

WATER AND WASTEWATER UTILITIES FINANCIAL PLAN 2012-2018

2016 MAY 25



PROGRESS REPORT



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1.0 INTRODUCTION

This report provides an update on the Water and Wastewater Utilities (the Utilities) Financial Plan, in particular the progress towards achieving the financial targets and maintaining compliance with the financial policies set out in the Utilities Financial Plan. Additionally, this report also provides the results of a recent review of the continued relevance of the Utilities' financial policies and targets in relation to the goal of financial sustainability and utility industry best practices.

The Utilities Financial Plan was first established in 2011 to provide improved financial capacity and sustainability to meet the challenges of maintaining service and responding to growth. This original plan set out a six year timeframe for the Utilities to meet the targets of the plan, in line with the three year budget cycle that was in place at the time. In 2014, an update on the Financial Plan progress was prepared for Council. At that time, the Utilities moved to a seven year timeframe to meet the financial targets to align with the new four year budget cycle of 2015-2018.

1.1 CONTEXT FOR REVIEW OF FINANCIAL PLAN, POLICIES & TARGETS

At just over half way through the seven year financial plan timeline, it is timely to ensure the financial policies and targets set out in 2011 continue to ensure financial sustainability and manage the Utilities' financial risk.

In 2016 January, Council approved a new off-site levy bylaw which resulted in changes to the degree of cost recovery from the development industry for utility infrastructure to support growth. This financial plan progress report considers the impact of off-site levy revenue on the Utilities' financial policies and targets.

The Utilities have undertaken a review of the existing financial targets and policies. The review included an assessment of each policy to ensure they continue to meet industry best practices.

In 2017, the Utilities will conduct a Cost of Service Study in advance of setting indicative rates for the 2019-2022 budget cycle. It is important to understand the current financial state of the Utilities and potential financial policy changes in advance of the Cost of Service Study.



2.0 THE WATER AND WASTEWATER UTILITIES BUSINESS MODEL

Together, the Water Services and Water Resources business units operate the Water and Wastewater Utilities under a utility business model. Under this model, revenues must cover all the costs to provide the Utilities' services.

The key components of the Utilities model include:

- Utility rate revenue The Utilities' revenue consists primarily of rate revenue which is based on the Council-approved utility rates for Water and Wastewater.
- Off-site levy revenue The Utilities collect an off-site levy on development of new and existing areas.
 The off-site levy is used to fund the full cost of infrastructure investments required to support new growth.
- Cost of service basis A Cost of Service Study is carried out to ensure costs are being recovered
 appropriately by each customer class and that the right mix of fixed and volumetric charges are in
 place.
- Returns on equity (ROE) The Utilities pay an ROE annually to The City.
- Franchise fee The Utilities pay a franchise fee annually to The City.
- Capital intensive The nature of the Utilities requires ongoing capital investment in infrastructure.
 Investment is required to develop and maintain assets to provide services to existing and future customers, while continuing to achieve regulatory and environmental requirements.
- Financial Policies In addition to complying with relevant Council and Administrative policies, the Utilities maintain financial policies specific to their operations.

The services provided by the Utilities and the requirements to deliver them are defined in part by watershed management planning activities. The integrated watershed management goals for the Utilities and Drainage are to:

- 1. Protect our water supply by reducing upstream risks to our water source;
- 2. Use water wisely through responsible and efficient use;
- 3. Keep our rivers clean by reducing Calgary's impacts on the rivers; and
- 4. Build resiliency to flooding.

An update on activities supporting these goals was recently presented to UCS on 2016 April 27 through UCS2016-0167 Watershed Management Planning Update 2015, and UCS2016-0168 Flood Resiliency and Mitigation 2015 Update. Appendix A includes additional detail of the activities underway that support these goals.



2.1 UTILITY RATE REVENUE

Utility rate revenue is generated through basic service charges and volumetric rates that are applied by customer class and are calculated to reflect the cost of providing services to customers.

The Utilities rate revenue is partially dependent on customer consumption. Part of the Utilities' integrated approach to Watershed Management includes a Water Efficiency Plan and related water conservation programs. Water conservation efforts aim to reduce water consumption and are important to ensure the long term water supply reliability and sustainability. As consumption decreases, rates need to be adjusted to compensate for the declining revenues since the Utilities' costs are largely fixed in nature. New accounts attributed to growth help to offset the impacts of conservation efforts on the revenues.

