



EPCOR
WATER & DRAINAGE SERVICES
2023 ANNUAL OPERATIONAL PLAN

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INTRODUCTION

This document presents the 2023 Operational Plan for the Water Treatment, Distribution and Transmission, and Wastewater Treatment (collectively referred to as "Water Services") and the Drainage Services business units of EPCOR Water Services Inc. (EWSI). The purpose of this document is to provide Edmonton City Council, Utility Committee and stakeholders an overview of operational initiatives planned for the 2023 calendar year for both business units.

OVERARCHING GOALS

The common goal of Water and Drainage Services is to provide customers with safe and reliable water, wastewater and stormwater services while meeting or exceeding all environmental requirements, delivering value and achieving a fair return. Water and Drainage Services' shared vision is to be an industry leader valued by our customers and shareholder who keep the public safe and the river healthy. This will be accomplished through effectively planning business requirements, focusing on excellence in engineering and capital project delivery, and pursuing proactive operational practices informed by a rigorous stakeholder engagement process.

COMMON STRATEGIC FRAMEWORK AND INITIATIVES

A significant number of initiatives are common to both Water and Drainage Services. These initiatives drive synergies, gain efficiencies and to align the businesses operationally.

Both Water Services and Drainage Services initiatives are presented within a common strategic framework with six focus areas:

- Customers and Stakeholder our customers and stakeholders trust us and value our services
- Public Health and the Environment we are environmental stewards for our customers and communities and will meet or exceed all public health and environmental standards
- Employee and Public Safety create a collaborative culture of health and safety ownership and performance at all levels to keep ourselves, our customers and contractors, and our communities safe
- People we aim to develop engaged and accountable employees who are capable, confident and work as an inclusive team
- Operational Performance perform the right work the right way at the right time with the right resources through a continuously improving, innovative and collaborative mindset
- Growth and Financial Performance improve the financial performance to achieve allowed return while meeting performance expectations and targets

This report will first highlight key initiatives that will be advanced over the coming year, followed by 1) common initiatives that are being pursued by Water Services and Drainage Services together, 2) Water Services' specific initiatives and 3) Drainage Services' specific initiatives.

HIGHLIGHTS AND CITY ALIGNMENT

The 2023 Operating Plan for EWSI has been developed with thoughtful intention so that the work EWSI does every day aligns with the priorities of the company, community and the City of Edmonton. Appendix 1 describes the ways in which EWSI's work in 2023 will align with and advance the City Plan. This section highlights initiatives that are key to the EWSI's vision and will advance significantly over the coming year. They include: Water/Drainage integration; Environmental, Social and Governance (ESG) leadership; design and development modernization, equity and affordability; water supply flood resiliency; and automated metering.

WATER/DRAINAGE INTEGRATION

A key aspect of the transfer of the City's Drainage operations to EPCOR in 2017 was the plan to pursue a "One Water" approach to managing operations across the entire water cycle. In 2023, EPCOR is planning an overall organizational re-design that allows for implementation of a new vision and strategy for a unified Water and Drainage. This overall organizational structure re-design will achieve integration of Water and Drainage at the highest level. Water Services and Drainage Services will be combined into a single business unit led by one Senior Vice President.

Water and Drainage Services continue to advance strategies for identifying, developing and implementing synergies to realize operating and capital efficiencies. These strategies include completion of the Real Estate Consolidation project, pursuit of synergies in a number of specific operational areas that are common to Water and Drainage, and an overall organizational re-design plan that allows for implementation of a new vision and strategy for a combined Water and Drainage business unit.

With construction of the Aurum facility completed in 2022, the Real Estate Consolidation project will move into the next phase of implementation which includes employees beginning to move to the Aurum site in a phased process starting in January 2023 and ending in May 2023. EPCOR's properties at Kennedale, Eastgate, Coronation, McCauley and Poundmaker have been sold and we will be exiting the lease at the Edmiston and MNP facilities at the end of March, 2023. Most of the employees based at these facilities will be moving to the Aurum site but some will be moving to EPCOR Tower and Rossdale during the same timeframe.

We will continue to advance a number of operational excellence projects in 2023. Some of these projects depend on the move to Aurum. These projects include: control and dispatch; fleet dispatch and coordination; inspections; certified safety equipment; shops; site restoration; pre-job set up; and above

ground and preventative maintenance. Other operational efficiency projects related to growth planning, drafting and design and project management and engineering will also be advanced in 2023 as these Water and Drainage teams are combined at the EPCOR Tower and Rossdale sites.

In 2023, an overall organizational structure re-design will be pursued in order to achieve integration of Water and Drainage at the highest level. The re-design will be consistent with a One Water/One System approach to the organization. In 2023, the plan is to move from a primarily asset based towards a more functional based organizational structure with centralization of many functions that were previously decentralized based on assets. This structure will promote development of new capabilities and strategies that were identified through leadership workshops that took place in 2022.

ENVIRONMENT, SOCIAL & GOVERNANCE

For EPCOR, demonstrating strong ESG performance over time is key to long-term success. To achieve EPCOR's long-term goals, ESG principles of environmental stewardship, social responsibility and excellence in governance practices must continue to be integrated across the company.

