Request: MV-EWS-1

Topic: Asset Depreciation

Reference: Appendix M - Depreciation Studies

Preamble: *The depreciation study states that recommendations were primarily based on input from EPCOR representatives and the judgement of the consultant who undertook the study.*

i) Did the consultant's work include benchmarking against comparable wastewater and drainage utilities?

ii) Does EPCOR have access to other benchmarking studies and / or industry standards to inform the recommendations for updated asset lifetimes?

iii) How do these updated asset lifetimes compare with other wastewater and drainage utilities for comparable Canadian and US cities?

iv) If this benchmarking is available, can EPCOR please provide this information?

EWS RESPONSE:

i) No. Alliance Consulting Group is not aware of any reliable industry-wide benchmarking studies for wastewater and drainage utilities available in the public domain. The EWS depreciation study incorporates the limited, Company-specific, historical retirement experience, information provided by Company subject matter experts, and professional judgement of Mr. Watson obtained as a professional engineer and having conducted depreciation studies for public utilities across North America for more than 35 years. EWS' historical fixed asset detail and unique account structure make Company-specific information more relevant than the approved lives utilized by other wastewater and drainage utilities when developing the average service life for the mix of assets within each asset category.

ii) EWS does not have access to other formal benchmarking studies for depreciation due to a lack of publicly available information. EWS' reference point was based on replacement experience based on internal asset management practices and engineering and design standards developed with reference to industry design standards. For example, with reference to EWS' Low Impact Development (LID) assets, as EWS has no replacement experience of LID assets, informal experience from other utility experts was requested and information was received from the City of Calgary and the Alberta Low Impact Development Partnership that was supportive of the use of a 50 year life.

iii) The proposed service lives for each asset category are reasonable compared to the lives Alliance Consulting Group has observed for similar wastewater and drainage assets while completing depreciation studies across North America for over 35 years. Please also refer to answer i) above.

iv) Please refer to answer ii) above

Request: MV-EWS-2

Topic: Asset Depreciation

Reference: Appendix M - Depreciation Studies

i) What has been EPCOR's actual experience in the useful lifetimes for these assets and their timing requirements for replacement? Please comment on historical and planned replacement frequencies relative to updated useful lifetimes noted in the study.

EWS RESPONSE:

i) As noted in Appendix M, EWS has very limited financial records available relating to retirements. EWS' Wastewater Treatment operations were transferred from the City of Edmonton in 2009 and the Wastewater Collection operations were transferred in 2017. Retirement information for those subsequent years was provided to the consultant, but for most assets retired during that period the original amount placed into service for each vintage was not available as it would have been placed into service prior to the transfer to EWS. That, together with the relatively small number of retirement years available, meant that a reliable set of survivor curves could not be constructed on which to derive useful lives.

As part of the depreciation study, interviews with EWS staff identified several areas where recent retirement experience identified areas where components of asset categories were being retired on a different timeline that the average life for the asset group and therefore those components are being proposed to be separated and depreciated on a different useful life.

For example, within Wastewater Collection operations, the manhole assets category currently includes manhole sealing and cover assets, which are being proposed to reflect separate components with 25 years as a useful life compared to 75 years for the remaining manhole asset. The average age of retired manhole assets is 48 years for all components which reflects the replacement of these new components and aligns with

EWS' ongoing investment in specific programs for manhole sealing and cover replacements.

Similarly for pump station assets, which are currently covered by one combined rate of 44 years life, the underlying characteristics of the assets can be broadly split into building related assets, electrical assets, instrumentation assets and mechanical assets. As EWS has separate programs to address replacement of each asset component, separating these assets into different components with different useful lives would align with EWS' planned investment programs. The actual retirement experience of these assets are 38 years for building assets, 27 years for electrical assets, 25 years for instrumentation assets and 24 years for mechanical assets.

For vehicles, Wastewater Collection operations has not previously separated vehicles into vehicle types and only utilized a single useful life of 10 years. Splitting vehicles by type aligns to the previously approved groupings for Wastewater Treatment. The average retirement age for vehicles ranges from 10 years for light vehicles to 18 years for forklifts. This is similar to the range of proposed lives of 7 years for light vehicles to 20 years for some of the longer trailer lives.

For buildings, the average age of retired assets between 2017 and 2022 was 10 to 44 years which has led to a proposal to componentize building assets between substructure and superstructure components, including a shorter life 10 year category for HVAC related assets. EWS notes that the average age of the retirements realized between 2017 and 2022 include retirements related to the consolidation of its various work centres to a single site resulting in a lower than normally expected average age of retirements.

For Wastewater Treatment operations, the main recommendations are to create a wider range of component categories for electrical equipment, instrumentation equipment, mechanical equipment, piping assets and tools. Electrical equipment currently has one life of 25 years compared to a new range of categories from 5 to 40 years. Based on the limited history of retirements, the average age of retirements from 2009-2022 was 18 years. Similarly with instrumentation assets the proposed lives of 5 to 25 years compares

to the current life of 15 years, and this compares with the average age of historic retirements of 13 years. For mechanical assets the proposed lives range from 10 to 40 years compared to the current life of 25 years. This compares to an average age based on actual retirements of 15 years. Piping assets are recommended to move from 35 years to a range of 15 to 65 years. The current historic experience is an average age of 17 years which would seem at the lower end of the range, but as retirement experience is limited the longer lived assets will not have any significant volume of retirements. Finally, for tool assets the recommendation is to move from one life of 10 years to a range between 3 and 15 years. Actual retirement experience is an average age of retirement of 5 years, which would be within the range of lives proposed.

Request: MV-EWS-3

Topic: Asset Depreciation

Reference: PBR Main Report, Section 4.4

Preamble: *The PBR report notes that EPCOR only proposes to incorporate the new depreciation periods on assets acquired from 2025 onwards. Existing assets will depreciate according to their current schedules.*

i) Can EPCOR calculate the full impact of annual depreciation expense to its entire plant in service and impact to ratepayers from these proposed combined changes?

ii) Given the change in the estimated useful life, are current assets going to be revalued to determine their appropriate remaining useful life for the 2025 period onwards based on the new depreciation policy? Please provide support for how existing assets will be treated.

EWS RESPONSE:

i) If the proposed lives had been applied to EWS' existing assets, then the accumulated depreciation reserve for Wastewater Treatment would have been approximately $245 million compared to the actual reserve of $212 million – an under collection of approximately $33 million. Based on the annual depreciation on existing assets in service at the end of 2022 (being the last full year of actual depreciation available on which the depreciation study was based), if the proposed lives had been adopted on existing assets, the impact on annual depreciation for the 2025 to 2027 period would be an average increase over the 2025-2027 period of $2.9 million per year. In addition, there would have been an increase in depreciation in 2023 and 2024 which would also need to be recovered through rates of $8.6 million. EWS would propose recovering this amount over the 2025 to 2027 period at approximately $2.9 million per year.

Similarly, for Wastewater Collection, if the proposed lives had been applied to EWS' existing assets, then the accumulated depreciation reserve would have been

approximately $573M compared to the actual reserve of $515 million – an under collection of approximately $58 million. If the proposed lives had been adopted on existing assets, the impact on annual depreciation would be an average increase over the 2025-2027 period of approximately $4.9 million per year. In addition, there would have been an increase in depreciation in 2023 and 2024 of $9.8 million which would also need to be recovered through rates. EWS would propose recovering this increase over the 2025 to 2027 period at approximately $3.3 million per year.

Note that in deriving these impacts on the accumulated depreciation reserve and on annual depreciation, assumptions had to be made to assign existing assets to the new categories for areas where a broader range of component lives are being proposed. A number of assets, particularly those transferred from the City of Edmonton, were identified by location in the financial records rather than by type of component and there is a degree of estimation uncertainty around the impacts identified above. This is another factor that EWS considered in proposing existing assets continue to be depreciated using their existing category. New assets descriptions will be captured with more granular detail to enable categorization to the new categories.

ii) As noted in Section 4.4 of the Main Report, the application of the approved recommendations from the depreciation study will be adopted for new asset additions from 2025 onwards. For current assets in service there will be no impact. Current assets will continue to be stated at their original cost of construction / acquisition and will continue to be depreciated based on the approved useful lives at the time those assets went into service. No change will be made to the useful lives assigned to the existing asset categories for current assets.

New asset categories will be established with the new approved lives which will be applied to the new assets from 2025 onwards. By establishing new asset categories EWS will be able to maintain the application of existing and new approved lives to both its current and new asset additions.

Request: MV-EWS-4

Topic: Operating Costs Forecasts

Reference: PBR Main Report Section 4.6 Capitalized Overhead Methodology

Preamble: *Starting in 2025, EWS will adopt a standardized methodology for capital overhead across all its operations.*

i) Please provide a detailed description of what the new standard approach of how the overhead costs will be capitalized and contrast with existing methodology for Wastewater collection and treatment and Stormwater.

ii) Please provided a copy of the capitalized overhead costs model for our review.

EWS RESPONSE:

i) The new standard approach utilizes Water and Wastewater Treatment's existing methodology, which has been approved in previous applications and applies this methodology to Wastewater Collection.

This model identifies the labour and salary costs for each work area (defined as a unique combination of responsibility centre and activity area in EWS' accounting records) and allocates a portion of these costs to capital overhead based on the budgeted operating and capital activity for each work area.

The capital overhead model calculates the residual labour costs after deducting the direct time that has been charged to operating or capital projects as well as the percentage that has been directly charged to capital at each level. The residual labour costs include supervisory time for managers and senior managers related to the direct labour charged to capital. The pool calculation takes this residual labour and multiplies it by the percentage directly charged to capital – this represents the majority of the capital overhead pool.

In addition, there are certain groups that do not charge time directly to capital, but work primarily on capital projects (i.e., the Capital Finance group does not work on individual projects and therefore does not charge time directly to capital, but the group wholly exists to support capital projects). These groups are identified by discussions with managers in each area and an estimate of time spent supporting capital is identified (i.e., by number of FTEs as a proportion of the total team for groups such as Health & Safety, or by the percentage of purchase orders relating to capital compared to total purchase orders for groups such as Supply Chain).

For Wastewater Collection, a simplified version of the model was used when the operations were transferred from the City of Edmonton. However, instead of looking at labour costs for each Responsibility Centre and Activity (RC-Activity) and calculating a detailed percentage charged to capital in each area, the main groups that were considered to work on capital that did not charge any time to capital were identified. These included the Construction and Project Management Directors, the Project Management Office, Health and Safety, Supply Chain and Finance, as well as an adjustment for incentive based on the average direct time charged to capital. By only looking at areas that did not charge any time to capital, the previous methodology did not identify any supervisory costs for managers and senior managers on teams that were directly charging time to projects.

In moving Wastewater Collection over to the more granular Water / Wastewater Treatment methodology, discussions highlighted that there may be certain areas where their home account (where an employee is paid from) is the same as is used to charge operating work. In this case, the extent of operating work performed would be hidden as the credit from the home account would offset the charge to operating. This had the risk of understating the work performed on operating activities and overstating the residual labour left for potential inclusion in the capital overhead pool. As a result, in the new consolidated model an additional column for manual operating transfers has been included to mimic these unidentified transfers to operating work with an assumption that at least 70% of all labour in an RC-Activity is charged to either operating or capital work.

For Wastewater Treatment, this is the only change to the previous methodology (aside from the regular annual updates to assumptions for Health & Safety, Supply Chain and other areas that do not directly charge to capital projects).

ii) Please see attached MV-EWS-4 Attachment 1.xlsx for the requested model.

Request: MV-EWS-5

Topic: Operating Costs Forecasts

Reference: Variance Analysis

Preamble: *Please provide further explanation on the variances noted below:*

Wastewater Treatment

i) Power costs – Table 6.2.1.1-1 It is noted in the comparison between the 2024 D and 2024 F that they were lower than forecast power rates of $1.1 million. Starting in 2025F these are expected to increase $2.5 million as the power contract is set to expire in 2024. The new power contract is expected to have higher electricity rates. Was there a change in the existing power contract that lowered the rates during the 2024 forecast period?

ii) Goldbar WWTP Operations – Table 6.2.1.2-1 - What has caused the insurance costs to increase by $0.8 million? Please provide an explanation for the remaining increase in operations costs of $0.6 million.

iii) Meter Services – Table 6.2.3-1 - The increase is attributed to lower metering reading costs. Why were these lower than anticipated?

iv) EWS Shared Service Costs – Table 6.2.4-1, 14.2.4-1 - The increase of $3.9 million in these expenditures is due to: $0.7 million increase in insurance, $0.7 million increase in rent, $1.1 million increase in Supply change management due to $0.50 million in staffing costs and $0.6 million in materials costs. What is driving the increases in these costs?

v) Non-Rate Revenues – Table 11.0-1 - There has been a $1.2 increase from the 2024 D and 2024 F in Biosolids and $0.4 million increase from the 2024 D to 2024 F in SWAP, while the other non-rate revenues have been forecast to increase by inflation. Please explain why these two revenues are expected to increase.

Wastewater Collection

vi) Operations and Maintenance – Table 14.2.1.7-1 - Overall there is a $3 million decrease which has been attributed to a $1.6 million reallocation of expenditures to construction and $1.5 million lower than anticipated costs related to backwater value subsidiary program. There is a further explanation for lower staff costs of $0.3 million due to the transfer of $2.5 million from Operations and maintenance functions to customer service partially offset by $1.8 less transfer of staffing costs to capital projects. The offset between the transfer of costs explained is $0.7 million, which is different from the $0.3 million staffing differential identified. What does the $0.4 million difference relate to?

vii) Operations and Maintenance – Table 14.2.1.7-1 - Variance explanations suggest that Operating and maintenance expenditures have decreased by $3.4 million while the actual decrease in the table is $3 million decrease, what has caused this discrepancy?

viii) Non-Rate Revenues – Table 19.0-1 - For Wastewater collection there has been a $0.9 decrease from the 2024 D and 2024 F in compliance and monitoring, while the other non-rate revenues have been forecast to increase by inflation. Please explain why this revenue is expected to be lower.

EWS RESPONSE:

i) The current power contract is valid from January 1, 2021, to December 31, 2024, and it has remained unchanged during this period. The 2024 forecast reflects that power charges are expected to decrease due to revised consumption assumptions, particularly lower power charges due to the shutdown of the dewatering facility. A contracted mobile dewatering facility is currently in use and power costs for the mobile dewatering facility are included in the third-party mobile dewatering contract as explained in paragraph 219 of the Application.

ii) In 2024, the increase in insurance costs was due to the rise in EWS' general liability premiums. The remaining increase is primarily due to Ostara operations previously being grouped into Power/Other/Utilities and now being grouped under WWTP operations.

iii) The reduction in meter reading costs is primarily due to decreased staff expenses stemming from the reduced number of meter readers as part of the AMI project implementation.

iv) The rise in insurance is discussed in response to ii) above. The increase in supply chain management costs are attributed to higher labor expenses and increased allocated shared service costs resulting from a revised allocation method. The rent increase is primarily due to the 2023 organizational restructuring, which led to the elimination of rent recoveries between Water and Drainage entities.

v) A new contract with Arrow Utilities for Biosolids Management was executed effective January 1, 2022 which was after approval of the 2024 Decision amounts. The $1.2M increase from 2024 D to 2024 F represents the additional amount owing to EWS in accordance with this new contract. The $0.4M increase in the 2024 forecast for SWAP revenue is primarily due to higher net flow of sanitary wastewater treated at the Gold Bar Wastewater Treatment Plant versus the Arrow Utilities Wastewater Treatment Plant. Negotiations for a new SWAP agreement with Arrow Utilities is expected to commence in 2025.

vi) The minor $0.4M unexplained difference relates to various items primarily related to contractor costs.

vii) See response to vi) above.

viii) Compliance and monitoring revenue offsets for 2024F are expected to be lower than the 2024D amounts based on historical experience and are anticipated to remain at these levels during the 2025-2027 test period, see MFR Schedule 13-1 for 2022 Actual and 2023 Forecast.

Request: MV-EWS-6

Topic: Corporate and Indirect Costs Allocations

Reference: Appendix J - EPCOR Water Services Integrated Operations and Shared Services Allocation Methodology

Preamble: *EWS Shared Services comprise of allocated charges and direct charges for specific services provided to Water, Wastewater Treatment and Wastewater Collection Operations. The Integrated Operations costs for the 2025 to 2027 Forecast period is noted to have increased due to inflation. When reviewing the forecasts in Table 2.2-1 (Integrated Operations Forecast) we noted that the 2024F year shows a total of $48.6 million while 2025 is forecast to be $45.6 million similar to the 2024D of $45.6. The 2026 and 2027 are similar to 2024 forecast year at $48.6 and $49.5 million.*

i) Please provide the model for our review that outlines cost allocators used to allocate Integrated Operations and EWS Shared Services costs to regulated Water, Wastewater Treatment and Wastewater Collection that supports Table 2.3.2 (Allocation of Integrated Operations) and Table 3.3-2 (Allocation of EWS Shared Services).

ii) This decrease in 2025 does not follow the stated increase due to inflation. Can you please explain the rationale for the 2025 forecast year?

EWS RESPONSE:

i) Please see attached spreadsheet MV-EWS-6 Attachment 1.xlsx for the allocation model.

ii) Refer to the 2025-2027 forecast amounts shown in Table 2.2-1 of the updated Appendix J provided on July 5, 2024. The forecast cost increases are due to inflation.

Request: MV-EWS-7

Topic: Corporate and Indirect Costs Allocations

Reference: Appendix I - Corporate Costs Allocation Methodology

i) Please quantify both as a percentage and absolute number Corporate Costs allocated to Water, Wastewater Treatment, Sanitary Drainage, and Stormwater Drainage for 2023 actual, 2024 D, 2024 F, 2025 F, 2026 F and 2027F.

ii) Please explain any variances in allocations.

EWS RESPONSE:

i) Please see attached spreadsheet MV-EWS-7 Attachment 1. Note that total corporate costs are not forecast in the applications, rather EWS' share of corporate costs in the base year is escalated using PBR inflation, similar to other costs.

ii) Total corporate costs increased by $5.27 million from 2023A to 2024F primarily due to higher corporate information services costs related to initiatives such as Service Management, Service Desk Transition and the migration of the Corporate website to a new platform due to the existing technology reaching end of life.

Request: MV-EWS-8

Topic: Cost of Capital

Reference: Appendix C

i) Please prepare a confidential exhibit, in relation to Appendix C "Credit Rating Report," providing the current DBRS and S&P reports as well as the reports used in the last PBR application.

EWS RESPONSE:

i) During the PBR development phase, EWS contacted DBRS and S&P to obtain a private indicative stand-alone credit rating for EWS. However, as noted in Appendix C, both rating agencies declined to provide an indicative credit rating report, citing concerns of confidentiality and public disclosure. As a result, there are no current reports pertaining to EWS from any rating agencies which can be shared.

The confidential credit rating report for the last PBR Application was filed with the City of Edmonton and the related rating from DBRS has been referenced in Section 5.3.2 of the 2022-2024 Drainage Services PBR Application and in Section 4.3.2 of the 2022-2024 Wastewater Treatment PBR Application. Due to the confidentiality concerns raised by the rating agencies, EWS is unable to redistribute the credit rating reports to a third-party.

Request: MV-EWS-9

Topic: Stormwater Customer Class Updates

Reference: June 24 Reports

Preamble: *Beyond the cost of service swing between Sanitary vs. Stormwater, it is noted that run-off coefficients have been updated due to zoning changes and there are new Stormwater-only accounts which EPCOR plans to start billing.*

i) Please detail the large billing impacts to those customers mentioned in the Update Report Paragraph #9, discuss why this is appropriate, and discuss what stakeholder engagement activities have been performed to date with these specific customers.

ii) Please describe potential net-new billing impacts to the new Stormwater-only accounts (i.e., range of potential monthly stormwater charges).

iii) What impact from adding these on these new customers will there be on residential stormwater bills?

iv) Please describe the extent of stakeholder engagement activities with these new stormwater-only customers which have been performed to date.

EWS RESPONSE:

i) In its June 24, 2024 Stormwater Update Report to Utility Committee, EWS referred to a small group of customers it has identified as having more significant bill impacts as a result of changes to Stormwater billing reflected in EWS' 2025-2027 PBR Application. For reference, this report is provided as MV-EWS-09-i-Attachment1 and includes further background on the impacts of EWS' 2025-2027 PBR Application on Stormwater billing.

Based on EWS' analysis, there are approximately 1,200 properties (0.3%) out of over 300,000 stormwater customers showing estimated bill increases of greater than $15 per month and greater than 20% of their total bill. Figure MV-EWS-09-i and Table MV-EWS-09-i below provides further detail on these outlier properties. The bill impacts shown in

the Table reflect the net impact of stormwater bill increases offset by reductions in the sanitary bill. The net bill increase is used to identify outliers because there will be offsetting decreases in the sanitary bill. As explained in section 20 of EWS's 2025-2027 Wastewater PBR, the applied-for sanitary and stormwater rates reflect an updated cost-of-service study. This study concluded that sanitary rates should decrease and stormwater rates increase so that the revenues from the rates charged to customers result in revenues that more closely align with the cost of providing sanitary and stormwater services. The proposed changes are largely offsetting for most customers. However some customers who have large properties with low water usage will see their overall wastewater bill increase, which more accurately reflects the stormwater costs to service their properties. This is the case for some of the customers in the outlier group.

In the fall of 2024, EWS will begin engaging with each of the customers associated with these properties to assist them with mitigating their stormwater bill increases. These mitigations are described below and include potential to adjust the runoff coefficient to reflect the property's characteristics and/or the installation of stormwater capture infrastructure which would also lead to a reduction in the runoff coefficient for their property.

Figure MV-EWS-09-i

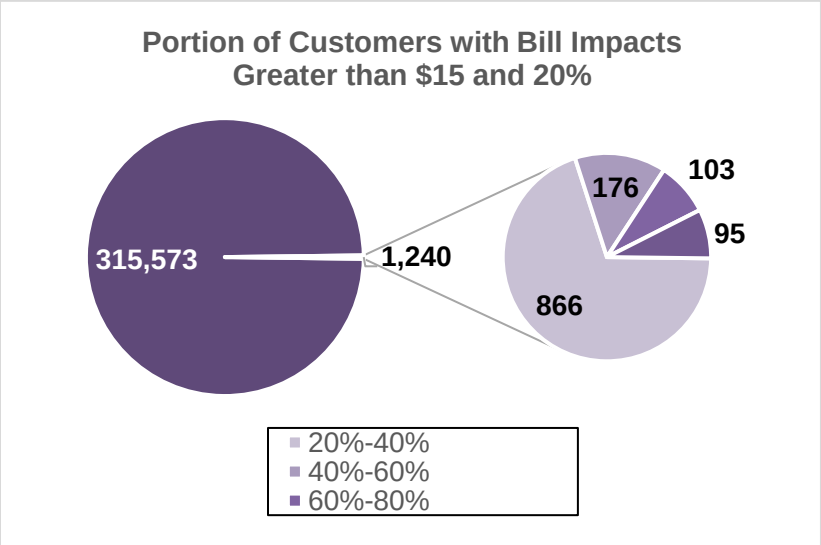


Table MV-EWS-09-i
Average and Maximum Bill Increases from 2024 to 2025 for Outlier Customers by Zone
(Stormwater Bill Increase Net of Sanitary Bill Decrease)

	New Zone	A Number of Properties	B Avg (Net) Bill Increase %	C Avg (Net) Bill Increase $	D Max (Net) Bill Increase %
1	IH	309	72%	293	132%
2	IM	242	38%	289	140%
3	BE	166	44%	188	898%
4	DC2(>700)	126	122%	164	299%
5	PS	105	34%	98	95%
6	RSF(>450)	82	83%	98	233%
7	RR	42	33%	27	33%
8	CG	35	36%	137	81%
9	PSN	28	34%	38	57%
10	AG	22	95%	570	166%
11	RS(>450)	21	84%	241	566%
12	Other Zone	62	105%	674	266%

Reasons for Stormwater Bill Increases

The following provides reasons for these bill increases. Further detail can be found in MV-EWS-09-i-Attachment1.