2.2 OFF-SITE LEVIES

In 2015, Build Calgary undertook a review of the off-site levy bylaw. In January 2016, Council approved a new off-site levy bylaw (C2016-0023, Bylaw 2M2016). The resulting bylaw provides for full cost recovery of growth-related infrastructure through the collection of off-site levies from developers. Previously, only 50 per cent of growth-related capital costs were collected through off-site levies with the other 50 per cent being recovered through utility rates. The new bylaw will collect 100 per cent of water and wastewater growth-related infrastructure costs. Off-site levy revenue is used to pay principal and interest charges for major water and wastewater infrastructure to service new growth. Examples of off-site infrastructure include leading infrastructure such as water and wastewater treatment plants, pump stations, water feeder mains, and sanitary sewer trunks.

Even though the Utilities are now recovering 100 per cent of costs through off-site levies, the current economic environment injects uncertainty and risk into actual revenue collections. Off-site levies are charged when developers enter into either a development agreement for greenfield areas or a development permit for existing areas. If development does not materialize as projected, the result would be an unfavorable revenue variance, which would require mitigation.

The increase in forecasted revenue from off-site levies in future years are still uncertain due to the current economic climate, and will not impact the approved utility rate increases for the remainder of this business cycle, but may decrease pressure on utility rates in 2019-2022.

In conjunction with the new bylaw, accounting changes have been implemented. Off-site levy revenue was previously recognized when billing occurred according to the payment schedule. This is reflected in the original budget for 2015-2018 approved as part of Action Plan. It did not take into account unbilled off-site levy revenue from active development agreements or match corresponding expenditures such as debt servicing.

Starting in 2016, off-site levy revenue for all lines of service will be recognized based on the total of levies that will be payable for development agreements signed, and matched to the expenditures incurred for growth related investments. This is a change from an accounting perspective that will result



in revenue being recognized based on investments that have been made, with the actual collection of off-site levy amounts occurring only as payments are made based on the agreed upon payment schedule articulated in the off-site levy bylaw documents.

The approved net-zero budget adjustments recognize both the revised revenue recognition approach as well as changes from the 2016 off-site levy bylaw.

2.3 COST OF SERVICE BASIS

It is an industry best management practice to conduct cost of service studies every 5 to 10 years. Cost of service is a methodical process by which the costs of providing a service are assigned to customer classes in proportion to the benefit derived by that customer class. In addition to ensuring the equitable allocation of costs, these studies are an analytical tool to support financial management, and provide validation and documentation for ratemaking decisions.

A Cost of Service Study is performed for the Utilities in advance of setting indicative rates for each budget cycle.

2.4 RETURN ON EQUITY

The Utilities pay a return on equity (ROE) annually to The City. It is \$42.5 million annually (Water \$28.75 million and Wastewater \$13.75 million).

2.5 FRANCHISE FEES

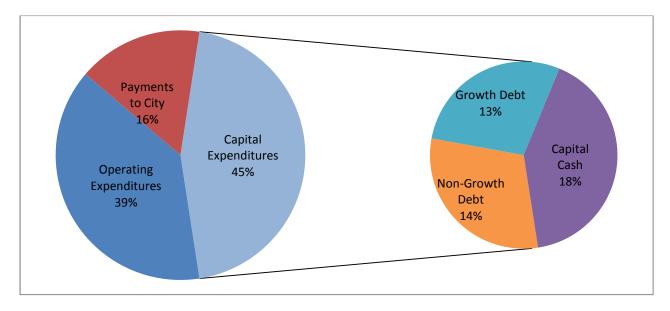
Water Resources and Water Services are granted the exclusive right to provide utility services within the City of Calgary. The Utilities pay an annual franchise fee for the use of municipal rights of way. The franchise fee is calculated as 10 per cent of revenue from inside city sales of goods and services. In 2015, the Utilities franchise fees totaled \$53.1 million (Water \$28.6 million and Wastewater \$24.5 million).

2.6 CAPITAL INTENSIVE

As the city continues to grow, so too does the requirement for infrastructure necessary to provide reliable service to Calgarians. The nature of the Utilities requires significant ongoing capital investment in infrastructure. The capital is required to build and upgrade facilities and pipe networks to treat and distribute potable water, and to collect and treat wastewater. Of the current Utilities operating budget, approximately 45 per cent is capital related, as shown in Figure 1.