A materiality assessment in 2019 helped EPCOR determine the ESG factors most important to its stakeholders. The top ranked and high ranked factors were:



The materiality assessment and resulting top and high ranked factors informed the targets and measures that make up our ESG scorecard, which was published in the 2020 ESG Report and 2021 Performance Update. Many of the measures and targets are set for the company, but some are specific to geographic locations and/or Business Units. The following outlines progress on measures that apply directly to EWSI (both Water Services and Drainage Services).

The 2021 ESG results:

- Were consistent with prior year performance (e.g. governance measures, workforce demographics, customer measures, community investment)
- Demonstrated progress towards multi-year goals (greenhouse gas reduction projects, flood resilience upgrades, lead service line replacement, customer cost containment)
- Varied within a normal range of outcomes (river water quality, water loss, employee turnover), and/or
- Reported and explained modest changes in the schedule for achieving interim targets (one year differences for completing the initial phases of the flood resilience upgrades and achievement of "Committed" status in the Progressive Aboriginal Relations certification)

In addition to reporting progress against publicly declared measures and targets, further work has been done to create and measure progress against internally stated measures of ESG performance that align with the top ESG factors (Appendix 2). Examples include setting goals to achieve greater workforce diversity by 2026, and setting appropriate near term measures of performance implementing the Stormwater Integrated Resource Plan (SIRP).

A new materiality assessment is planned for Q4 2022/Q1 2023, with discussion of the results and the evolution of EPCOR's performance focus and reporting scope anticipated in mid-2023. To help reflect on our own performance, and continue to develop an industry-leading sustainably strategy and identify trends, an ESG review of several industry peer companies will also be conducted. The materiality assessment will also include more internal and external interviews to ensure our diverse stakeholder groups and customers are adequately covered.

The expanded materiality assessment will provide more information about what measures will best help drive and demonstrate ESG performance and progress.

Overall, EPCOR's strategy of setting meaningful ESG measures and objectives, matched to material risks or opportunities facing the business and our stakeholders, is producing strong results. Feedback from various stakeholder groups, including debt investors, employees, Shareholder representatives, and members of the broader communities served, has been positive. Continued focus on material ESG factors and meaningful contributions aligned with our overall business strategy.

Implementation

EPCOR has established a team to lead the development of a strategy to operationalize the integration of ESG principles across the company, and track and manage the company's performance against the metrics and targets established to support that strategy, including the externally published measures and targets in current and future ESG Reports. The strategy is currently in development, and includes four components:

- 1. Performance analysis and strategy development
- 2. ESG reporting and data controls
- 3. Thought leadership and capacity building, and
- 4. Partnerships

The ESG measures and associated data will be used as a measure of performance, but the manner in which data is interpreted, gaps are identified, and needed actions are executed requires a network reaching across the company. To support this work EPCOR is assembling a sustainability working group made up of an engaged, diverse team from across the company. This will connect and integrate strategy teams from across the company (e.g. grid transformation, lead management, fleet services, one water planning), creating mutual visibility, opportunities for collaboration, and consistent performance reporting and management. The working group provides a structure for identifying strategy gaps, emerging trends and opportunities.

In addition to developing strategy, these teams are driving implementation. They are identifying, understanding and forecasting the role grant funding plays, providing information to policy makers to evolve legislation and funding incentives as needed, providing research and work opportunities for students and staff, and identifying emerging future projects. The objectives of the sustainability strategy, in part, will be to identify, understand and integrate the work of all the teams, making connections across the company and helping to identify emerging strategy needs or gaps. A repository for sustainability information and opportunities for skill development and capacity building will also support this work.

External partnerships will also play a crucial role. EPCOR is not alone in working to improve safety performance, diversify our workforce, improve Indigenous relations and reduce our carbon footprint. Connecting and working with the right government leaders and agencies, industry organizations, research institutions and relevant associations will allow for learning, collaboration and for EPCOR to be influential in its areas of expertise. Again, there are already many EPCOR employees connected and working with external partners. The role of the sustainability strategy is to see the big picture and find any gaps or new emerging opportunities as they arise for sustainability issues.

EWSI acknowledges the goals and Big City Moves of the City Plan and has outlined how our work will support those goals.