For all of EWS' customers, the Stormwater charges are based on applying the following formula:

Stormwater Charge = Area x Runoff Coefficient x Development Intensity x Stormwater Rate

Reasons for increases in Stormwater charges for customers fall into three categories:

1. Increases in the runoff coefficient for the property's zone. Runoff coefficients are based on zoning. With the approval of the City's Edmonton Zoning Bylaw 20001, EWS

has updated the runoff coefficients to align with the new zones. EWS undertook an engineering review to update the runoff coefficients as part of its Design Standards Review. EWS has modernized its design standards for water, sanitary and storm systems in order to ensure prudently built infrastructure that aligns with the City's new zoning and supports the City's plans for growth and densification. Based on this analysis, the updated runoff coefficients reflect the appropriate average runoff for a property within that zone. Zones where runoff coefficients were increased include heavy industrial (IH) and agricultural (AG) zones. Runoff coefficients for all other zones have either decreased or remained the same.

2. Increases in the runoff coefficient due to changes in zone. Runoff coefficients can also increase if the property's zone has changed to a zone with a higher runoff coefficient. In some cases, the original zoning in the billing system did not reflect that the property had been fully developed and, as part of the implementation of the City's new zoning bylaw, the zone has been updated to reflect the current land use. In these cases, there is often a large difference between runoff coefficients between the original and new zone. Examples of properties in this category include those which have changed from AG, A, RR or AP (open space zones) to developed zones such as RSF, DC or PS.

3. Increases in the Stormwater rates. As noted above, the updated cost-of-service study which results in stormwater rates increases will impact customers who have large properties with low water use. These customers will see their overall wastewater bill increase, which more accurately reflects the stormwater costs to service their properties. Many of the customers in this outlier group are large properties with low water usage whose increases in stormwater charges are not fully offset by decreases in their sanitary charges.

Note that the above analysis identifies potential outliers is based on applying the 2025 applied-for PBR rate increases and new runoff coefficients based on new zoning. There has not been any adjustments to development intensity factors, which would reduce the number of actual outlier customers below 1,200.

EWS is continuing to evaluate the bill increases for each of these outlier customers. In cases where the runoff coefficient based on zoning is significantly different compared to the actual runoff for the property, EWS intends to work with these customers to aid them in assessing the specifics of their parcel and the potential for them to apply for an adjustment to the development intensity factor through EWS' Intensity Adjustment Program (refer to Section 21.3 of the 2025-2027 Wastewater PBR Application). An adjustment to the development intensity factor will effectively reduce the runoff coefficient to accurately reflect the actual runoff for that particular property based on its current land use and taking into account any Stormwater infrastructure on the property. In cases where these bill increases are appropriate because the runoff coefficient based on zoning is correct for the property, these customers can still mitigate their bill impacts by taking advantage of EWS' new Stormwater Management Rebate Program (refer to Appendix P to EWS' 2025-2027 Wastewater PBR Application). Under this program, a customer can install Low Impact Development installations on their property to capture stormwater and reduce runoff. By doing this they can decrease their runoff coefficient and reduce their stormwater bill.

EWS intends to begin engaging with these 1,200 customers in the fall of 2024 in advance of the implementation of new rates and runoff coefficients on April 1, 2025. EWS will tailor its engagement approach for each customer based on their unique circumstances.

ii) For background, EWS is planning to implement a phased approach to bring additional customers into stormwater billing over time to ensure all properties who are receiving stormwater services pay for their share of the costs to provide those services. The first phase will commence on April 1, 2025, when EWS will introduce full billing of all properties in Edmonton that currently have water or sanitary service accounts.

The second phase of bringing new customers into billing will commence after April 1, 2025 and be implemented during the 2025-2027 PBR term. This phase includes the Stormwater only customers (properties that do not currently have water or sanitary service accounts but do have stormwater or snowmelt that flows off their property and enters the stormwater system). EWS' geospatial analysis indicates that there are portions of land in

Edmonton that are not currently being billed for Stormwater services, but likely receive these services. This includes several types of properties ranging from those with higher runoff, like parking lots, to properties with lower runoff, such as parks, vacant and undeveloped land. Although some of these properties are being billed, most are not being billed today.

At this time, EWS has not yet completed the analysis to identify these customers or estimate their bills. Because this will require a large administrative effort to identify these customers and set up accounts for stormwater only service, these potential customers will be brought into billing gradually over the 2025-2027 PBR term. By bringing these properties into billing, all ratepayers will benefit in the future as the costs to serve are more fairly and equitably borne by all customers who benefit from stormwater services.

iii) Beginning in the 2028 PBR, all customers will benefit from lower rates with these additional Stormwater only customers added into billing. However, as noted in EWS' response to ii) above, at this time it is premature to quantify the benefit because additional analysis is required to identify these potential customers and to determine the potential additional revenues. In addition, the increase in revenues from adding more customers into billing is expected to be partially offset by reductions in revenues as more customers apply for changes to their development intensity factor through EWS' Intensity Adjustment Program. At this time, EWS is not able to forecast the offsetting revenue reductions from these changes.

iv) EWS has not completed any stakeholder engagement with the additional Stormwater only customers that are expected to be added into billing during 2025-2027. As noted in EWS' response to MV-EWS-9-ii, EWS has not yet identified the property owners for these parcels and future stormwater customers. As these customers are identified, EWS will estimate their Stormwater bills and engage with them to provide notice and advise on opportunities to mitigate bill impacts.

Request: MV-EWS-10

Topic: Bill Comparisons

Reference: Appendix O - Separate rates analysis for wastewater vs. stormwater

i) Can EPCOR provide estimated bill comparisons separately for the Wastewater service (sanitary collection + wastewater treatment) and its stormwater service? Given there are currently separate rates and how many other wastewater and stormwater utilities charge for their services, this should be readily achievable and provides a greater level of transparency.

EWS RESPONSE:

i) EWS has provided separate bill comparisons for Wastewater and Stormwater. but notes that Vancouver and Winnipeg do not have a separate Stormwater charge. See MW-EWS-10 Attachment 1 and tabs labelled "MV-EWS-10" for the bill comparisons.

In Appendix O, EWS made an inadvertent error in the formula of the commercial bill comparison that overstated the fixed charges for Wastewater collection bills for Edmonton (i.e., EWS) under the three different scenarios. The impact of the error resulted in an overstatement of approximately $104 for 325 m^3 of consumption, $1,037 for 6,000 m^3 of consumption and $1,296 for consumption of 20,000 m^3. This has been corrected in the MW-EWS-10 Attachment 1.

Request: MV-EWS-11

Topic: Bill Comparisons

Reference: Appendix O - Selection of comparable jurisdictions

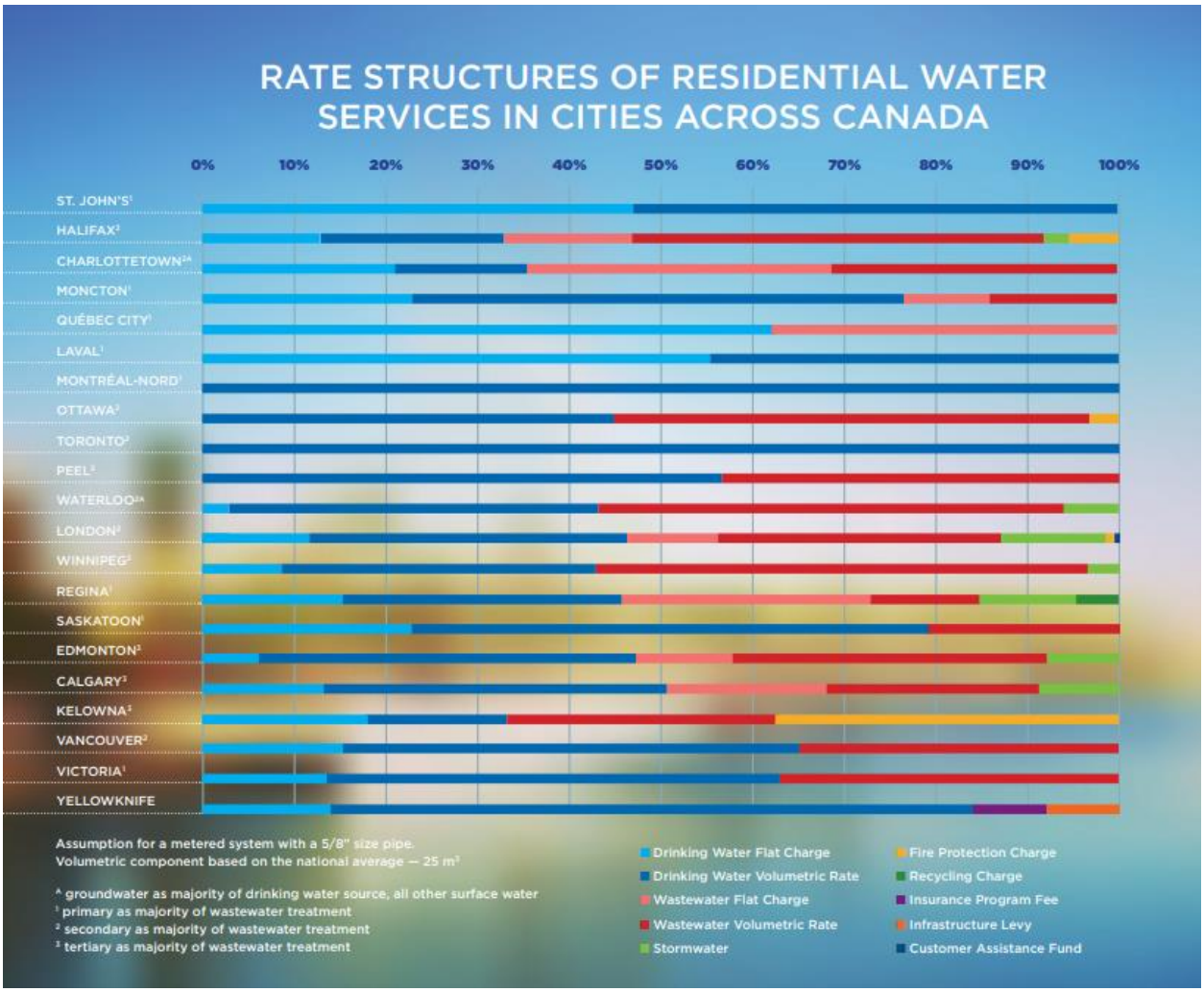
i) The "comparable jurisdictions" include some which are not comparable to Edmonton's size or customer density. Can EPCOR instead focus its comparisons to larger Canadian centers to provide a more meaningful bill comparison?

EWS RESPONSE:

i) Many of the other large municipalities have rates and rate structures that make it difficult to conduct an "apples-to-apples" bill comparison. For example, the City of Toronto has a bundled rate (i.e., one rate) for its water and wastewater services. In Montreal, water revenue is collected via municipal taxes. See Figure MV-EWS-11-i for a graphical view of the differences in rate structures across Canada from a 2015 report from the Canadian Water Network. Ottawa's and the Peel Region's population is slightly higher than Edmonton's population and are included in the attached bill comparisons; however differences in population density, water consumption and sanitary generation volumes influenced by metering practices, conservation and climate, topography, source water quality and other factors make the bill comparison against these municipalities less meaningful. In addition, investments required to address climate change and flood mitigation vary across jurisdiction, as do the sources of funding for those investments (utility rates, tax revenues, grants), which significantly influences the costs incurred by the utilities and thereby the resulting rates. See MW-EWS-10 Attachment 1 for a bill comparison with the additional municipalities.

Figure MV-EWS-11-i

Rate structures of residential water services in cities across Canada[1]



[1] Source: 2015 Canadian Municipal Water Priorities Report, Canadian Municipal Water Consortium - 2015-Canadian-Municipal-Water-Consortium-Report-web.pdf (cwn-rce.ca)

Request: MV-EWS-12

Topic: Bill Comparisons

Reference: Appendix O - 2025 vs. 2027 Bill Comparisons

i) Since EPCOR already estimated 2025 bills for other jurisdictions by using a 2.5% increase vs. 2024 - can it also extend this analysis to prepare bill comparisons for 2027? This is more meaningful given it has projected continued increases to rate revenue requirements across 2025-2027 and is also seeking approval for its 2027 rates.

EWS RESPONSE:

i) EWS has extended the bill comparison analysis to 2027. Only Winnipeg has published rates for 2027. For the other municipalities, EWS used their most current published rates and escalated it by 2.5% (inflation) per year to 2027. EWS notes that the 2.5% increase for other jurisdictions only reflects a generic inflation forecast and does not consider the impact of future capital and operating requirements for these jurisdictions. For example, in Vancouver, residents are expected to face an increase between $80 and $140 per year to pay for the cost of the North Shore Wastewater Treatment plant. At the low end, this translates to approximately a 30% increase in their wastewater bill, which is not accounted for in the 2.5% inflationary increase used to compare rates across other jurisdictions. On the other hand, EWS' rates are based on a bottom-up projection of necessary investments for 2027. See MW-EWS-10 Attachment 1 and tabs MV-EWS-12.

Request: MV-EWS-13

Topic: Wastewater Treatment Cost of Service

Reference: Appendix K-2 Plant in Service Allocation Methods - Section 3.5 & Exhibit 7a

Preamble: The cost of service provides a description regarding how the plant in service was functionalized (on an asset-by-asset basis) and then allocated to the different types of cost drivers (volume, pollutants, customer, and revenue-related per section 3.4.2). Per Exhibit 7a, it appears estimates were used to allocate costs across each cost driver for each asset type. However, no rationale or support to underlying treatment performance data were presented in the document.

i) How were the plant's historical loading treatment performance records (including loadings measured at different treatment process intervals) used to guide these estimates?

ii) Please provide the rationale for the percentage allocations indicated in Exhibit 7a and note if the design basis or the functional basis methods were used (per WEF Manual 27 guidance).

iii) Given that a significant portion of the collection network features combined stormwater and sanitary mains, it is noted that Goldbar's flow capacity is required to support contributed stormwater flows during wet weather events. How is this reflected in the cost of service analysis, particularly where the percentage of costs allocated to the “Volume” cost driver within the plant in service is low (approximately 7%)?

EWS RESPONSE:

i) The purpose of this analysis is to develop a reasonable allocation of costs based on the purpose of the asset, not necessarily the loadings at specific times or for specific assets, which is an overall system average approach to how the system functions and operates. Given this, the allocation approach was based on the current operating conditions and EPCOR staff’s knowledge of the facilities.

ii) The Water Environment Federation (WEF) Manual of Practice (MOP) #27 outlines the possible approaches that may be used to allocate costs as examples of how to develop an allocation approach. For this study, the allocation approach was a blend of the design and functional basis using EPCOR's knowledge of the system function and purpose of the asset to establish the percentages.

iii) The focus of this analysis is treatment, and as outlined in Exhibit 7a, the primary purpose of the treatment assets are to meet strength related components. While volume is an allocation component, the primary purpose of the asset data is to remove constituents. In many cases, assets are allocated a significant component to volume, however, when compared to all other assets, with larger values allocated to the strength related components, volume-based allocation is not as large as other system components. In the future, as primary treatment assets are replaced, more costs may be allocated to volume given the higher costs (new assets) associated with the replacement of the existing primary treatment assets.

Request: MV-EWS-14

Topic: Wastewater Treatment Cost of Service

Reference: Appendix K-2 Treatment for I/I - Exhibits 3&5

Preamble: It appears I/I was allocated to customer classes in the same ratio as their estimated annual flows (billed water consumption).

i) Has EPCOR analyzed the contributing factors for its I/I in its collection network?

ii) Per WEF Manual 27 guidance and as illustrated in Figure 2.0.1 in EPCOR's capital business case for the Inflow and Infiltration Relining Program, were other customer cost drivers considered (e.g., number of customer connections)?

iii) How were the loading concentrations represented by I/I contributions considered in the strength distribution factors?

EWS RESPONSE:

i) EPCOR has analyzed the contributing factors for I/I through the following approach. The city has been divided into 24 Sanitary Planning Areas (SPA) based on the trunk network configuration. Each SPA may have a few to tens of neighbourhoods (NBH), to assess Inflow and Infiltration (I&I) into the local sewer network. I&I assessment for each SPA is based on various contributing factors such as pipe defects (joint separation or cracks based on CCTV review), pipe material (clay or concrete), recent basement flooding records (2018-2023), sump pump season discharge permits, low lying areas with potential surface ponding after heavy rainfall, and sewer flow monitoring (based on limited number of permanent and temporary flow monitors deployed in the local sewer network and lift station flow meters). Based on these assessments, as part of the Wastewater IRP, five SPAs have been prioritized for the implementation of I&I reduction strategies. Two of these strategies are detailed in Appendix G-9 – Inflow and Infiltration Relining program and Appendix P - Stormwater Rebate program for downspout disconnections. In addition, to supplement the limited existing permanent flow monitors, permanent flow monitor installations are planned throughout the city with initial focus on the priority SPA

areas. The costs for these flow monitors are below the threshold requiring a full business case. The top five SPA for I&I reduction implementation are Jasper Place (63 NBH), Millwoods (24 NBH), Calgary Trail (19 NBH), Castle Downs (15 NBH) and Griesbach (11 NBH).

ii) The MOP #27 provides examples for how the I&I costs are allocated. For this study, the allocation of I&I costs did not consider other customer cost drivers. I&I for treatment was allocated proportionally between all customers based on total volumes at the plant. In the long-term, additional monitoring and studies will provide additional input in the allocation of I&I and revisions may be made to the cost of service approach.

iii) The volumes (i.e., daily flow) used in the strength factors (Exhibit 5) is based on the total flow by class of service as calculated in the volume factor (Exhibit 3) which includes the proportional share of I&I.

Request: MV-EWS-15

Topic: Wastewater Treatment Cost of Service

Reference: Appendix K-2 Strength Distribution Factors - Exhibit 5

Preamble: The estimated kgs of loadings removed is based on each class's avg. factor (mg/L) multiplied by their daily flow (ML/Day).

i) How were measured loadings historically removed at the treatment plant considered as part of this mass balance analysis?

ii) It is understood that Goldbar supports liquid waste disposal for hauled wastewater (typically high strength) - how does the mass balance consider this service and the loadings they contribute? Are the costs of service calculated for residential and commercial customers net of the costs required to support this service?

iii) It is understood EPCOR has established wastewater "swaps" with Arrow Utilities to eliminate costly investments in dedicated interceptor / transmission mains. Are the outgoing wastewater flows vs. incoming wastewater flows measured for their loading concentrations?

EWS RESPONSE:

i) As shown in Exhibit 5, the total Kg's removed for each strength constituent considered is noted (i.e., Total kg's Removed and provided in the footnote). The loading factors were then calculated to reasonably reflect the total Kg's removed at the plant.

ii) As shown in Exhibit 5 in detail, the loadings for overstrength customers are considered as part of the factor. The overstrength loadings are based on actual performance data and provide the basis for the Kg's removed as compared to the remaining system Kg's. Therefore, the allocation of costs between residential, multi-family, commercial, and overstrength customers takes these higher strength loads into consideration.

iii) The loading concentrations of outgoing and incoming flows are not measured as part of the SWAP agreement. Volume differentials are only used to calculate the compensation for the party receiving more wastewater as per the negotiated agreement.

Request: MV-EWS-16

Topic: Wastewater Treatment Cost of Service

Reference: PBR Application Section 4.8.2 Volume Projections

i) Please provide the historical billed volume data results per customer class as described in the PBR that historical forecasted billed consumption levels per average account per class. For single family residential customers, please detail both estimated indoor consumption levels per capita and outdoor irrigation usage characteristics.

EWS RESPONSE:

i) See Table MV-EWS-16-i for historical billed consumption data.

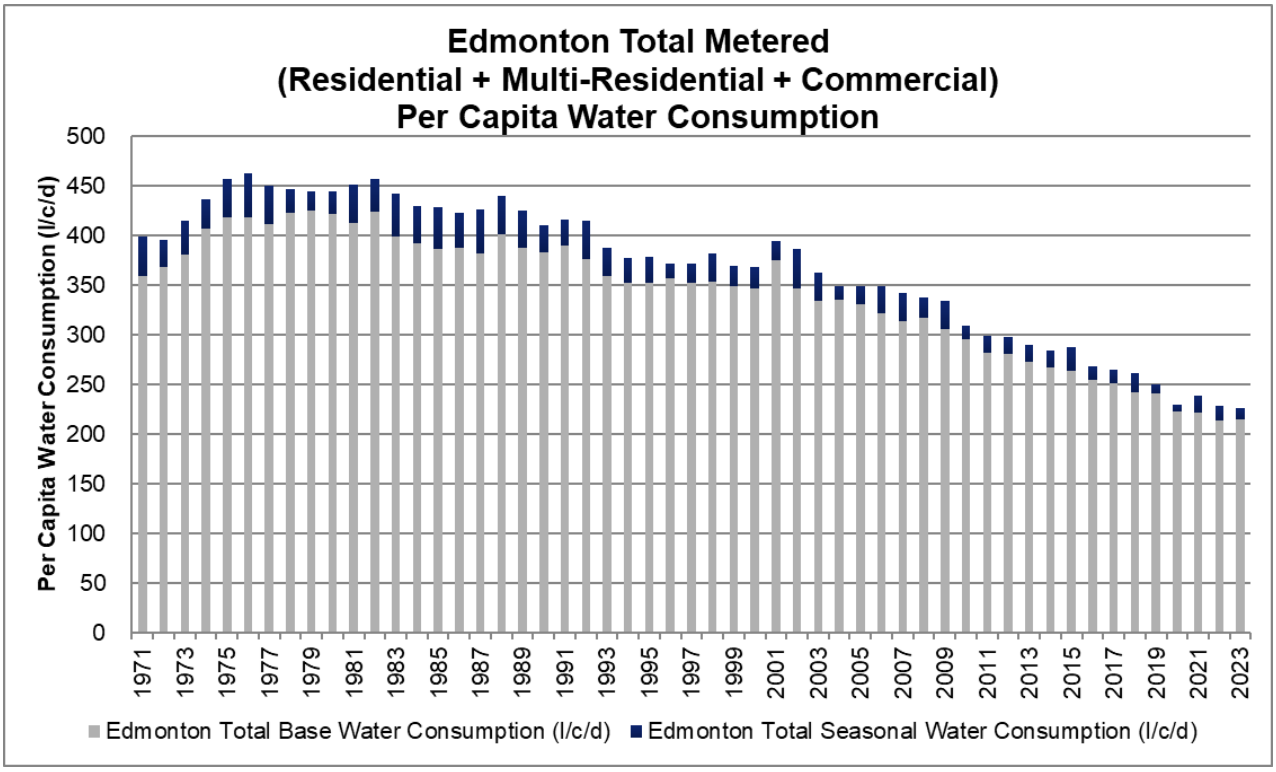
Table MV-EWS-16-i
Billed Consumption by Customer Class

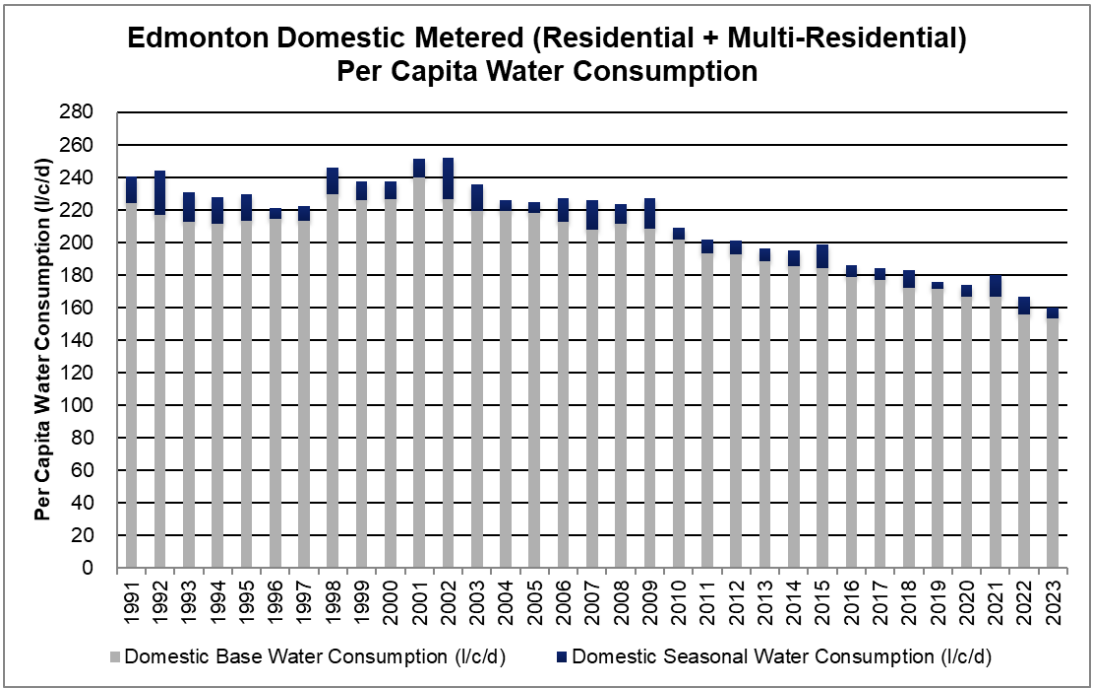
	Residential	Multi-Residential	Commercial
	Total Consumption (ML)	Total Consumption (ML)	Total Consumption (ML)
2014	44,855	17,704	25,126
2015	46,891	18,066	24,933
2016	45,453	17,993	24,375
2017	45,368	17,795	23,798
2018	45,901	17,679	23,675
2019	44,580	17,767	23,011
2020	48,203	18,462	18,921
2021	49,973	19,036	19,798
2022	46,856	18,501	22,087
2023	47,699	19,021	23,600

EWS is unable to provide single family residential indoor and outdoor per capita consumption, due to data limitations. Federal census data only provides total population (includes single family residential customers and multi-residential customers). EPCOR presented a detailed review of water consumption patterns in Edmonton to Utility

committee at the May 20th, 2022 Utility committee meeting. The includes charts of the seasonal usage trend patterns for the combined residential and multifamily sector. https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=144196

The charts below show the comparison of seasonal usage vs. residential, multifamily and commercial accounts on a per capita basis between 1971 and 2023. The second chart provides residential and multifamily on a per capita basis between 1991 and 2023. Prior to 1991 multifamily was grouped with Commercial.





