



**Report to Utility Committee  
October 2, 2020**

**EPCOR WATER SERVICES INC.**

**Performance Based Regulation Renewal  
Process and Timeline Report**

**TABLE OF CONTENTS**

1.0 Background ..... 2

2.0 Regulatory Construct..... 2

3.0 Application Terms..... 2

4.0 Application Format ..... 6

5.0 Utility Committee Motions and Directions ..... 7

6.0 Significant Inclusions in the Application ..... 9

7.0 Application Timing ..... 13

8.0 Public Awareness and Stakeholder Engagement Strategy..... 14

## **1.0 BACKGROUND**

1. The EPCOR Water Services and Wastewater Treatment Bylaw (Bylaw 17696) and EPCOR Drainage Services Bylaw (Bylaw 18100) both expire March 31, 2022. EPCOR intends to file Rates Notices and Rates Reports (also referred to as rate applications or applications) to seek City Council approval to set new rates commencing April 1, 2022. The associated processes are defined in the EPCOR Edmonton Regulated Utilities Procedures Bylaw (12294). This report provides an overview of EPCOR Water Services Inc.'s (EWSI) proposed approach to the applications, planned inclusions and supplemental reports and the general timing of the various steps in the approval process. The intent is to ensure alignment with Utility Committee requirements and expectations.

## **2.0 REGULATORY CONSTRUCT**

2. Water Services has been under Performance Based Regulation (PBR) since 2002 and has filed four previous 5-year term applications. Gold Bar was transferred to EPCOR in 2009 and has filed two previous 5-year term applications. In the letter of intent developed as part of the transfer of Drainage Services to EPCOR, the desire to establish a PBR structure for drainage was also defined in the clause that stated: "City Council will remain as regulator of drainage rates through a Performance Based Regulation, similar to water." EWSI proposes that the upcoming applications continue under a PBR structure and retain the same general terms and approaches as the current applications (2017-2021). This includes the risk/return framework, inclusion of non-routine adjustments for changes beyond EWSI's control and annual performance metrics with penalties to ensure the maintenance of a defined standard of performance. EWSI's believes that a PBR approach remains the best regulatory structure to provide ratepayers stable and predictable rates.

3. EWSI also proposes to maintain public fire protection services under a separate contract with the City of Edmonton, Fire Rescue. This structure enables the costs associated with the provision of fire protection to be allocated through the property tax system rather than through a rate per consumption approach. The property taxes basis remains the most appropriate mechanism as it is a more accurate reflection of cost causation for these services.

## **3.0 APPLICATION TERMS**

4. All PBRs completed to date have been based on 5-year terms as this is seen as the optimal time period to balance both risk and rewards and the regulatory burden of developing and assessing a PBR application. As noted previously, the terms for water, drainage and Gold Bar are currently aligned with common end dates. Based on initial discussion with the Utility Committee, there was the stated desire to establish a staggered schedule for the applications so that all three would not be

reviewed at a single point in time given the inherent workload for City Council, the Utility Committee, City administration and EWSI.

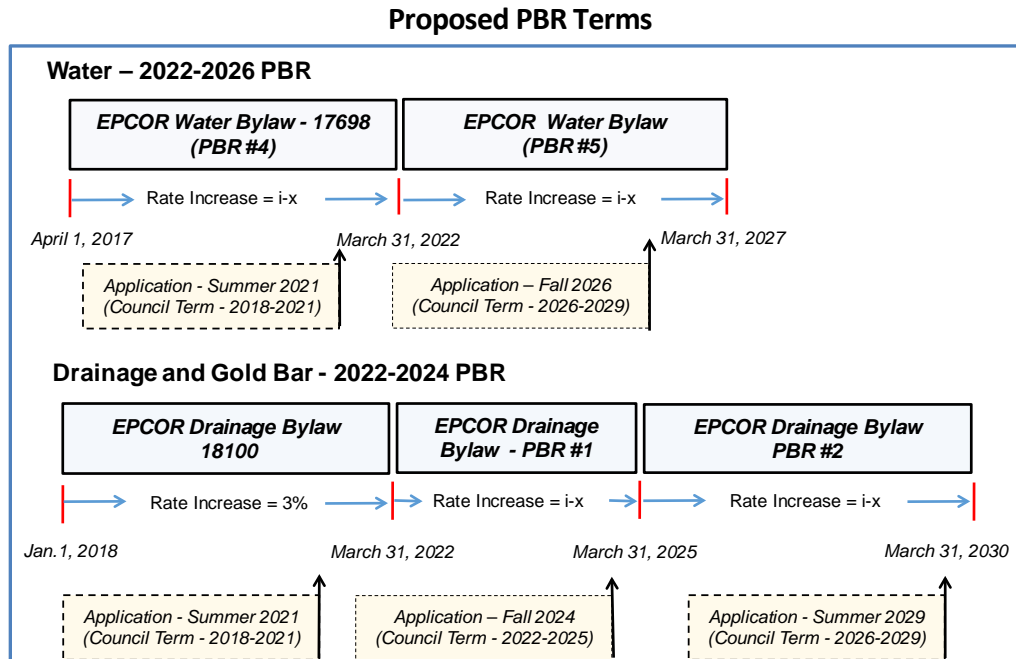
5. In order to establish a staggered schedule while addressing all current terms expiring at one point in time, it will be necessary to provide all three applications in the initial submission. Those submissions would be of different term lengths in order to establish a staggered schedule for future applications. The PBR application terms initially discussed with Utility Committee was for Drainage Services to apply for a five-year term and to extend the current Water (water treatment, distribution and transmission) PBR term for an additional two years based on the continuation of the current rate escalation formula (i-x). The Wastewater Treatment (Gold Bar) PBR term would be the same as Drainage Services in order to better align wastewater collection and wastewater treatment from both ratepayer and regulator perspectives. It was thought that a formulaic extension for water would not require the detailed application and background material nor regulator review processes normally seen in a full application. In essence, this would provide a less burdensome approach to completing all three applications at a single point in time.

