annual Basic Charge	244.55	262.80	18.25	-
Annual Volume Charge	572.40	619.20	46.80	-
Total Annual Water	816.95	882.00	65.05	7.96
Wastewater				
Annual Basic Charge	189.80	204.40	14.60	-
Annual Volume Charge	422.14	454.61	32.47	-
Total Annual Wastewater	611.94	659.01	47.07	7.69
Annual Drainage Infrastructure Levy	160.60	175.20	14.60	9.09
Total Annual Utility Charges	1,589.49	1,716.21	126.72	7.97

FIGURE 20: 2015 UTILITY RATE IMPACT FOR AVERAGE HOME

2015 Rate Impact - Sample Commercial Owner				
	2014 (\$)	2015 (\$)	Dollar Change (\$)	Per Cent Change (%)
Water				
Annual Basic Charge	441.65	474.50	32.85	-
Annual Volume Charge	4,770.00	5,160.00	390.00	-
Total Annual Water	5,211.65	5,634.50	422.85	8.11
Wastewater				
Annual Basic Charge	339.45	368.65	29.20	-
Annual Volume Charge	4,204.20	4,527.60	323.40	-
Total Annual Wastewater	4,543.65	4,896.25	352.60	7.76
Annual Drainage Infrastructure Levy	646.05	700.80	54.75	8.47
Total Annual Utility Charges	10,401.35	11,231.55	830.20	7.98

FIGURE 21: 2015 UTILITY RATE IMPACT FOR A SAMPLE COMMERCIAL OWNER

Rate Comparison – Sample Residential Customer

The following chart compares Regina's 2014 rates with those for other cities for a typical residential customer who uses 360 cubic metres of water per year. Such water consumption is typical for a family of two adults and two children, in a home with two bathrooms, a dishwasher and washing machine and on a lot with typical landscaping for Regina. The chart uses rates for 2014 as some other cities have yet to determine their 2015 rates.

Sample Residential Customer - 2014 Rates					
Utility Bill Details	Regina	Calgary	Edmonton	Saskatoon	Winnipeg
Water					
Annual Basic Charge	\$ 244.55	\$ 189.00	\$ 84.36	\$ 102.96	\$ 109.50
Annual Volume Charge	572.40	618.30	687.55	368.58	511.20
Total Annual Water	816.95	807.30	771.91	471.54	620.70
Wastewater					
Annual Basic Charge	189.80	193.80	145.32	102.96	-
Annual Volume Charge	422.14	363.38	556.67	211.74	795.60
Total Annual Wastewater	611.94	557.18	701.99	314.70	795.60
Annual Drainage Infrastructure Levy	160.60	110.40	198.09	193.88 ¹	-
Total Annual Utility Charges	\$ 1,589.49	\$ 1,474.88	\$ 1,671.99	\$ 980.12	\$ 1,416.30

FIGURE 22: COMPARISON OF UTILITY RATES ACROSS WESTERN CANADIAN CITIES FOR A SAMPLE RESIDENTIAL CUSTOMER (2014 RATES)NOTE:

1. Saskatoon's infrastructure levy is not specific to the drainage infrastructure.

Rate Comparison – Sample Commercial Customer

The following chart compares the 2014 rates for Regina and other cities for a sample commercial customer. The commercial customer has a 40 millimetre meter and uses 3,000 cubic metres of water per year on a property between 3,000 and 5,000 square metres in size. This water consumption would be typical for a strip mall that has a restaurant and a hair salon as tenants as well as a parking lot and minimal landscaping. Rates for 2014 were used as some other cities have yet to determine their 2015 rates.

