Appendix J

EPCOR WATER SERVICES

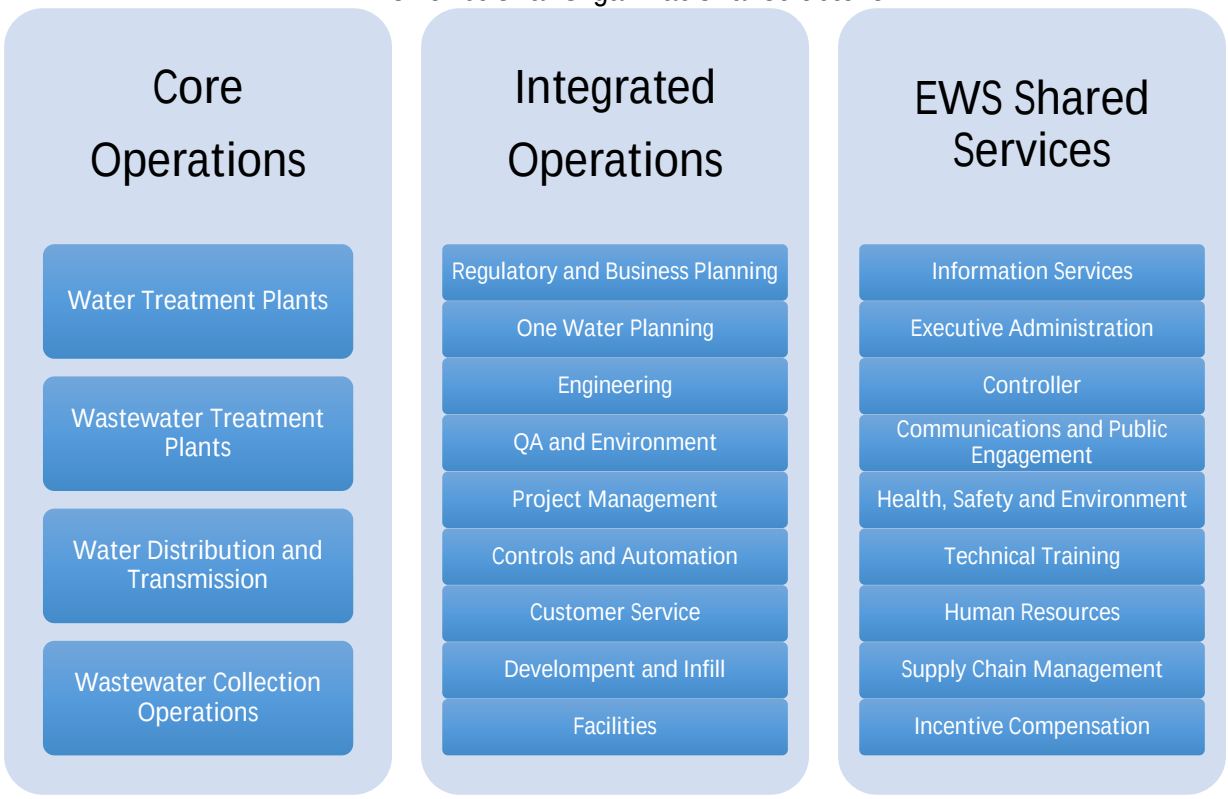
Integrated Operations and Shared Services Allocation Methodology

May 31, 2024

1.0 OVERVIEW

1. In 2023, EPCOR completed a comprehensive restructuring of its organizational framework, merging and integrating the two distinct businesses of Water and Drainage into a unified business unit. The primary goal of this integration is to streamline operations across the entire water cycle by adopting a "One Water" approach, while enhancing customer experiences and optimizing resource utilization across the entire water cycle. The unified strategy involves transitioning from the previous asset-based resource management structure to a more integrated cross-functional structure. To enable this transition, numerous decentralized and embedded functions within the Water and Drainage operations were centralized to establish the new integrated business unit. Figure 1.0-1 shows the restructured organizational structure of EWS.

Figure 1.0-1
EWS Functional Organizational Structure



2. The integration of Water and Drainage operations resulted in the creation of the following centralized functional areas to facilitate enhanced decision making, service delivery and resource management across the entire water cycle: Regulatory and Business Planning, One Water Planning, Engineering, Quality Assurance and Environment, Project Management, Controls and Automation, Customer Service, Development and Infill and Facilities, collectively referred to as "Integrated Operations".

3. The water treatment plants, water distribution and transmission system, Gold Bar wastewater treatment plant, and sanitary and stormwater collection functions are collectively referred to as "Core Operations". The integrated functions support the core functions to optimally manage the water and wastewater operations and infrastructure by applying a "One Water" approach, from planning to implementation.