Based on ten-years of consumption per active service data for residential and multifamily customers, approximately 6.5% is attributed to seasonal consumption.

Request: MV-EWS-17

Topic: Drainage Cost of Service

Reference: Appendix K-1 Appendix A, Exhibit 3 - Volume Distribution Factors

Preamble: The cost of service (section 3.4.3) for sanitary collection describes calculating a volume distribution factor for different customer classes to account for outdoor irrigation habits. In typical practices, this calculates a "wastewater return factor" per customer class based on the percentage of billed water consumption that is estimated to be returned to the sanitary collection system. This is typically calculated by considering average winter (indoor) consumption relative to year-round consumption habits per customer class.

i) Exhibit 3 does not calculate wastewater return factor - it only adds I/I estimates to each class's billed water consumption. Please explain how the volume distribution factor was considered when estimating sanitary flow volumes per customer class.

ii) Similarly, common industry practices view that estimated wastewater flows which reflect differences in outdoor irrigation habits per customer class are more equitable in the Wastewater Treatment Cost of Service (Appendix K-2) than each class's billed water consumption. Please explain why billed water consumption is used instead.

iii) Exhibit 3's average daily flow values appear to be the same as the annual totals - is this correct?

EWS RESPONSE:

i) The volume distribution factor was based on the water consumption data for each customer class of service. I&I was allocated proportionally between all customers based on total volumes.

ii) The MOP #27 discusses alternative methods for establishing the volume distribution factor. One of those alternatives use total water consumption as a reasonable approach

to allocating costs between customer classes of service and was the approach used to develop the distribution factor.

iii) No. However, the "Avg. Daily Flow At Plant" column should have been divided by 365 days. The "Avg. Daily Flow At Plant" is the same as shown in Exhibit 3 of Wastewater Treatment Cost of Service study – Appendix K-2.

Request: MV-EWS-18

Topic: Drainage Cost of Service

Reference: Appendix K-1 Section 5.2.1 University of Alberta customer class

i) Please describe the definition of sanitary assets which UofA does not benefit from which results in their treatment as a "wholesale" customer (it is acknowledged they provide their own "collection services" rather than transmission). Is there a formal definition for sanitary pipe size diameter that provides this differentiation between "collection' vs "transmission"? Can EPCOR provide details on the unique cost of service results for its transmission vs. collection services?

ii) Is it assumed that I/I enter the sanitary system equally across retail collection mains and larger interceptor / transmission mains?

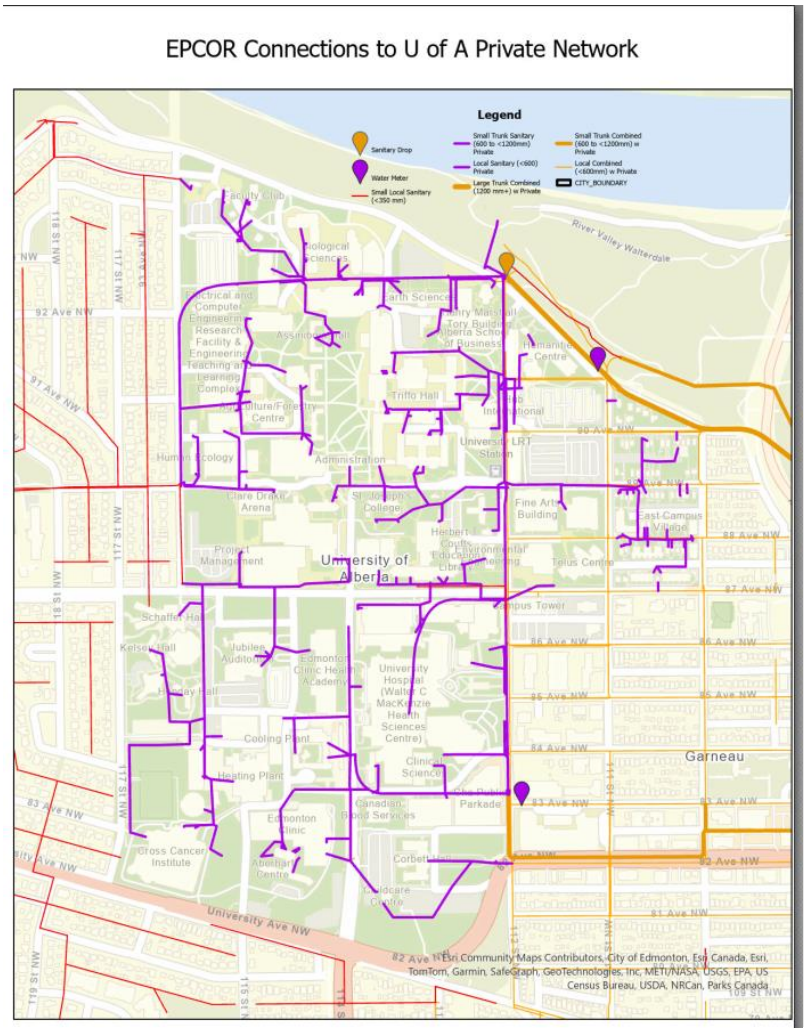
iii) Based on (a) and (b), how does this apply to the wastewater swaps with Arrow Utilities?

iv) Please provide the supporting rationale and analysis for why UofA receives a 44% discount based on this (Table 3-4)."

EWS RESPONSE:

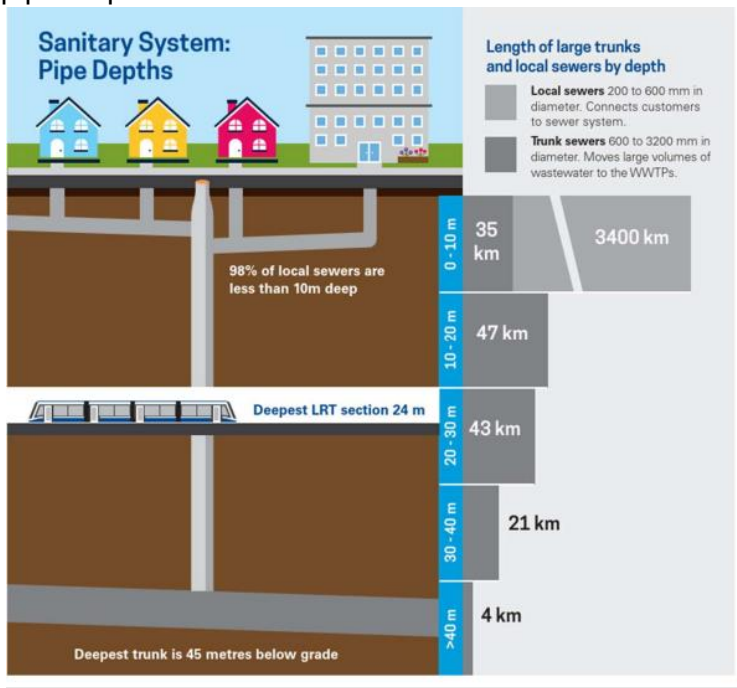
i) The University of Alberta main campus is both a wholesale water and sanitary customer. The water metering location is via two metering vaults on the east side of the campus. The sanitary volumes billed are based off of these flow meters. The sanitary discharge is via a single location in the northeast corner of the campus direct into the EPCOR owned combined trunk network. The map below shows the relationship between the EPCOR owned and operated pipes, the connection points for the bulk water meters and discharge connection for sanitary discharge and the University private sanitary collection system. Within the University property, the University owns, operates and maintains a network of pipes located underground and within their extensive utilidor network to provide utility services to the entire campus. EPCOR does not have records to detail whether these private pipes are located within the utilidor system or direct buried. Utilidor pipe maintenance is a different type of maintenance than what EPCOR performs

on the wastewater collection system as this is more equivalent to process piping configuration. EPCOR also does not have access to the utilidors.



ii) Large trunks are normally deep (15 m+) and not considered as to be contributing to I&I due to the large elevation difference between the ground surface and the deep trunk pipes and the fewer number of manholes along these pipes limiting the amount of rainwater that can enter via a manhole grate or pickhole opening. I&I reduction strategies are primarily focused on local sewer network (pipes < 750 mm) and private property contributions as I&I Flow paths are primarily from the shallow local sewer network (pipes and maintenance holes) and service lines from individual properties.

However, I&I entering local sewer network eventually is conveyed by large trunks to wastewater treatment plants. The figure below shows the depths of the trunk network vs. the shallow pipes exposed to I&I.



iii) The current swap agreement with ARROW Utilities is solely based on volume of wastewater exchanged and does not consider I&I as well as wastewater strength. The agreement is up for renewal in 2025 and may consider both. ARROW and EPCOR are both implementing I/I reduction strategies and have been collaborating on approaches across all the communities served on the integrated sanitary system.

iv) The U of A discount has been in place prior to the transfer of the Drainage utility from the City of Edmonton to EPCOR in 2017. EWS has maintained this historical approach for this customer class and does not have access to the detailed background on the rationale or analysis undertaken when the rate structure for this customer class was developed..

Request: MV-EWS-19

Topic: Drainage Cost of Service

Reference: Appendix K-1 Section 3.5 and 3.6 Allocation Methods

i) The results of the allocation methods used for Common Assets was deemed to be the ratio of net plant in service between sanitary vs. stormwater network assets. Please explain why this method was selected as the most defensible relative to other potential options considered (e.g., ratio of sanitary vs. stormwater flows).

ii) There are no details provided to describe the rationale for the allocations of the net plant in service between Volume vs. Capacity (Table 3-2) - please provide.

iii) There are no details provided to describe how O&M costs were allocated across Volume, Actual Customer, Capacity, and Revenue drivers - please provide.

EWS RESPONSE:

i) Common assets reflect assets that benefit both sanitary and storm functions. Since stormwater flows are not metered, calculating a split based on that data did not seem reasonable. However, given that the assets benefit both utilities, the use of existing assets was determined to be a more reasonable split. EPCOR has been evaluating and reviewing these common assets in order to provide a more accurate split of these assets over time.

ii) The classification of net plant in service between capacity and volume allocation factors included reviewing each plant line item and determining which cost components the assets were related to. The proposed allocations are based on HDR's understanding of EPCOR's current sanitary drainage facilities, their current operations, and generally accepted allocation methodologies for sanitary/wastewater utilities. See Exhibit 7 for a breakdown of this allocation.

iii) The allocation was developed by HDR in collaboration with EPCOR staff to reflect that the majority of the system is in place to meet overall volume, or the movement of wastewater flows from customers to the treatment plant, along with a demand (capacity) component.

It was estimated to reasonably reflect the capacity component to meet those demands. As noted in the WEF MOP #27, collection system can be allocated 100% to capacity. However, this did not seem reasonable for EPCOR's system as it is not being utilized at the full capacity and therefore has a volume component.

Request: MV-EWS-20

Topic: Drainage Cost of Service

Reference: Appendix K-1 Appendix A, Exhibit 2 - Industrial Monitoring

i) Please explain the industrial monitoring function listed (~ $8.3M) and why it should be allocated only to residential and commercial customers and not wastewater overstrength surcharge customers?

EWS RESPONSE:

i) The "Industrial Monitoring" label is a legacy name assigned to this function before Drainage Services was transferred to EWS. One of the many activities performed by the Industrial Monitoring function includes overstrength reporting; however, overstrength reporting is not the sole or main activity performed by this group. The legacy name of "Industrial Monitoring" does not reflect all of the activities performed by this function, which benefits all Wastewater Collection customers equally. Key activities for this function include:

- First responders and investigations for any spills on the entire collection system;
- Determining regulatory reporting requirements;
- Determining enforcement actions for the entity that caused the spill;
- Collecting samples; and
- Management of overstrength customer reporting.

Request: MV-EWS-21

Topic: Drainage Cost of Service

Reference: New Stormwater Only Customers

Preamble: The PBR application notes the estimated increases in new stormwater-only customer accounts across 2025-2027. These are the result of an initial phase of work. It is understood that, going forward as part of a second phase of work, additional stormwater-only accounts will be identified and planned to be added. These additional customers are not yet defined within the PBR application.

i) Will any additional stormwater-only accounts be added and billed during the 2025-2027 cycle? Or will it wait to add these to the subsequent PBR cycle? If the objective is to incorporate them in 2025-2027, can EPCOR provide appropriate estimates (number of accounts and estimated additional stormwater billing revenues)?

ii) How will EPCOR manage the incremental revenues within the PBR?

iii) Will rates be reduced for all existing customers once new customers are introduced?

iv) If rates will not be reduced, how will EPCOR treat the excess revenues it may collect versus rate revenue requirements?

v) How may this increased revenues impact the proposed ROE given these will reduce financial risk (particularly fora service line whose revenues are not contingent on customer's actual usage).

EWS RESPONSE:

i) Due to the effort required to first identify the stormwater-only customers and then set up EPCOR accounts to begin billing, EWS will bring these customers into billing gradually as they are identified over the course of the 2025-2027 PBR term with the intention of having all of these customers in billing by the start of the next PBR term in 2028. EWS intends to focus first on adding customers with higher runoff, such as parking lots.

ii) At this time, EWS does not have any estimates of the number of accounts or estimated additional Stormwater billing revenues. EWS has completed some initial geospatial analysis of the percentage of area by zone that is currently in billing within Edmonton. However, this geospatial analysis is only indicative of the potential additional area that could be charged for stormwater services in the future because some of these unbilled areas may not actually be receiving stormwater services if their topography holds the stormwater on their parcel. As part of its administrative effort to add new stormwater only accounts into billing, EWS will need to assess each property individually to ensure it is actually receiving stormwater services from the stormwater system.

iii) In next PBR term starting in 2028, EWS expects that the additional stormwater only accounts added over the course of 2025-2027 will help to reduce Stormwater rates. However, the extent of any potential reductions is contingent upon successfully adding these customers into billing (see response to ii) above). Rates may be reduced because the cost of providing stormwater utility services will be more fairly spread across all of the customers that receive stormwater services. EWS has not reflected a forecast of increased Stormwater revenues in its 2025-2027 PBR application from adding the stormwater only accounts due to the uncertainty around the number of customers, estimated stormwater revenues and the timing of adding these customers into billing.

Additionally, offsetting these expected revenue increases over the 2025-2027 PBR term will be reductions in revenues from existing stormwater customers applying for adjustments to their development intensity factor through EWS' expanded Intensity Adjustment Program. Due to the uncertainty in estimating these adjustments, EWS has not forecast these offsetting revenue reductions into its forecast of stormwater billing determinants for the 2025-2027 PBR term.

iv) Any excess revenues from additional stormwater only accounts net of any revenue reductions from changes to development intensity factors will be treated as a forecast variance during the 2025-2027 PBR term. Once the rates are reset in 2028, they will reflect the actual additional stormwater only accounts and changes to the development intensity factors that occurred during 2025-2027.

v) These potential increases in revenues do not impact the proposed return on equity because the proposed return on equity is determined based on the generally accepted methodologies described in Appendix D to the PBR Application (discounted cash flow model, capital asset premium model and risk premium model). As explained in Appendix D, these methodologies rely on Canadian and U.S. proxy groups to establish a recommended return on equity for EWS.

Request: MV-EWS-22

Topic: Rates Design

Reference: Appendix K-2 Rates Design

i) It appears that the proposed rates design matches historical rates design structures. Please describe how EPCOR will address input received from the stakeholder engagement process to future rates design efforts.

EWS RESPONSE:

i) Input and feedback received from stakeholders during this PBR term will be used to inform the rate design efforts that will be undertaken to aid the development of EWS' consolidated PBR application (i.e. one application for Water, Wastewater Treatment and Wastewater Collection operations), which is anticipated to be effective January 1, 2028. EWS intends to review all components of its rates across all three operations to ensure that the proposed rate design is contemporary, fair, equitable and simple to understand, while reflecting stakeholder values and meeting the overall objectives of establishing cost-based rates.

Request: MV-EWS-23

Topic: Performance Measures

Reference: Main PBR Application Section 22

Preamble: Noting that a suite of performance measures should include a mix of operational and outcome measures that represent a holistic and balanced view of an organization's performance, has EWSI considered, or would EWSI consider, modifying any of its proposed measures as described below and if not, the rationale for selecting the proposed measure to reflect EWSI performance in the noted area:

i) Stormwater Flow Monitoring (22.4.2) - it is not clear how this measure is indicative of performance and a measure that better reflects the customer priority of reducing contaminants to the river could be considered, such as total loadings to the river or a reduction in total loadings relative to a target.

ii) Stormwater Rebates (22.4.2.2) - this is intended to replace the Green Hectares measure. A measure that better reflects the effectiveness or progress of the program could be considered, such as volume of rainfall retained or effective impervious area removed, potentially relative to a planned target.

iii) Service Maintenance Calls (22.4.4.1) and Emergency Dig Ups - Service Restored (22.4.4.2) - the application is proposing to move these measures from the Customer Service Index to the System Reliability and Optimization Index. These are response time-based measures which are indicative of customer service and may be better suited to remain in the Customer Service Index.

iv) Full Property Flood Inspections (22.4.4.4) - a measure that better reflects the effectiveness of the program could be considered, such as the reduction in the number of properties at high and medium-high risk of flooding, relative to a planned target.

v) H2S Exceedances (22.5.2) - it is noted that the intent of the H2S exceedances measures is to reflect numerically the instances that odour may be detected by neighbouring residents. However, by averaging the results, better performance at one site appears to mask the exceedances at the other site. A standard that reflects individual exceedances may better represent actual performance.

vi) Biosolids Management (22.5.3) – without further context of the amount of biosolids generated, the proposed standard is not necessarily reflective of performance related to biosolids management. It is further noted that the Biosolids Inventory Reduction Factor is proposed for removal as a performance measure. A measure that reflects the ratio of beneficial reuse of biosolids to the total amount of biosolids generated, on an annual or rolling average basis, could be considered.

EWS RESPONSE:

In the process of reviewing the performance measures at the time of each PBR renewal, EWS gives careful consideration to the following objectives for establishing new metrics:

- Relevant to EWS regulators and customers;
- Sustainable over the long-term;
- Define standard performance rather than aspirational targets;
- Reasonable period of historical data and performance; and
- Able to be reviewed and audited annually.

EWS has provided specific comments on each of the performance measures suggested below. EWS will consider these suggestions for performance measures for the 2028 PBR term or, where more appropriate, for separate tracking and reporting to Utility Committee for information but outside the PBR performance measures program.

i) Stormwater flow monitoring (22.4.2) is a measure required in EPCOR Wastewater Approval to Operate with Alberta Environment and Protected Areas (AEPA) as part of the Total Loadings Plan in that approval. This measure was a previous Drainage utility performance measure prior to the transfer to EPCOR and has been maintained due to the

environmental regulator AEPA requirement to have this measure as part of the Approval to Operate. The 10 year Wastewater Approval to Operate is currently under review with AEPA as the term ends in 2025. As part of this review with AEPA, EWS has proposed alternative measures for the Total Loadings Plan but has not yet received direction from AEPA if they would agree with this change. Since there is uncertainty on what direction will come from AEPA, EWS is recommending maintaining the Stormwater Flow Monitoring measure for this PBR period. Any new measures that AEPA includes in future updates to the Approval to Operate could be considered for the 2028 PBR term.

ii) Stormwater Rebates (22.4.2.2) - Greened Hectares is a measurement of volume of rainwater retained or effective impervious area removed. EWS will still be tracking and reporting on Greened Hectares and will report progress through our updates to Utility Committee on the overall SIRP strategy. However, it is recommended to be removed as a performance measure for PBR rate setting due to the complexity of tracking for PBR audit purposes since the scope of installation is expanding beyond the land right of ways controlled by EWS or City of Edmonton. The Stormwater Management Rebate Program is a new program being introduced by EWS and will require considerable effort and focus to implement across multiple departments within EWS. This measure is recommended to ensure the desired outcomes of the new program are achieved.

iii) Service Maintenance Calls (22.4.4.1) and Emergency Dig Ups - Service Restored (22.4.4.2) - The movement of the measures to the System Reliability and Optimization Index aligns the Water and Wastewater Collection performance indicators. The Service Maintenance Calls Performance Measure (22.4.4.1) and Emergency Dig Ups – Service Restored (22.4.4.2) Performance Measure are analogous to the Water Main Break Repair Duration Factor within the Water PBR. The measures reflect the time to restore service and use disruption minimization as an indicator of system reliability and the effectiveness of EWS processes and programs.

iv) Full Property Flood Inspections (22.4.4.4) – EWS did assess a number of different performance measures that could be considered representative of progress on the Stormwater Integrated Resource plan when this measure was introduced in the previous

PBR period. The flood inspection measure was one of the two measures selected for PBR and was developed in consultation with the insurance sector recognizing that these inspections would be required by the property owner in the future to support their access to the national flood insurance programs being developed through the Federal government. EWS' SIRP analysis and its review of the insurance sector showed that flood proofing of properties was considered the most impactful intervention for pluvial flooding. EWS provided additional background on this to Utility Committee at the August 27, 2021 Utility Committee meeting – Report CR_8090. The challenge with shifting to a measure related to the number of properties at high risk of flooding is that the capital programs are primarily addressing pluvial flood risks via installation of dry ponds across the City and the timing to implement the construction on these locations requires multiple years from conceptual design to completion. Timing for construction is also dependent on coordination with City and schools for access to these large parcels of land and coordination with City roadways for detours and alignment with neighborhood improvements for construction of the pipes connecting the ponds to the stormwater network. EWS is currently updating the original SIRP City wide 2018/2019 risk assessment across the entire City to reflect the reduction in risk across the City based on the progress made on the five SIRP themes and will present this to Utility Committee when complete, as part of EWS' regular progress reporting. As these periodic City wide risk updates will occur on a five year cycle, they would not be suitable for use as an annual PBR measure. The updated risk assessment will include an update on the number of stormwater sub-basins at risk of flooding and the severity of this risk from a safety, environmental, social and financial risk perspective. Individual property flood risk as one of the risk components within each sub-basin and will be included in the update.

v) H2S Exceedances (22.5.2) – The Strathcona Industrial Association Gold Bar and Beverly Monitoring Stations are south and north of the Gold Bar plant, respectively. Wind speed and direction are critical parameters that affect the dispersion of low levels of H2S. An average of the Beverly and Gold Bar Monitoring Stations exceedances has historically been used for this performance measure because wind speed and direction are highly variable by season and year resulting in variability in exceedances at these locations. The proposed standard for these measures is an average of 4 exceedances per year for 1-hour

exceedances and an average of 1 exceedance per year for 24-exceedances to provide a better understanding of performance over the larger area surrounding the plant, not just at one station location.

vi) Biosolids Management (22.5.3) – The Biosolids Inventory Reduction Factor was a performance measure developed at a time when the biosolids inventory in the Clover Bar Biosolids Resource Recovery Facility (CBRRF) basins was at a historic high and assessed as an operational risk. Its main purpose was to show that the inventory was being reduced over time from the historic high. With the amount in the basins now well below the historical high, a simpler alternate metric is proposed to better assess performance of EWS' operational decisions to a set of new challenges. EWS was previously able to dewater biosolids at the City of Edmonton Dewatering Facility located at the Edmonton Waste Management Facility. In late 2022, the Dewatering Facility had a significant electrical failure that resulted in the permanent shut down of the facility. This was an unexpected failure that had a significant impact on EPCOR's ability to dewater and land apply biosolids. EWS is now trialing portable dewatering and dredging equipment to make-up for the shortfall that has resulted from the facility closure. As shown in Table 22.5.3-2, the total amount in dry tonnes removed is variable on an annual basis and there are many uncontrollable factors that contribute to this variability. The new performance measure will be able to demonstrate the performance of the new equipment against years when the Dewatering Facility was in operation.