Sample Commercial Customer - 2014 Rates					
Utility Bill Details	Regina	Calgary	Edmonton	Saskatoon	Winnipeg
Water					
Annual Basic Charge	\$ 441.65	\$ 510.00	\$ 286.56	\$ 1,630.80	\$ 149.65
Annual Volume Charge	4,770.00	3,873.00	3,916.38	2,429.11	4,049.68
Total Annual Water	5,211.65	4,383.00	4,202.94	4,059.91	4,199.33
Wastewater					
Annual Basic Charge	343.10	193.80	236.76	1,630.80	0
Annual Volume Charge	4,204.20	3,168.90	5,225.40	2,167.45	6,630.00
Total Annual Wastewater	4,547.30	3,362.70	5,462.16	3,798.25	6,630.00
Annual Drainage Infrastructure Levy	642.40	110.40	1,782.84	1,315.48	-
Total Annual Utility Charges	\$ 10,401.35	\$ 7,856.10	\$ 11,447.94	\$ 9,173.64	\$ 10,829.33

FIGURE 23: COMPARISON OF UTILITY RATES ACROSS WESTERN CANADIAN CITIES FOR A SAMPLE COMMERCIAL CUSTOMER (2014 RATES)

Note: 1. Saskatoon's infrastructure levy is not specific to drainage infrastructure.

2015 – 2019 Utility Capital Plan

The 2015 Utility Capital Plan addresses the most critical capital needs of the Water and Sewer Utility to support the asset management plan and aging infrastructure. The focus is two-fold:

1. **Capital Programs:** are ongoing investments for renewal and rehabilitation work related to the Utility's major assets to keep them in good working condition, prevent further deterioration and extend their useful life. Investment decisions are made to minimize the risk to a targeted service level.

2. **Capital Projects:** are investments that result in new assets arising from growth in the city that require the expansion of trunk lines or the acquisition or construction of new assets such as retention ponds. Projects have a defined start date and end date and can take multiple years to complete.

The focus of capital renewal for the Regina Water and Sewer Utility in the future is the upgrading of drainage and wastewater (sewage) collection systems as well as essential plant renewals and upgrades (Wastewater Treatment Plant and Buffalo Pound Water Treatment Plant).

2014 to 2019 Utility Capital Plan - Programs (\$000s)

Division	Reporting Group	Carryforward	2015	2016	2017	2018	2019
Corporate Services	Other Capital Initiatives	-	20.0	40.0	20.0	20.0	40.0
Corporate Services Total		-	20.0	40.0	20.0	20.0	40.0
Transportation & Utilities	Water Distribution	6,258.5	5,785.0	7,535.0	7,535.0	7,535.0	7,535.0
	Water Supply	1,234.6	-	1,000.0	1,000.0	1,000.0	1,000.0
	Water Pumping	-	-	750.0	1,000.0	2,000.0	3,000.0
	Other Capital Initiatives	1,182.1	300.0	800.0	800.0	800.0	800.0
	Wastewater Collection	5,233.0	10,055.0	25,055.0	19,880.0	18,880.0	11,880.0
	Drainage System Upgrading	295.1	455.0	455.0	280.0	280.0	280.0
	Drainage Infrastructure & New Development	1,218.0	2,400.0	2,400.0	2,400.0	2,300.0	3,300.0
Transportation & Utilities Total		15,421.3	18,995.0	37,995.0	32,895.0	32,795.0	27,795.0
Grand Total		15,421.3	19,015.0	38,035.0	32,915.0	32,815.0	27,835.0
Funding Source			2015	2016	2017	2018	2019
Utility Reserve			19,015.0	34,975.0	30,755.0	6,280.0	4,475.0
Service Agreement Fees (Utility)			-	3,060.0	2,160.0	1,800.0	360.0
Debentures			-	-	-	24,735.0	23,000.0
Grand Total			19,015.0	38,035.0	32,915.0	32,815.0	27,835.0