4. The core and integrated functions receive support services from shared functional areas such as EWS Executive, Finance, Health, Safety and Environment, Human Resources, Information Services, etc. These shared functional areas are referred to as "EWS Shared Services". EWS Shared Services comprise allocated charges and direct charges for specific services provided to Water, Wastewater Treatment and Wastewater Collection operations.

5. EWS also obtains certain corporate services from its parent corporation, EPCOR Utilities Inc. ("EUI" or "EPCOR"), which are primarily comprised of activities that are centrally managed within the EPCOR group due to their nature and/or for the purpose of realizing economies of scale. Appendix I describes the corporate services provided by EUI to EWS.

6. A brief description of the specific integrated and shared services provided by EWS, including the methodologies employed to determine the service charges for Water, Wastewater Treatment and Wastewater Collection operations, is presented in the following sections.

2.0 INTEGRATED OPERATIONS

2.1 Integrated Operations Provided by EWS

7. A brief description of the integrated services provided by the centralized functions within EWS is as follows:

2.1.1 Regulatory and Business Planning

8. Regulatory and Business Planning is responsible for regulatory research and strategy, PBR application development, annual performance reporting, and management of relationships with several stakeholders including the City of Edmonton and the Regional Water Customer Group (RWCG). In addition, this group facilitates and manages continuous improvement initiatives for EWS to achieve operational efficiencies and strategic objectives; regulatory financial planning; tracking and reporting of key performance indicators and enterprise risk management for EWS; and manages billing exceptions and customer inquiries for the stormwater services.

2.1.2 One Water Planning

9. One Water Planning leads the strategic planning for the entire water cycle, ensuring sustainable water management through holistic and integrated approaches. This includes developing integrated resource plans for the water, sanitary and storm systems to define capital and operational strategies that ensure the growth and resilience of the one water system. Four key groups comprise One Water Planning:

- Integrated Resource Planning;
- Pipe Strategies;
- Plant Strategies; and
- Land Strategies.

10. The Integrated Resource Planning team ensures that the various Integrated Resource Plans (WatIRP, SIRP, WWIRP) are aligned and optimized. This involves initiating and advancing projects with multi-system one water co-benefits such as LID, inflow and infiltration reduction and resource recovery, in addition to capital investments based on asset life cycle replacement. Working closely with the Pipe, Plant, and Land Strategies groups along with EWS Core Operations, the team develops a balanced capital portfolio based on consistent asset risk frameworks and aligns with City Plan strategic objectives, all while ensuring affordable utility services.

11. The Pipe Strategies team develops the IRP components for linear assets. This includes planning the water and wastewater pipes for growth and resiliency, working closely with the City of Edmonton on concept development for major infrastructure relocations due to transportation initiatives, and coordinating with the development community in the early stages of land development to optimize servicing through the development and utilization of pipe modelling

tools. This includes prioritizing system investment (monitoring, inflow and infiltration reduction techniques, bypass strategies, enhancements, etc.) by geographic area.

12. The Plant Strategies team focuses on long-term planning activities and initiatives for the water and wastewater treatment plants, reservoirs and lift stations. This includes the development of IRPs for the water and wastewater treatments plants, resource recovery, pump stations and storage to ensure the continued growth and resiliency of the system. Regional coordination is prioritized to optimize water and wastewater service delivery to a growing capital region.

13. The Land Strategies team focuses on stormwater and watershed management (through the Integrated Watershed Management Strategy), climate adaptation, and integrated resource planning. This includes the development and optimization of SIRP to improve flood resiliency and planning widespread LID to slow the flow of stormwater to the system and reduce loading to protect the North Saskatchewan River.

2.1.3 Engineering

14. The Engineering group provides design engineering and technical support for all EWS asset areas. This also includes process safety services, asset management and planning, drafting and hydraulic modelling support.

2.1.4 Quality Assurance and Environment

15. The Quality Assurance and Environment group is responsible for:

- Monitoring and testing water quality to ensure that quality standards are maintained;
- Monitoring and testing treated wastewater to ensure that effluent standards are maintained;
- Quality assurance and auditing of operational water and wastewater quality data;
- Environmental services that include monitoring, tracking and reporting of environmental and public health incidents within Water and Wastewater and providing support to operation for incident management,
- Supporting EWS's Environmental Management Systems;
- Management of EWS' watershed programs;
- Management of EWSI's Cross Connection Control program;

- Monitoring of and tracking developing regulations and industry concerns to determine impact on EWS strategies and plans;
- Maintaining a water and wastewater treatment process optimization program;
- Working with environmental regulators and ensuring EWS reporting requirements are met;
- Managing process optimization activities within the Centre of Excellence's pilot laboratory and pilot plant as well as providing technical support to Operations and Engineering teams; and
- Providing foresight on emerging trends and wastewater research activities as well as supporting a networking function that links pilot and operational-scale issues to outside subject matter experts such as consultants, academics and government agencies/departments.