6. Since those initial discussions, EWSI completed a more detailed analysis of a formulaic extension of water's current term and has determined that it is not the preferred approach. A pure extension of the current i-x formula would be financially detrimental to ESWI as the timing and level of capital spending as well as inflationary adjustments have changed from that originally forecast in the PBR application. The normal PBR process allows EWSI the opportunity to account for these as well as other changes as part of its application. The process also enables the regulator to fully test those changes to ensure their inclusion is prudent.

7. Under a formulaic extension, adjustments for known changes including the capital spending and inflationary adjustments changes could be included. However, since they would be developed without the rigour of a full application development cycle, their accuracy is diminished and that presents additional risk to EWSI. By extension, this approach would also not provide for the level of due diligence required to test the underlying assumptions as normally done by the regulator. If the formulaic adjustment approach was developed to the level required to provide a higher level of development and review rigour, the associated work would be similar to a full application, which would defeat the purpose of the formulaic approach in the first place.

8. EWSI also contemplated a number of variations of a formulaic extension to mitigate the concerns noted above. These included deferral accounts, moving to a cost of service basis structure instead of a PBR formula and other mechanisms. In all instances, these options provided results that were contrary to providing ratepayers with stable and predictable rates or increased the risk to EWSI and/or ratepayers.

9. EWSI preferred option is to set a five-year term for water services (2022-2026) while the Drainage Services and Gold Bar PBR terms will be aligned and set at three-years (2022-2024). This approach is illustrated the following diagram:



10. In addition to establishing the basis for the eventual staggering of the three PBR term, this approach has the following benefits:

- Presenting all three applications in the upcoming renewal enables the current Utility Committee and City Council to complete a full review and approval.
- Filing a five-year PBR application for water services allows the regulator to fully review and test the evidence underlying the proposed water rate increases. A formulaic extension approach would not allow for a fully tested rate application with review of EWSI’s operating and capital programs for the next test period.
- Filing a five-year PBR application for water services would incorporate adjustments to the return on equity and productivity factor as directed by Utility Committee.
- Filing a five-year PBR application for water services allows for rate rebalancing to correct the over-collection from residential water customers and under-collection from commercial customers and fire protection customers.
- Compared to a five-year PBR term, a three-year Drainage PBR term better allows both Drainage Services and the City Council as regulator to manage the risk of unknown items since the condition of the sanitary and stormwater assets are still being assessed. Furthermore, two

very large and brand new programs (SIRP and CORE) are just beginning and the first few years of executing these strategies will be a period of learning as Drainage Services begins to gain experience in these areas. A three-year Drainage PBR term will allow the regulator an earlier opportunity for adjustment if required for the SIRP, CORE and other Drainage Services capital programs. Implications on each of SIRP and CORE is discussed below.

- A three-year Drainage PBR term better aligns with timing set out for the Corrosion and Odour Reduction Strategy (CORE). As part of the July 30, 2019 CORE Strategy that was delivered to Utility Committee for the CORE Non-Routine Adjustment process, Drainage Services submitted forecast capital and operating expenses to 2026. As outlined in the report, during the period 2022-2023, Drainage Services will undertake a system monitoring plan which will allow it to obtain additional information about the extent of corrosion in parts of the network that have not been inspected before because of access limitations. As such, Drainage Services indicated that there may be a need for additional capital projects following completion of this system monitoring campaign at the end of 2023. A three-year PBR term would allow Drainage to gather information from the system monitoring campaign and then incorporate that information into the next five-year PBR submission beginning 2025.
- A three-year Drainage PBR term provides the regulator with an earlier opportunity to reassess and adjust the SIRP strategy if required. As part of the July 30, 2019 SIRP Capital and Operational Plan that was delivered to Utility Committee for the SIRP Non-Routine Adjustment process, Drainage Services submitted forecast capital and operating expenses for SIRP to 2028. As outlined in the report, the SIRP strategy includes an estimated \$1.6 billion in capital spending over a 30-year period and approximately \$2.2 million per year in operating cost increases reflecting 18 new positions to deliver the five sub-strategies or themes within SIRP. The five themes include slow, move, secure, predict and respond. There is additional risk associated with the cost and timing of implementing these five themes because many are new strategies which require (i) newer technologies (various types of Low Impact Development (LID), smart sensors, automatic control gates); (ii) the need for extensive community engagement or regulatory processes prior to construction (to determine dry pond locations, outfall control gates in the river valley); (iii) rolling out brand new programs (enhanced building flood proofing program); or (iv) significantly expanding the size of existing programs (backwater valve subsidy program, maintenance and inflow and infiltration program, emergency response). As such, a three-year application for Drainage Services will provide the regulator with an earlier opportunity to adjust the SIRP strategy which may be required given the many new initiatives within SIRP.
- Since 2002, Water has developed its capital plans and programs on a five-year basis. Therefore, continuation of the five-year term for Water will be, in large measure, a similar

application to those previously submitted which will allow the regulatory review to compare overall capital spending levels with previous terms.

The inherent draw back to this approach is the workload on all participants resulting from prosecuting three applications together. EWSI has commenced developing of all three applications and is prepared to work with Administration to structure the application to lessen the regulatory review burden. This may be achieved, for example, by determining some of the key PBR parameters (such as return on equity, efficiency factors and inflation factors) in advance or facilitating a separate technical review process for capital business cases, etc.

#### **4.0 APPLICATION FORMAT**

11. In its February 23, 2018 report to Utility Committee, EWSI set out a reporting framework for regular reporting to Utility Committee which defined the reporting requirements and principles for the PBR Applications. EWSI's upcoming PBR applications will adhere to these requirements and principles and will be comprised of evidence that will be very similar in terms of content, level of detail and organization as in EWSI's 2017-2021 PBR applications.