DESIGN AND DEVELOPMENT MODERNIZATION

To support the City Plan objectives of a Rebuildable City, EWSI has undertaken a body of work to remove historical infrastructure barriers for infill and greenfield developers. Design standards are being modernized, improving affordability. The upcoming PBR filing will identify opportunities to invest in priority infill areas to advance responsible development

The City Plan and in particular the Nodes and Corridors, District Plans, Zoning Bylaw renewal and Greener as We Grow aspects have identified the priority need for EPCOR to modernize the Water and Drainage Design and Construction standards to support the City Plan goals including economic development and non-residential growth as well as the traditional focus on increasing residential densities and leveraging use of existing infrastructure. EPCOR is focused on four aspects of the design standards for modernization:

- Water consumption and Sewer Generation levels Report presented to Utility Committee in May 2022,
- Fire Flow Standards Collaborative work underway with Development community, Edmonton
 Fire Rescue Services and City Planning teams. This work is close to final resolution as we develop
 approach that supports both infill and greenfield development,
- Inflow/Infiltration Standards this is identified in both SIRP and SanIRP as a key component to
 maximize the use of existing infrastructure. Requires additional flow monitoring over the next few
 years to develop final recommendation,
- Greened Infrastructure As part of SIRP, EPCOR continues to expand the greened infrastructure techniques available to the development community within the design and construction standards. This work is proceeding collaboratively with City of Edmonton, Commercial property owners and the development community.

Working with the City of Edmonton Urban Planning team EWSI has also been identifying opportunities for advance investment in infrastructure to open up priority nodes and corridors for development. Future PBR filings will include opportunities for investments to advance development. Additional information on how EWSI is aligning with the City Plan is in Appendix 1.

EQUITY AND AFFORDABILITY

In 2022, EWSI reviewed water industry approaches for including water equity as a lens to guide business decisions. The water industry is exploring the inclusion of sustainability, social responsibility and affordability as key factors in service delivery. EWSI's policies, services, and capital and operational programs must be equitably designed and implemented. EWSI established a working group in 2022 with members from the Water and Drainage business units to gather and assess socio-economic datasets, understand equity initiatives past and present, as well as to document future opportunities.

Water equity (as defined by the US Water Alliance) is achieved when all communities:

- have access to safe, clean, affordable drinking water and wastewater services;
- are resilient in the face of floods, drought, and other climate risks;
- have a role in decision-making processes related to water management in their communities; and
- share in the economic, social, and environmental benefits of water systems (US Water Alliance, 2017).

The overall high quality of EWSI's municipal water, sanitary and storm systems in Edmonton, can obscure the water equity challenges that can exist in our community. Service failures can have inequitable impacts on lower income neighbourhoods, increasing homelessness has affected water access (particularly during extreme weather conditions), and affordability issues have been exacerbated due to the COVID pandemic and high inflation.

ESWI is also focused on continuing and expanding operations as a workplace that reflects the diversity of the communities we serve, including a deeper focus on making business decisions, adjusting EWSI's focus from service equality to service equity. Additional focus areas could include increasing community resilience, infrastructure investment, improvements to customer service, partnerships, affordability, etc.

WATER SUPPLY FLOOD RESILIENCY

EWSI is taking action to protect the water supply for Edmonton and more than 65 surrounding communities in the event of a major flood, while also partnering with local communities on flood resilience. The Water Treatment Plants Flood Mitigation project was approved as part of Water Services' 2022-2026 PBR application and will include \$22 million in federal and provincial grant funding.

Protecting the Water Supply

By taking action now, EWSI can manage the risk associated with flooding and ensure that customers continue to receive clean, safe and reliable drinking water during a flood emergency. Protecting our water treatment plants during a major flood event will include three kinds of work:

- Increase protection to critical assets, or relocate them to higher ground within the water treatment plants.
- Prevent river water from backing up into the plants through pipes that discharge to the river.
- Develop flood barriers to protect equipment and storage facilities that can't be moved.

Addressing Community Concerns

Over the past year, EWSI has had numerous conversations and interactions with the surrounding communities, including meetings with the Community Leagues' executive, online and in-person workshops, one-on-one meetings and pop-up events in which home flood prevention information was shared and free water sensors distributed. During these conversations, we heard two main questions relating to the impact of the project, and EPCOR's role as a neighbour in the Rossdale community:

- 1. What is EPCOR doing to support flood protection for local communities as a whole?
- 2. How is EPCOR ensuring that the proposed flood barriers will not adversely affect nearby homes?

A key commitment of our plan to protect the plants is that any flood barriers will not worsen flooding in the surrounding neighbourhood or negatively impact nearby homes. Hydraulic modelling from the provincial government, based on work by the United States Army Corps of Engineers and confirmed by a third-party consultant, shows that there would be no change in the water level across the flood plain around Rossdale due to the treatment plant flood barriers. In addition, flood flows through the community would not be worse due to the presence of flood barriers around the plant. The communities around E.L. Smith are not affected by riverine flooding.

EPCOR has programs in place to help Rossdale and other communities and homeowners mitigate other impacts of both rainfall and river-related flooding.

- The Stormwater Integrated Resource Plan is a 20-year, \$1.6-billion plan that includes a variety of
 actions to slow, move, secure, predict and respond to flooding in Edmonton neighbourhoods. In
 Rossdale, this will mean construction of a dry pond, improvements to the outfall gates to prevent
 river water backup, and low-impact development (or "green infrastructure").
- The Homeowner Flood Prevention Program includes free flood-proofing home inspections, as well as a backwater valve subsidy for eligible properties. EWSI also distributed 31 free Wi-Fi water sensors to the Rossdale and Riverdale communities this past summer.