2014 to 2019 Utility Capital Plan - Projects (\$000s)							
Division	Reporting Group	Carryforward	2015	2016	2017	2018	2019
City Planning & Development	Water Distribution	1,695.0	365.0	5,100.0	10,100.0	12,600.0	15,100.0
	Other Capital Initiatives	-	-	-	-	-	-
	Wastewater Collection	1,200.0	-	-	-	-	-
	Drainage System Upgrading	3,750.0	-	-	-	-	-
	Drainage Infrastructure & New Development	-	2,330.0	-	-	1,750.0	-
	City Planning & Development Total		6,645.0	2,695.0	5,100.0	10,100.0	14,350.0
Corporate Services	Other Capital Initiatives	298.7	325.0	325.0	625.0	325.0	325.0
Corporate Services Total		298.7	325.0	325.0	625.0	325.0	325.0
Transportation & Utilities	Water Distribution	7,321.0	2,820.0	3,900.0	3,150.0	2,000.0	6,500.0
	Water Pumping	-	-	-	-	800.0	800.0
	Water Supply	14,379.7	7,000.0	12,000.0	8,500.0	12,500.0	16,000.0
	Other Capital Initiatives	113.4	1,833.0	1,000.0	1,000.0	6,000.0	11,000.0
	Wastewater Collection	8,537.5	3,360.0	300.0	600.0	100.0	4,600.0
	Wastewater Treatment	16,029.0	15,000.0	-	200.0	-	-
	Drainage System Upgrading	8,493.7	3,200.0	4,150.0	6,500.0	8,450.0	10,200.0
	Drainage Infrastructure & New Development	-	2,300.0	-	-	-	-
Transportation & Utilities Total		54,874.1	35,513.0	21,350.0	19,950.0	29,850.0	49,100.0
Grand Total		61,817.7	38,533.0	26,775.0	30,675.0	44,525.0	64,525.0
Funding Source			2015	2016	2017	2018	2019
Utility Reserve			26,669.0	15,019.0	15,721.0	26,195.0	19,060.0
Service Agreement Fees (Utility)			9,946.0	8,468.0	12,762.0	15,590.0	23,355.0
Debentures			-	-	-	-	18,000.0
Moose Jaw			1,918.0	3,288.0	2,192.0	2,740.0	4,110.0
Grand Total			38,533.0	26,775.0	30,675.0	44,525.0	64,525.0

Utility Operating Expenditure Summary (\$000s)					
Expenditure Details (\$000s)	2014 Budget	Forecast	2015 Budget	Budget Change	
				Dollar Change (\$)	Percent Change %
Operations & Construction					
Water Operations	13,145.5	12,855.9	13,749.1	603.6	4.6
Water & Sewer Construction	8,089.1	9,369.9	8,576.5	487.4	6.0
Sewer & Drainage Operations	6,121.3	6,621.2	6,388.8	267.5	4.4
Waste Water Treatment	6,718.2	6,718.2	8,883.7	2,165.5	32.2
Subtotal	34,074.1	35,565.2	37,598.1	3,524.0	10.3
Planning & Engineering					
Water Works Engineering	2,292.8	1,412.2	2,457.8	165.0	7.2
Construction & Compliance	2,795.8	2,766.4	2,665.9	(129.9)	(4.6)
Subtotal	5,088.6	4,178.6	5,123.7	35.1	0.7
Utility Administration					
Customer Service & Administration	6,419.0	5,351.3	6,763.6	344.6	5.4
Access Fee	8,002.9	8,002.9	8,494.5	491.6	6.1
Utility Administration Charge	5,501.0	5,501.0	5,386.6	(114.4)	(2.1)
Subtotal	19,922.9	18,855.2	20,644.7	721.8	3.6
Total Operating Expenditures	59,085.6	58,599.0	63,366.5	4,280.9	7.2
Other Expenditures					
Debt Costs	45,920.1	45,920.1	1,439.0	(44,481.1)	(96.9)
Total Expenditures	105,005.7	104,519.1	64,805.5	(40,200.2)	(38.3)
Net Utility Reserve Transfer	2,719.7	2,719.7	51,646.0	48,926.3	1,799.0

Staffing Summary

FTE's by Division	2014 ¹			2015			Change
	Permanent	Casual	Total	Permanent	Casual	Total	
City Operations ²	194.8	28.1	222.9	169.3	31.2	200.5	(22.4)
Corporate Services	25.5	2.8	28.3	26.5	2.8	29.3	1.1
Office of the City Manager	1.0	-	1.0	1.0	-	1.0	
Total	221.3	30.9	252.2	196.8	34.0	230.8	(21.4)

NOTE:

- The 2014 staffing figures have been restated to remove staffing from work units that allocate costs to the Utility. Those staff are reflected in the staffing summaries in the General Operating Budget.
- The staffing summary for City Operations for 2015 reflects a reduction of 26 Permanent FTE and 0.2 Casual FTE due to the operational change at the Wastewater Treatment Plant. As of January 1, 2015, these staff are employees of EPCOR Water Prairies Inc. The total above reflects an increase 4.6 FTEs after the transferred employees are accounted for.