Request: MV-EWS-24

Topic: Performance Measures

Reference: Main PBR Application Section 22

Preamble: Noting that EWSI is proposing to move two customer service related measures (Service Maintenance Calls and Emergency Dig-Ups – Service Restored) to the System Reliability and Optimization Index and remove two measures from the System Reliability and Optimization Index, would EWSI consider the following alternatives to the measures proposed to be removed:

i) Sewer Renewal (22.4.6) - noting that the measure does not reflect EWSI's risk-based approach, a measure that reflects the reduction in risk could be considered, such as the length of sewer that has moved to a lower risk rating, against a planned target.

ii) Infrastructure Condition Rating (22.4.6) - noting that the measure did not change appreciably over time, a measure that reflects how much infrastructure is moved from a lower condition rating to a higher condition rating against a planned target could be considered.

EWS RESPONSE to i) and ii):

In the process of reviewing the performance measures at the time of each PBR renewal, EWS gives careful consideration to the following objectives for establishing new metrics:

- Relevant to EWS regulators and customers;
- Sustainable over the long-term;
- Define standard performance rather than aspirational targets;
- Reasonable period of historical data and performance; and
- Able to be reviewed and audited annually.

EWS has provided specific comments on each of the performance measures suggested below. EWS will consider these suggestions for performance measures for the 2028 PBR

term or, where more appropriate, for separate tracking and reporting to Utility Committee for information but outside the PBR performance measures program.

Sewer Renewal (22.4.6) and Infrastructure Condition Rating (22.4.6) removal – The Infrastructure Condition Rating included a tracking of how much infrastructure moved from a lower condition rating to a higher condition rating relative to a planned target. As explained in the PBR Application, due to the size of the Edmonton wastewater collection network included in the existing asset inventory and the current rate of new asset growth, the overall system condition does not change appreciably over time and given the limited benefit of calculating and auditing this measure on an annual frequency, it was proposed to be removed. EWS will continue to track this information and will include it for information in updates to Utility Committee as part of the SIRP and Sanitary IRP updates that will occur on a five-year cycle.

Request: MV-EWS-25

Topic: Performance Measures

Reference: Main PBR Application Section 22

i) Please comment on whether consolidating the safety performance measures across all three utility services will mask underperformance in one service area and how EWSI plans to ensure safety performance meets the standard in each of the three service areas.

EWS RESPONSE:

i) Consolidation of safety performance measures across all three utility services will not mask underperformance in any of the individual service areas. Consolidation of safety performance measures is appropriate as safety is managed consistently across EWS' operations. Currently, performance measures for each service area are tracked individually and also in aggregate. Safety performance results are communicated broadly within EPCOR on a monthly basis to ensure all utility service areas are meeting performance targets. This detailed level of reporting will continue following the consolidation of the safety performance measures across all three utility services.

Request: MV-EWS-26

Topic: Performance Measures

Reference: Main PBR Application Section 22

Preamble: The previous PBR application review, EPCOR Water Services Inc – Performance Based Regulation Review (May 31, 2021), recommended that EWSI establish the costs of a study to evaluate the additional costs to ratepayers of exceeding performance standards. In addition, the Wastewater Effluent Performance Limit (22.5.1) represents the quality of wastewater effluent relative to that allowed by EWSI's Approval to Operate from Alberta Environment. The Standard of 26% indicates that EWSI intends to consistently treat effluent to a level well below that allowed in its Approval. While this aligns with the customer priority of reducing contaminants to the river, it likely also requires a higher level of investment of resources than if EWSI operated closer to its Approval limits, which in turn results in increased costs being borne by ratepayers. Furthermore, water and wastewater utilities internationally are increasingly setting performance outcomes based on customer values or customer willingness to pay assessments.

i) Has EWSI undertaken, or would EWSI consider undertaking, an assessment of the resources invested by EWSI to consistently exceed the standard of some performance measures, or in the case of the WELP to significantly exceed the requirements of its Approval to Operate?

EWS RESPONSE:

i) In October 2022, an assessment was completed to evaluate the plant's ability to meet the current WELP target as population grows and understand the relationship between WELP and the Energy Efficiency Factor. The findings show that the lowest achievable WELP target with the current technology and Approval to Operate in place will need to be higher than the current target as influent loadings increase with population growth. It also takes more energy to drive WELP down reducing the plant's overall energy efficiency. The other impact of WELP is the delay of capital and maintenance work because taking secondary

treatment process trains out of service for any period increases WELP, especially during colder weather. With this knowledge, EWS is keeping the WELP target currently in use (i.e., no further reduction to the measure), but the measure has been adjusted to address situations requiring process shutdowns to accommodate capital works on secondary treatment trains and due to emergent situations where a process shutdown is needed to correct.

The environmental effects of treated effluent on the North Saskatchewan River are another consideration when changes to WELP are discussed. Alberta Environment and Parks sets wastewater treatment effluent limits as low as reasonably practical for the technology in use. In addition to the loadings from the Gold Bar and Arrow plants, EWS evaluates other loadings to the river that are part of the one-water cycle. The goal is to keep the amount of substances entering the river stable, even as the Edmonton region grows. With this holistic watershed management approach in place, the need for a WELP measure is reduced because the overall environmental effects of the loadings from the Gold Bar plant are assessed along with other sources in the Edmonton region. EPCOR will consider removing the WELP index from the PBR performance measures in future PBR submissions.

Request: MV-EWS-27

Topic: Performance Measures

Reference: Stakeholder Engagement Report Appendix H

Preamble: Noting that the Stakeholder Engagement Report (Appendix H) indicates that customer priorities include ease of reporting issues and customer service/support that is easily available. Common measures for customer service performance include those related to customer experience, including call centre performance indicators or measures of customer satisfaction derived from post-contact surveys, or metrics related to billing and meter reading performance. These are common metrics used in the water utility industry, as well as by AUC for electricity and gas distribution system operators. Furthermore, service interruption frequency and duration are prevalent performance measures used in the water and wastewater industry across North America (AWWA) and internationally (OFWAT, IPART) and measure the impact on service delivered directly to the customer base.

i) Has EWSI considered including these types of performance measures for the Customer Service Index?

EWS RESPONSE:

i) In this PBR Application, EWS has proposed customer service performance measures that it considers to be important to customers and related to wastewater collection and treatment operations.

With respect to potential measures for call centre support and billing, EWS contracts out its billing and call centre functions to EPCOR Energy Alberta LP (EEA) who is regulated by the AUC and is responsible for providing service quality reporting to the AUC annually in accordance with Rule 003. While these areas of performance are already subject to scrutiny from the AUC, EWS could consider some of these service quality measures for inclusion in its 2028 PBR Applications.

With respect to customer experience measures, within the Water PBR, the post service audit factor performance measure is based on a customer satisfaction survey and is

modeled after the AUC's satisfaction survey for electric and gas distribution utilities and energy service providers.

With respect to service interruption performance measures, EWS would consider these measures in its future PBR as more data is available regarding sewer service interruptions for wastewater collection operations.

Request: MV-EWS-28

Topic: Transition of Drainage Services

Reference: Main PBR Application Total Rate Revenue Requirement Projections

i) Can EPCOR describe the overall operating and capital efficiencies it has obtained across the total rate revenue requirements for Drainage Services since its transfer from the City?

ii) Please specify financial efficiencies it has realized and where these can be found in the PBR application.

iii) To what degree have Corporate Overhead costs been reduced on a per customer account basis due to efficiencies gained from assuming Drainage Services?

iv) EPCOR has noted its commitment to continue developing its One-Water Resource Management approach across Water, Wastewater, and Stormwater. With this approach it was expected corporate shared service costs would be lower in the future, however they seem to be increasing according to the cost tables in the PBR. Why are these corporate costs not decreasing as a result of the efficiency to be achieved through the One-Water approach?

v) Please describe the potential areas for future operating, capital, and financial efficiencies which are likely to be delivered from this One-Water approach in the subsequent PBR applications.

vi) Reflecting on (a) and (b) above, how do these efficiencies counteract the impact of the proposed continued ramp-up of the ROE? Are Edmonton rate-payers better off? Why or why not?

EWS RESPONSE:

i) Refer to Section 2 and Section 13.3.1 of the 2022-2024 Drainage PBR Application (link: https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=108191) and an independent report by Grant Thornton on the Drainage Transfer Review (link:

https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=108178) detailing the operating and capital efficiencies achieved by EPCOR since the transfer of Drainage Services from the City of Edmonton.

ii) See response to i) above.

iii) In its 2022-2024 PBR Application for Water and Wastewater Treatment, EWS reflected a reduction of $2.7 million and $0.8 million respectively for corporate costs as a result of the transfer of Drainage. These savings continue to be reflected in our forecasts.

iv) See response to MV-EWS-7-ii for the increase in corporate costs from 2023A to 2024F. Over the 2025-2027 PBR term, corporate cost increases are based on the inflation factor. Note that corporate costs are allocated using different cost allocators that reflect the factor or factors that drive the cost of providing corporate services to WWT and WWC, which includes allocators such as assets, headcount, revenue and net income.

v) Potential areas for future operating, capital and financial efficiencies from a One-Water approach are well documented in industry and EWS is evolving its operations in alignment with these recommended best practices. The 2023 report from the US Water Alliance - "One Water Roadmap: The Sustainable Management of Life's Most Essential Resource" linked below has a comprehensive set of examples of the types of benefits other utilities that have shifted to One Water have achieved.

https://uswateralliance.org/wp-content/uploads/2023/09/Roadmap-FINAL_0.pdf

For the wastewater treatment and collection systems within Edmonton, how these One Water concepts apply to the future capital and operational needs covered in this PBR were also provided in the Wastewater IRP report to Utility committee on January 22, 2024.

https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=209687

vi) Efficiencies provide a partial offset to the impact of the ramp-up of ROE, however, are not related. The ramp-up of the ROE is to bring the equity return to an appropriate level for

the utility. Efficiencies are an ongoing objective incented through the application of the efficiency factor to the annual rate adjustment. See response to UA-EWS-1-vi highlighting the savings and cost avoidances that is expected to benefit ratepayers over multiple PBR terms in the future.

Request: MV-EWS-29

Topic: Other - Various Items

Reference: Proposed Regulatory Accounting Methods

Table 4.1.1 Proposed Regulatory Accounting Practices:

i) Based on EPCOR's proposed treatment for its regulatory accounting practices versus IFRS, please detail the totality of the impacts to the rate revenue requirements.

SaaS Capitalization:

ii) We see that the total estimate for SaaS Computing is approximately $11.9M across Collections and Treatment.

Wouldn't this budget amount require the completion of a business case for capital investment? One is not provided in the business cases. If these costs are to be capitalized, why wasn't a business case prepared?

To what degree are these costs related to setup/customization that justifies why these costs should be capitalized?

To what degree are these costs subscription-based (and hence should be included in operating)?

Leases:

iii) Why has EWS chosen to expense lease payments for assets held under rental and lease agreements where control of the assets for the lease term resides with the lessor?

EWS RESPONSE:

i) EWS' 2025-2027 revenue requirement forecasts are developed in accordance with the regulated basis of accounting described in section 4.1 of the application. Forecast revenue requirements are not developed on an IFRS basis because, as described below,

differences in income measurement, asset recognition and asset valuation make IFRS unsuitable as a basis for developing just and reasonable rates.

Although revenue requirements are not forecast on an IFRS basis, as part of its internal financial reporting processes, EWS compares actual IFRS financial results to regulated financial results. The following comparison of 2022 and 2023 actual IFRS and Regulated financial results for Wastewater Collection illustrates the potential pitfalls of developing revenue requirements on an IFRS basis:

Table MV-EWS-29-i
Comparison of IFRS and Regulated Net Income
($ millions)

		A	B	C	D	E	F
		2022 A			2023 A		
		Regulated	IFRS	Change	Regulated	IFRS	Change
	Income Statement						
1	Revenue	238.6	244.3	(5.7)	251.7	261.3	(7.4)
	Expenses						
2	Operations & maintenance	122.7	120.5	2.2	117.7	125.2	(5.3)
3	Depreciation & amortization	39.8	40.0	(0.1)	42.0	50.1	(8.1)
4	Finance expense	27.9	31.8	(3.9)	35.4	37.9	(2.5)
5	Sub-total	190.5	192.3	(1.8)	195.1	213.1	(15.8)
6	Net income	48.1	52.0	(3.9)	56.6	48.1	8.5
	Balance Sheet						
	Assets						
7	Property, Plant & Equipment	1,800.7	2,076.1	(275.4)	1,993.9	2,254.7	(260.8)
8	Construction work in process	85.5	82.8	2.7	91.6	90.2	1.5
9	Other assets	57.2	57.2	-	42.1	42.1	-
10	Total Assets	1,886.2	2,216.1	(272.7)	2,085.6	2,344.9	(259.3)
	Liabilities & Equity						
11	Liabilities	1,163.5	1,162.5	1.1	1,296.2	1,290.2	6.0
12	Shareholder's equity	779.9	1,053.7	(273.8)	831.5	1,096.8	(265.3)
13	Total Liabilities and Equity	1,943.4	2,216.1	(272.7)	2,127.7	2,387.0	(259.3)

Table MV-EWS-29-i shows that regulated net income (line 6) is $3.9 million less than IFRS net income in 2022 and $8.5 million greater in 2023, whereas the regulated values of property plant and equipment (line 7) are $275.4 million less than the IFRS values in 2022 and $260.8 million less in 2023. The primary causes of these differences include:

a) Regulated revenue is shown net of the consumption deferral, whereas under IFRS revenue is based on the total amounts billed to customers. The regulated basis of accounting recognizes EWS' future obligation to refund the deferral account balance to customers in future periods (i.e. the "matching" principle).

b) Regulated O&M expenses exclude abandonments and SaaS costs, which are capitalized for regulated accounting purposes, whereas these costs are expensed in IFRS. These factors result in greater volatility of O&M expenses under IFRS and, to the extent that SaaS costs provide benefits to customers in future periods, result in inter-generational subsidies.

c) Regulated depreciation expense is slightly less than that IFRS depreciation expense in 2022 and much less in 2023. This reflects differences in asset lives due to the adoption of asset componentization under IFRS (which will be aligned with the recommendations proposed in the depreciation study) as well as differences in practice in the accounting treatment of asset retirements. Under IFRS, assets retired earlier than their assumed useful life lead to a loss being recognized on retirement which leads to higher volatility in depreciation expense. Under regulatory accounting, these losses are recognized over the original life of the asset which creates more stability for customer rates. In addition, there is slightly higher depreciation for IFRS as a result of higher net property, plant and equipment balances (line 7) due to the recognition in the regulatory set of books of contributions from local improvement funds and other grants that were not associated with individual assets. These were not eligible for recognition as contributions in the IFRS set of books, resulting in a higher net IFRS property, plant and equipment value and higher associated depreciation. For regulatory purposes as these funds have already been received from customers it would be unfair to remove them from calculation of rate base which would result in an increase in rate base that would need to be recovered from customers. Regulated finance expenses is less than IFRS because the allowance for funds utilized during construction ("AFUDC") allowed for regulated accounting is greater than interest during construction ("IDC") required for IFRS. While both AFUDC and IDC represent the costs of financing construction work in process ("CWIP"), IDC is based on the assumption that CWIP is financed solely through debt, whereas AFUDC

is based on the assumption that CWIP is financed through both debt and equity, the same basis as property plant and equipment included in rate base. The AFUDC/IDC difference results in slightly higher capital additions for regulated accounting purposes than for IFRS.

ii) As noted in paragraph 74 of the application, the impact on capital expenditures for the 2025-2027 period from capitalizing SaaS costs is approximately $13.3 million. However, these costs relate to approximately 15 different projects over the three-year period and none of these projects meet the business case threshold of $5 million for Wastewater Treatment and $10 million for Wastewater Collection. EWS' proposed capital treatment aligns with the capital treatment for comparable expenses approved by the AUC in Decision 27675-D01-2023.

As noted in paragraph 75 of the Application, if these SaaS costs are classified as operating expenses, EWS' revenue requirement for Wastewater Collection and Wastewater Treatment would increase by $9.9 million and $2.0 million, respectively. Classifying these SaaS costs as operating costs would result in higher than necessary rate increases.

IT project costs for the 2025-2027 application were based on the estimates required to develop appropriate solutions. Where it was considered that the IT solution was likely to result in a cloud solution the project was flagged as a cloud project. All costs related to design, setup and customization and configuration associated with a cloud based product have been identified as part of the cloud related project cost. These also include any subscription costs required to support the project's development up to the point that the solution was ready for use. Any subscription costs after the project is put into service are treated as operating costs (like any other on premise based IT project requiring annual licence fees).

This treatment would be similar to EWS' treatment of design, setup and integrations required for any on premise IT solution, which have previously been capitalized as an intangible asset. The complication with some of these cloud projects is the degree of uncertainty over the final solution. For projects at early stage development, a cloud solution has been considered the most likely solution, but following detailed design, an

on premise solution may be selected. This proposed treatment would enable EWS consistency in application for any IT product which has an ongoing benefit over the product's lifetime.

iii) As noted in paragraph 72 of the application, EWS has not chosen to expense leases, it follows the guidance issued by the Alberta Utilities Commission under Rule 026 to determine appropriate accounting treatment for its regulated financial statements. Rule 026 prescribes entities to follow current regulated practice for deemed finance leases after the introduction of IFRS, i.e. to continue to expense lease payments. Further, EWS' current leases in the 2025 to 2027 application relate to short term vehicle leases which are generally less than one year and would not be deemed to convey ownership as right of use assets in EWS' IFRS financial statements.

Request: MV-EWS-30

Topic: Other - Various Items

Reference: Table 5.0-1 Revenue Requirement

i) There appears to be a calculation error on this table (row 27 total versus sum of rows 18 and 26). The change in revenue requirement for Wastewater Collection appears to be incorrect and indicates a higher revenue requirement over the PBR term. Please clarify these differences, restate the table, and specify if this impacts the requested PBR rates.

EWS RESPONSE:

i) There was an inadvertent transposition error in columns B through E of Table 5.0-1 (rows 19 – 26) for Stormwater operations. See restated table MV-EWS-30-i.

Note that the total revenue requirement for Wastewater Collection shown on row 27 of Table 5.0-1 is correct and remains unchanged, refer to Financial Schedule 3-1 attached to the Application. There are no impacts to the requested PBR rates.

EPCOR Water Services
2025-2027 PBR Application
MV-EWS-30

Table MV-EWS-30-i
Revenue Requirement

	Cost Component	A 2024D	B 2024F	C 2025F	D 2026F	E 2027F
1	Wastewater Treatment					
2	Operations and Maintenance Costs	66.5	73.8	78.1	79.7	81.1
3	Franchise Fees and Property Taxes	10.8	11.6	11.7	12.0	12.5
4	Depreciation and Amortization	26.4	28.2	30.3	32.3	34.0
5	Return on Rate Base Financed by Debt	13.6	13.4	14.9	16.1	18.0
6	Return on Rate Base Financed by Equity	23.2	21.5	26.1	28.2	30.2
7	Revenue Requirement before Revenue Offsets	140.5	148.5	161.1	168.2	175.7
8	Less: Revenue Offsets	(7.3)	(8.8)	(8.9)	(9.1)	(9.3)
9	Wastewater Treatment Revenue Requirement	133.2	139.7	152.2	159.1	166.4
10	Variance	-	6.5	12.5	6.9	7.3
	Wastewater Collection					
	Sanitary Utility					
11	Operations and Maintenance Costs	49.1	53.5	52.0	53.1	54.1
12	Franchise Fees and Property Taxes	12.1	13.8	12.8	12.5	12.6
13	Depreciation and Amortization	21.4	22.5	24.5	26.2	28.3
14	Return on Rate Base Financed by Debt	20.3	24.1	26.8	28.7	31.7
15	Return on Rate Base Financed by Equity	34.5	35.6	43.1	50.2	58.6
16	Revenue Requirement before Revenue Offsets	137.3	149.5	159.1	170.7	185.3
17	Less: Revenue Offsets	(4.6)	(3.6)	(3.6)	(3.7)	(3.5)
18	Sanitary Utility Revenue Requirement	132.7	145.9	155.4	167.0	181.8
	Stormwater Utility					
19	Operations and Maintenance Costs	58.9	53.6	52.1	53.3	54.3
20	Franchise Fees and Property Taxes	1.0	0.7	0.7	0.7	0.8
21	Depreciation and Amortization	29.7	25.7	28.4	31.2	34.2
22	Return on Rate Base Financed by Debt	20.3	23.1	25.6	28.4	32.6
23	Return on Rate Base Financed by Equity	34.9	33.9	41.2	49.8	60.3
24	Revenue Requirement before Revenue Offsets	144.7	137.0	148.0	163.5	182.1
25	Less: Revenue Offsets	(0.7)	(0.7)	(0.7)	(0.7)	(1.0)
26	Stormwater Utility Revenue Requirement	143.9	136.4	147.4	162.8	181.0
27	Wastewater Collection Revenue Requirement	276.7	282.3	302.8	329.8	362.8
28	Variance		5.6	20.5	27.0	33.0

Request: MV-EWS-31

Topic: Other - Various Items

Reference: Rebate Programming

Section 18.4 Return on Rate Base Calculation:

i) What is the Edmonton Economic Recovery Rebate referenced in paragraph number 452? Please describe this rebate program provided across 2022-2024.

General Rebate Programming

ii) For the rebate programs provided by EPCOR, who pays for rebates and incentive programs? How is the effectiveness of EPCOR's portfolio of rebate programs tracked from a cost: benefit perspective?