EWSI is committed to helping our neighbours in the event of a severe flood from the river overtopping its banks. The City of Edmonton and Alberta Environment and Parks would activate their Emergency Operations Centre and EPCOR would work with our partners during the response, and ensure that safe, clean water remains available to help with response and recovery efforts.

Minimizing Vegetation and Wildlife Impacts

An Environmental Impact Assessment has been done for this project. Based on the results of the Environmental Impact Assessment, it is not anticipated that the project will result in significant adverse effects to the environment.

Overall, the adverse residual effects associated with the project are mostly limited to minor changes to vegetation and wildlife habitat and wildlife movement. These effects were reduced by project design considerations, including siting the majority of the flood mitigation structures within existing disturbance.

For the work associated with this flood mitigation project, EWSI will begin implementation of a vegetation management plan with the aim of achieving an overall net gain in ecosystem structure and function in the area.

INDIGENOUS ENGAGEMENT

Over the past year, EWSI has been working with Indigenous Nations and rights-holders to understand perspectives and preferences related to flood barriers and treatment plant protection. EWSI has also regularly employed Indigenous monitors during ground disturbance work for this project. In partnership with Indigenous Nations and communities, ceremonies were held at Rossdale to respect teachings and Indigenous ways of knowing as it relates to these lands.

NEXT STEPS

Further information on the preferred designs and amenities will be coming forward as part of an overall review of the project plan with City Council in early 2023. Construction on the flood barriers is expected to begin in 2024.

EWSI also received \$22 million in support from the Government of Canada to bolster flood mitigation at the Gold Bar Wastewater Treatment Plant and for 117 stormwater collection facilities across the city.

AUTOMATIC METERING INITIATIVE (AMI)

EWSI has begun the Water Advanced Metering Infrastructure (AMI) project to replace the majority of water meter reading technology throughout the City of Edmonton. Once meters are upgraded meter readings will be "piggybacked" and sent wirelessly to EPCOR through the electricity AMI meter reading network that is already in place.

The AMI will result in the following benefits over time:

- Customers will receive timely, accurate billing for the water they use every month, allowing them to monitor their consumption and adjust it accordingly.
- EPCOR will receive data directly, which means meter readings can be obtained without entering
 yards, homes, buildings or businesses, providing both a more complete picture of water
 consumption, and reducing exposure to the risks of meter reading.
- In the long-term, it can allow detection of higher-than-normal consumption problems, such as leaks, quickly, to help customers take action before too much damage or costs are incurred. This enhancement will be assessed in a future PBR.

This project is split into two phases. Phase 1 focuses on project planning and developing and implementing IT system integrations, as well as safety processes and developing customer communication materials. This phase started in 2022 and will continue into Q3 of 2023. Phase 2 is planned to start in Q4 of 2023 with EWSI's contractor beginning installations, which will continue until the end of 2025.

WATER AND DRAINAGE SERVICES — COMMON INITIATIVES

Initiative	2023 Actions	
Customers and Stakeholders		
Continue to seek alignment with City planning and goals EPCOR and the City of Edmonton are committed to collaboratively delivering services in the best interest of our customers. To achieve this goal, EWSI and the City of Edmonton continue to have a multi-tiered information sharing and problem solving framework. EWSI and the City's leadership team meet quarterly and intermediate managers meet monthly in targeted working groups focused on operations and maintenance, long range planning and growth/development, and capital program delivery, land management and Open Data and GIS sharing. In 2023, one of the primary focus items will be the continued alignment with the City plan and the impacts related to infrastructure requirements to achieve the City Planning	 Assess options for alternative funding approaches for developer contributed assets. Build strong relationships with key City of Edmonton departments at all levels Water and Drainage Design Standards modernization Support for infill development and infrastructure requirements to support nodes and corridors do 	
goals. Four areas in particular have an infrastructure dimension; Zoning Bylaw Renewal, District Plans, Nodes and Corridors and Greener as We Grow.		
Improve customer service in Edmonton	Initiatives:Continue to perform market research to gauge drivers	
Build systems / processes / training to provide consistently good service that feels seamless to the Customer. Understand our Customers' needs and develop processes and tools to meet their expectations	of customer satisfaction. Provide timely responses to customer inquiries and complaints Launch a developer portal	
Create a One EPCOR feel for our Customers and Stakeholders	 Improve the coordination of Water and Drainage infill activities from the customers' perspective Improve coordination, visibility or management of work with developers 	
Public Health and the Environment		
Develop an Integrated Watershed Management Strategy for Edmonton	 Improve load quantification and watershed protection for EWC's Edmonton operations. Assess effects on the North Saskatchewan River and urban creeks. Ensure collaborative stewardship of urban creeks. 	
Management Systems - Conform to ISO 14001/17025 standards across all Water Canada sites and continue to improve performance.	Maintain ISO 14001 conformance across all Water Canada registered systems.	
Employee and Public Safety		
Implement the contractor safety improvement plan	Ensure continued compliance to the Contractor Management Standard and Procedure to reduce overall organizational risk.	