2.1.5 Project Management

16. The Project Management group is accountable for delivering projects effectively and efficiently. Project managers lead project teams to plan and execute the design, construction and commissioning of infrastructure improvements. They ensure that the projects meet quality requirements, are cost effective, completed in a timely manner and encourage collaboration.

17. The Inspection Services Group is responsible for making sure that EWS capital construction projects are constructed as per design and construction standards by conducting all necessary site inspections during the construction phase. The construction-related activities include quality assurance, safety and environmental inspections, tracking construction milestones, and completing the documentation review to process construction completion and Final Acceptance Certificates. The inspection group supports project managers by providing regular updates on projects progress, providing change order opinion or recommendations and conducting joint measurements to verify invoice quantities.

18. The Project Management Office ("PMO") is responsible for developing, documenting and delivering the annual and long-term capital plans. Developing project and portfolio related processes, procedures, tools and templates in order to bring consistency to the project management function. Providing training and support to the project and program managers and providing annual capital program oversight are also key components of the PMO's deliverables.

2.1.6 Controls and Automation

19. Controls and Automation is a specialized engineering group responsible for the design, operation and asset management of the instrumentation, process control communication networks, cybersecurity and the control systems required for the reporting, monitoring and automation of water treatment, wastewater treatment, and wastewater collection operations, including supervisory control and data acquisition (SCADA) systems. As well, this group establishes and maintains design practices and standards while providing support to operational and capital projects as required. This group also includes a Situational Awareness team that is accountable for providing internal users better access to data and tools to visualize data. This team develops the plan for new technology and data to support EWS' business plans, defines and implements the data architecture needs that support improved access to data.

2.1.7 Customer Service

20. The Customer service group includes customer agents who assist with scheduling appointments for water meter installations and provide technical support to assist customers in understanding their consumption patterns. This team also supports customers to identify leaks that could be contributing to higher water bills.

2.1.8 Development and Infill

21. Development and Infill is responsible for ensuring that expansion of the water system proceeds in accordance with planning documents approved by the City of Edmonton, and in conformance with EPCOR Design and Construction standards. Development and Infill is also responsible for reviewing and approving new water and sewer servicing at the subdivision, lot level and providing technical and administrative support to EWS construction crews to install the new water and sewer services. The Land Administration function works with private developers, the City of Edmonton and other entities to put utility easements, restrictive covenants, crossing agreements, and facility proximity agreements into place to protect EWS infrastructure.

2.1.9 Facilities

22. Facility Operations is responsible for all building related costs such as operations, maintenance, utilities, and lease costs.

2.2 Integrated Operations Forecast

23. EWS' Integrated Operations forecast by function for 2024-2027 are summarized in Table 2.2-1. The 2024 approved amounts with EWS' latest forecast for 2024 are provided for comparison.

Table 2.2-1
2024-2027 Integrated Operations Forecast
($ millions)

	Function	A 2024D	B 2024F	C 2025F	D 2026F	E 2027F
1	Regulatory and Business Planning	2.9	2.9	2.9	2.9	3.0
2	One Water Planning	6.9	6.6	6.9	6.6	6.7
3	Engineering	7.0	10.1	7.0	10.1	10.2
4	Quality Assurance and Environment	11.5	11.4	11.5	11.4	11.6
5	Project Management	7.0	3.8	7.0	3.8	3.9
6	Controls and Automation	3.3	5.1	3.3	5.1	5.2
7	Customer Service	1.6	2.8	1.6	2.8	2.8
8	Development and Infill	1.8	2.3	1.8	2.3	2.4
9	Facilities	3.6	3.6	3.6	3.6	3.7
10	Total	45.6	48.6	45.6	48.6	49.5

2024 Decision to 2024 Forecast

24. The 2024 forecast Integrated Operations cost reflects an overall increase of $3.0 million compared to the approved amounts. This overall increase is primarily driven by the reallocation of resources and the transfer of associated expenses from the previous asset-based organizational structure to the centralized and integrated organizational structure implemented in 2023. The functions with significant variances are as follows:

- Engineering and Project Management: A $3.1 million increase in the Engineering function, accompanied by a corresponding decrease in the Project Management function, due to the transfer of staff and related costs previously part of the Project Management function under the former organizational structure and the 2024 approved amounts;
- Controls and Automation: A $1.8 million increase in the Controls and Automation function primarily due to the transfer of staff and related costs of $1.3 million from Wastewater Collection Core Operations operating and maintenance, and an additional $0.5 million for establishing the Situational Awareness function; and

- Customer Service: A $1.2 million increase in Customer Service function due to the transfer of staff and related costs previously embedded and included within Wastewater Collection operations in the 2024 approved amounts.