Operating Expenditure Summary (\$000s) by Type of Expenditure

Expenditures	2014 Budget	Forecast	2015 Budget	Budget Change	
				Dollar Change (\$)	Percent Change %
Salary & Benefits	17,632.2	17,258.2	15,852.9	(1,779.3)	(10.1)
Employee Related Payments	86.8	90.4	59.4	(27.4)	(31.6)
Office & Administrative Expenses	1,011.2	1,141.6	1,045.1	33.9	3.4
Professional & External Services	2,208.1	2,794.0	8,603.6	6,395.5	289.6
Materials, Goods & Supplies	4,905.3	5,286.1	3,045.8	(1,859.5)	(37.9)
Utilities and Other Expenditures	11,926.7	12,198.3	12,518.8	592.1	5.0
Intra-Municipal Services	21,315.3	19,827.2	22,241.0	925.7	4.3
Total Operating Expenditures	59,085.6	58,595.8	63,366.6	4,281.0	7.2
Debt Servicing	45,920.1	45,920.1	1,438.9	(44,481.2)	(96.9)
Total Expenditures	105,005.7	104,515.9	64,805.5	(40,200.2)	(38.3)
Net Utility Reserve Transfer	2,719.7	2,917.7	51,646.0	48,926.3	1,799.0

Analysis of Utility Operating Expenditures 2015

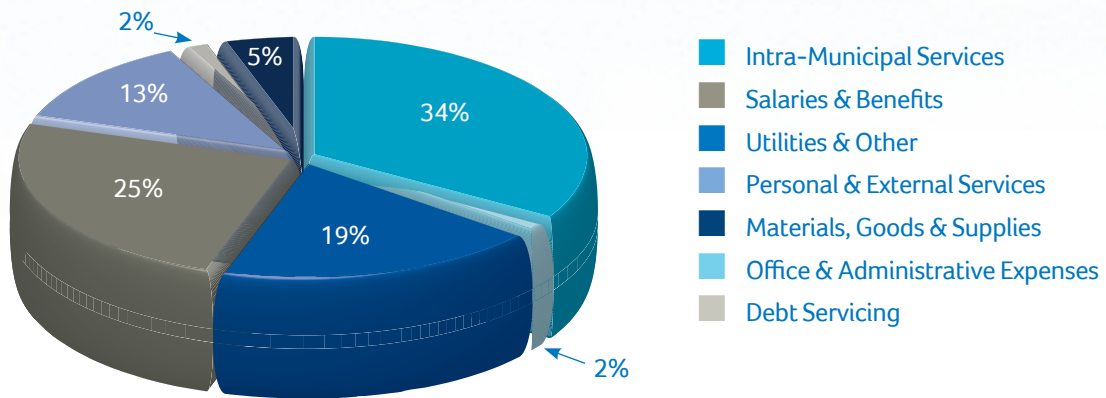


FIGURE 24: ANALYSIS OF 2015 UTILITY OPERATING EXPENDITURES

Analysis of Operating Expenditure Budget Change

		Details (\$000s)
2014 Total Operating Expenditures Budget		\$105,005.7
1	Salaries and Benefits - Includes cost changes resulting from in-range progression increases, classification reviews, general employer benefit costs (EI, CPP, WCB, etc. which increase proportionate with salaries), the City's portion of increases in employee pension contributions and negotiated salary increase. (Base). The change also reflects a reduction in staffing costs due to the transfer of former City of Regina employees to EPCOR Water Prairies Inc. as part of the P3 contract to develop and operate the new Wastewater Treatment Plant.	(1,369.0)
2	2014 One Time Items - This represents the removal of one time items contained in the 2014 budget. (One-Time)	(166.8)
3	Trucking Contract - Increase in price for trucking services. (Base)	169.2
4	Increase in Allocated Fleet Costs for use of vehicles and equipment. (Base)	126.6
5	Increase in other Allocated costs.	179.4
6	Purchase of Water - Increase in cost of water from Buffalo Pound Water Treatment Plant (Base) and due to growth. (On-going)	409.0
7	Power Costs - Increase in power cost for pumping at the Buffalo Pound Water Treatment Plant. (Base)	10.0
8	Utility Billing Postage - Increased cost as a result of postage increases from Canada Post (Base) and due to growth. (Ongoing)	50.0
9	WWTP Operational Costs - In 2015 and 2016, additional operating costs are budgeted to allow for impact of operating the plant through the construction phase. The change also reflects operational staffing costs now covered through the P3 contract to develop and operate the new Wastewater Treatment Plant due to the transfer of former City of Regina employees to EPCOR Water Prairies Inc. See Salaries and Benefits note above.	4,084.9
10	Construction Staff - Increased staffing for water and sewer construction program, supporting both emergency repair and replacement as well as planned capital work. This ongoing request includes two casual FTEs paid through operating funds and one casual FTE paid through the capital program. (Three Casual FTEs) (Ongoing)	167.2