Figure 1: Utilities - Expenditure Breakdown 2015 Actual



The Utilities' capital requirements continue to experience increased pressure due to factors such as:

- Aging infrastructure, which impacts the ability to operate efficiently and effectively without service interruptions;
- Changes to regulatory and environmental requirements, which necessitate infrastructure upgrades or the construction of additional infrastructure;
- Introduction of new services or service levels, which require new or upgraded infrastructure;
 and
- Continued population growth, which triggers capacity upgrades and expansions.

These factors are summarized in Figure 2.



Figure 2: Investment Drivers

Investment Driver	Objective	Percentage of Water Infrastructure Investment Plan (WIIP)
Maintain assets	Maintaining, protecting and extending the life of infrastructure investments.	15% - 20%
Regulatory & Environmental Protection	Continuing to meet increasingly stringent regulatory and environmental protection requirements.	15% - 20%
Service	Continuing to provide reliable and high quality services to meet the needs of citizens.	25% - 30%
Growth	Providing infrastructure to meet the needs of a growing city.	35% - 40%

Each investment driver provides a different perspective on when and where infrastructure investments are needed. The process to prioritize investments considers the need and timing of investments in light of the four drivers. The desired outcome is to meet customer and environmental priorities while staying within the financial capacity of the Utilities.

2.6.1 Maintain Assets

Investments in capital maintenance are necessary to keep existing infrastructure operating to meet its intended purpose. Customers benefit from these investments through reliable and trusted service, lower utility rates, less property damage, and protection of public health. The Utilities have ongoing condition assessment and maintenance programs, which have helped identify and eliminate potential service failures that could be costly to replace on a reactionary basis.

2.6.2 Regulatory and Environmental Protection

The City of Calgary has a Wastewater Operating Approval under the Environmental Protection and Enhancement Act (EPEA) which sets out limits for specific parameters, monitoring and reporting requirements and operator certification requirements. Similarly, The City of Calgary has a Water Operating Approval under the EPEA that outlines treatment, monitoring and reporting, and operator certification requirements. Increasingly stringent regulations for water and wastewater treatment also drive additional investment requirements at the water and wastewater treatment plants. Continual capital investments will be required to ensure the treatment plants continue to meet compliance with regulations.

The federal *Wastewater Systems Effluent Regulations* recently came into effect, and will necessitate upgrades of the Fish Creek wastewater treatment plant to comply with ammonia toxicity standards. The south catchment study is being undertaken to ensure compliance with these new regulatory



requirements. Additional capital investments may also be required as a result of negotiations with Alberta Environment and Parks to renew the Wastewater Operating Approval in 2018.

2.6.3 Service

Calgarians have historically reported a high level of satisfaction in the services provided by the Utilities, as demonstrated by the annual City Satisfaction Survey results. In 2014, 96 per cent of citizens reported that they were "satisfied" or "very satisfied" with the quality of The City's drinking water services. Despite such positive indicators of service levels, opportunities exist to improve services and better meet community expectations.

2.6.4 Growth

The City of Calgary has undergone significant growth over the last several years. The 2015 Civic Census showed that Calgary grew by 35,719 people over the previous year. Forecasts for 2016 indicate a citywide population growth of 28,785 people (*Suburban Residential Growth 2016-2020 Report*). The average citywide gain over the next five years is forecasted to be an average of 27,117 people per year (2016-2020).

Water and wastewater infrastructure are key enablers for growth. To align with the Corporate Growth Management Framework and to support growth, the Utilities monitor performance measures for serviced land supply and treatment capacity. Currently the Utilities' target is to have three to five years of land available for development that is serviced by water, wastewater and stormwater infrastructure. The Utilities also target to have at least five years of both water and wastewater treatment plant capacity available. Of the current Utilities operating budget, about 13 per cent is attributed to debt payments and finance charges for growth-related infrastructure.