EWS RESPONSE:

i) The Edmonton Economic Recovery Rebate refers to the return on equity voluntarily foregone by EWS for Wastewater collection in order to reduce costs to ratepayers over the 2022-2024 PBR term. In the 2022-2024 Drainage PBR Application, rather than using the applied for rate of return on equity ("ROE") of 9.95%, EWS proposed to "ramp up" the ROE on Sanitary and Stormwater Utility services, excluding SIRP and CORe, from 5.5% in 2022 to the applied ROE over a 5-year period so that ROE on base services is 5.5% in 2022, 6.6125% in 2023 and 7.725% in 2024. As a result of this rebate, EWS' Wastewater revenue requirement was reduced by a total of $66 million over the 2022-2024 PBR term.

ii) The Backwater valve subsidy program that has been in place since 2004 is funded through stormwater rates charged to all customers. The proposed new Stormwater Rebate programs will also be available to all customers and are also funded through stormwater rates. Both programs support the reduction in flooding risks to properties and are a component of the Stormwater Integrated Resource plan. The Backwater valve subsidy program supports the SIRP – Secure theme of reducing risk of sanitary sewer mains surcharging and flooding basements. The new Stormwater Rebate program supports the

SIRP-Slow theme of retaining stormwater on property during an extreme event and slowly releasing the flow to the existing storm pipe network deferring and /or eliminating the need for new and larger pipes to address increasing storm risks. Since both programs support the deferral of capital improvements that would be paid for by all customers, the rebate programs are funded by rates. Backwater valve subsidies and home flood inspections are tracked in EPCOR's work management system which will be expanded to also track the stormwater rebate program. The effectiveness of the new Stormwater Rebate program will be tracked in this PBR through the new PBR Performance measure for this program.

Request: MV-EWS-32

Topic: Other - Various Items

Reference: Capital Plan Delivery

Preamble: In general, it is perceived that a main cause of historical capital underspends is due to delay in capital projects.

i) Is there a pervasive issue with EPCOR delivering on required capital projects?

ii) Does this create a risk of a backlog of capital projects?

iii) Should the capital ask in this PBR be reduced to factor in all the incomplete projects from the last PBR?

iv) Is there an issue around being able to meet capital renewal requirements that needs to be delved into?

EWS RESPONSE:

i) No, there is no pervasive issue with EPCOR delivering on required capital projects.

As explained in section 7.0 and 15.0 of the Application, during the execution of the capital plan, actual capital expenditures may deviate from the approved amounts due to project advancement or delays caused by aging infrastructure, approval delays, accommodate growth, or to meet City requirements. These deviations are communicated to Edmonton City Council in the Annual PBR Progress Reports.

EWS takes a portfolio approach to its capital plan and manages its capital spend to remain within the approved capital envelope while optimally prioritizing the renewal or replacement of its infrastructure to maintain service quality and to ensure uninterrupted provision of its services to customers. However, at times, changes to individual projects or program are required to meet emerging needs or to address delays caused by external factors. For instance, during the current PBR term, capital spending on SIRP and Flood Mitigation was extended due to the need for additional coordination with the City and

other stakeholders to finalize the dry pond designs, to determine the amenities to be included with dry ponds, and to obtain full approvals from the City to begin excavation in areas that had not previously experienced extreme flooding. The under expenditure on these projects are more than offset by the additional capital investments made by EWS for the Drainage System Rehabilitation and Corrosion and Odour Remediation projects. Overall, during the current PBR term, capital expenditures for Wastewater Treatment and Wastewater Collection are expected to exceed approved amounts. For an overview of EPCOR's robust project management approach, see response to UA-EWS-11-i.

ii) As explained in response to i) above, EWS optimally prioritizes projects and programs during the PBR term to maintain service quality, to ensure uninterrupted provision of services and to meet emerging needs. As a result, at times, certain medium-low risk projects are shifted to facilitate the delivery of urgent and/or emerging high-risk requirements. This nimble approach affords EWS the flexibility to address critical risks as they emerge while making prudent and responsible investment decisions. These deviations are communicated to Edmonton City Council in the Annual PBR Progress Reports.

iii) No, EWS strongly cautions against such an approach as it could negatively impact customers. As noted in Section 4.2.3 of the Application, EWS' proposed capital plan is developed using input from various information sources, PBR specific assessments, and internal and external expert resources, which provides a consolidated and balanced perspective of the capital requirements. The proposed capital plan also takes into account existing projects that are expected to extend into the future. EWS' asset management follows a risk-based approach for determining whether continued maintenance or capital investment is the optimal course of action for an asset. The assessment is based on evaluating each asset's potential to impact employee health and safety, environmental concerns, public health, operating permit requirements, customer and capacity needs, as well as the financial losses that may arise in the event of a failure. Assets with a high risk of failure and high impact/consequence at failure are given priority in EWS' capital plan

as projects or programs to ensure sustained performance. As a result, EWS recommends approval of the proposed capital plan.

iv) See response to i), ii) and iii) above and UA-EWS-11.

Request: MV-EWS-33

Topic: Cost of Capital

Reference: Appendix D

i) Please provide where in form 10-K the U.S Water Utility Proxy Group percentage of debt and equity is found or provide the calculations for the debt and equity breakdown as shown on Schedule 5, page 2 of 2, in Appendix D of the application.

EWS RESPONSE:

i) See MV-EWS-33-i Attachment 1.xlsx.

Request: MV-EWS-34

Topic: Cost of Capital

Reference: Benchmarking Risk Profiles for Wastewater and Stormwater

i) It is acknowledged that the primary basis for the cost of capital consultant's work has been focused on other water utilities across Canada and the United States. Please comment on whether EPCOR has considered different risk profiles for water, wastewater and drainage.

EWS RESPONSE:

i) As an integrated utility, EWS manages its risk across the entire water cycle, similar to other integrated proxy group comparators. The differences in risk between the three operations were not considered separately because the publicly traded proxy groups would have all three operations and the differences in risk profiles would be reflected in the market data.

MV-EWSI-4 Attachment 1

2025 Combined Water Services - Capital Overhead (COH)
Rate to be used for 2025 PBR - Based on Round 2 2024/2025 Budget.
WWC to use Water / Wastewater Treatment methodology
Water/Waste methodology to be updated to include 5223 transfers

			D	E								F	44%			A	B	C = (A-D-E-F) x B	Total Transfer %
Summary by RC		5211 - Labour & Salary	5212 - Labour & Salary Overtime	5213 - Salary Transfers - Overtime	5214 - Salary Allocations	5216 - Other Compensation	5217 - STIP Expense	MANUAL 5223 - Salary-Inter Dept. Operating	5223 - Salary-Inter Dept. Operating	5224 - Salary-Inter Dept. Capital	5225 - Salary-Inter Dept. Commercial	5228 - Other Wages	5245 - Labour & Salary Cost Recovery (Manual Capital True-Up)	5232 - Employee Benefits	5233 - Salary Transfers - Burdens	5240 - Wage/Benefit /Premium Recoveries	Total Salaries	% Capital Total	Capital Overhead $	70%
1	7001	90,441	0	0	0	0	0		0	0	0	0	0	24,437	0	0	114,878	0.00%	0	
2	2365	0	0	0	0	0	0		0	0	12,920	0	0	0	5,628	0	18,548	0.00%	0	
2	3001	262,033	0	0	0	0	0		0	0	0	0	0	70,801	0	0	332,835	0.00%	0	
2	3441	4,161,708	30,000	0	0	0	0		0	0	(12,920)	0	0	1,124,494	(5,628)	0	5,297,654	0.00%	0	
2	3448	2,422,033	0	0	(220,600)	0	0	(1,542,423)	0	(5,000)	(148,000)	0	0	654,433	(65,683)	0	1,094,760	-0.21%	(2,260)	70%
2	3451	620,500	0	0	0	0	0	(393,350)	0	(19,000)	(22,000)	0	0	167,659	(17,601)	0	336,208	-3.06%	(10,295)	70%
6	6021	2,089,081	27,000	0	0	0	0		0	0	0	0	0	564,470	0	0	2,680,551	0.00%	0	
9	6161	747,255	0	0	0	0	0	(401,837)	0	(49,992)	(71,250)	0	0	201,908	(52,049)	0	374,036	-6.69%	(25,023)	70%
15	3001	539,872	0	0	0	0	0		0	0	0	0	0	145,874	0	0	685,746	0.00%	0	
19	3001	2,527,803	15,000	(15,000)	0	0	0	(634,462)	(15,000)	(1,045,000)	(75,000)	0	0	683,012	(487,256)	0	954,098	-41.34%	(394,426)	70%
19	3332	1,529,409	100,000	(100,000)	0	0	0	0	(20,000)	(1,285,000)	(500)	0	0	413,246	(560,451)	0	76,705	-84.02%	(64,447)	85%
19	3333	0	0	0	0	0	0		75,000	0	0	0	0	0	32,198	0	107,198	0.00%	0	
19	9456	936,118	0	0	0	0	0	(81,783)	10,000	(580,000)	(3,500)	0	0	252,939	(246,204)	0	287,571	-61.96%	(178,173)	70%
20	3001	1,629,395	200,000	(200,000)	0	0	0	0	(90,000)	(1,084,600)	(2,500)	0	0	440,262	(505,329)	0	387,228	-66.56%	(257,757)	72%
21	3001	546,237	14,400	(11,820)	0	0	0	(253,966)	(56,400)	(72,000)	0	0	0	147,593	(66,000)	0	248,044	-13.18%	(32,355)	70%
21	4315	771,499	42,000	4,500	0	0	0	(521,529)	25,280	(38,400)	(5,400)	0	0	208,459	(7,951)	0	478,458	-4.98%	(21,500)	70%
21	4409	5,977,408	1,074,693	(870,000)	0	0	0	(630,035)	(1,170,650)	(2,320,800)	(62,700)	0	0	1,615,096	(1,525,797)	0	2,087,215	-38.83%	(730,911)	70%
21	4410	0	0	26,400	0	0	0		147,415	0	0	0	0	0	69,996	0	243,811	0.00%	0	
21	4411	0	0	7,200	0	0	0		25,395	0	0	0	0	0	10,902	0	43,497	0.00%	0	
21	4413	0	0	40,200	0	0	0		132,585	0	0	0	0	0	56,004	0	228,789	0.00%	0	
21	4415	0	0	360,000	0	0	0		660,907	0	0	0	0	0	284,580	0	1,305,487	0.00%	0	
21	4416	0	0	26,400	0	0	0		84,985	0	0	0	0	0	40,140	0	151,525	0.00%	0	
21	4417	0	0	15,600	0	0	0		38,760	0	0	0	0	0	16,860	0	71,220	0.00%	0	
21	4418	0	0	1,740	0	0	0		12,180	0	0	0	0	0	4,560	0	18,480	0.00%	0	
21	4420	0	0	3,300	0	0	0		62,720	0	0	0	0	0	25,800	0	91,820	0.00%	0	
25	3001	806,489	6,000	0	(110,000)	0	0		0	0	0	0	0	217,913	0	0	920,402	0.00%	0	
25	4330	1,099,002	75,000	0	(737,226)	0	0		0	0	0	0	0	296,950	0	0	733,726	0.00%	0	
25	9300	1,110,283	10,000	0	0	0	0		0	0	0	0	0	299,998	0	0	1,420,281	0.00%	0	
25	9456	1,315,582	0	0	0	0	0	(613,649)	0	(307,259)	0	0	0	355,470	(131,906)	0	618,239	-23.36%	(144,392)	70%
26	3312	1,223,030	0	0	0	0	0		0	0	0	0	0	330,463	0	0	1,553,493	0.00%	0	
29	3001	394,991	0	0	0	0	0	(3,217)	0	(273,277)	0	0	0	106,727	(117,318)	0	107,906	-69.19%	(74,655)	70%
30	3005	3,766,350	302,000	0	0	0	0	(2,448,127)	0	(188,318)	0	0	0	1,017,668	(80,845)	0	2,368,728	-5.00%	(103,337)	70%
30	3006	2,718,860	216,000	0	0	0	0	(1,767,301)	0	(135,901)	0	0	0	734,636	(58,342)	0	1,707,952	-5.00%	(74,575)	70%
31	3601	1,592,728	1,040	1,040	0	0	0	(727,943)	13,525	(400,492)	0	0	0	430,355	(166,125)	0	744,129	-25.15%	(186,588)	70%
35	3860	1,847,968	35,000	0	0	0	0	(71,183)	0	(1,222,394)	0	0	0	499,321	(524,774)	0	563,938	-66.15%	(349,882)	70%
39	3001	266,345	0	0	0	0	0		(6,680)	0	(23,464)	0	0	71,967	(12,941)	0	295,227	0.00%	0	
39	4005	653,622	0	0	0	0	0		(25,320)	0	(57,236)	0	0	176,609	(35,441)	0	712,233	0.00%	0	
40	4001	4,225,575	61,988	(26,153)	0	0	0	(1,445,965)	(886,658)	(624,638)	(641)	0	0	1,141,750	(617,448)	0	1,827,810	-14.78%	(264,895)	70%
40	4004	0	0	15,406	0	0	0		481,650	0	0	0	0	0	216,513	0	713,569	0.00%	0	
40	4005	0	0	3,815	0	0	0		466,505	0	0	0	0	0	209,226	0	679,546	0.00%	0	
40	4011	2,688,718	99,693	(52,591)	0	0	0	(349,146)	(1,214,791)	(313,419)	(4,747)	0	0	726,492	(660,826)	0	919,383	-11.66%	(101,680)	70%
40	4014	0	0	13,337	0	0	0		418,064	0	0	0	0	0	187,944	0	619,345	0.00%	0	
40	4015	0	0	4,577	0	0	0		339,580	0	0	0	0	0	152,673	0	496,830	0.00%	0	
40	4024	0	0	4,860	0	0	0		165,108	0	0	0	0	0	74,242	0	244,210	0.00%	0	
40	4025	0	0	1,007	0	0	0		143,402	0	0	0	0	0	64,436	0	208,845	0.00%	0	
41	4001	7,127,848	440,000	(255,000)	0	0	0	(1,842,549)	(2,310,000)	(836,945)	0	0	0	1,925,945	(1,350,983)	0	2,898,316	-11.74%	(318,595)	70%
41	4004	0	0	49,000	0	0	0		1,190,000	0	0	0	0	0	510,867	0	1,749,867	0.00%	0	
41	4005	0	0	27,000	0	0	0		870,000	0	0	0	0	0	373,491	0	1,270,491	0.00%	0	
42	3005	3,948,274	180,000	(9,180)	0	0	0	(2,530,741)	35,000	(263,050)	(5,000)	0	0	1,066,824	(79,894)	0	2,342,232	-6.66%	(144,668)	70%
42	3010	109,117	8,000	3,000	0	0	0		75,000	0	0	0	0	29,483	33,000	0	257,601	0.00%	0	
42	3015	613,307	30,000	2,500	0	0	0	(476,002)	83,000	(36,313)	0	0	0	165,716	27,367	0	409,575	-5.92%	(22,326)	70%

MV-EWSI-4 Attachment 1

42	3020	126,360	6,000	1,000	0	0	0		57,686	0	0	0	0	34,143	24,805	0	249,994	0.00%	0	
43	3601	2,328,787	156,928	(156,928)	0	0	0	0	0	(1,693,221)	0	0	0	629,238	(726,900)	0	537,904	-72.71%	(391,101)	73%
44	3001	220,168	300	0	0	0	0		0	0	0	0	0	59,489	0	0	279,957	0.00%	0	
46	3601	548,513	9,500	0	0	0	0	(182,885)	0	(201,074)	0	0	0	148,208	(86,321)	0	235,941	-36.66%	(83,009)	70%
47	3601	2,139,229	1,000	0	0	0	0	(1,125,815)	6,000	(365,646)	(12,000)	0	0	578,020	(159,547)	0	1,061,241	-17.09%	(181,221)	70%
49	3001	446,324	0	0	0	0	0		0	0	0	0	0	120,597	0	0	566,920	0.00%	0	
50	3001	631,218	3,996	(2,004)	0	0	0	(383,856)	(30,000)	(27,996)	0	0	0	170,555	(24,898)	0	337,015	-4.44%	(14,859)	70%
50	4335	1,181,681	45,000	(7,500)	0	0	0	(100,153)	(190,000)	(537,024)	0	0	0	319,290	(312,111)	0	399,183	-45.45%	(164,370)	70%
50	4409	1,051,550	210,000	(100,000)	0	0	0	0	(655,000)	(195,000)	0	0	0	284,129	(364,905)	0	230,774	-18.54%	(22,396)	81%
50	4412	0	0	2,500	0	0	0		195,000	0	0	0	0	0	83,714	0	281,214	0.00%	0	
50	4413	0	0	20,000	0	0	0		263,000	0	0	0	0	0	112,906	0	395,906	0.00%	0	
50	4414	0	0	60,000	0	0	0		670,000	0	0	0	0	0	287,631	0	1,017,631	0.00%	0	
50	4415	0	0	0	0	0	0		1,000,000	0	0	0	0	0	429,300	0	1,429,300	0.00%	0	
50	4418	0	0	10,000	0	0	0		262,000	0	0	0	0	0	123,000	0	395,000	0.00%	0	
50	4436	0	0	0	0	0	0		32,000	0	0	0	0	0	15,000	0	47,000	0.00%	0	
50	4515	1,124,847	60,000	(53,000)	0	0	0	(112,393)	(625,000)	(25,000)	(25,000)	0	0	303,934	(289,778)	0	358,610	-2.22%	(7,815)	70%
50	4570	1,405,352	200,000	0	0	0	0		(700,000)	0	0	0	0	379,726	(300,510)	0	984,568	0.00%	0	
50	4580	859,209	60,000	(49,000)	0	0	0	(347,447)	(177,000)	(77,000)	0	0	0	232,158	(109,042)	0	391,879	-8.96%	(34,133)	70%
55	3001	2,802,355	29,800	(25,000)	0	0	0	(1,342,807)	0	(500,842)	(118,000)	0	0	757,196	(265,669)	0	1,337,034	-17.87%	(238,099)	70%
66	2338	0	0	21,814	0	0	0		0	0	174,600	0	0	0	74,956	0	271,370	0.00%	0	
134	2310	0	0	0	0	0	0		0	0	105,650	0	0	0	45,356	0	151,006	0.00%	0	
211	7001	0	0	0	(217,441)	611,199	4,492,760		0	0	0	3,140,000	(552,543)	0	0	0	7,473,975	-27.39%	(1,398,099)	
233	7134	630,318	11,517	0	0	0	0		0	0	0	(15,240)	0	170,312	0	0	796,907	0.00%	0	
261	3575	417,077	0	0	(213,333)	0	0		0	0	0	0	0	112,694	0	0	316,438	0.00%	0	
261	3580	1,589,210	16,000	0	0	0	0		(22,152)	0	0	0	(815,418)	429,404	(9,510)	0	1,187,534	0.00%	0	
261	3584	1,397,262	0	0	0	0	0		0	0	0	0	(667,126)	377,540	0	0	1,107,676	0.00%	0	
261	3591	0	0	0	0	0	0		108,225	0	0	(7,734)	0	0	46,461	0	146,952	0.00%	0	
261	4001	0	90,000	(90,000)	0	0	0		3,293,458	0	0	(235,367)	0	0	1,413,882	0	4,471,973	0.00%	0	
311	7001	1,218,942	0	0	0	0	0		0	0	0	(38,088)	0	329,358	0	(300,000)	1,210,212	0.00%	0	
546	3312	1,449,836	0	0	0	0	0		0	0	0	(46,250)	(920,791)	391,746	0	0	874,542	0.00%	0	
547	3781	2,142,569	5,760	0	0	0	0		0	0	0	(70,725)	0	578,922	0	0	2,656,526	0.00%	0	
610	7001	455,276	0	0	0	0	0		0	0	0	(28,950)	0	123,015	0	0	549,342	0.00%	0	
611	0	0	0	0	0	255,402	3,839,419		0	0	0	862,449	(1,343,797)	0	0	0	3,613,473	-27.39%	(1,121,671)	
611	3860	344,768	0	0	0	0	0		0	0	0	(53)	(437,924)	93,156	0	0	(53)	0.00%	0	
611	6021	1,437,085	25,000	0	0	0	0		0	0	0	(50,880)	(836,629)	388,300	0	0	962,876	0.00%	0	
615	3001	5,600,272	0	0	0	0	0	(3,136,152)	0	(784,038)	0	(300,352)	0	1,513,194	(336,588)	0	2,556,336	-14.00%	(357,887)	70%
619	3001	879,773	0	0	0	0	0		0	0	0	(37,222)	(374,448)	237,715	0	0	705,818	0.00%	0	
620	3001	217,875	0	0	0	0	0	(87,150)	0	(65,362)	0	(9,201)	0	58,870	(28,060)	0	86,971	-30.00%	(26,091)	70%
620	4001	8,561,266	0	0	0	0	0	0	(3,401,683)	(4,060,858)	0	(11,938)	0	2,313,254	(3,203,669)	0	196,373	-47.43%	(93,145)	87%
620	4471	6,785,324	1,634,724	(1,634,724)	0	0	0	(67,853)	0	(4,681,874)	0	(39,609)	(1,159,589)	1,833,395	(2,009,928)	0	659,866	-69.00%	(1,255,424)	70%
620	4472	4,747,763	1,719,157	(1,719,157)	0	0	0	(47,478)	0	(3,275,956)	0	(11,698)	(1,131,833)	1,282,846	(1,406,368)	0	157,276	-69.00%	(889,485)	70%
630	3516	1,385,506	50,004	(45,000)	0	0	0	(207,826)	0	(762,028)	0	(34,013)	0	374,364	(327,139)	0	433,868	-55.00%	(235,875)	70%
630	3601	4,903,587	0	0	0	0	0	(833,610)	0	(2,598,901)	0	(126,414)	0	1,324,949	(1,115,708)	0	1,553,903	-53.00%	(823,569)	70%
630	3860	5,971,230	60,000	(39,996)	0	0	0	0	0	(4,060,436)	0	(21,612)	(1,384,243)	1,613,426	(1,743,145)	0	395,224	-68.00%	(1,196,435)	68%
635	3364	0	0	0	0	0	0		30,960	0	0	(2,446)	0	0	11,769	0	40,283	0.00%	0	
635	3431	5,005,456	40,800	0	0	0	0	(3,253,619)	0	(250,200)	0	(308,092)	0	1,352,474	0	0	2,586,819	-5.00%	(127,264)	70%
635	3432	6,013,950	43,000	0	0	0	0	(4,141,365)	0	(68,400)	0	(380,110)	0	1,624,969	(29,364)	0	3,062,680	-1.14%	(34,345)	70%
635	4305	10,200,434	881,373	0	0	0	0	(6,054,052)	(86,252)	(1,000,000)	0	(615,192)	0	2,756,157	(466,328)	0	5,616,141	-9.80%	(464,173)	70%
635	4310	6,975,031	288,000	0	0	0	0	(4,609,270)	75,500	(348,752)	0	(439,644)	0	1,884,653	(117,307)	0	3,708,212	-5.00%	(171,011)	70%
646	7001	863,349	0	0	(549,538)	0	0		0	0	0	0	0	233,277	0	0	547,088	0.00%	0	
727	7304	1,042,645	0	0	0	0	0		0	0	0	(66,358)	0	281,723	0	0	1,258,010	0.00%	0	
743	7001	1,161,875	0	0	(739,132)	0	0		0	0	0	0	0	313,939	0	0	736,682	0.00%	0	
	Total	156,622,152	8,615,673	(4,735,856)	(2,787,270)	866,601	8,332,180	(42,768,938)	(132,696)	(36,681,407)	(356,688)	1,105,263	(9,624,340)	42,319,306	(15,744,382)	(300,000)	104,729,598	-27.39%	(12,834,217)	
tive System - 2025 Budget		156,622,152	8,615,673	(4,735,856)	(2,787,270)	866,601	8,332,180	0	(132,696)	(36,681,407)	(356,688)	1,105,263	(9,624,340)	42,319,306	(15,744,382)	(300,000)	147,498,536			
	Difference	-	-	-	-	-	-	(42,768,938)	0.00	-	-	-	-	-	-	-	(42,768,938)			