11	Utility Billing Collections Officer - Increased number of customers along with an increased volume of calls has increased work volumes sufficiently to require an additional staff resource. (One Permanent FTE) (Ongoing)	63.5
12	Equipment Operator - Program changes in Sewer and Drainage Operations, including an additional steamer unit to clear frozen catch basins and a specialized mower for drainage channels, are required to support improved service delivery and maintenance standards. (One Casual FTE) (Ongoing)	60.7
13	Closed Circuit Television Camera (CCTV) Operator - This one-time request will provide funding to deliver an increased inspection program and to perform a pilot program to determine feasibility of delivering inspection work to support the capital program through use of internal forces. (One Casual FTE) (One-time)	58.5
14	Utility Billing Staffing - Increased volume of work in addition to increased complexity in billing related to building permits has resulted in a need for additional resources until process improvements planned for 2015 and 2016 can be implemented. (One Casual FTE) (One-time)	60.4
15	Water & Sewer Utility charges paid to General Operation Fund. Represents the Access fee and Utility administration charges.	377.2
16	Debt Costs - This represents the change in total interest and principle payments for the Utility in 2015. (Base)	(44,481.0)
2015 Operating Expenditures Budget		\$64,805.5

Utility System Detail

Water System Overview

The water supply and pumping and distribution system provides water for residential and commercial use and fire protection. The system serves a population of approximately 215,000 including all residents and businesses in the city limits and a number of customers outside the city. Its service goals include:

- Providing water that meets or exceeds provincial water quality standards and objectives.
- Providing water at adequate pressure and in sufficient quantity to satisfy the requirements for domestic and commercial use, irrigation and fire protection.
- Identifying and implementing improvements to the water system through long range planning, monitoring, improved operation, capital works and new technology.

Components of the water system include:

- **Buffalo Pound Lake and Wells** – All water needs are provided from Buffalo Pound Lake. There are wells available for backup purposes. The well water is chlorinated and does not require further treatment to meet current health standards.
- **Buffalo Pound Water Treatment Plant** – Water from Buffalo Pound Lake is drawn and pumped three kilometres to the Buffalo Pound Water Treatment Plant, a facility owned jointly with the City of Moose Jaw. Once there, the water is mixed with coagulants that cause algae, bacteria and other impurities to clump together so that they settle out of the water. The water is then filtered and chlorinated. During warmer weather, the water is passed through granular activated carbon to improve the taste and odour.
- **Supply Pipelines** – From the Buffalo Pound Water Treatment Plant, the water is pumped through a 56 kilometres pipeline to the City's water distribution system. The pipeline has been twinned to increase capacity and reliability of the water supply. A number of other supply

pipelines transport water from wells to reservoirs. In all, the system includes over 280 kilometres of supply pipeline.