12. More specifically, EWSI will be preparing the following:

- A Rates Notice and Rates Report, in accordance with the Bylaws (17698 and 18100), through which Council approves EWSI's proposed rates and terms and conditions of service and a high-level summary of the applications.
- Separate applications for Water Services, Wastewater Treatment Services and Drainage Services that provide all of the evidence supporting the requested rates for the upcoming PBR terms. The PBR applications will set out EWSI's operational and capital plans for the upcoming PBR term.
- Separate financial schedules for Water Services, Wastewater Treatment Services and Drainage based on the minimum filing requirements ((MFR) as approved by Utility Committee in 2013. This standardized MFR was implemented in the 2017-2021 PBR applications and allows for comparability with these applications and with EWSI's PBR Progress Reports.
- Common set of appendices which will include (but will not be limited to):
  - Summary of key changes to the Bylaws;
  - Expert reports to support key parameters in the PBR (such as cost of capital, productivity factors, EWSI credit rating);
  - PBR progress reports for the previous PBR term;

- Business cases and post implementation reviews (for 2017-2021 approved projects/programs where spending is more than 20% over the PBR forecast);
- A stakeholder engagement report; and
- Cost of service studies.

13. Capital expenditure justifications will be prepared for both historical capital expenditures to justify the opening rate base and for future capital expenditures over the upcoming PBR term. Formal business cases will be prepared for all projects and programs which are at or above \$5 million for Water Services and Wastewater Treatment Services and at or above \$10 million for Drainage Services. The business cases prepared for each of the three applications is anticipated to represent approximately 75% of the total capital expenditures for each business unit for the PBR term. Business cases for discrete projects will include an alternative analysis and business cases for programs will provide background on the program criteria used to determine the level of spending. Overarching strategies will be included for some larger initiatives to provide the context behind the various programs and projects needed to support the strategy (e.g. Stormwater Integrated Resource Plan and CORe).

## **5.0 UTILITY COMMITTEE MOTIONS AND DIRECTIONS**

14. At the completion of the 2017-2021 PBR approval, Utility Committee reviewed the PBR application process and provided direction and motions to administration and EWSI for a number of items. Specifically, EWSI (either individually or in conjunction with administration) was directed to complete a number of activities in preparation for the next PBR application. These directions included the following:

### **5.1 Rate on Equity/Risk Determination**

15. Both EWSI's rate of return expert and the City's consultants who reviewed the 2017-2021 PBR application recognized that EPCOR's regulatory structure is inherently riskier than contemplated by the Alberta Utility Commission in their generic cost of capital decision. The Utility Committee observed that the exact extent of the risk has not been quantified resulting in uncertainty in the level of risk premium over the generic cost of capital that EPCOR should be awarded. The Utility Committee directed EPCOR work with City Administration to determine an approach to quantify this premium in order to support the return on equity proposal for the next PBR application.

16. In mid-2019, EWSI and City Administration commenced that review and the discussions culminated in the development of a formal "Request for Information" (RFI) that was circulated to the consulting community. The intent of the RFI was to seek guidance and input from industry experts to more fully define the risk premium approach requested by the Utility Committee. The risk premium



approach involves identifying and quantifying the various risk factors that support the need for an equity risk premium for EWSI above the Alberta Utilities Commission's approved generic cost of capital. The information from the consultants was planned to be used in seeking approval of the final approach from Utility Committee and to inform the eventual "Request for Proposal" (RFP). The RFP would be issued to select a consultant to complete the actual assessment and quantification of the risks and the development of the return on equity recommendation.

17. Unfortunately, the response to the RFI was less than anticipated as only two firms responded. Neither response adequately defined a methodology that would lead to the intended outcome of defining and quantifying the various risk factors. Subsequent conversations with the consultants revealed that the risk premium approach, while conceptually sound, is difficult to impossible to enact as there is no basis to adequately quantify and justify the risk factors. At best, the assessment could be completed with risks aggregated into larger "buckets" and the associated risk premium subjectively determined. Both consultants indicated that this approach is not an established practice.

18. EWSI is of the opinion that continuation of a risk premium approach as the sole methodology for determining return on equity is not the preferred course. EWSI plans to contract an industry-recognized consultant that can provide a broader comparison to other utilities (preferably water utilities) and their risk profiles as part their recommendations. More traditional cost of capital approaches may also be utilized. The analysis would also provide some discussion of the risk premium approach based on the AUC generic and how it aligns with the other methodologies, but that would not be the only data point in the analysis. EWSI will also continue to work with Administration in the development of this approach.

## **5.2 Efficiency Factor Methodology**

In the presentation of the 2017-2021 PBR, the Utility Committee recognized that different approaches can be used by external experts in determining the efficiency factor used in the rate setting process. While the different approaches are valid, they can provide differing measures of industry efficiency which results in some inconsistency from one PBR term to the next. The Utility Committee has directed that EWSI work with City Administration and determine an appropriate methodology based on EWSI's circumstances and use that approach in the next PBR application.

Questions regarding efficiency factor methodology were included in the Cost of Capital RFI described above. Administration and EWSI have reviewed the approach and will ultimately select a consultant based on a methodology most applicable EWSI's circumstances. This is anticipated to be completed mid-year.

### **5.3 Rate Structure/Design Review**

19. The 2017-2021 Water PBR application maintained the same approach to rate design as was used the prior application. That design included an inclining block structure for residential customers and a declining block structure for the commercial class. It also included the same fixed versus variable rate proportionality as was first introduced in the 2012-2016 PBR term. While the Utility Committee agreed that maintaining the rate design was appropriate for the 2017-2021 term, they also directed EWSI to review the rate structures and the fixed/variable split and present alternatives with benefits and drawbacks to the Utility Committee prior to commencing the preparation of the next PBR application.