			Assumptions
		Water/WWWT PMO	(265,704) 90% chargeable
		WWC PMO	(387,082) 90% chargeable
5632 - Benefits	532,290	Water/WWT Supply chain	(688,769)
5996 - Sectional Overhead	(199,111)	WWC Supply chain	(1,482,544)
5998 - Capital Overhead	(11,837,681)	Water / WWT Capital Finance/CGR	(1,051,778)
	93,225,096	WWC Capital Finance/CGR	(1,274,553)
Staff Costs & Employee Benefits Expense per I/S	135,994,034	Water / WWT Health & Safety	(150,000)
Difference	42,768,938	WWC Health & Safety	(920,791)
		COH Costs to be Capitalized	(19,055,437)
		COH rate	52%

COH pool for PBR Application	
Drainage	(10,884,808)
Water	(6,034,593)
Wastewater	(2,136,036)
	(19,055,437)

Allocations - no direct charges to capital

Supply Chain - Water Wastewater Treatment

	Budget Labour	% of Time = Capital	COH Pool
Stores / Wareh	717,979	27%	196,367
Contract Mana	983,281	33%	327,728
Purchasing / Pr	557,714	19%	103,456
Other Manager	220,363	28%	61,218
	2,479,338	28%	688,769

Supply Chain - Wastewater Collection

	Budget Labour	% of Time = Capital	COH Pool
Inventory Man	1,087,224	75%	815,418
Contract Mana	889,501	75%	667,126
	1,976,725	75%	1,482,544

Water / Wastewater Capital Finance (including Capital Governance & Reporting

	Budget Labour	% of Time = Capital	COH Pool
5211 - Salary	780,110	100%	780,110
5232 - Benefits	210,786	100%	210,786
5217 - STIP	60,882	100%	60,882
	1,051,778	100%	1,051,778

Wastewater Collection Capital Finance (including Capital Governance & Reporting

	Budget Labour	% of Time = Capital	COH Pool
5211 - Salary	1,003,427	100%	1,003,427
5232 - Benefits	271,126	100%	271,126
	1,274,553	100%	1,274,553

Water / Wastewater Health & Safety

	Budget Labour	% of Time = Capital	COH Pool
Salary & Benefit	200,000	75%	150,000

Wastewater Collection Health & Safety

	Budget Labour	% of Time = Capital	COH Pool
5211 - Salary	1,449,836	50%	724,918
5232 - Benefits	391,746	50%	195,873
	1,841,582	50%	920,791

MV-EWSI-6 Attachment 1
EPCOR Water Services
Integrated Operations Cost Allocations
2025-2027 PBR Application
2024 Forecast

		2024 F Allocators				2024F Costs			
		Water	WWT	WWC	Total	Water	WWT	WWC	Total
Regulatory and Business Planning	Composite	37%	14%	49%	100%	1.1	0.4	1.4	2.9
One Water Planning	Composite	37%	14%	49%	100%	2.4	0.9	3.2	6.6
Engineering	Capitalized staff costs	30%	37%	33%	100%	3.0	3.7	3.3	10.1
QA and Environment	Staff time	67%	33%	0%	100%	7.7	3.8	-	11.4
Project Management	Capitalized staff costs	44%	10%	46%	100%	1.7	0.4	1.8	3.8
Controls and Automation	Allocated equally	33%	33%	33%	100%	1.7	1.6	1.8	5.1
Customer Service	CS Composite	50%	15%	35%	100%	1.4	0.4	1.0	2.8
Development and Infill	Composite	37%	14%	49%	100%	0.9	0.3	1.1	2.3
Facilities	Aurum Headcount	25%	0%	75%	100%	0.9	-	2.7	3.6
						20.7	11.6	16.3	48.6

	2024D Costs			
	Water	WWT	WWC	Total
Regulatory and Business Planning	1.0	0.5	1.4	2.9
One Water Planning	-	-	6.9	6.9
Engineering	2.2	2.4	2.3	7.0
QA and Environment	7.0	4.5	-	11.5
Project Management	3.7	0.9	2.4	7.1
Controls and Automation	1.5	1.8	-	3.3
Customer Service	1.6	-	-	1.6
Development and Infill	1.8	-	-	1.8
Facilities	-	-	3.6	3.6
	18.9	10.1	16.6	45.6

MV-EWSI-6 Attachment 1
EPCOR Water Services
Integrated Operations Allocation Factors
2025-2027 PBR Application
2024 Forecast

	Aurum Headcount		PM Split		Engineering Split		QA Allocations	
	Actual	%	Actual	%	Actual	%	Actual	%
WTPs & WDT	147	25%	2,570	44%	2,206	30%	7,618	67%
WWTP	-	0%	585	10%	2,772	37%	3,745	33%
WWC	443	75%	2,651	46%	2,479	33%	-	
Total	590	100%	5,805	100%	7,457	100%	11,363	100%

	Actual			Percentage			
Multifactor	PPE	Revenues	HC	PPE	Revenues	HC	Average
WTPs & WDT	2,442	319	262	28%	39%	43%	37%
WWTP	591	152	104	7%	19%	17%	14%
WWC	5,581	347	242	65%	42%	40%	49%
	8,614	817	608	100%	100%	100%	100%

	Dispatch		Meter Reading		Total	
Customer Service Composite	Actual	%	Actual	%	Actual	%
WTPs & WDT	1,377	50%	3,448	50%	4,825	50%
WWTP	-	0%	1,468	21%	1,468	15%
WWC	1,377	50%	2,034	29%	3,411	35%
Total	2,754	100%	6,950	100%	9,704	100%

MV-EWSI-6 Attachment 1
EPCOR Water Services
Shared Service Cost Allocations
2025-2027 PBR Application
2024 Forecast

		2024 F Allocators				2024F Costs			
Service	Cost Allocator	Water	WWT	WWC	Total	Water	WWT	WWC	Total
Information Services	Headcount	36%	16%	48%	100%	3.3	1.5	4.4	9.2
Executive	Composite	37%	14%	49%	100%	3.1	1.2	4.1	8.4
Controller	Composite	37%	14%	49%	100%	2.4	1.7	1.9	6.0
PGA	Composite	37%	14%	49%	100%	1.3	0.5	1.8	3.6
HSE	Headcount	36%	16%	48%	100%	1.6	0.7	2.1	4.3
Technical Training	Headcount	36%	16%	48%	100%	1.1	0.5	1.4	2.9
HR	Headcount	36%	16%	48%	100%	0.4	0.2	0.6	1.2
Supply Chain Management	Composite - SC	47%	25%	28%	100%	2.7	1.5	1.6	5.8
STIP/MTIP	Headcount	36%	16%	48%	100%	3.3	1.4	4.3	9.0
Total						19.3	9.2	22.2	50.6

0

	2024D Costs			
	Water	WWT	WWC	Total
Information Services	3.1	0.8	4.0	7.9
Executive	3.9	0.3	3.4	7.7
Controller	1.7	0.7	3.0	5.4
P&GA	1.2	0.3	2.5	4.0
HSE	1.3	0.5	2.4	4.2
Technical Training	1.0	0.4	1.7	3.1
HR	0.3	0.1	0.8	1.2
Supply Chain Management	2.0	0.8	1.9	4.7
Incentive and Other Compensation	3.5	1.4	3.7	8.6
Total	18.1	5.3	23.3	46.7

MV-EWSI-6 Attachment 1
EPCOR Water Services
Shared Service Cost Allocations
Headcount allocator calculation
2025-2027 PBR Application
2024 Forecast

	Headcount Actual	%	Share of IO	IO allocated	Total
Water Treatment Plants	262	21%	30%	15%	36%
Wastewater Treatment Plants	104	8%	15%	8%	16%
Wastewater Collection	242	19%	55%	28%	48%
Integrated operations and construction	642	51%			
	1250	100%	100%	51%	100%

			Allocate base on IO allocators			Weighted avg base on IO allocators			
Integrated ops and construction weighting			Water	WWT	WWC	Water	WWT	WWC	
Construction	201	16%	0%	0%	100%	0.0%	0.0%	16.1%	
Regulatory and Business Planning	14	1%	37%	14%	49%	0.4%	0.2%	0.5%	
One Water Planning	46	4%	37%	14%	49%	1.4%	0.5%	1.8%	
Engineering	86	7%	30%	37%	33%	2.0%	2.6%	2.3%	
QA and Environment	66	5%	67%	33%	0%	3.5%	1.7%	0.0%	
Project Management	95	8%	44%	10%	46%	3.4%	0.8%	3.5%	
Controls and Automation	28	2%	33%	33%	33%	0.7%	0.7%	0.7%	
Customer Service	72	6%	50%	15%	35%	2.9%	0.9%	2.0%	
Development and Infill	30	2%	37%	14%	49%	0.9%	0.3%	1.2%	
Facilities	4	0%	25%	0%	75%	0.1%	0.0%	0.2%	
	642	51%							
						15%	8%	28%	51%
						30%	15%	55%	

MV-EWSI-6 Attachment 1
EPCOR Water Services
Shared Service Cost Allocations
Supply Chain allocator calculation
2025-2027 PBR Application
2024 Forecast

	Costs based on POs/Spend				
	Actual	%	Share of IO	IO allocated	Total
Water Treatment Plants	2,376	41%	28%	6%	47%
Wastewater Treatment Plants	1,298	22%	13%	3%	25%
Wastewater Collection	816	14%	59%	14%	28%
Integrated operations and construction	1,348	23%			
	5,838	100%	100%	23%	100%

			Allocate base on IO allocators			Weighted avg base on IO allocators			
Integrated ops and construction weighting			Water	WWT	WWC	Water	WWT	WWC	
Construction	597	10%	0%	0%	100%	0.0%	0.0%	10.2%	
Regulatory and Business Planning	16	0%	37%	14%	49%	0.1%	0.0%	0.1%	
One Water Planning	42	1%	37%	14%	49%	0.3%	0.1%	0.4%	
Engineering	78	1%	30%	37%	33%	0.4%	0.5%	0.4%	
QA and Environment	298	5%	67%	33%	0%	3.4%	1.7%	0.0%	
Project Management	85	1%	44%	10%	46%	0.6%	0.1%	0.7%	
Controls and Automation	38	1%	33%	33%	33%	0.2%	0.2%	0.2%	
Customer Service	99	2%	50%	15%	35%	0.8%	0.3%	0.6%	
Development and Infill	42	1%	37%	14%	49%	0.3%	0.1%	0.3%	
Facilities	55	1%	25%	0%	75%	0.2%	0.0%	0.7%	
	1,348	23%							
						6%	3%	14%	23%
						28%	13%	59%	

MV-EWS-7 Attachment 1
Corporate Costs Allocated to EWS
(in Millions)
Includes only CAM, AUF, and ROA (no direct costs)

	2023A	2022-2024/2026D	2024D	2024F
Water Treatment	14.06		14.35	16.05
Wastewater Treatement	5.68		5.52	6.21
Wastewater Collection	18.89		17.21	20.15
Total EWS	38.62		37.08	42.41
Total Corporate	97.63			102.90
Water Treatment	14.40%	15.62%	15.62%	15.60%
Wastewater Treatement	5.81%	6.01%	6.01%	6.03%
Wastewater Collection	19.35%	18.78%	18.78%	19.58%
Total EWS	39.56%	40.41%	40.41%	41.21%

Total corporate costs increased by $5.27 million from 2023A to 2024F primarily due to higher corporate information services costs related to initiatives such as Service Management, Service Desk Transition and the Corporate website.

Report to Utility Committee
June 24, 2024

EPCOR WATER SERVICES
2025-2027 PBR Application

Stormwater Update Report

TABLE OF CONTENTS

1.0 Stormwater Charges – Background

1. Edmonton's Stormwater collection system is a complex network of runoff capture, storage and conveyance that includes thousands of kilometers of above and underground infrastructure (catchbasins, ditches, culverts and pipes) along with hundreds of strategically placed stormwater management facilities (wet and dry ponds). The system not only collects and transfers stormwater, but also mitigates against flooding and improves the quality of flows that are returned to the North Saskatchewan River and other local water bodies.

2. The cost to implement, operate and maintain the Stormwater system is a shared responsibility and is distributed across properties in Edmonton. Like all of EPCOR's utility rates, the Stormwater rates are based on a cost-of-service model that is reviewed through the PBR process and approved by City Council. Application of stormwater rates are also referenced in the EPCOR Wastewater Services Bylaw 19627, which states that all properties that either directly or indirectly access EPCOR's stormwater system should be charged for stormwater services.

3. Stormwater charges are intended to cover the cost to provide Stormwater services across the City of Edmonton and the charges for each individual property are calculated based on the following formula:

Monthly Stormwater Charge =

Area X Runoff Coefficient X Development Intensity X Stormwater Rate

- Area – the size of each individual property in square meters.
- Runoff Coefficient – is a measure of how fast water runs off a property. It is assessed for each zone based on an engineering review of the runoff for a typical customer within that zone. The zone for each property is determined and assigned by the City.
- Development Intensity (I factor) – is an adjustment of the runoff coefficient based on specific property characteristics. The I factor is 1.0 for all customers unless a customer qualifies for an adjustment through the "Intensity Adjustment Program". This program is available to commercial and multi-residential properties. The objective of the program is to incentivize customers to reduce runoff by adding stormwater infrastructure to their properties.

- Stormwater Rate – is the monthly stormwater charge per square meter, which is determined by EPCOR for each PBR term and approved by City Council through the PBR proceeding.

2.0 Customer Stormwater Bill Impacts in the 2025-2027 Wastewater Application

4. In addition to the general rate increases proposed for the 2025-2027 PBR term, there are three other factors that will result in Stormwater bill impacts to customers:

- Impact to Stormwater rates from Cost of Service Study recommendations (allocation of costs between the sanitary system and the stormwater system);
- Updates to runoff coefficients to align with City of Edmonton zoning changes in 2024; and
- Implementation of billing for Stormwater services for customers that are currently unbilled.

2.1 Impact to Stormwater Rates from Cost of Service Study Recommendations

5. An independent cost-of-service study helped inform EPCOR's wastewater collection and treatment PBR application. A copy of the report is included as Appendix K-2 of the PBR application. The primary objective of this analysis is to support EWS' established practice of setting cost-based rates by determining how costs should be allocated between the wastewater collection (sanitary) and stormwater system. The conclusions from this study indicate that sanitary rates should decrease and stormwater rates increase so that the revenues from the rates charged to customers result in revenues that more closely align with the cost of providing sanitary and stormwater services. The proposed changes result in revenues for each utility service that are within 5% of their cost of service, which is reasonable. Without making a change to reflect the cost allocation between sanitary and stormwater costs, there would be an overcollection of revenues for sanitary services of approximately 16% and an undercollection of stormwater revenues of approximately 16%. The proposed changes are largely offsetting for most customers. However, customers who have large properties with low water use will see their overall wastewater bill increase, which more accurately reflects the stormwater costs to service their properties.

2.2 Updates to Runoff Coefficients to Align with City of Edmonton Zoning Changes

6. With the approval of the City's Edmonton Zoning Bylaw 20001, runoff coefficients have been updated to align with the new zones. EPCOR undertook an engineering study to update the runoff coefficients as part of its Design Standards Review. EPCOR has modernized its design standards for water, sanitary and storm systems in order to ensure prudently built infrastructure that aligns with the City's new zoning and supports the City's plans for growth and densification. Based on this analysis, the updated runoff coefficients reflect the appropriate average runoff for a property within that zone.

7. Runoff coefficients for the new zones are reflected in the proposed Wastewater Services Bylaw 20865, which is included in the PBR application, and are compared with runoff coefficients for the original zones in the table below. These new runoff coefficients will be applied to city of Edmonton properties for determining their Stormwater charges effective April 1, 2025.

Table 2.2-1
Stormwater Runoff Coefficients – New and Original Zones

Runoff Coefficient	Original Zone	New Zone
0.1	AG	
0.2	A, RR	A, AG, NA, RR, RVSA
0.3	AP, US (schools)	PS, PSN
0.4		FD
0.5	RF1-4, RMH, IH, MA, AGU	AJ, RS/RSF >450m^2
0.55		DC <700m^2, PU, RM/RSM >450m^2, RS/RSF <450m^2, UF
0.6		DC >700m^2, RL, RM/RSM <450m^2, UI
0.65	RSL, RF5, RF6, RA7, RPL	CN, MUN
0.75	RA8, US (except schools), PU	BE, CB, CG, IH, IM, MU
0.9	RA9, CNC, CSC, CB1, CHY, CO, IB, IM, AGI, DC	
0.95	CB2	

8. EWS is incorporating differentiated runoff coefficients for certain zones to recognize that the runoff for a typical property in these zones differ by area of the property. Specifically, runoff coefficients differ between residential properties less than 450 m^2 and properties greater than 450 m^2 to recognize the differences in the ratio of building size and natural areas between smaller and larger lots. DC zones are also divided into properties less than 700 m^2 and properties greater than 700 m^2 to recognize that smaller properties with a DC zone classification are usually

residential properties with lower typical runoff compared to larger (non-residential) properties with a DC zone classification.

9. Although these changes result in lower runoff coefficients for some properties and higher runoff coefficients for others, the monthly bill impacts, both positive and negative, tend to be low. However, a small number of properties will see a significant bill increase. These increases are primarily due to previous incorrect zoning classifications of a property (i.e., original agricultural zoning of the property wasn't updated in the billing system following development) or updates to reflect the appropriate average run-off coefficient factor for a particular zone (i.e., heavy industrial zone). For these properties with more significant bill impacts, EPCOR will be engaging and informing them of their bill impacts and potential options to mitigate the increases.

10. Options available for multi-residential and commercial properties to mitigate their bill increases include:

- if a customer can demonstrate their property's runoff coefficient is materially different from that of a typical property within the same zone, a customer can request an adjustment to their runoff coefficient through EPCOR's Intensity Adjustment Program.

- if a property's runoff coefficient is appropriate based on the zone, customers can still reduce their runoff coefficient by taking advantage of EPCOR's new Stormwater Rebate Program. Under this program, a customer can install Low Impact Development installations on their property to capture stormwater and reduce runoff. By doing this they can decrease their runoff coefficient and reduce their stormwater bill.

2.3 Implementation of Billing for Stormwater Services that are Currently Unbilled

11. In accordance with the EPCOR Drainage and Wastewater Treatment Bylaw, any property that receives stormwater services is a customer who should be billed for this service. To ensure fair and equitable charges to all customers receiving stormwater services within Edmonton, EPCOR is aiming to ensure there is consistent application of the stormwater utility charges. All properties in Edmonton that have the potential for stormwater or snowmelt to flow off of the property and into EPCOR's stormwater system should be charged for Stormwater services. Enrollment of all properties who receive stormwater services into billing results in a more appropriate and fair allocation of the cost to be recovered through EPCOR's rates.

12. For the most part, the Stormwater Utility has only been billing for stormwater services to properties that also have a sanitary service account with EPCOR. Following the transfer of the

Drainage utility to EPCOR in 2017, EPCOR began an audit of the stormwater utility that revealed some exceptions to this. Certain sanitary customers in account were not being billed for stormwater services including some of the City's properties and most of the privately owned cemeteries and golf courses.

13. EPCOR had planned to begin billing for these properties in 2022 as contemplated in its 2022-2024 PBR application. In 2021, EPCOR notified the City of the estimated bill increase for 2022 and began notifying impacted customers, including privately owned cemeteries. However, during the public hearing based on Councillor feedback, for the 2022-2024 PBR, EPCOR adjusted its approach and postponed bringing these properties into billing until the next PBR term in 2025 to provide more sufficient notification.

14. To ensure all properties who are receiving stormwater services pay for their share of the costs to provide those services, EPCOR is implementing a phased approach, which will result in an allocation of the costs to provide stormwater services to these unbilled properties. The first phase will commence on April 1, 2025, when EPCOR will introduce full billing of all properties in Edmonton that currently have water or sanitary service accounts. This includes:

- Certain City properties (recreation centres, community leagues, attractions, etc.) that are currently not receiving a stormwater bill. Including these properties will result in $1.7 million in additional stormwater billing to the City beginning in 2025. This bill increase will be partially offset by decreases to the sanitary bill.
- Privately owned cemeteries that currently are not receiving a stormwater bill.
- Privately owned golf courses are not receiving a stormwater bill.

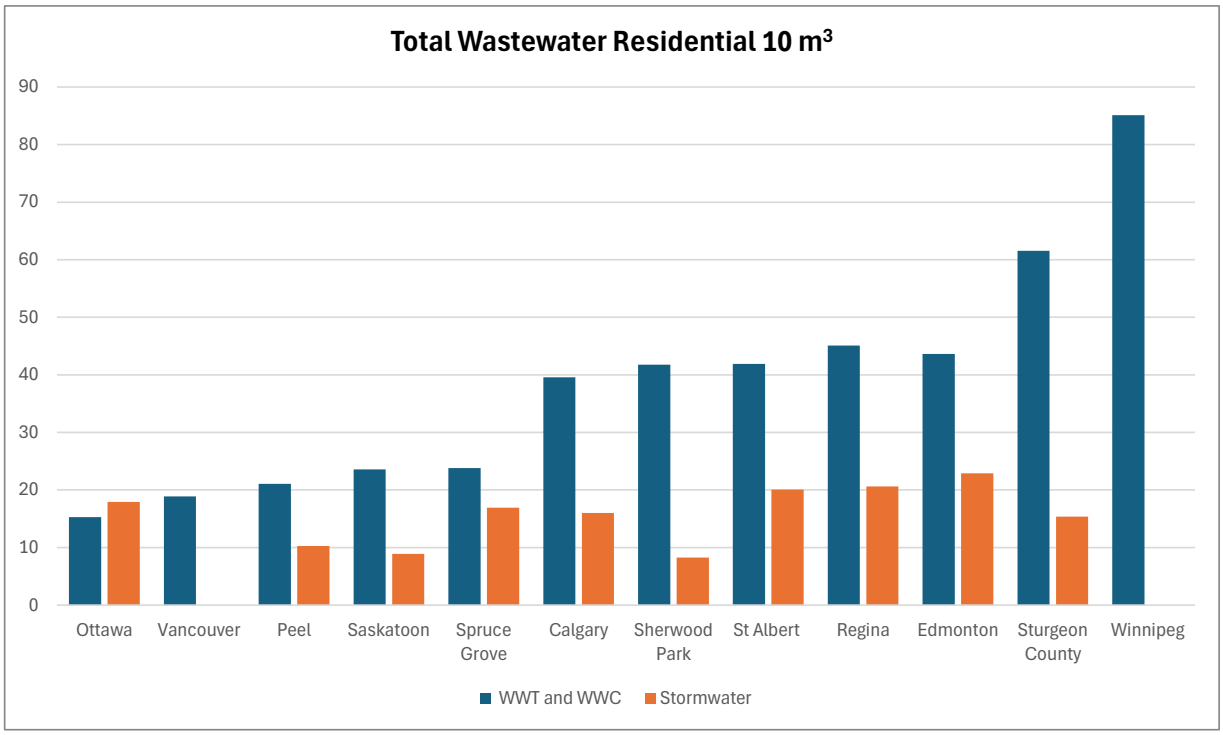
15. EPCOR will engage with these customers to inform them of the changes, as well as share options on how to mitigate these increases through Stormwater Management Rebate Program and Intensity Adjustment Program, if eligible.