2025 Forecast to 2027 Forecast

25. The year-over-year increase in Integrated Operations costs for the 2025-2027 forecast period is due to inflation.

2.3 Integrated Operations Cost Allocation Methodology

26. The centralization of the various integrated functions within EWS necessitates the implementation of a cost allocation process to ensure that the expenses associated with the services and benefits provided by these integrated functions are accurately reflected in the operational costs of the Water, Wastewater Treatment, and Wastewater Collection operations. To address this, EWS developed a cost allocation methodology for the Integrated Operations costs with the primary aim of ensuring that the allocated costs are fair and reasonable, cost-effective, predictable and reflective of the benefits provided by these functions (i.e., cost causation).

27. Table 2.3-1 outlines the cost allocators used to allocate Integrated Operations costs to the regulated Water, Wastewater Treatment and Wastewater Collection operations. A functional cost causation allocator has been used for costs that can be logically allocated using an identified cost causation driver, such as headcount. For costs that cannot be allocated using a specific functional cost causation allocator, a composite cost causation allocator has been utilized.

Table 2.3-1
EWS Integrated Operations Cost Allocators

	Function	A EWS Allocator
1	Regulatory and Business Planning	Composite – Revenue, Assets, Headcount
2	One Water Planning	Composite - Revenue, Assets, Headcount
3	Engineering	Functional Cost Causation – Capitalized Staff Costs
4	Quality Assurance and Environment	Staff Time
5	Project Management	Functional Cost Causation – Capitalized Staff Costs
6	Controls and Automation	Allocated Equally
7	Customer Service	Composite - Revenue, Assets, Headcount
8	Development and Infill	Composite - Revenue, Assets, Headcount
9	Facilities	Functional Cost Causation – Headcount

28. Table 2.3-2 provides a comparison between the approved amounts for 2024 and EWS' most recent forecast, including a comparative overview of the cost allocation percentages and allocated costs to regulated Water, Wastewater Treatment and Wastewater Collection operations.

Table 2.3-2
Allocation of Integrated Operations
2024 Decision vs. 2024 Forecast
($ millions)

	Regulated Operations	A 2024D %	B 2024F %	C 2024D $	D 2024F $
1	Water	42%	43%	19.0	20.7
2	Wastewater Treatment	22%	24%	10.1	11.6
3	Wastewater Collection	36%	33%	16.5	16.3
4	Total	100%	100%	45.6	48.6

3.0 EWS SHARED SERVICES

3.1 Shared Services Provided by EWS

29. A brief description of the shared services provided by EWS to the regulated Water, Wastewater Treatment and Wastewater Collections operations is provided in section 3.1.1 to 3.1.9.

3.1.1 Information Services

30. Information Services includes charges related to EWS' unique applications and costs associated with desktops, printers and network support.

3.1.2 Executive Administration

31. Executive Administration includes the costs of providing senior management oversight and administrative support to the regulated Water, Wastewater Treatment and Wastewater Collection operations of EWS. This includes staff cost for EWS Senior Vice President, Directors, Administrative Assistants and associated ancillary costs.

3.1.3 Controller

32. Controller includes staff costs and associated ancillary costs for EWS' Controller function required to provide financial oversight and accounting services. Controller includes the following functions:

- Financial oversight;
- Preparation of financial reports and analysis;
- Administration of the financial reporting services;
- Asset accounting administration;
- Budget administration;
- Development and maintenance of accounting policies and procedures;
- Financial support for regulatory applications; and
- Costs associated with maintaining office space in EPCOR tower.

3.1.4 Communications and Public Engagement

33. Communications and Public Engagement includes staff costs and associated ancillary costs of EWS' communications and public engagement function required to provide stakeholder and public consultation requirements. Specific functions include:

- Stakeholder relations and public consultation services;
- Internal communications related to business unit matters; and

- External communications such as the coordination of public notices, performance reports, public addresses and presentations, print collateral, and operational communications.