Initiative	2023 Actions
People	
Create a diverse, equitable and inclusive (DEI) environment where employees are engaged and their participation and input is valued. EPCOR believes in the power of our differences and the collective impact we can make when we come together. In creating a culture where everyone feels welcome to bring their true and whole self to work every day. Change isn't easy and we know we are early in our journey. Develop our employees for the future and ensure they have the tools and information to manage their careers.	 Initiatives Support Corporate Services' mental health/psychological safety program. Implement the corporate hiring program intended to develop a workforce that reflects the communities we serve Identify DEI activities that are meaningful for front line based groups and develop action plans for implementation. Continue to enhance and expand DEI moments, ERG support and site focused DEI activities. Rotate management and senior management employees for development.
Improve employee culture and communication.	Ensure development plans are in place for 80% of all people leaders who complete assessments Define the elements of a renewed EWSI culture at the
Develop a comprehensive program to facilitate the implementation of the water/drainage redesign and integration	 conclusion of the Water and Drainage Integration. Implement change management programs and training (including leading through change for people leaders) to ensure the successful implementation of the Water and Drainage Integration.
Encourage and support employee ownership of career development and growth at all levels	Incorporate career development discussions into all mid-year reviews. Encourage employees to have a development plan
Optimize hybrid working arrangements Ensure we can work as effectively in hybrid working situations as we can in in-person arrangements, and ensure that employees are supported in the acquiring the skills necessary to work in hybrid situations.	 Define use of technology How to manage a hybrid workforce (leading a virtual workforce)
Operational Performance	
Develop a comprehensive program to facilitate the Water / Drainage redesign and integration	 Implement Water and Drainage Integration organizational structure recommendations with support from third party consultant. Realize expected benefits of Water and Drainage Integration.
Continuously Strive to Improve Operational Performance and Reduce Costs by Focusing on Process Improvement and Innovation. Efficient operations are cost-effective, while maintaining quality and service. Operational efficiency also advances affordability, which is central to EWSI's current planning and management approach. An example of process improvement through innovation is the future (2023-2025) deployment of AMI technology. These meters will leverage	 Initiatives Implement metrics tracking and external benchmarking aligned with PBR standards. Determine the key operational excellence goals we want to achieve and the associated metrics. Build networks and relationships with other utilities and contractors to raise awareness of best practices and industry trends. Development of a risk management framework to ensure oversight of, and strategy to, identify and

Initiative	2023 Actions
EPCOR Distribution and Transmission's (EDTI's) existing electricity infrastructure and will provide direct, accurate, and timely meter reads.	manage emerging risks through programs included in capital and operating plans.
Use data and information to proactively manage our system. Leverage technology to improve performance	Develop a Data Management, Governance and Utilization strategy
Data is paramount for informed decision making. A focus on situational awareness allows EWSI to see a holistic view of the situation which leads to smart decisions in the moment and predictive abilities for the future.	
Growth and Financial Performance	
Contribute to the "Utility of the Future" Initiative The Utility of the Future is a plan to modernize operations and reduce long term operating and capital costs by leveraging technology and processes used and refined by leading water utilities around the world. The review is focused on six key areas of potential optimization: Asset Optimization; Customer Engagement; Sustainability; Procurement, Partnerships and Supply Management; Advance Notification of Events; and Rate Pressure	 Situational awareness - develop strategy that will allow us to leverage technology and use data and information to proactively manage our system Alternative Procurement delivery model
One Water - Continue to develop and refine integrated planning and implementation approach to manage finite water resources. Water and Wastewater utilities around the world are enhancing their strategic planning by moving to a "One Water" approach to managing the entire Water cycle in their community. The One Water approach has been defined as a holistic approach to sustainable water management that breaks down the traditional silos within the water utility sector and encourages collaboration between water utilities and other sectors.	 Complete the sanitary system integrated resource plan (SanIRP), with requirements built into operating and capital budgets. Collaboratively with COE and Development community review SSSF rate structure considering implications of changing water consumption\sewer generation patterns, design standard modernization, City plan growth priority areas and SanIRP approaches for system expansion. Develop growth scenarios for priority nodes and corridors based on the City's growth plan with requirements built into the capital plan. Develop a long term strategy for creeks and outfalls in collaboration with key stakeholders Prepare for the next Edmonton Wastewater system