20. EWSI is currently reviewing alternative rate structures and intends to provide that analysis along with recommendations to the Utility Committee at the October 2, 2020 meeting. As rate design has a direct impact on ratepayers, the Public Awareness and Stakeholder Engagement plan (as defined later in this document) has a component for rate design review included. This is anticipated to entail reviewing an alternative rate design with ratepayer to ensure it will achieve its intended objectives.

## **6.0 SIGNIFICANT INCLUSIONS IN THE APPLICATION**

### **6.1 Cost of Service Study – Drainage and Gold Bar**

21. The last Drainage Services cost of service study was completed under City of Edmonton management in 2016 and was based on 2013 financial results. Since that time, there has been considerable operational change within the utility, mostly a result of the transferred to EPCOR management and the changes associated with that transition. Several large programs, namely the Storm Water Integrated Resource Plan (SIRP) and the Corrosion and Odour Reduction Strategy (CORe) have also been introduced in addition to a number of functional areas being consolidated with those of Water Services. As a result of these changes, an updated cost of service study will be developed and included in the PBR application to ensure that these changes are incorporated and that rates continue to be cost based (i.e. costs are appropriately allocated to benefiting users).

22. In order to complete the cost of service study, EWSI has contracted HDR, Inc. to develop a study for both Drainage Services and Gold bar. HDR is a large international design firm specializing in engineering, architecture, environmental and construction services and has considerable experience in developing cost of service studies across all of North America. HDR was previously contracted to develop the EWSI water services cost of service study so they have a great deal of familiarity with the operations of EWSI.

## 6.2 Cost of Service Study – Water

23. EWSI completed the last cost of service study for water services in preparation for the 2017-2021 PBR application. In addition to determining the allocation of costs amongst the in-city customer classes (i.e. those within the PBR application and includes the residential, multi-residential and commercial customer classes), the cost of service study also allocated costs to the Regional Water Customer Group (RWCG) and costs related to both public and private fire protection. Development of that study entailed considerable discussion and analysis with the RWCG group as they account for approximately 27% of water production, yet utilize only a portion of the overall system. As part of the implementation of that cost of service study, EWSI and the RWCG agreed that broad scale revisions to the study need only to be completed if there are major operational or structural changes to the system.

24. As the system has been stable with no major changes since the last cost of service was implemented, EWSI is not contemplating completion of a new cost of service study for the upcoming PBR application. The current model allows the underlying parameters to be updated based on most recent operational data, so those updates will be completed. The RWCG members will also be engaged through their annual review process of the cost of service to ensure that parameters remain valid from their perspective. It is anticipated that these changes will be minor, if any are completed at all, as the RWCG annually completes a detailed review of all aspects of the cost of service through an industry-leading consultant as part of the annual settlement process. To date, there has been no requested changes to the model of the underlying allocation of costs.

## 6.3 Depreciation Review

25. Asset lives are typically reviewed prior to the development of a rate application in order to ensure that depreciation rates remain accurate. This review can be done on a system wide basis through formal depreciation studies or through technical updates within a limited number of asset classes. EWSI has reviewed the need for full studies and is not proposing to undertake depreciations studies for the upcoming PBR applications. The rationale for this approach is as follows:

- In 2014, depreciation studies were performed for both Water and Gold Bar to support the 2017-2021 PBR Application. To align the asset categories and lives between IFRS and regulatory reporting, EWSI changed its capital asset categories for regulatory reporting for the 2017-2021 PBR to further componentize those assets which have major identifiable components with substantially different useful lives. This change aligned the regulatory records more closely with IFRS and resulted in certain assets being separated into different components and depreciated over their different useful lives. The move to more componentized categories reflected a fine-tuning of EWSI's depreciation calculation and did not result in a significant change in EWSI's accounting policy for regulatory reporting. The

application of this componentized practice has brought benefit to rate payers by providing a more granular rate base and thus over time a more accurate revenue requirement.

- When Drainage operations was transferred to EPCOR from the City of Edmonton, a detailed depreciation review was undertaken of the assets being transferred, and useful lives assigned to the plant in service based upon engineering recommendations and comparisons with industry averages. These have proven accurate to date.
- There have not been any significant changes in the depreciation accounting policies since the 2017-2021 PBR application.
- No early retirement write offs during the 2017-2021 term is an indication of systematic inappropriate useful lives.
- In discussion with operation and maintenance teams, it was determined that there have not been any systematic failures prior to anticipated end of useful life and no indicators of significant or unexpected wear and tear on the plant in service necessitating significant additional maintenance over time.
- Condition assessments performed have not indicated any plant in service not performing to its expected useful life.

#### **6.4 Revenue Leakage**

26. In 2019, Drainage Services began an audit of the Stormwater Utility that revealed multiple discrepancies in the billing system that resulted in incorrect charges to customers or inconsistencies in charges across a given customer class. These discrepancies are due to a number of factors including: incorrect data entry, lack of auditing since system inception in 2003, lack of written standards, information system limitations and billing system limitations. As such, a revenue leakage project was initially focused on correcting those issues with the underlying intent of developing a standard and consistent approach to the stormwater utility charges. This approach, based on ensuring equity and fairness across all stormwater utility ratepayers, is managed through a set of guiding principles:

- All parcels of land in Edmonton contribute to the storm and snowmelt run-off into the stormwater system and are therefore responsible eligible to pay a stormwater utility fee.
- Parcels are billed based on their land use zone.
- Stormwater are billed to the account holder for a parcel unless there is written agreement from the property owner / property manager / lessee.
- Wherever reasonable, parcels are divided equally amongst the total number of active water meters in the event of multiple accounts on one parcel.

- All non-residential customers have the opportunity to apply for a rebate through the Stormwater Utility Credit Program if they have a stormwater management system on site or can demonstrate a significantly lower amount of runoff as compared to the typical runoff for their land zoning.