- **Reservoirs** – Five storage reservoirs are used to store water to meet peak demands and ensure that there is an adequate supply of water available for firefighting and during high-usage periods. The reservoirs have a combined storage capacity equal to about one-and-a-half days of average water use.
- **Pumping Stations** – There are four pumping stations (North, Farrell, Ross and North Zone) that are used to pump water from reservoirs to the distribution system.
- **Distribution System** – The distribution system consists of more than 1,130 kilometres of pipelines ranging in size from large 1,067 millimetres diameter trunk mains to 100 millimetres distribution pipes. The pipelines are made of a variety of materials including steel, cast iron, concrete, asbestos cement, polyvinylchloride and high-density polyethylene. The distribution system also includes more than 6,000 valves that allow the water to be turned off during repairs and maintenance.
- **Service Connections** – Distribution pipes are connected to a customer's water line through a service connection. The City owns and is responsible for the maintenance of over 600 kilometres of service connection pipe on the "City side" of the property line.
- **Water Meters** – Water meters measure water consumption via automated meter reading equipment and a mobile data collection unit.

Wastewater System Overview

The wastewater collection and treatment system collects sewage from residential, institutional, commercial and industrial customers in the city. Wastewater treatment and final effluent meet provincial environmental standards. Service goals include:

- Collecting domestic, commercial and industrial wastewater in the city and delivering it reliably to wastewater treatment facilities.

- Producing a treated wastewater effluent that is biologically and physically safe for the environment and that meets the requirements of the provincially-issued operating permit.
- Ensuring solids removed from the wastewater are treated and disposed of in an environmentally responsible manner.

Components of the wastewater system include:

- **Service Connections** – Building plumbing systems are attached to the wastewater collection system by a service connection pipe. The City owns and is responsible for the maintenance of over 600 kilometres of pipe on the “City side” of the property line.
- **Collection Mains and Trunk Mains** – The service connection pipes are attached to wastewater collection mains, typically 200–250 millimetres in diameter. The collection mains drain into trunk mains, which are 300 millimetres or more in diameter. The system includes approximately 860 kilometres of pipeline.
- **Manholes** – More than 9,500 manholes provide access to the wastewater collection system for maintenance and repair.
- **Lift Stations** – Wastewater flows through the collection system by gravity. In low-lying areas of the city, lift stations must be used to pump the wastewater to collection and trunk mains at a higher elevation. Gravity then takes wastewater to the McCarthy Boulevard Pumping Station. There are 19 lift stations in the wastewater collection system.
- **McCarthy Boulevard Pumping Station** – All wastewater collected in the city flows to the McCarthy Boulevard Pumping Station. The station provides screening and continuous transfer of wastewater from the collection system to the wastewater treatment facilities five kilometres to the west. The McCarthy facility is capable of transferring wastewater at up to four times the average daily rate.
- **Septage Receiving Station** – The Utility receives trucked liquid waste at the Wastewater Treatment Plant. When the upgrade at the Wastewater Treatment Plant is completed, this location will no longer be available. In 2014, work began to develop an alternate location for a septage receiving station, which is scheduled for completion before the middle of 2016.
- **Wastewater Treatment Plant** – The plant processes wastewater through four stages of treatment:
 - Primary treatment removes sand, grit and organic material from the sewage.
 - Secondary treatment reduces dissolved organic material through the use of aerated lagoons.
 - Tertiary treatment removes phosphorus, algae and suspended solids with aluminum sulphate and polymer.
 - Ultraviolet light is used to disinfect the effluent before it is released into the Wascana Creek.

A major upgrade project is underway through a P3 model to comply with new regulations before the end of 2016.

Drainage System Overview

The drainage system collects water from rainfall and melting snow in and around the city and conveys it to Wascana and Pilot Butte Creeks. The system serves approximately 69,000 residential and commercial properties. Service goals include:

- Collecting and controlling drainage water within the city to minimize danger to the public, property damage and inconvenience.
- Monitoring the potential for flood conditions in Wascana Creek and the drainage channels while carrying out flood control measures as required.

The **Minor Drainage System** consists of the underground piping system that collects and transports small to medium amounts of drainage from rainfall, snow melt and minor storms. Components of the minor system include:

- **Catch Basins** – More than 18,000 catch basins located in streets and open spaces collect water and direct it into the

drainage lines. Catch basins are designed to keep sand, silt and other matter out of the piping system by causing it to settle to the bottom of the basin.