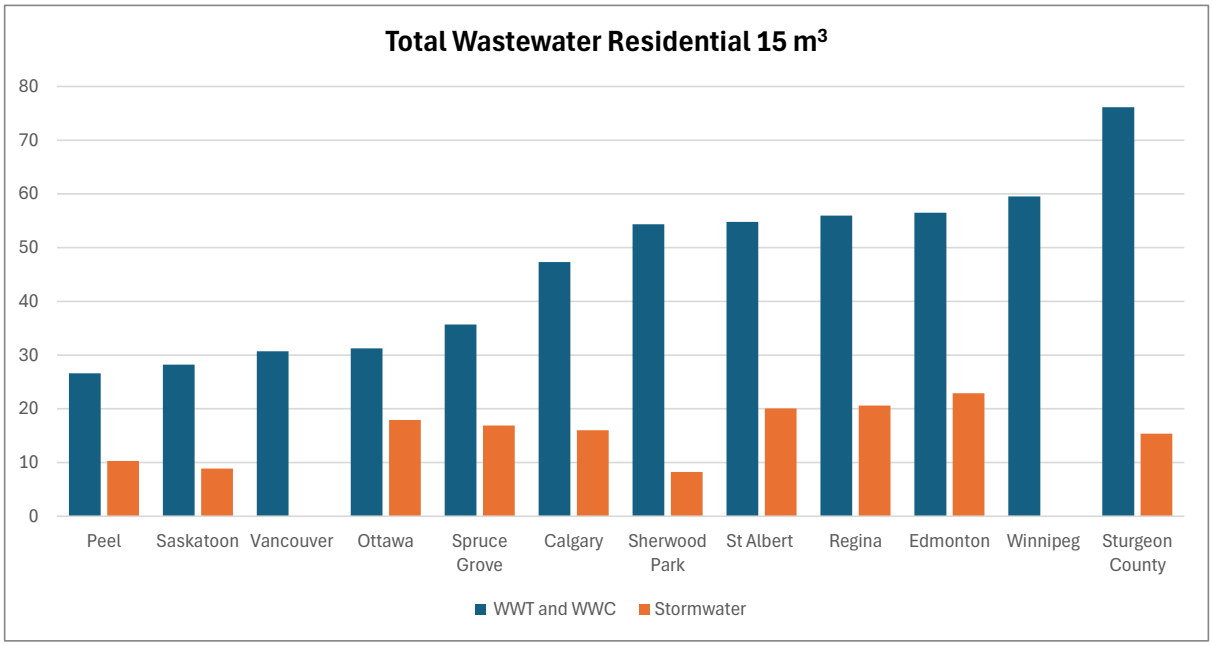
16. The second phase of bringing new customers into billing will commence after April 1, 2025 and be implemented during the PBR period and will include properties that do not currently have water or sanitary service accounts but do have stormwater or snowmelt that flows off their property and enters the stormwater system. EPCOR's geospatial analysis indicates there are portions of land in Edmonton that are not currently being billed for Stormwater services, but likely receive these services. This includes several types of properties ranging from those with higher runoff, like parking lots, to properties with lower runoff, such as parks, vacant and

undeveloped land. Although some of these properties are being billed, most are not being billed today.

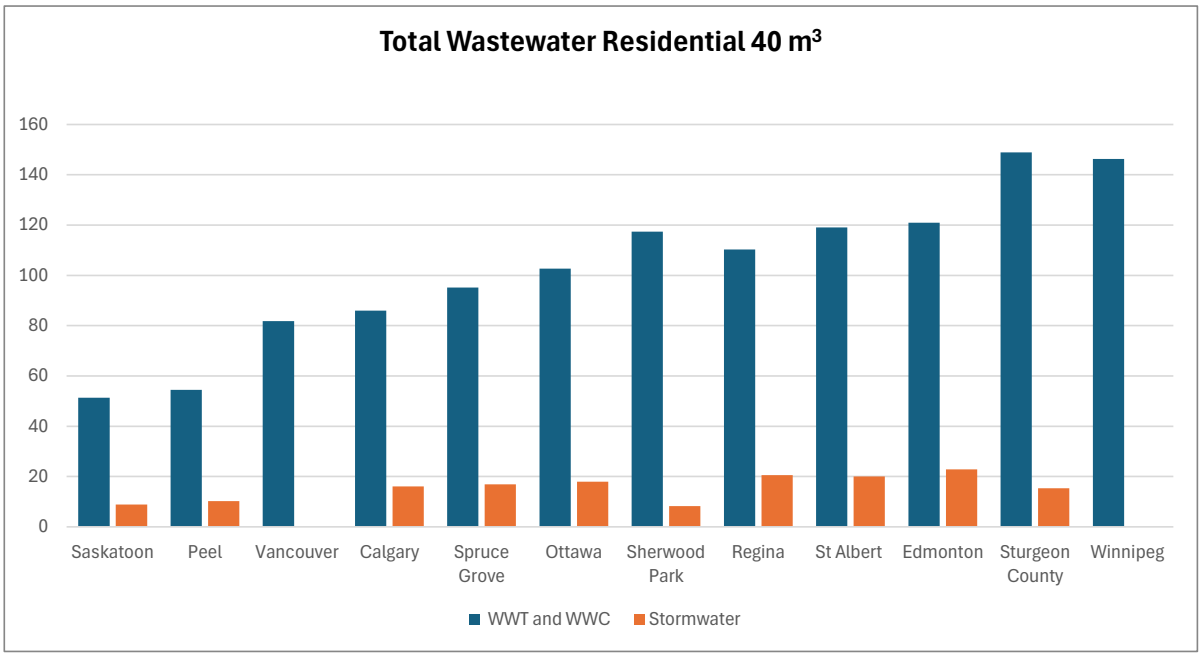
17. Because this will require a large administrative effort to identify these customers and set up EPCOR accounts for stormwater only service, these customers will be brought into billing over the PBR period. By bringing these properties into billing, current ratepayers will benefit as the costs to serve are more fairly and equitably borne by all customers who benefit from stormwater services.