approval

WATER SERVICES

INITIATIVE	2023 Actions
Customers and Stakeholders	
Improve operational coordination with the Regional Water Customer Group (RWCG), Alberta Capital Region Wastewater Commission (ACRWC), and Indigenous partners.	 Continue collaborative approach with RWCG and ACRWC and look for opportunities to partner on initiatives. Foster partnerships with indigenous neighbours as outlined in the proactive communications strategy.
Improve development processes and communications with the City of Edmonton and developers utilizing an electronic dashboard.	 Continue to work with developers and City Planning to develop appropriate communication, feedback channels, tools and developer portals to meet the needs of the community.
Public Health and the Environment	
Enhance and implement the Climate Change Adaptation Plan in alignment with EPCOR Corporate Strategy	 Ensure EWSI's Climate Change strategy and initiatives align with corporate ESG objectives. Continue to execute flood hardening design work at both water treatment plants
Execute the Lead Management Program in Edmonton and rollout to other communities.	 Implement orthophosphate system in Q1, 2023. Monitor the effectiveness of orthophosphate addition for lead and corrosion control.
Between approximately 25,000 and 30,000 dry tonnes of digested biosolids are produced by the Gold Bar and Alberta Capital Region wastewater treatment facilities annually. Biosolids and stored in lagoons located at the Edmonton Wastewater Management Facility, then applied to agricultural land through the Nutrigold program. Some of the biosolids are used to reclaim land and soil from former mine sites.	 Determine approach to acquiring or building a dewatering facility. Implement Clover Bar long-term recommendations from bio-solids strategy.
A detailed long-term strategy will be developed to include a detailed review of biosolids generation forecasts, regulatory and market changes, assessments of emerging technologies and quantification of environmental benefits, including from a GHG perspective.	
Employee and Public Safety	
Develop and implement an employee health and safety operational plan aligned with the corporate vision	 Review 25% of existing Emergency Response Plans to determine readiness resulting in a minimum 50% score on the Readiness Dashboard Roll out Cause Centred Investigation Methodology across Water Canada Participate in the Public Safety & Damage Prevention Team; implement working group across EWSI and

INITIATIVE	2023 Actions
	support transition to online education/awareness modules
People	
All initiatives are detailed in the Common section above	9
Operational Performance	
Continue the alignment of Asset Management across EWC with ISO 55000; build a data-driven Asset Management culture. The Asset Management Framework outlines the approach, processes and tools required to ensure Water Services has accurate and comprehensive information about our assets to meet our goals. The framework aims to provide consistent mechanisms to identify the costs and risks associated with operating and maintaining assets, in addition to standardizing the approach to investing in our assets to manage both cost and risk.	 Work with stakeholders across EWC to build and document site-specific asset management roadmaps. Implement Asset Information Standards with metrics Build an asset management "windshield" to visualize metrics, improvements that have been made, and where we need to go. Develop a plan to drive asset management into decision making processes.
Integrate Edmonton water/wastewater laboratories for increased efficiency	 Begin construction of integrated lab and determine lab organization structure. Complete lab visioning study, identifying gaps and opportunities and develop an appropriate implementation plan.
Growth and Financial Performance	
Improve the financial performance of EPCOR Water Canada.	Adopt Indigenous procurement strategy.

DRAINAGE SERVICES

Initiatives and Objectives	2023 Actions
Customers and Stakeholders	
Build Relationships with Stakeholders to Create Trust and Understanding	 Complete flood proofing inspections as per SIRP plan Odour reductions in the hotspots are achieved as per CORe
EWSI and the Alberta Capital Region Wastewater Commission share the treatment of sanitary sewage across the region and operational activities can have impacts on both of the wastewater treatment plants. The teams meet regularly to coordinate on discussions with the environmental regulators, planning impacts as new subdivisions connect to the system and opportunities to reduce inflow/infiltration into the sanitary networks. In 2023, a scheduled review of the SWAP agreement between EWSI and ACRWC will be initiated.	
The SIRP and CORe strategies within the Drainage utility continue to be of importance to customers throughout the region.	
In 2023, expansion and optimization of the SIRP flood inspection programs in particular will be a focus to broaden beyond the residential sector and in particular focus on the highest risk communities in the River Valley	
The CORe program odour hotspot reductions will continue with a primary focus on pumping optimization and trunkline cleaning as monitoring data on the work completed to date for CORe has shown this to be most impactful to the system	
Utilize data and information to be proactive with our Customers and Stakeholders	Identify and prioritize areas of our activities that are dependent on customer education that we can tie to an operational performance metric
Public Health and the Environment	
Manage Impact of Our Operations on the Environment	Increase the area of Edmonton serviced through outfalls with continuous monitoring
The Drainage network impact on the environment is primarily via the outfalls that discharge to the different creeks and river system. The program will be continued in 2023 to expand the monitoring at all outfalls to understand and improve ability to respond to adverse impacts. The expansion of the SIRP- Slow low impact development	 Increase the number of Greened Hectares in Edmonton Implement SIRP- Secure Inflow & Infiltration strategy, CORe odour monitoring and control strategy Maintenance program plans for at risk Drainage Services infrastructure to prevent impact from Urban Wildfire and Ice Accumulation
will continue with a doubling of the amount of greened hectares from last year's target. Expansion of greened hectares into new developments will also be explored as well as the opportunity to install at the parcel level in the residential sector via the deployment of box planters throughout the City on downspout discharges.	