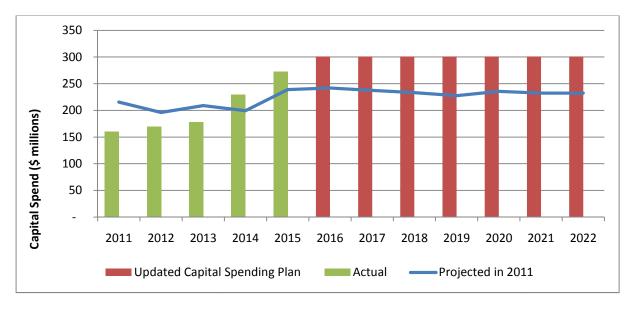
Higher than anticipated population growth in Calgary puts additional requirements on the Utilities capital budget. Plant upgrades and expansions take several years to deliver due to their complexity and regulatory approvals and require large capital investments. Investments in capacity upgrades and the next planned wastewater treatment plant expansion at the Bonnybrook Wastewater Treatment Plant are being advanced to address the rapid growth. The Bonnybrook Wastewater Treatment Plant Capacity Expansion Program is estimated to cost \$690 million (class 4 estimate) to deliver the necessary treatment capacity by 2020. The current projected population growth requires plant expansions very 10 years.

2.6.5 Annual Spending Plan

To accomplish investments per these capital program drivers for the 2015-2018 budget cycle, the Utilities will deliver annual capital spending plans of about \$300 million (Figure 3).



Figure 3: Utilities - Capital Spending Plan



Per the recommendation approved by Council on 2015 November 25 in the Proposed Adjustments to the 2016 Budget (C2015-0855), Water Resources is undertaking a recast of the capital budget for the Utilities. The recast process will result in a Utilities capital budget more closely aligned with anticipated capital spend, still targeting an annual spend of \$300 million, and ensuring that the investment commitments made in Action Plan are fulfilled. The Utilities will deliver capital projects through a process with additional controls that ensure that budget is allocated to highest priority projects when they are ready to proceed and with the most accurate cost estimates available. In particular, investment in wastewater treatment plants includes a large proportion of materials and equipment that are subject to uncertainty around foreign currency exchange rates; steps are being taken to mitigate this uncertainty.

2.7 FINANCIAL POLICIES

2.7.1 Financing and Use of Debt

An appropriate mix of debt and cash financing derived from maximum debt limits and minimum cash requirements is necessary to deliver water and wastewater services. A good mix of financing strengthens the financial position of the line of service while providing greater flexibility when planning for future capital requirements.

Operating costs are always fully funded from revenues. Subject to funding availability, cash financing is used for capital projects that are part of an ongoing improvement program, or will reduce operating and maintenance costs. Cash financing is derived from retained earnings - the return to capital portion of



the net income. The Utilities Financial Plan outlined a policy that the Utilities will have a target of cash financing 100 per cent of the capital maintenance projects identified in the capital budget.

Debt financing is used for capital projects that are substantial in cost and size, and where the benefits will extend over a relatively long period; this spreads the costs of the infrastructure over an appreciable portion of the useful life of the assets.

Debt limits and debt servicing limits are normally established by lending institutions to ensure that debts and related interest costs are repaid in a timely manner. The City as a whole has both a debt limit and a debt servicing limit as required by the *Municipal Government Act* (MGA). The MGA outlines that for The City, debt may not exceed a limit of twice the revenue and that debt servicing may not exceed a limit of 35 per cent of revenue. The City has set an administrative target of 80 per cent of the MGA total debt and debt servicing limits. The debt from the Utilities contributes to The City debt levels and is subject to these targets.

The total debt limit target of \$2 billion, and debt to equity target ratio of 60 per cent, were set for the Utilities in the 2011 Utilities Financial Plan. These targets exclude Drainage related debt.

A target of 40 per cent of revenues was set for the Utilities debt servicing. As with the debt limit, this target excludes Drainage.

For assets financed by self-supported debt, the Utilities apply debt terms based on the specific asset and its purpose with the purpose of matching a longer debt term with an asset that has a longer useful life. The Utilities employ a 25 year debt term on major projects with the exception of treatment plant expenditures relating to growth which employs a 10 year debt term. The accelerated debt servicing is incorporated in the new off-site levy rates. Shorter terms may be employed on other projects where the benefits extend over shorter periods.

2.7.2 Amortization and Depreciation

The Utilities employ amortization accounting practices, and maintains depreciation rates that are aligned with generally accepted accounting principles. Depreciation on donated assets is not charged as an operating expense for the purpose of rate setting.