27. The audit noted that the City of Edmonton is the largest stormwater utility customer and the current charges are not aligned with these principles. The City is currently paying approximately \$88,000 per month in stormwater fees when, if charged as per the bylaw, should be paying approximately \$680,000 per month. As with other customers, some of the discrepancy is due to lack of auditing, lack of written standards and system limitations. However, the largest reason appears to be a conscious decision of the City to not apply the stormwater utility charge to themselves. This results in a deficit and/or cross subsidization across customers for EWSI's stormwater utility revenue of greater than \$7.0M per year (based on 2020 rates).

28. Based on the premise that all customers should contribute to the stormwater system based on their use of that system, EWSI will propose to charge the City of Edmonton for stormwater services commencing April 1, 2022. EWSI is prepared to work with City Administration to ensure a smooth implementation of these charges including identifying specific charges and service recipients or any other requirements that they may have.

## **6.5 Automated Metering Infrastructure**

29. EWSI is currently conducting a pilot study of advanced meter reading technologies to determine if they are viable from a cost/benefit perspective. This technology, referred to as either Automatic Meter Reading (AMR) or Advance Metering Infrastructure (AMI) automatically collects consumption, diagnostic and status data from water meters and transfers that data to a central database for billing, troubleshooting and other uses. AMI extends beyond AMR into include remote utility management.

30. AMI meters can collect data based on programmed logic and are often referred to as smart meters. The advantage and AMR/AMI technology is that it allows sophisticated system monitoring in addition to cost savings from not requiring physical read meters. The analysis of these technologies will determine the operational benefits of their introduction and the potential costs savings to ratepayers.

31. The currently planned technical configuration for AMI is based on utilizing the communication backbone of an AMI system introduced by EPCOR's electricity business unit for their customer's use. The advantage of this approach is that duplicate backbones do not have to be developed, although the electricity business will require compensation from Water Services for the utilization of their communication network. As electricity is a regulated business, that compensation will be returned to

ratepayers through lower rates. Overall, the expectation is for a positive benefit to Edmonton ratepayers when both the increased cost on the water side and reduced costs on the electricity side are considered. Utility Committee is being asked to advise if they perceive any concerns with this approach.

## **7.0 APPLICATION TIMING**

32. In the past, an application to adjust rates was presented to Utility Committee in June or July of the year preceding the bylaw expiry with bylaw approval by City Council anticipated by the end of that preceding year. Maintaining that schedule is not appropriate for the upcoming rate applications as 2021 is a civic election year and the normal timing interferes with that process.

33. EWSI is proposing to file its applications in early 2021 with anticipated completion by July 1 of that year. This will enable the current Utility Committee and City Council to complete the entire approval process well before the start of the election cycle. The proposed schedule is detailed below. This schedule will be finalized through discussions with Administration and adjusted when the 2021 Utility Committee meeting dates are known.

<b>Application Timing with City of Edmonton</b>		
	<b>Activity</b>	<b>Date</b>
1	<b>Application Submission</b>	
2	File Rates Notice and Rates Report with City Manager	February, 2021
3		
4	<b>Initial Presentation to Utility Committee</b>	
5	Presentation by EPCOR of proposed changes to Waterworks and Drainage Bylaws	Mid Feb. 2021
6	Utility Committee - High level review and recommendation to City Council	Mid Feb. 2021
7		
8	<b>First Reading</b>	
9	City Council - Review and consideration of first reading and direction to CoE Admi	Mid April , 2021
10	<i>If passed, council refers to committee for public hearing (Rates Procedure Bylaw</i>	
11	<i>requires a public hearing to occur within 60 days of passing first reading)</i>	
12		
13	<b>Information Requests</b>	
14	Councillor's IR's submitted to City Manager	TBD
15	Deadline for public submissions to CoE	TBD
17	Deadline for Administration/Consultant IRs to EPCOR	TBD
18	Responses to IR Complete	TBD
19		
20	<b>Public Hearing</b>	Mid June 2021
21	Presentation by EPCOR	
22	Administration report on reasonableness of rates and summary of submissions	
23		
24	<b>Second and Third Readings</b>	
25	Council Meeting - review for consideration for second and third reading	July 1, 2021
26	<b>Bylaws passed</b>	

## 8.0 PUBLIC AWARENESS AND STAKEHOLDER ENGAGEMENT STRATEGY

34. The PBR rate application process will result in a series of recommended operational and capital programs, performance measures and rate designs. The EPCOR Edmonton Regulated Utilities Procedures Bylaw (Bylaw 12294) requires EPCOR to provide the Utility Committee with a related public awareness and engagement plan consistent with the City's public engagement policy and carry out activities consistent with the plan.

35. EWSI's engagement process proposed for the upcoming PBR applications for Gold Bar, Water and Drainage integrates public and stakeholder input into building the rate applications and capital plans for Water, Wastewater and Drainage. This section provides detail on the principles EWSI will

follow when engaging or communicating with the public and stakeholders, and the process that will be implemented.

### **8.1 Overall Public Engagement Approach**

36. EPCOR and EWSI believe in listening to and engaging stakeholders. We demonstrate social responsibility by building and sustaining relationships through effective consultation on our business, operations and new ventures. Our consultation process ensures that stakeholders have opportunities to provide meaningful input into projects and operations that affect them. Our resulting decisions and actions are guided by our understanding of our stakeholders' interests and priorities and the values we share.

37. EPCOR's approach is designed to align with the City of Edmonton's public engagement policy. This initiative is at the Refine level on the public participation spectrum. At this level, we commit to working with stakeholders to ensure their concerns and aspirations are reflected in the alternatives developed, and report on how their input influenced decisions around policy, programs and services.

38. The PBR plan will also incorporate previous engagement into the Drainage Corrosion and Odour Reduction Strategy, which was conducted at the Refine level of engagement; and the Stormwater Integrated Resource Plan (SIRP) and Gold Bar Integrated Resource Plan (IRP), which were conducted at the Create level.