Initiatives and Objectives	2023 Actions	
Employee and Public Safety		
Continue to make safety a top priority for the organization	 Explore technology and alternate work methods to eliminate or mitigate high risk activities Analyze the Drainage Services risk register to identify and mitigate tasks with high residual risk. Revamp and simplify registry entries Raise awareness of Emergency Operations Center and emergency response processes and improve bench strength Conduct business unit wide safety meetings All operational leaders complete Safety Leadership training 	
Encourage ownership of health and safety at all levels	 Monitor and communicate key leading and lagging indicators Major incidents investigated by a cross functional multi-level team 	
Train Staff for Competency and Confidence	 Competency assessment and or passports developed and implemented for high risks tasks and tied to positions Explore alternate learning approaches that can bring learning to the field. Example: YouTube training 	
Reduce customer and community health and safety risk	Complete SIRP "Respond" emergency response plans for high risk (A to C) basins	
People		
Develop teams that work collaboratively and understand how their work impacts the system as a whole	Enhance internal understanding of key initiatives such as SIRP, SanIRP and Organizational Program Management in the Operational Plan, and how everyone contributes to delivering these initiatives	
Operational Performance		
All initiatives are detailed in the Common section above		
Growth and Financial Performance		
Meet the requirements of the approved PBR and prepare for the next PBR application	Track and report PBR performance	
Improve awareness of financial and regulatory impact when making decisions	Develop financial 101 training and materials to support understanding and awareness.	
Meet operational and capital budget targets	Monitor and track key financial metrics against target	

APPENDIX 1: ALIGNMENT WITH CITY PLAN

This section describes the ways in which EWSI's work planned for 2023 advances Edmonton's City Plan.

GREENER AS WE GROW

EPCOR was a founding member of the Corporate Climate Leaders Program. This City-led program supports and empowers corporate members to make decarbonization commitments¹. In 2021, EPCOR announced that it was expanding its commitments to all of its locations. Specifically, EPCOR commits to companywide net GHG reductions of 50% in 2025, 85% in 2035 and 100% (net-zero) by 2050². The largest source of greenhouse gas emissions within EWSI is from the electricity used to pump water in both water and wastewater treatment operations.

EWSI has contributed to EPCOR's 2035 targets through two projects:

- Development of new, local renewable generation through the kisikaw pisim solar farm;
- Wind energy procurement EPCOR Utilities Inc. has signed an agreement with Renewable Energy Systems Canada to develop and construct the Hilda wind farm in southern Alberta. EPCOR will acquire Renewable Electricity Certificates from the project for a 20 year term. The combination of this offtake agreement and the Solar Farm at E.L. Smith will result in EPCOR Water utilizing 100% green electricity for all its operations within the City of Edmonton. Renewable Energy Systems Canada has obtained Alberta Utilities Commission (AUC) approval for the Hilda wind farm with rezoning activities underway. The Hilda wind farm is expected to be constructed in fall/winter 2022 with commercial operations commencing in Q1 2023.

In order to work toward EPCOR's 2035 targets, EWSI will continue to identify opportunities to reduce long term Scope 1 and Scope 2 emissions, with a focus on efficiency opportunities and grant funding.

Additionally, Drainage Services is implementing the SIRP and CORe programs as presented in greater detail in EWSI's 2022 Progress Report to Utility Committee.

INCLUSIVE AND COMPASSIONATE

Affordability is central to EWSI's current planning and management approach, due to the current economic environment and the financial hardship experienced by many Edmontonians, particularly those most vulnerable. EWSI has advanced modernized design standards, integration of operational activities across business units and the active pursuit of grant funding opportunities. Affordability will also be advanced through innovation and risk prioritization.

EPCOR Water Services – Water, Wastewater and Drainage

¹ https://www.edmonton.ca/programs_services/environmental/corporate-climate-leaders approved in Water Services' 2022-2026 PBR, T² https://www.epcor.com/about/news-announcements/Pages/epcorreleases-esg-report-2020.aspx

EWSI will focus in 2023 on fostering partnerships with indigenous neighbors including Enoch Cree Nation and the Metis Nation of Alberta, as outlined in the proactive communications strategy. EWSI will also implement an Indigenous procurement strategy. For the water treatment plant flood protection project, feedback and responses were gathered from Indigenous Nation and community representatives during pipe ceremonies, in-person walking tours, virtual information sharing and guidance-seeking workshops, hybrid (online and in person) events, Indigenous monitoring during ground disturbance work, and one-on-one conversations.

EWSI's commitment to equity is driven from the corporate level. Advancing service equity, as discussed in Sections 2.2 and 2.3, would align with the City's Big Move 4 – to create an inclusive and compassionate city, rooted in efforts to improve equity, end poverty, eliminate racism, and make clear progress towards Truth and Reconciliation. Internally, EWSI will establish front line based groups by area to identify DEI activities/ideas and action. DEI moments will be incorporated into team meetings and will focus on improving retention of minorities.

CATALYZE AND CONVERGE

The Utility of the Future is an ambitious path to modernize operations and reduce long term operating and capital costs by leveraging technology and processes used and refined by leading water utilities around the world. In 2023, EWSI will development a roadmap for investment, consider alternative procurement and define a longer-term vision for data analytics.

The AMI initiatives, discussed in Section 2.5, further advances this Big City Move.