2.7.3 Reserves

In 2011, the Utilities Sustainment Reserve was created to provide a measure of financial flexibility to mitigate the financial impact of significant unexpected events. The Utilities aim to maintain sufficient reserves to mitigate risk. The size of the reserve is set at 10 per cent of total revenues. The purpose of this reserve is to provide cash flow to fund minor fluctuations in both operating and capital budget expenditures, and to mitigate the risk of period shortfalls in projected revenue.



3.0 PROGRESS UPDATE

3.1 OPERATING PRESSURES

Of the current Utilities operating budget, approximately 40 per cent is for operating and maintenance (see Figure 1, Page 8).

As existing facilities are expanded or new facilities are built, increased pressure is placed on the operating budget to accommodate the additional costs to deliver services to Calgarians. In addition, external factors, such as variability in energy costs, and the economy-wide price on carbon announced by the Province of Alberta, can increase pressure on operating budgets. In the Utilities, a number of initiatives are in place to monitor these factors and manage the pressure on budgets. Three significant areas of ongoing cost pressure are biosolids management, energy management, and fleet management.

3.1.1 Biosolids

The current biosolids management strategies rely heavily on third party contracts for biosolids dewatering and reuse to supplement the Calgro land application program. Progress has been made to diversify the biosolids management program to dewater the biosolids followed by composting. Water Resources and Water Services have been working with Waste and Recycling Services (W&RS) on plans for a joint composting facility which will allow for economies of scale and operational efficiencies. The composting facility is scheduled to be ready to receive biosolids by the end of 2017. This means that third party contracts to manage biosolids will end in 2017. Details on the organics and biosolids composting program were brought to Council on 2013 April 15 in C2013-0246, Organics and Biosolids Composting Program.

The Utilities will pay W&RS for the operating, maintenance and capital costs of the new facility that relate to the handling and processing of biosolids. This will be an additional operating expenditure for wastewater and is anticipated to be up to \$10 million per year. This new operating expenditure will be partially offset by a reduction in third-party contracting resulting in an estimated net operating budget impact of \$5 to \$7 million (Figure 4). This change in operating cost has been included in the 2015-2018 utility rate structure.



Biosolids Management Costs 25.0000 20.0000 Costs (\$ millions) 17.07 15.0000 12.63 12.63 10.06 10.0000 9.44 5.0000 0.0000 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 Calgro 3rd Party Contracts Dewatering Composting 2012-2018 Budget

Figure 4: Projected Biosolids Management Costs

3.1.2 Energy

Energy costs have varied from that forecasted over the last budget cycle. Periodically, energy suppliers review their operational costs and apply rate riders to customers. Historically, rate riders have been fractions of a cent. However, in 2015, the *Transmission and Distribution* rider costs fluctuated between 1.09 cents/kWh and 2.44 cents/kWh. While the commodity cost for electricity is known, the uncertainty of rate riders makes it challenging to appropriately budget for energy costs. In an attempt to manage higher energy costs, the Utilities have implemented efficiency initiatives to reduce consumption where possible and to increase power generation at the wastewater plants (Figure 5). It is expected that electricity costs will continue to rise over the remainder of this business cycle, mostly driven by delivery and transmission rate riders, and the commissioning of capital works.



22.00 200,000 190,000 Annual Electricity Consumption in MWh 20.00 Annual Electricity Expenditure in \$M 180,000 18.00 170,000 16.00 160,000 14.00 150,000 12.00 140,000 10.00 130,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 Electricity Expenditure Electricity Consumption

Figure 5: Water Resources and Water Services Electricity Consumption and Costs

3.1.3 Vehicles and Equipment

Water Services and Water Resources make use of a diverse inventory of light and heavy (specialized) fleet to manage its operation including travelling, carrying equipment, and maintaining infrastructure. To keep costs manageable, there has been an emphasis to maximize utilization through right sizing and identification of efficiencies across the Utilities. The vehicles and equipment (V&E) budget is about 10 per cent of the overall operating budget.

In June 2015, UEP initiated the 'UEP Fleet Optimization Strategy', a joint project between UEP and the Fleet Business Unit. The project has reviewed all cost areas and is working to develop strategies to optimize the V&E budget by the end of this business cycle.

Figure 6 shows budget versus actuals for the past four years. V&E costs are driven primarily by lease and maintenance costs, along with the costs of hiring equipment, when needed.