MV-EWS-10 Attachment 1.xlsx

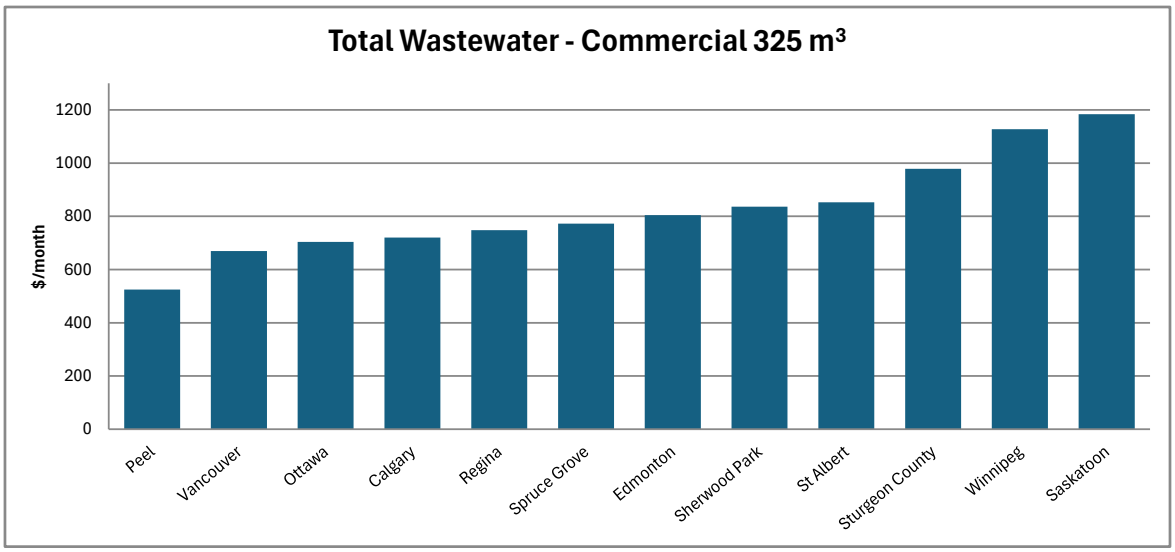


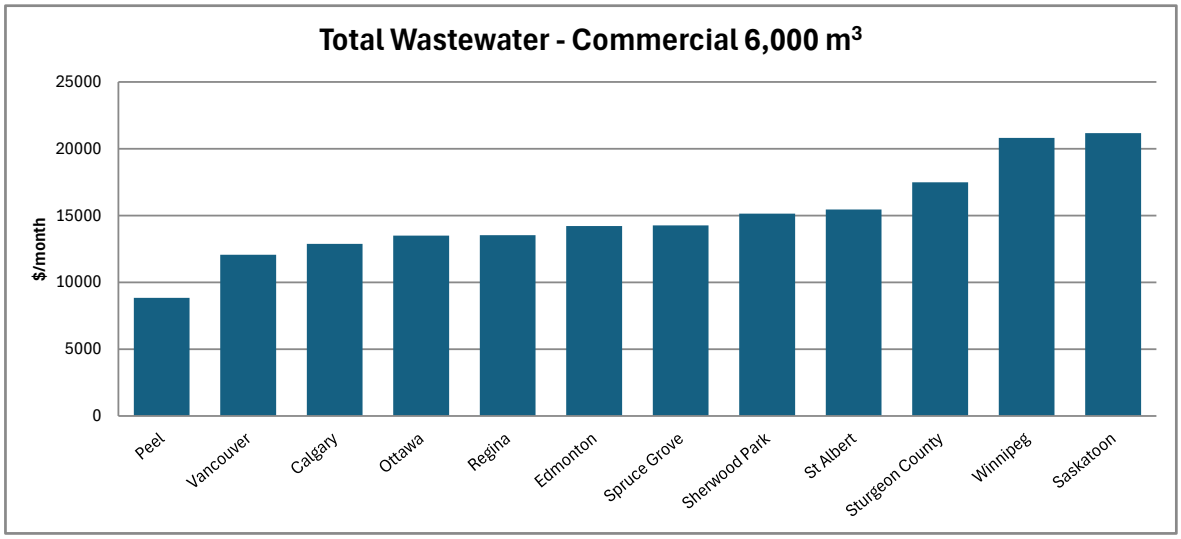


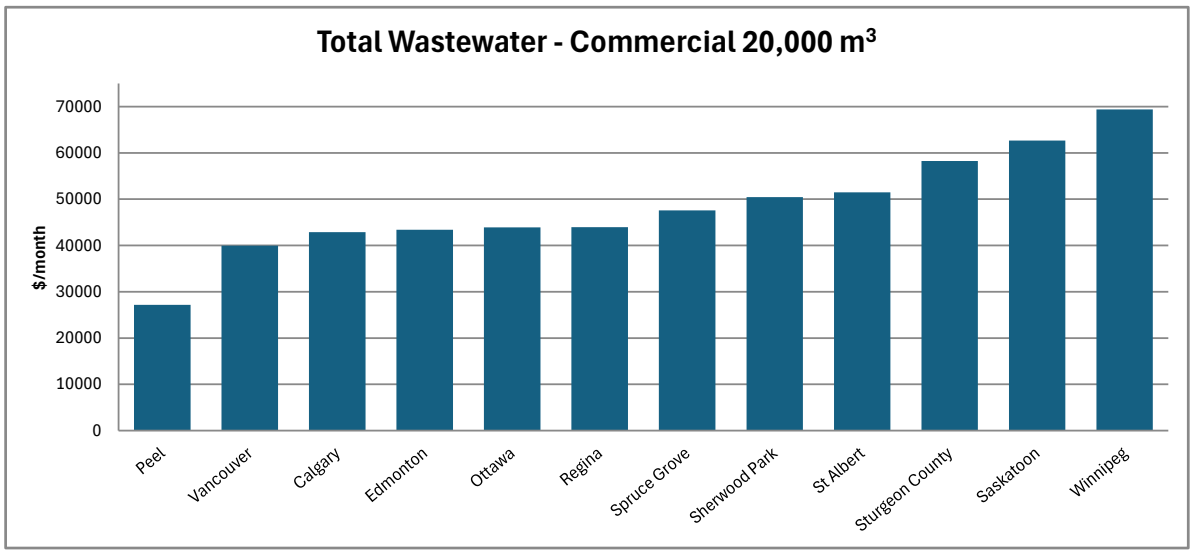
MV-EWS-10 Attachment 1.xlsx



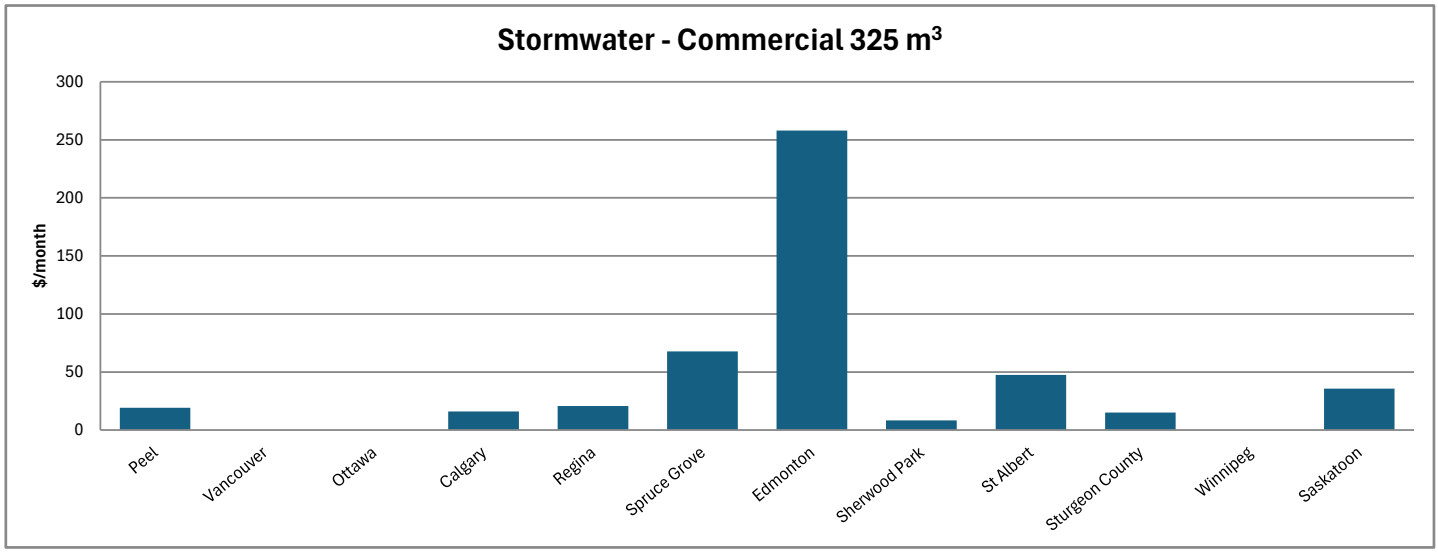
MV-EWS-10 Attachment 1.xlsx

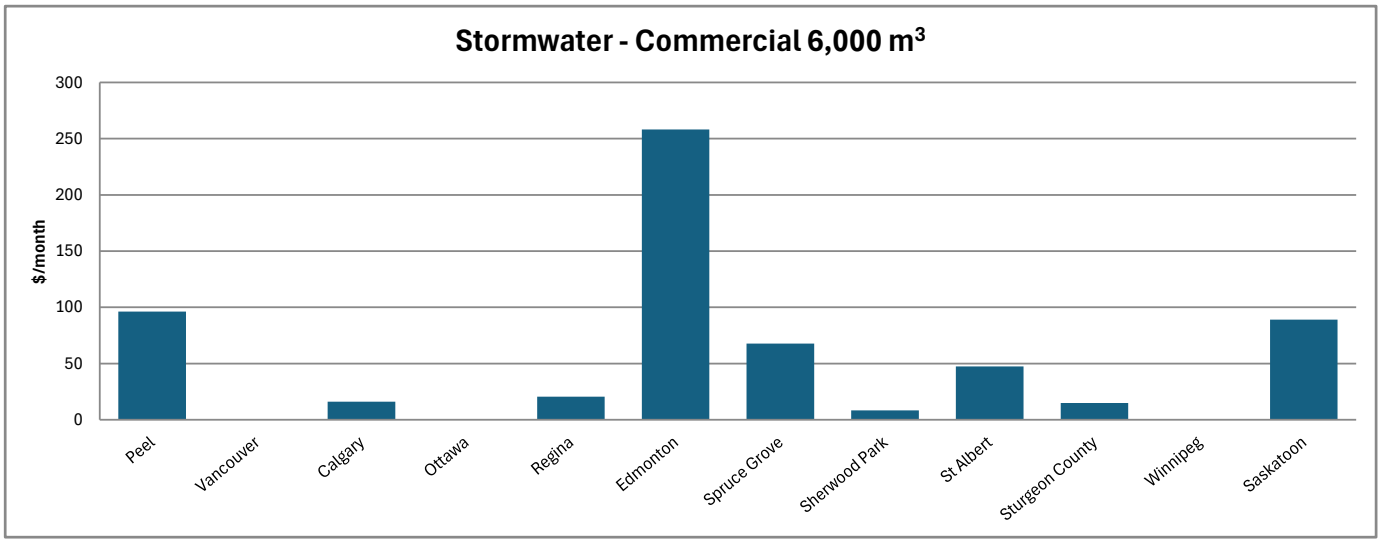


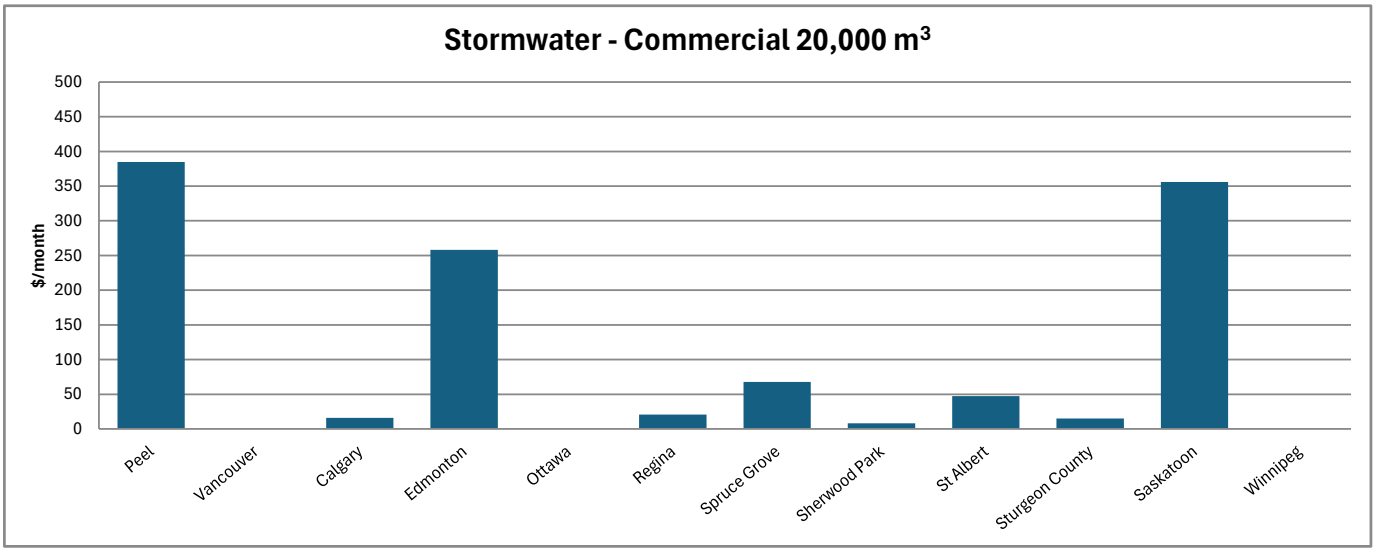




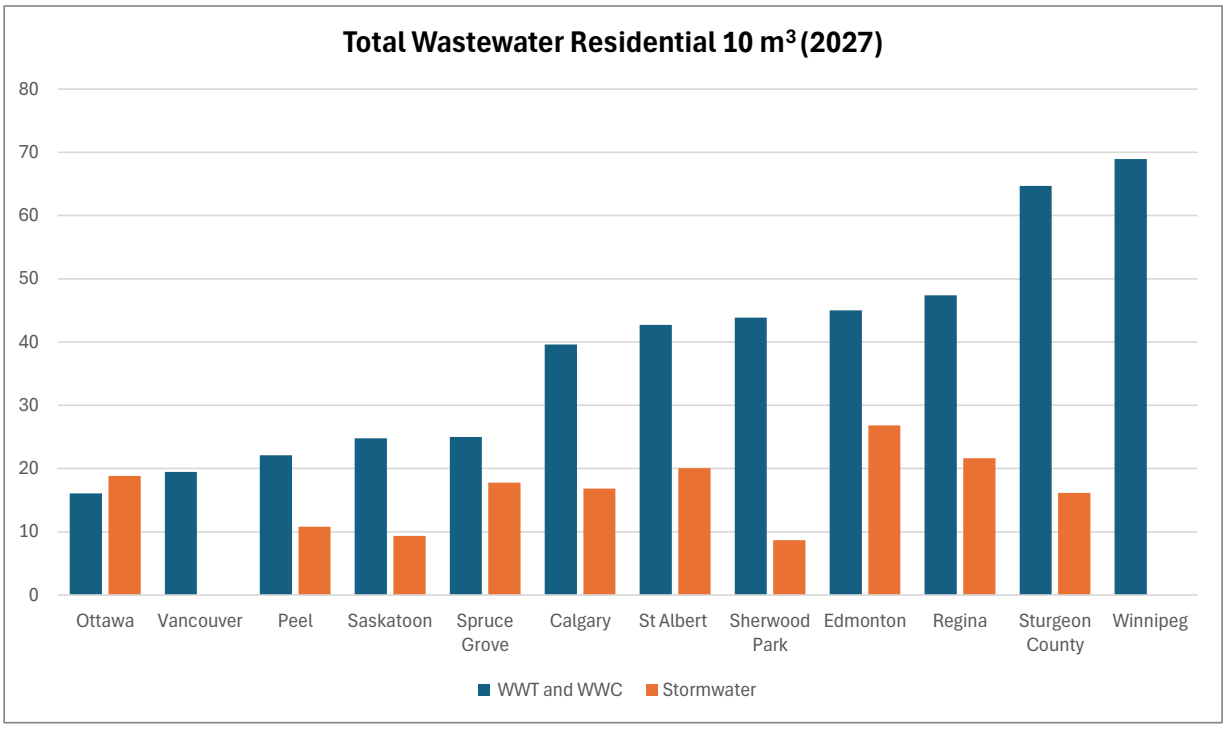
MV-EWS-10 Attachment 1.xlsx

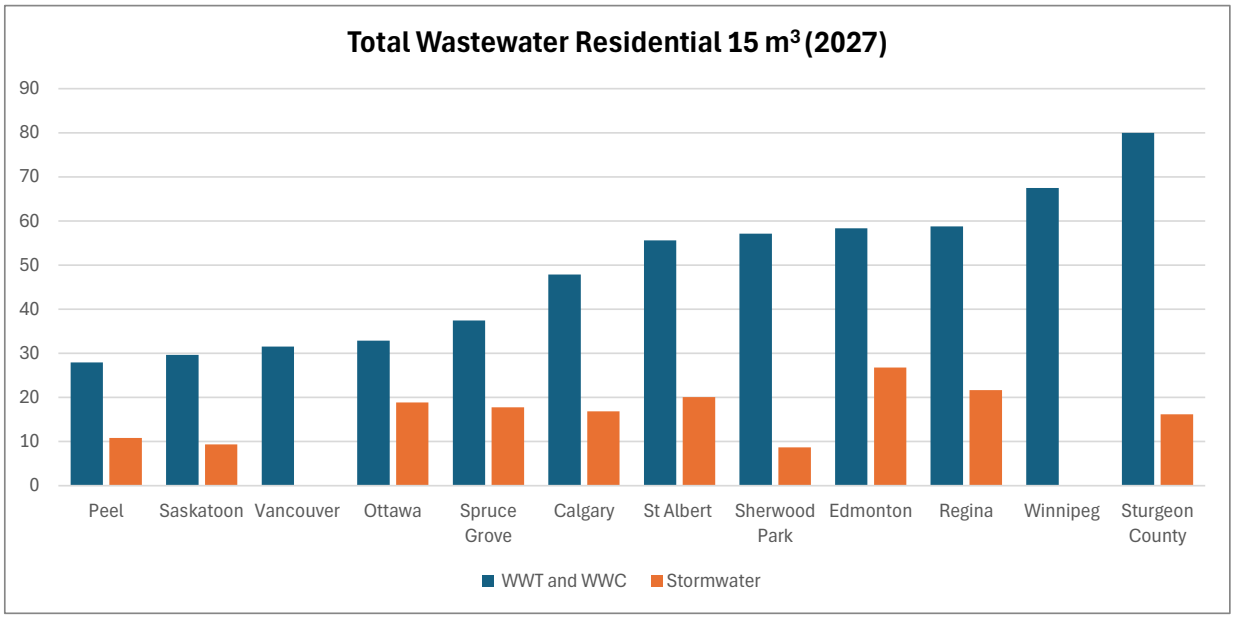




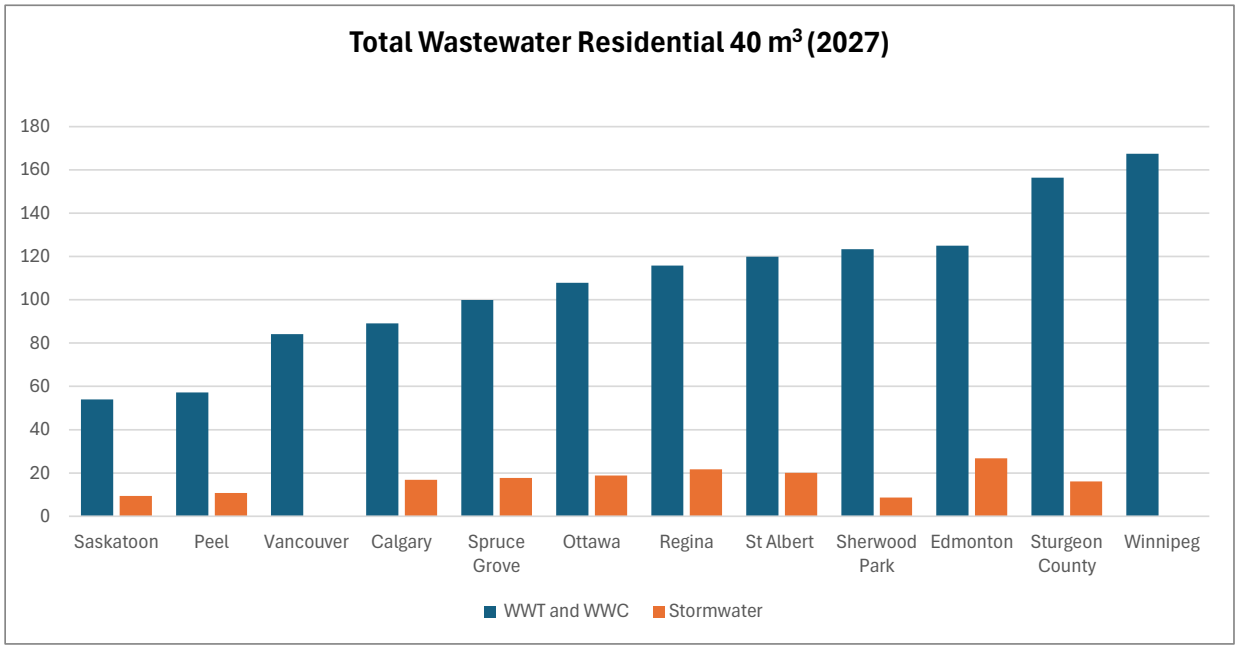


MV-EWS-10 Attachment 1.xlsx

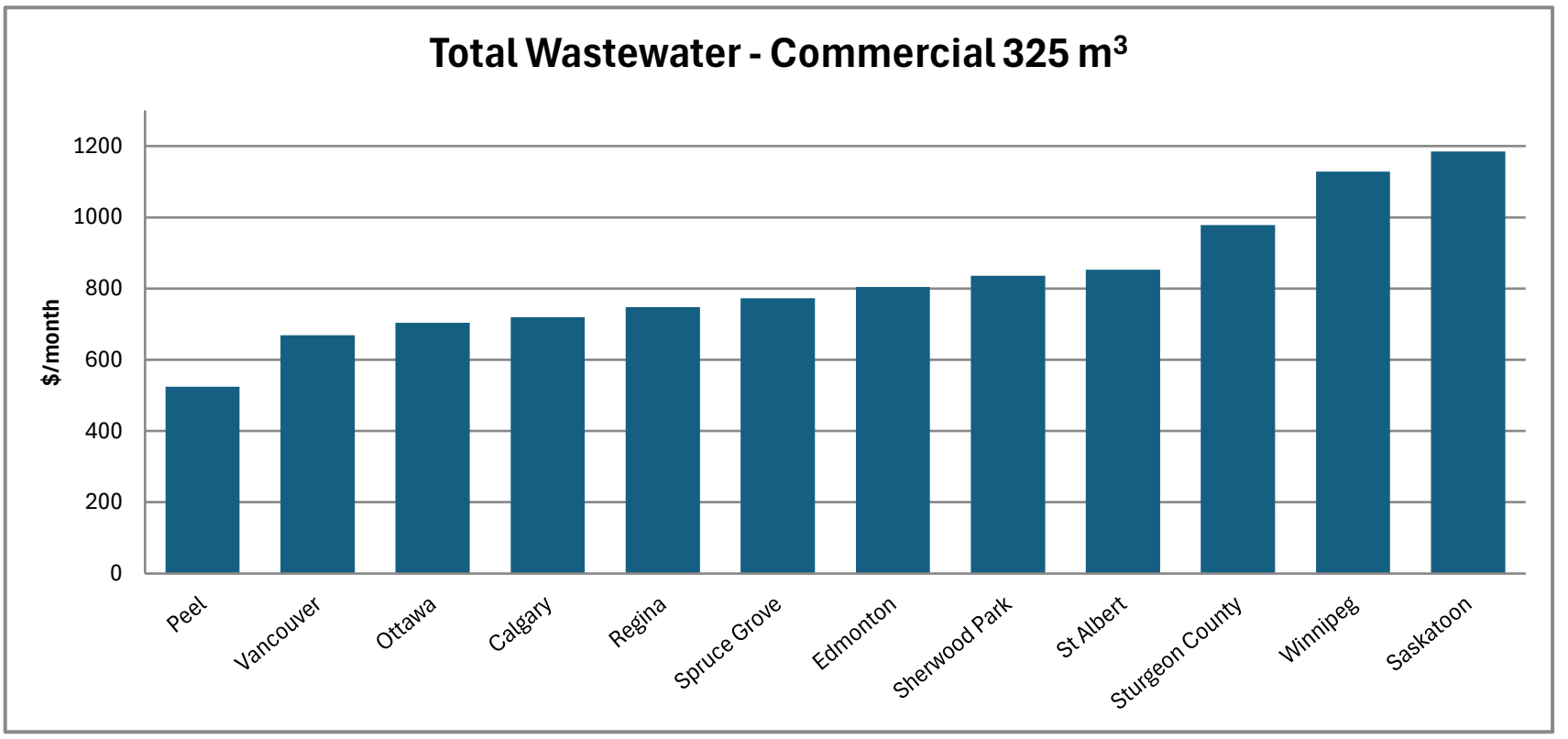


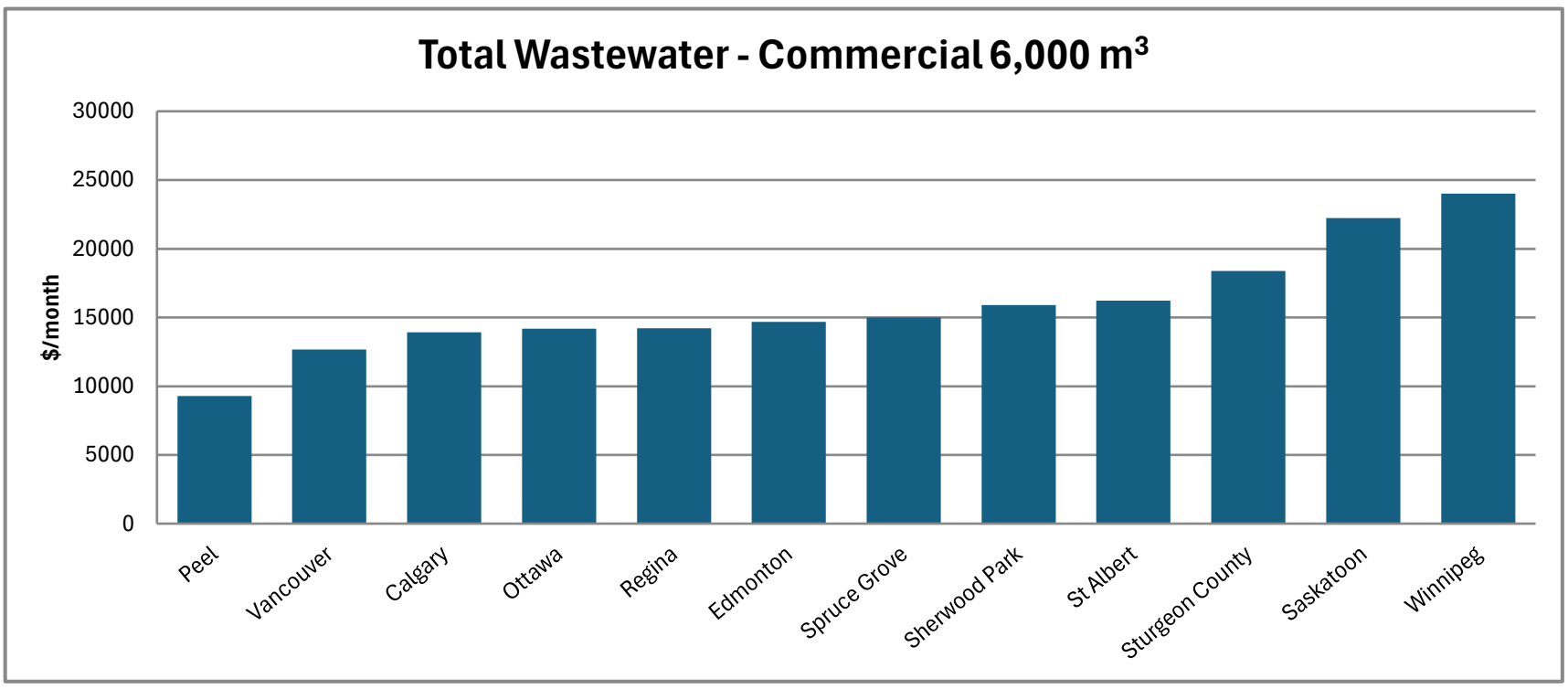


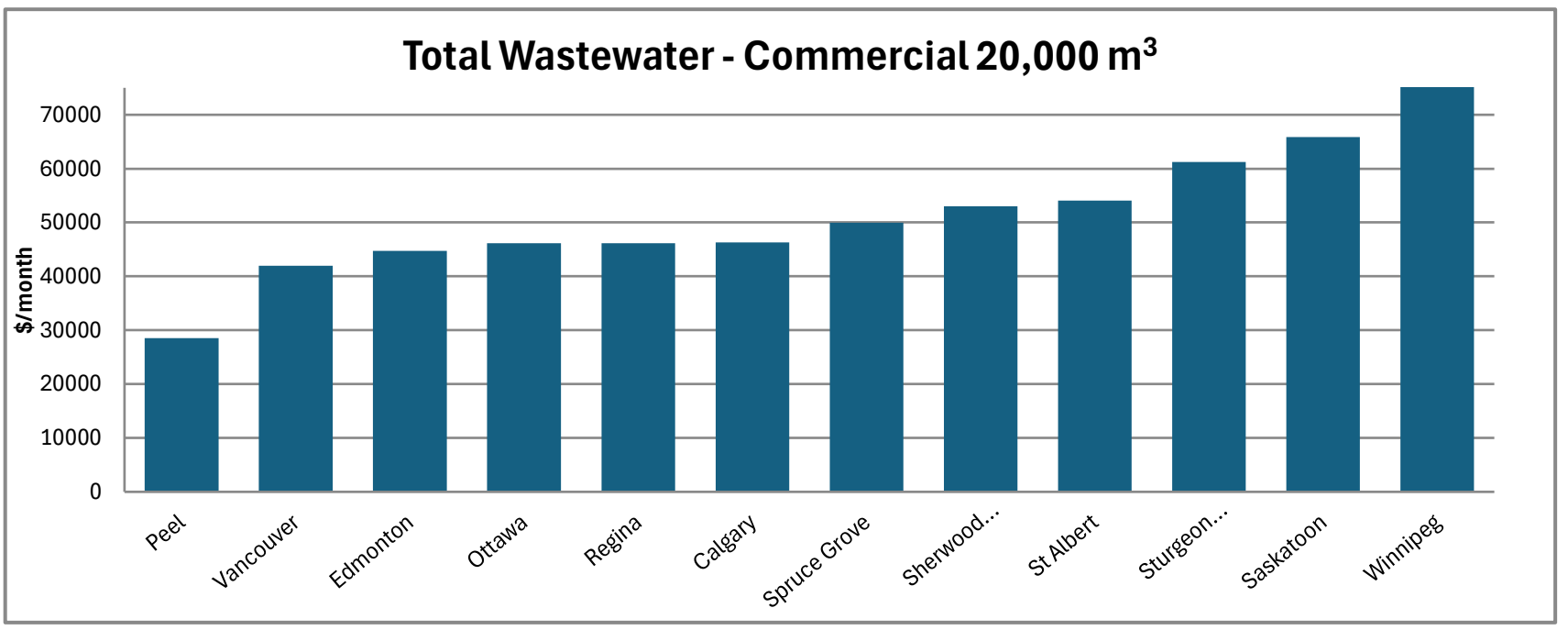
MV-EWS-10 Attachment 1.xlsx



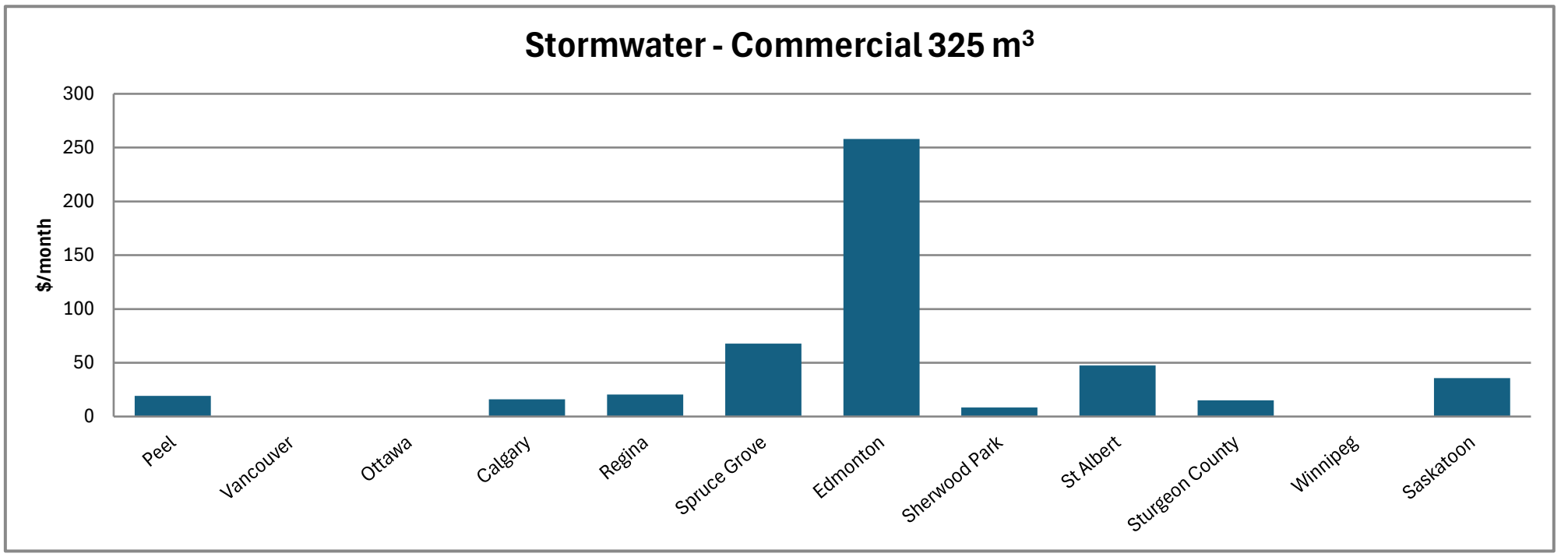
MV-EWS-10 Attachment 1.xlsx

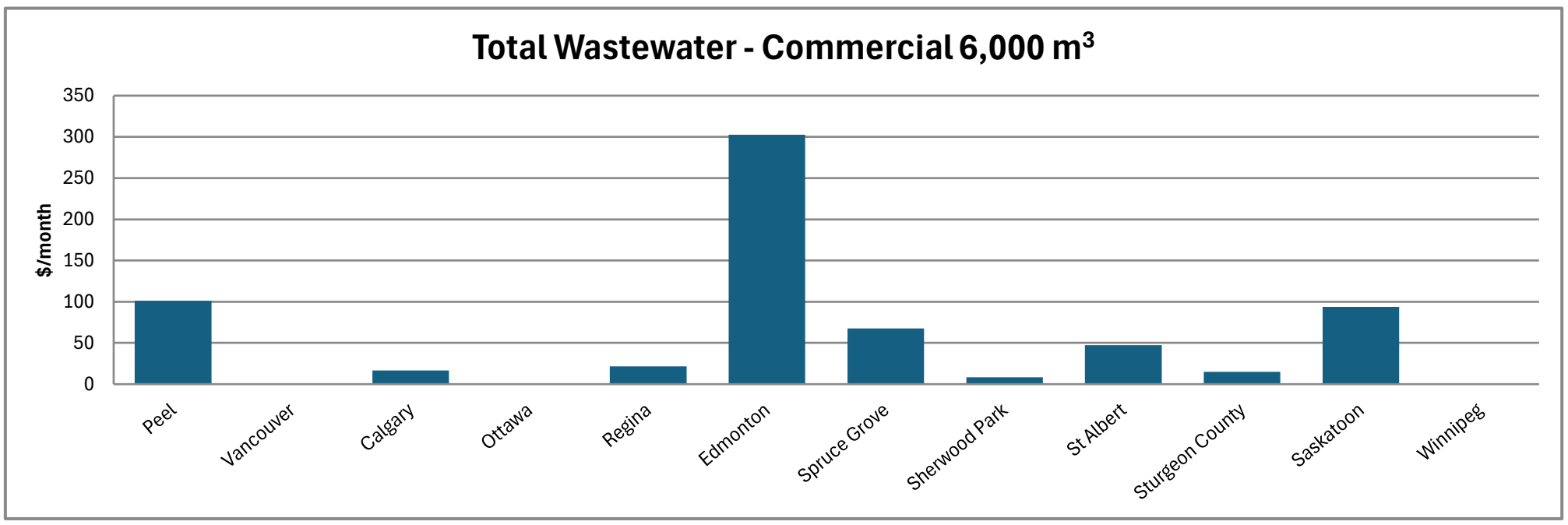


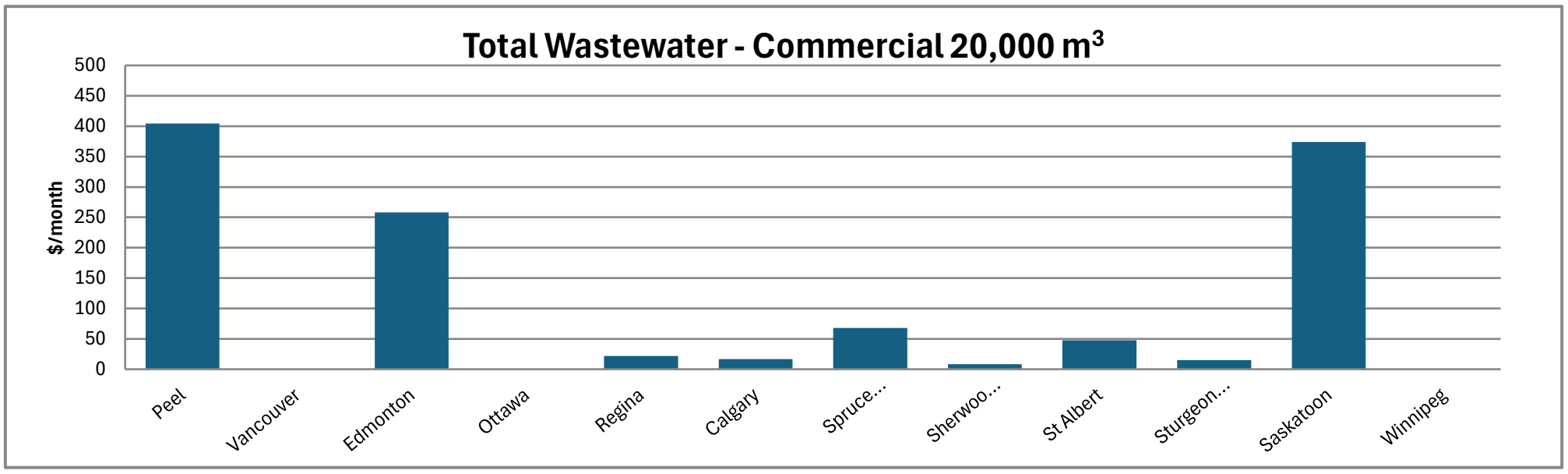




MV-EWS-10 Attachment 1.xlsx







MV-EWS-33-i Attachment 1

EPCOR Water Services Inc.
Capital Structures for Fiscal Year 2022
for the U.S. Water Utility Proxy Group

		2022
AWR	American States Water Company	
	Long-Term Debt	38.65 %
	Preferred Stock	0.00
	Common Equity	61.35
	Total Capital	100.00 %
AWK	American Water Works Company, Inc.	
	Long-Term Debt	59.29 %
	Preferred Stock	0.02
	Common Equity	40.70
	Total Capital	100.00 %
CWT	California Water Service Group	
	Long-Term Debt	44.39 %
	Preferred Stock	0.00
	Common Equity	55.61
	Total Capital	100.00 %
WTRG	Essential Utilities Inc.	
	Long-Term Debt	54.99 %
	Preferred Stock	0.00
	Common Equity	45.01
	Total Capital	100.00 %
MSEX	Middlesex Water Company	
	Long-Term Debt	43.33 %
	Preferred Stock	0.29
	Common Equity	56.37
	Total Capital	100.00 %
SJW	SJW Group	
	Long-Term Debt	57.39 %
	Preferred Stock	0.00
	Common Equity	42.61
	Total Capital	100.00 %
	Average	
	Long-Term Debt	49.67 %
	Preferred Stock	0.05
	Common Equity	50.27
	Total Capital	100.00 %

Source of Information
Annual Forms 10-K

MV-EWS-33-i Attachment 1

2022	AWR	AWK	CWT	WTRG	MSEX	SJW
Long Term Debt	446,946,000	11,207,000,000	1,055,797,000	6,570,413,000	307,742,000	1,496,325,000
Preferred Stock	-	3,000,000	-	-	2,084,000	-
Common Equity	709,549,000	7,693,000,000	1,322,394,000	5,377,386,000	400,328,000	1,110,868,000
Total Perm Capital	1,156,495,000.00	18,903,000,000.00	2,378,191,000.00	11,947,799,000.00	710,154,000.00	2,607,193,000.00
% Long-Term Debt	38.65%	59.29%	44.39%	54.99%	43.33%	57.39%
% Preferred Stock	0.00%	0.02%	0.00%	0.00%	0.29%	0.00%
% Common Equity	61.35%	40.70%	55.61%	45.01%	56.37%	42.61%