APPENDIX 2: ESG MEASURES & TARGETS

ESG Measure	Description	Target	
Environment			
Net greenhouse gas emissions	EPCOR owned and leased, company-wide Scope 1 and 2 emissions net of offsets (tonnes CO ₂ e).	2025: 50% reduction in net Scope 1 and Scope 2 CO₂e emissions from 2020 levels; 2035: 85% reduction in net Scope 1 and Scope 2 CO₂e emissions; and	
		2050 : Net zero Scope 1 and Scope 2 CO₂e emissions.	
Protect river water quality	Annual discharges of suspended solids into the North Saskatchewan River from land drainage, wastewater treatment operations and combined sewer overflows (kg/day).	Performance data only, with reporting lagging by one year.	
Implementation of Edmonton flood resilience upgrades	Protect utility assets and critical infrastructure from river flooding to at least a 1:200 year flood event (percentage implemented).	Complete asset protection and relocation, and backflow prevention by 2023. Embankments 100% complete by December 2027.	
Water loss	Limit the percentage of treated drinking water lost due to transmission and distribution line leaks and failures, and inaccurate meters (US and Canada combined).	Performance data only, with reporting lagging by one year.	
Social			
Total recordable injury frequency	Continuous reduction in total incidents (TRIF).	A safety-first culture, driving to zero incidents.	
Lost-time injury frequency	Continuous reduction in lost time incidents (LTIF).	A safety-first culture, driving to zero incidents.	
Lead mitigation	Number of high priority lead service lines replaced as part of EWSI's updated 2019 Enhanced Lead Mitigation Strategy, and not including EWSI's lead replacement programs prior to this date.	Edmonton households comply with new Health Canada guidelines for lead at the tap by 2025, prior to provincial regulation. EWSI has replaced 360 high	

ESG Measure	Description	Target
		priority lead service lines by 2023, and commissioned the orthophosphate system.
Employee Engagement	Employee engagement as measured in a companywide survey.	Top decile performance against a group of comparator companies by 2023 (the next survey date).
Total Turnover	Employee departures for all reasons including retirement, divided by year-end headcount.	Performance data only.
Diverse and representative workforce	Women in the workforce, visible minorities, women in senior leadership (Canada and U.S.).	Performance data only.
Corporate reputation	EPCOR's reputation score in Edmonton compared to utility peers.	Exceed utility peer scores by 5 points or more.
Customer satisfaction	Number of customer satisfaction metrics that meet or exceed full-year satisfaction targets set by utility regulators.	Meet or exceed regulated targets in all surveys.
Reasonable costs	Operating costs per customer (rounded to the nearest dollar) as defined by the EPCOR's Mid-Term Incentive Plan and approved by Board of Directors.	Three-year average operating costs per customer increase by 2% or less. The 2020 percentage change reported is for a single year. The 2021 percentage change is a two year average, using 2019 as the base year
Safe water	Number of acute health-based drinking water violations from EPCOR controlled activities.	Zero violations.
Prompt service	Percentage of drainage maintenance calls resolved within 24-hours (Edmonton).	Meet or exceed regulated target of 80% of calls resolved within 24 hours.
Engagement	The number of community participants in engagement processes conducted at the "Advise" level or higher in the IAP2 engagement spectrum.	Performance data only.

ESG Measure	Description	Target
Economic value distributed	Direct economic value delivered to stakeholders, including suppliers, employees, providers of capital, governments and community organizations.	Performance data only.
Community investment	Cash donations and sponsorships (Future data will include eligible in-kind contributions, implementations costs and volunteering).	Achieve Imagine Canada's Caring Companies designation by 2023.
Indigenous relations	Progressive Aboriginal Relations (PAR) certification by the Canadian Council for Aboriginal Business.	Achieve PAR "Committed" status by 2021, achieve "Bronze" level performance certification by 2023, and set targets for higher level performance once "Bronze" level status achieved.
Governance	,	
Board Independence	Percentage of Directors who are independent under National Instrument 58-101.	At least 67% of Directors are independent under National Instrument 58-101.
Board Gender Diversity	Share of board seats held by women.	At least 30% of board seats are held by women.
Employee ethics training	Percentage of eligible employees who have received training on EPCOR's Ethics Policy.	EPCOR conducts ethics training every second year. 100% of eligible employees are trained.
Ethics complaints actioned	Number of ethics complaints received and the percentage investigated or otherwise resolved.	Reporting volumes are provided for context only. 100% investigated or otherwise resolved.

APPENDIX 3: LIST OF ACRONYMS

ACRWC Alberta Capital Region Wastewater Commission

AMI Advance Metering Infrastructure

AUC Alberta Utilities Commission

CORe Corrosion and Odour Mitigation

DEI Diversity, Equity and Inclusion

EDTI EPCOR Distribution and Transmission

EPIC Environmental Planning Information Checklist

ESG Environmental, Social and Governance

EWSI EPCOR Water Services Inc.

PBR Performance Based Regulation

RWCG Regional Water Customer Group

SANIRP Sanitary Integrated Resource Plan

SIRP Stormwater Integrated Resource Plan

SSSF Sanitary Servicing Strategy Fund