35 30 25 20 15 \$ Millions 10 5 2012 2013 2014 2015 2016 2017 2018 ■ Budget ■ Actual

Figure 6: Water Resources and Water Services Vehicle & Equipment Costs

3.1.4 Water Services Zero-Based Review (ZBR) Implementation

The implementation plan and specific financial benefits expected to be realized from the recommendations of the Water Services Zero-Based Review were reported to UCS2016-0169 (Water Services Zero-Based Review Implementation Plan) on 2016 April 27. The recommendations that are expected to have future benefits realized in the Utilities fall into the following theme areas:

- Trenchless Technology;
- Resource Optimization;
- Customer Experience;
- Risk Based Maintenance; and
- Performance Measurement.

Realized financial benefits will be used to offset increasing costs related to the operating and maintaining impacts of a large capital program, and a growing and aging infrastructure, while continuing to meet all regulatory requirements.

3.1.5 Operating Cost of Capital Program

The Utilities' capital spending plan is \$300 million annually over the remainder of this business cycle and the next, and on average, 40 per cent of the investments support growth. The operating cost of these



investments and an increased focus on risk based maintenance planning and asset life cycle planning will continue to be a key focus in the Utilities.

3.2 PROGRESS ON FINANCIAL TARGETS

The Utilities Financial Plan sets out specific financial targets to be complied with over a seven year horizon. The seven year timeline was selected to correspond with two budget cycles and provided the stability and flexibility necessary to achieve improved financial capacity in the Utilities with a moderate impact on customer rates. Figure 7 shows that overall the Utilities are on track to meeting the timeline for financial policy and target compliance by 2018.

Figure 7: Utilities financial targets

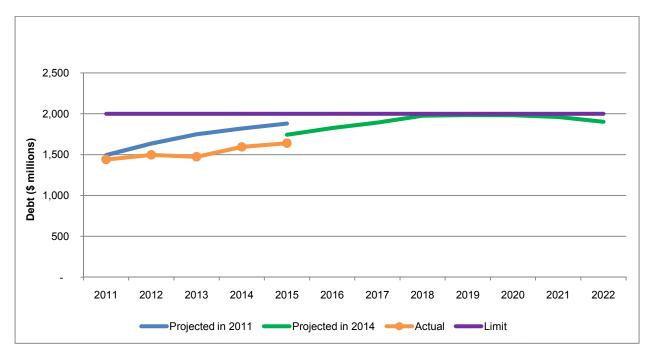
Policy Area	Financial Plan Target	2015 Actual
Debt limit	Maximum \$2.0 billion	\$1.64 billion
Debt service	Maximum 40% of revenues	26.5%
Cash financing of capital maintenance	100%	100%
Sustainment reserve	10% of revenues	1.2%
Debt to equity ratio	60/40	66/34



3.2.1 Debt

Since the implementation of the debt policy, total outstanding debt for the Utilities has been maintained below the limit of \$2 billion (Figure 8). The actual total debt outstanding for the Utilities in 2015 was \$1.64 billion.

Figure 8: Utilities – Outstanding Debt

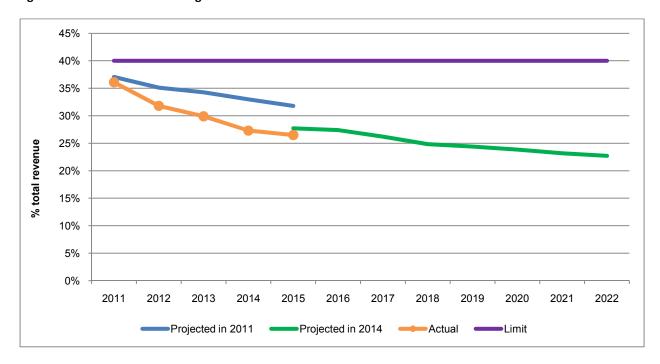




3.2.2 Debt Servicing

From 2012 to 2015, the Utilities have maintained debt servicing below the limit of 40 per cent of total revenues. The actual debt servicing for 2015 was 26.5 per cent of revenues.