39. EWSI will engage the public using a variety of methods and tools, including a combination of presentations, workshops, one-on-one meetings, face-to-face stakeholder outreach and public opinion research. Methods will be tailored to each stakeholder group based on the complexity of the topic and the type of input being sought. Due to the complexity of the PBR process, the engagement will focus on understanding the public's values and policy preferences at a high level. Concepts will be presented using non-technical language to help ensure a common basis for providing meaningful input.

### **8.2 Objectives of Public Engagement**

40. Through the public engagement process for the PBR applications, EWSI's goal is to develop and implement rate filings for Water, Drainage and Gold Bar that seeks input from stakeholders to guide how these utilities will evolve to serve them. EPCOR's objectives for public engagement and communications throughout this process are to:

- Have public and stakeholder input inform policy choices, priority-setting for operations and capital programs, performance measurement and rate design;



- Provide stakeholders with opportunities to ask questions, express concerns and raise issues with respect to the PBR renewal and their utility services;
- Maintain positive and productive relationships with the key decision makers and stakeholders throughout the PBR development and implementation; and
- Report back to stakeholders as the PBR renewal process progresses on how their feedback was used by EPCOR.

In addition, public engagement activities will help inform communications and campaigns to educate customers on their water, wastewater and drainage utilities.

### 8.3 Stakeholder Overview

41. The primary stakeholders for the purpose of this engagement process are water, wastewater and stormwater utility customers within the City of Edmonton. They include:

- Residential and multi-residential customers
- Commercial customers: In addition to a general grouping of commercial customers, customers in this category to consider include:
  - Large water users, such as schools; food service, production & processors; the City of Edmonton (sports, parks & recreation); hospitals; the University of Alberta; etc.
  - Overstrength commercial customers: customers who send specific compounds down the drain as part of their commercial processes (e.g. car washes, hair salons, etc.) which are above defined concentrations are charged overstrength fees for the additional wastewater treatment required.
  - Stormwater customers: customers who may not be captured in the large water user group above but sit on a large site and may have a sizeable stormwater utility charge.

Secondary stakeholders include groups that represent the above, such as:

- Community leagues
- Chamber of Commerce and business associations
- Developers
- Property management groups
- EPCOR-engaged community groups
- Metis Nation of Alberta and Confederacy of Treaty Six First Nations (who have a significant number of community members within the confines of the City of Edmonton)

42. EWSI provides water services to communities surrounding Edmonton under bulk water supply agreements with municipalities and regional water service commissions. These regional water

customer group (RWCG) members are governed by a separate process outside of the PBR and are not part of the scope of this public engagement. However, the RWCG members will be consulted as part of the PBR application development, particularly in regards to common issues such as cost of service.

#### **8.4 Topics for Public Input**

43. The upcoming PBR applications will put forward a series of policy, program and rate recommendations related to building, operating and maintaining drinking water, drainage and wastewater treatment services. The public engagement process will support this by identifying stakeholders' values and preferences for the utility services they receive; weighing the benefits of the proposed utility programs against the impacts and costs to deliver them. This input will inform how EWSI measures and prioritizes programs in terms of order, pace of execution, and total investment, and inform the rate design used for revenue collection.

#### Key Topics for Engagement

Engagement activities in the next phase will focus on four sets of topics:

1. **Values.** Understanding the values held by stakeholders and using these to guide the evolution of the utilities including the performance measures in the PBR.

The current water PBR performance measures are established in five performance areas under the headings of Water Quality, Customer Service, System Reliability and Optimization, Environment and Safety, and it weights the relative contribution of those five areas of performance in calculating overall performance. Gold Bar and Drainage have similar categories for performance measures.

Through engagement, EWSI will be seeking to

- a) Learn whether there are other aspects of performance that are important to stakeholders and should be considered in the performance metrics; and
- b) Understand what the relative importance of these categories is to stakeholders, which would influence EWSI's recommendation on the future categories and their weighting, and inform development of capital and operating programs to respond to the areas of highest priority.

*Timing and Tactics:* The first phase of engagement on this topic will be conducted in the first half of 2020, because it provides a foundational input for the development of PBR performance measures, and because any potential new measures derived connected to these values would require a test period to collect baseline performance and establish a view about

how to level-set a new measure. The preferred mechanism for this work are surveys that provide a statistically reliable and representative sample of the Edmonton population

2. **Performance Priorities.** Understanding the types of performance most valued by stakeholders, and the level of performance they are seeking, to guide the prioritization of capital and operating programs.

In the Stormwater Integrated Resource Plan research, EWSI presented stakeholders with examples of the impacts from flooding and asked them which were the most important to protect against. Through analysis of 150,000 data points from their forced-choice selections, EWSI developed priorities and principles that form the basis of the flood mitigation plan.

Similarly, public engagement for the 2022 PBR application presents the opportunity to describe the benefits and impacts from different operating and capital programs, and to ask stakeholders which impacts/benefits are most important to them. Understanding their preferred outcomes, and linking those preferences to specific utility programs, will provide an additional set of data that can be used to refine and prioritize the plans in each utility.

*Timing and Tactics:* This work will be conducted once the initial capital and operating plan elements are sufficiently defined, which is forecast for mid-year 2020. A mix of mechanisms are anticipated, with virtual stakeholder outreach augmenting broader input from surveys.

3. **Cost and Risk Sharing.** Understanding stakeholder views on how costs and risks should be shared between ratepayers, service recipients, insurers, government and the utilities, and using these views as an input to guide rate design and future communications;

The utility Bylaws set out the accountabilities of utilities and customers, including:

- The utility services that are received and funded within rates;
- Services for which rates and charges apply (for example, new service connections);
- The allocation of risks and incentives between ratepayers and the utilities (for example, water consumption risk, operating cost risk, and mechanisms for non-routine adjustments); and
- Liabilities that remain with customers (some of which are insurable).