- **Lines, Mains and Trunks** – There are more than 1,180 kilometres of drainage lines located beneath city streets. Lines and mains range from 200 millimetres to 1,200 millimetres in diameter, with trunks more than 1,200 millimetres.
- **Manholes** – More than 9,000 manholes provide access to the system for maintenance and repair.
- **Lift Stations** – Drainage water flows through the system thanks to gravity. There are low-lying areas where lift stations are used to pump the drainage water to a higher elevation. The water flows into a lift station at a low elevation and is pumped to a higher level where it continues to flow through a pipe or channel. There are 13 lift stations in the drainage system.

The **Major Drainage System** is used when drainage water exceeds the capacity of the minor system and must flow over land. The major system is designed so that water will flow down roadways and land easements. Components of the major system include:

- **Graded roadways, land easements, swales and lots** – In order for the runoff water to flow over land to a point where it can be collected, the surface area must be properly sloped.
- **Dry bottom detention facilities** – These are lower land areas in open space areas such as parks. A detention facility contains outlets to and from the minor system. During periods of heavy rainfall, water that would otherwise overload the minor system enters the detention facility and is stored there temporarily. It then flows back into the minor drainage system at a later time when flows have gone down.
- **Lake (or wet) retention facilities** – Lakes such as the ones in Lakeridge and Windsor Park are similar to dry-bottom detention facilities, except they normally contain water

all year round. When the minor system is overloaded, the water in these ponds rises, and then drops when the excess water flows back into the minor drainage system.

- **Underground detention tanks** – They are also used, particularly in some of the downtown areas, to store excess water temporarily until it can be accommodated by the minor drainage system.
- **Drainage channels and creeks** – Drainage water empties into the drainage channels of Wascana Creek. The channels function as very large drainage lines with earthen banks used to control the water rather than enclosed pipelines. The drainage channels carry the runoff to Wascana Creek. Drainage from the Rowatt Flood Control Project south of Regina flows to Wascana Creek through a constructed channel within the city Limits.

Although the major and minor systems are described as separate systems, they are part of an overall drainage system and must work in conjunction with each other.

Customer Service

Service Regina provides front line customer service for the Utility as well as other City services. Objectives include:

- Customer applications for water services and disconnections are handled accurately.
- Customers can access information about their bill and receive prompt responses to their inquiries.
- Payments can be made using convenient payment methods.
- All service requests are processed within a reasonable time frame.

Customer service is accessible by telephone, mail, fax, in-person and electronically via the City's website. Internet requests and e-business inquiries are increasing and this has been an area of focus. Continued awareness of customer needs to access information and services quickly in the manner of their choosing is a central plank of customer service efforts.

Service Regina's one-stop shop approach provides customers with information about the City's services through one central contact number. By directing customer calls to the area in question, staff ensure that the customer is dealt with efficiently at their first point of contact.

Service Regina strives for customer satisfaction in the five essential elements of service: timeliness, knowledge and competency, courtesy, fair treatment and final outcome. When all five of these elements are accomplished, customers rate services highly. The goal of the customer service area is to ensure satisfaction in every one of these areas with every customer.

Billing and Collection Services

The administration of customer accounts and the billing and collection function includes:

- Managing customer accounts, including setting up new customers, discontinuing accounts and transferring accounts from one individual to another. It also manages contracts with out-of-town water users who receive water from the City.
- Managing activities related to water meters, including obtaining meter readings and turning the water service on or off. Customers are divided into automated meter-reading routes so the meters are read according to a monthly schedule.
- Connecting and disconnecting water services in response to customer requests and from collection efforts for unpaid bills.
- Generating customer bills. Customers are divided into billing cycles so each customer is billed every month.
- Collecting overdue customer accounts through a variety of tools. Interest is added to outstanding balances, which encourages timely payment. When accounts remain outstanding, payment arrangements are negotiated where possible. This includes managing post-dated cheques as well as providing equalized payment options for Utility accounts.



City of Regina

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