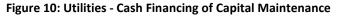
Figure 9: Utilities - Debt Servicing

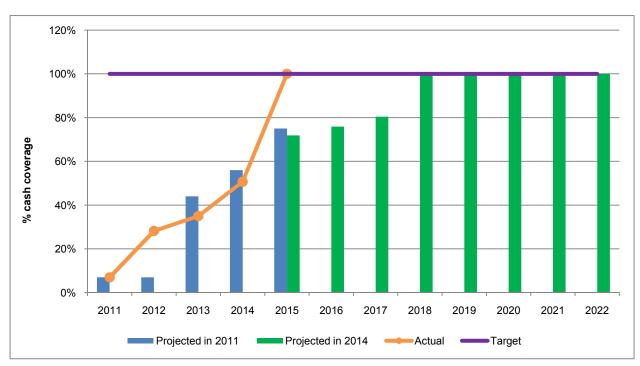




3.2.3 Cash Financing of Capital Maintenance

Based on the seven year timeline for compliance, it was projected that the Utilities would achieve the cash financing target by 2018 (Figure 10). In 2015, the Utilities cash financed 100 per cent of the capital maintenance projects, higher than anticipated. The Utilities' ability to outperform on this policy in 2015 was due to higher than projected contributions from operations as a result of growth in utility rate revenue as well as lower than projected capital expenditures.



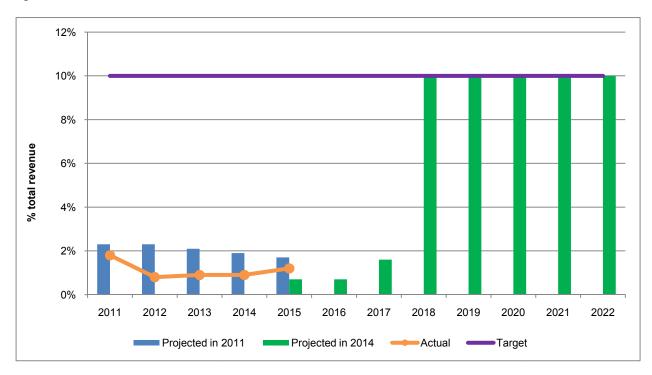




3.2.4 Sustainment Reserve

Based on the seven year timeline for compliance and the rate increases for the 2015-2018 budget cycle, it was projected that the Utilities would achieve the sustainment reserve target by 2018 (Figure 11). At the close of 2015, the Utilities Sustainment Reserve reached 1.2 per cent of revenues, slightly above 2014 projections, due to higher than projected contributions from operations as a result of growth in utility rate revenue.

Figure 11: Utilities - Sustainment Reserve

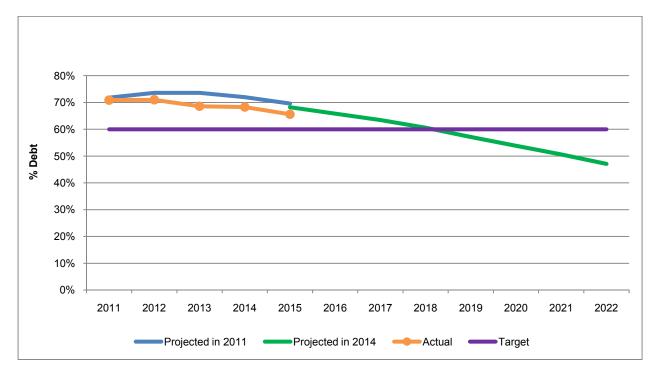




3.2.5 Debt to Equity Ratio

The actual 2015 debt to equity ratio was 66/34 which is on track to meet the 60/40 target by 2018. Since 2012, the debt to equity ratio has trended towards the target of 60/40 as projected in the 2011 Utilities Financial Plan (figure 12).

Figure 12: Utilities – Debt to Equity





4.0 FINANCIAL REVIEW

In 2015, Water Resources engaged a utility sector financial consultant to conduct a review of the Utilities' financial policies and assess the progress made to date on achieving the associated financial targets.

4.1 CONSULTANT'S SCOPE

The consultant was asked to assess the Utilities' current and projected level of financial risk as a standalone entity, not considering any financial support from The City, and make recommendations regarding mitigations through changes to financial policy.

4.2 CONSULTANT'S ASSESSMENT

The approach compared the Utilities' financial and managerial metrics to the criteria used by U.S. credit rating agencies to assess the risk of the Utilities defaulting on debt service payments to external creditors.

The Utilities' financial policies related to composition of its capital structure, debt service repayment, and the maintenance of adequate cash reserves were reviewed.