The Bylaws also reflect numerous principles that inform rate design, including but not limited to:

- Rates are based on cost of service;
- Rate stability and predictability (rates are based on a formula and EWSI bears the risk of annual variances in cost of service)

- Rates should be fair and without cross-subsidization between utilities or customer classes;
- No cross-subsidization of rates between generations of customers (to ensure customers pay rates based on the cost of the service they receive and costs are not unfairly borne by past or future generations of customers);
- Equity of rates to customers who are within a single customer class;
- Residential water customers should receive a base level of water volume at an affordable rate;
- Residential water customers should pay a higher rate for higher consumption volumes (known as an inclining block rate structure), as an incentive for conservation;
- Commercial and multi-residential water customers should pay a lower rate for higher consumption volumes (known as a declining block rate structure); and
- Stormwater utility customers should pay common rates by customer class, with the rates being based on the land area of the property and its development intensity.

The engagement process will seek to establish stakeholder views on:

- Their agreement with the existing principles that are used to guide rate design;
- The application of the principles, including how to balance competing principles; and
- Their preferences for the division of responsibilities between ratepayers, individual customers, insurers, governments and utilities, particularly with respect to damage to private property (or its prevention).

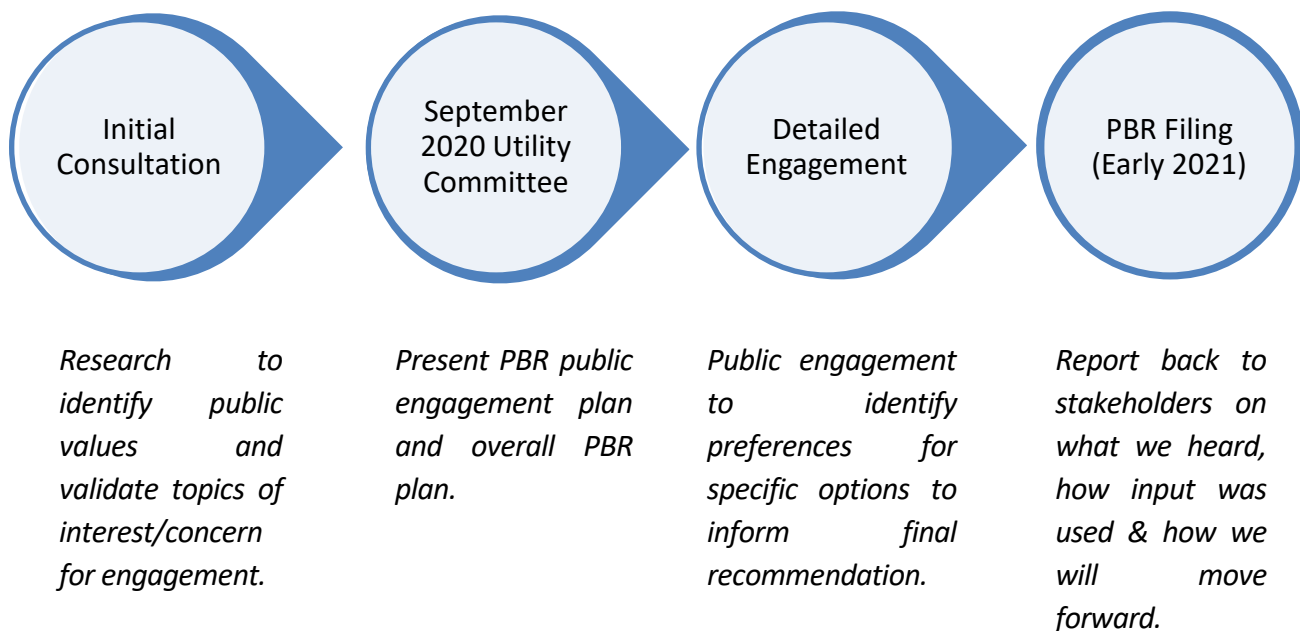
*Timing and Tactics:* This work will be conducted in mid-2020, and include engagement with a wide range of stakeholder organizations and individuals. This input could result in refinement of the services for which there are rates and charges. This input may or may not result in recommended changes to the current allocations of risk between the utilities, insurers and customers – it is more likely that if stakeholder views are significantly different than the *status quo* that this would be used to inform a dedicated process to evaluate options.

4. **Rates.** Understanding stakeholder views on the cost and benefit trade-offs from different levels of investment in Edmonton’s water, wastewater and drainage systems, and their preferences for future rates.

In each PBR cycle, EWSI has undertaken research to understand current perceptions of value-for-money, and stakeholder views on future rates and the trade-offs between rate increases and obtaining the benefits of future capital and operating programs. Understanding perceptions of existing and potential future rates will help inform EPCOR’s upcoming PBR applications.

44. On each of these topics, EWSI is mindful that technical terminology and complexity can be barriers to meaningful public engagement. EWSI's intent is to structure public engagement to provide context for these topics, and discuss them in terms of real-world impacts and benefits to customers rather than in technical terms.

## ENGAGEMENT PROCESS



Given the COVID-19 pandemic, we adapted our approach to stakeholder engagement in two ways.

- First we changed the timing of outreach to avoid connecting with individuals during the onset and height of COVID concerns when they were more focused on health matters and understanding the virus. This timing change would ensure a more normalized view from stakeholders with less influence of the pandemic on their responses.
- Second, we modified how we engaged so stakeholders would be comfortable throughout the process without concern of viral transmission.

This engagement plan is presented along with the overall PBR plan for information at the September 2020 Utility Committee meeting. Following this meeting, this plan will be refined to reflect any feedback received.

1. In the Initial Consultation phase, EWSI will engage groups representing residential, multi-residential, commercial and industrial customers to identify public values and develop and validate topics of interest/concern for engagement.