Overall, the opinion rendered by the consultant is that the Utilities' level of financial risk is moderate or better. The Utilities' debt, when viewed on a standalone basis separate from The City, would be assigned the following credit ratings:

- Standard & Poor's: AA (capacity to meet the financial commitment on obligations is very strong)
- Moody's Investors Service: Aa3 (high intrinsic strength and very low credit risk)

4.3 CONSULTANT'S RECOMMENDATIONS

The consultant supports the majority of the Utilities' existing financial policies, with the exception of the current self-imposed maximum debt limit of \$2 billion.

Further recommendations include:

- Establishing a dedicated capital reserve to mitigate the risk of large unplanned increases in capital improvement program expenditures; and
- Incorporating the use of debt service coverage ratios, in addition to other currently used financial metrics, as part of the financial management process.

Further analysis is required to determine the impact of any policy change, on both the Utilities and The Corporation, before it could be considered for implementation in the 2019-2022 business cycle.

Figure 13 summarizes all of the financial policy recommendations offered by the external consultant.



Figure 13: Financial Policy Recommendations

Utilities Policy Area	Financial Plan Target (2012-2018)	Consultant Recommendation	Utilities' Preliminary Response
Debt limit Debt service	Maximum \$2.0 billion Maximum 40% of total	Remove these policies and replace with debt service coverage ratio.	Agree - further analysis and policy engagement is required
	revenues	Target a minimum of 1.75 times for the Utilities	
Cash financing of capital maintenance	100%	Agree	Agree - align size of capital maintenance program to investment drivers of the WIIP
Debt to equity ratio	60/40	Agree	Agree
Sustainment reserve	10% of total revenues	Change policy to equal 120 days of annual operating and maintenance expenditures	Agree
Capital reserve	n/a - new	Establish a capital reserve equal to 25% of the average annual capital expenditure for the four year budget cycle	Further analysis and policy engagement is required



5.0 NEXT STEPS

Along with ongoing focus on achieving the financial targets by 2018, the Utilities will continue to manage increasing cost pressures, market uncertainty and financial sustainability while providing high quality water and wastewater services to Calgarians. With respect to the financial plan, the Utilities will concentrate on:

- Further analysis of the recommendations from the financial review with the aim of presenting recommended revisions to the financial policies in Q1 2017 ahead of the Cost of Service Study to inform 2019-2022 utility rates. This will include a recommendation on transfers to the corporation, based on a revised return on equity policy.
- A re-cast of the 2016-2018 capital budget for Water and Wastewater per the recommendation approved by Council on 2015 November 25 in the Proposed Adjustments to the 2016 Budget (C2015-0855).
- Aligning policy areas with recommendations to be implemented from the Water Resources ZBR
 and leveraging any financial benefits from both the Water Services and Water Resources ZBRs,
 to advance the financial position of the Utilities. The Water Resources ZBR specifically examines
 - Clarifying desired levels of service, which directly impact the operations and the investment required;
 - Changes to investment portfolio management intended to improve delivery of projects, and manage risk/contingency at different levels – portfolio, program, and project.

6.0 CONCLUSION

The Utilities remain on track to achieve compliance with the financial targets set out in the Utilities Financial Plan, thereby ensuring a financially sustainable future. Compliance to the financial plan by the end of 2018 relies on the Council approved rate increases for the 2015-2018 budget cycle.



Indicative rates Design Stormwater Rates and supporting tools and 2022 Activities Informing Future Utilities/Drainage Rates 2019-2022 Cost of Service Rates Phase-in Cost of Service Study and Rate Design 2021 programs 2019-2022 Integrated Watershed Management Planning Stakeholder Engagement – Drainage levels of service, target setting, rate programs 2020 **Build Drainage Revenue** Operational Activity Requirements TIMELINE 2019 Utilities levels of service Stormwater volume and release rate targets for Review Stormwater Strategy new development Indicative rates Report/Decision Drainage Service Level Matrix and Defining Customer 2018 Stormwater Infrastructure Longe Range Plan 2015-2018 Cost of Service Rates Phase-in Cost of Service Study and Rate 2015-2018 Flood Resiliency and Mitigation Design Outcomes Updated Watershed Stormwater 2017 Wastewater approval to operate Wastewater approval to operate Total Loadings Management **Total Loadings Management** Financial Policies Plan objectives for 2018 Plan objectives for 2018 Targets 2016 2015 Service Cycle Wastewater Engagement Drainage Cost of Water/