2. In September, as part of EWSI's Utility Committee report we will review our engagement plan with the committee and provide a progress report on engagement conducted to date. Feedback from Utility Committee will inform areas for detailed consultation and communication. .
3. In the Detailed Consultation phase, EWSI will conduct public opinion research and additional face-to-face (virtual) dialogue to identify preferences for specific options for projects and rate design.
4. Input will be compiled and reported along with EWSI's PBR filings in early 2021. EPCOR will also report back directly to stakeholder groups.

### Engagement Tactics

45. The following table summarizes activities under consideration that will be confirmed with stakeholders as part of our engagement process. Note that public engagement is an evolving process and the approach may be revised as needed.

Phase	Target Stakeholder Groups	Engagement Activities
Visioning & framing	<ul style="list-style-type: none"> <li>• Existing EWSI -engaged community groups</li> </ul>	<ul style="list-style-type: none"> <li>• Focus groups</li> <li>• Workshops</li> </ul>
Detailed consultation	<ul style="list-style-type: none"> <li>• Community groups (EWSI-engaged groups, community leagues, Metis Nation of Alberta and Confederacy of Treaty Six First Nations, etc.)</li> <li>• Associations representing businesses, developers, landlords</li> <li>• Large water users</li> </ul>	<ul style="list-style-type: none"> <li>• Public opinion survey</li> <li>• One-on-one virtual meetings with large water users, groups representing customer classes and Indigenous peoples (as outlined on the left)</li> <li>• Explore online engagement tools</li> </ul>
Validation w/ broader public	<ul style="list-style-type: none"> <li>• All residential customers</li> <li>• Multi-residential customers</li> <li>• Commercial customers</li> <li>• Large water users</li> </ul>	<ul style="list-style-type: none"> <li>• Public opinion survey</li> <li>• "What we heard" webinar</li> </ul>

### **8.5 Awareness Activities**

In addition to the public engagement activities described above, EWSI will conduct a multi-phased public awareness campaign. Communications leading up to and beyond the PBR filing will inform customers about:

- How to participate in public engagement and provide input into EWSI's PBR filings;
- EWSI's recommendations and the results of engagement;

- The value of the utility services provided to customers;
- Services available to homeowners; and
- How EWSI is investing in the city for today and the future.

Additional topics for communication will be determined through public engagement feedback.

## **8.6 Public Engagement Completed to Date**

46. Over the last three years, EWSI has conducted public engagement on several larger initiatives. Those results will guide work on the larger initiatives over the long term, inform EWSI's upcoming PBR filings and form the basis for the next phases of engagement as follows:

### Gold Bar Integrated Resource Plan (IRP)

47. Presented to Utility Committee in September 2019, the plan documents the long-term planning process for the wastewater treatment utility over a 40-year planning horizon. For each five-year PBR period, the IRP is converted into a specific capital and operating plan. This iteration of the IRP was informed by public engagement activities from 2017 to 2019, including a series of workshops with a Citizen Planning Committee in 2019.

48. This process resulted in the development of five Shared Outcome Statements which define goals for the Gold Bar wastewater treatment plant that are shared by EWSI and community stakeholders. The achievement of these Shared Outcomes is a key objective of the IRP, and an organizing principle for projects and operations at the Gold Bar Wastewater Treatment Plant. To support these five shared outcomes, stakeholders worked with EWSI to develop 20 design principles against which individual projects and design decisions can be tested.

49. This public engagement ultimately led EWSI to modify the approach on a series of previously planned projects while enhancing the approach to community engagement and education based on the specific values of the community.

### Stormwater Integrated Resource Plan (SIRP)

50. At the May 2019 Utility Committee meeting, EWSI presented the capital plan for the SIRP strategy. This was preceded in October 2018 by a risk framework that formed the basis for this capital plan. The risk framework integrated public and stakeholder input to provide a foundation for the prioritization of projects and public involvement in the concept design and detailed design for specific infrastructure projects.

51. Input was gathered through an online public opinion survey in August 2018 with 1,500 Edmontonians using a statistically reliable sampling methodology to test and validate public preferences for flood mitigation (what infrastructure they want to see protected from the impacts of a flood). Three levels of flood impact were tested: Moderate, Major, and Extreme. A choice-based approach was employed, in which respondents were forced to rank a variety of impacts as most and least important to protect against.

52. The list of impacts was built and validated through engagement with the City of Edmonton's Climate Change Adaptation Team, Water Community Advisory Panels, developer associations, essential service providers and other stakeholders. This work built on earlier public engagement that was conducted between November 2016 and June 2017 by the City of Edmonton that included public opinion surveys, community discussion groups and focus groups.

53. Through this research, EWSI identified relative preferences among Edmonton residents for infrastructure protection based on four broad categories: public safety, environment, financial and social impacts. The weightings of these categories were then integrated into the SIRP risk model to inform the areas of Edmonton that are at the highest risk for flood impacts, and thus defined priority of work detailed in the capital plan.

#### Corrosion and Odour Reduction Strategy

54. Presented to Utility Committee in June 2019, the Drainage Services strategy was initiated to address the impacts of corrosion and odour related to the sanitary and combined sewer network.

55. To develop a robust strategy, EWSI conducted public consultation and engaged with community members across the City, as well as conducted advanced sewer air monitoring campaigns, and expanded sewer asset inspections.

56. A public opinion survey was conducted from January to February 2019 with 1,600 Edmontonians, using a statistically reliable sampling methodology to test and validate public preferences for odour mitigation. The sample was drawn from Drainage Services customers representing communities with pre-existing sewer odour concerns.

57. A public preference for odour mitigation was identified, including priority over other sources of odour and general quality of life impacts. The results helped to confirm known odour hotspots, and suggested areas for further study. Finally, public preferences for pace and rate impact were tested.