3.1.5 Health, Safety & Environment

34. Health, Safety & Environment includes staff costs and associated ancillary costs related to the EWS Health, Safety & Environment function required to maintain appropriate health and safety practices that are in compliance with legislation. Specific functions include:

- Ensuring that existing health and safety practices and procedures are well designed and in compliance with legislation and compatible with service provider safety management policies;
- Business services including internal loss management, safety and training and related support staff;
- Health, safety & environment audit and inspections;
- Environmental issues management; and
- Health, safety & environment training, legal compliance and reporting.

3.1.6 Technical Training

35. Technical Training includes staff costs and associated ancillary costs of EWS Technical Training function required to design, develop and deliver technical training to operations staff and monitor staff compliance with regulatory requirements to maintain continuous and current health, safety and technical training.

3.1.7 Human Resources

36. Human Resources includes staff costs and associated ancillary costs of EWS' embedded Human Resources function, which includes human resources management; human resources consulting, talent management, facilitating the management of return-to-work scenarios for short-term disability, long-term disability as well as Workers' Compensation Board and non-supported claims management.

3.1.8 Supply Chain Management

37. Supply Chain Management includes staff costs and associated ancillary costs of EWS' embedded Supply Chain Management function required to provide services for warehousing,

inventory, reverse logistics, purchasing and strategic sourcing including management of the end-to-end procurement process for the goods required by the regulated Water, Wastewater Treatment, and Wastewater Collections operations. Specific functions include:

- Administration of procurement services, including but not limited to competitive bidding, PO creation resulting from the competitive bidding process, issuing requests for quotations and requests for proposals, contract negotiation and execution, contract administration and supplier relationship management;
- Administration of the warehousing and materials management services; and
- Administration of facility services for building related activities such as administration of the operations and maintenance of buildings and surrounding land, and lease agreement management.

3.1.9 Incentive Compensation

38. Incentive compensation is paid to EWS employees based on individual performance ratings and overall annual corporate targets. EPCOR's structure for compensating its non-union employees has four components: base compensation (annual salary), employer paid benefits, Short Term Incentive (STI), and Mid-Term Incentive (MTI) for participating Directors and Executives. EPCOR's structure for compensating unionized employees has three components: base compensation (hourly wages / annual salaries), employer paid benefits and STI. The compensation was designed to bring employee total compensation to a level which is at par with comparable positions in the market from which EPCOR must draw employees (i.e., to market value).

3.2 EWS Shared Services Forecast

39. EWS' Shared Services forecast by function for 2024-2027 are summarized in Table 3.2-1. The 2024 approved amounts with EWS' latest forecast for 2024 are provided for comparison.

Table 3.2-1
2024-2027 EWS Shared Services Forecast
($ millions)

	Function	A 2024D	B 2024F	C 2025F	D 2026F	E 2027F
1	Information Services	7.9	9.2	9.4	9.6	9.8
2	Executive Administration	7.7	8.4	8.6	8.7	8.9
3	Controller	5.4	6.1	6.2	6.3	6.4
4	Communications and Public Engagement	4.0	3.7	3.7	3.8	3.8

	Function	A 2024D	B 2024F	C 2025F	D 2026F	E 2027F
5	Health, Safety and Environment	4.2	4.3	4.4	4.5	4.5
6	Technical Training	3.1	2.9	3.0	3.0	3.1
7	Human Resources	1.2	1.2	1.2	1.3	1.3
8	Supply Chain Management	4.7	5.8	5.9	6.0	6.2
9	Incentive Compensation	8.5	9.0	9.2	9.4	9.6
10	Total	46.7	50.6	51.6	52.6	53.6

40. The 2024 forecast Shared Services cost reflects an overall increase of $3.9 million compared to the approved amounts. This overall increase is primarily driven by higher information services and supply chain management costs. The functions with significant variances are as follows:

- A $1.3 million increase in Information Services operating costs due to higher Corporate Application and Infrastructure costs;
- A $0.7 million increase in Executive Administration operating costs is primarily due to higher insurance costs;
- A $0.7 million increase in Controller operating costs primarily due to higher rent and staff costs, partially offset by lower contractor costs; and
- A $1.1 million increase in Supply Chain Management operating costs primarily due to higher staff costs of $0.5 million and higher materials costs of $0.6 million.

41. The year-over-year increase in EWS' Shared Services costs for the 2025-2027 forecast period is due to inflation.

3.3 Shared Services Allocation

42. Table 3.3-1 outlines the cost allocators used to allocate Shared Service costs to the regulated Water, Wastewater Treatment and Wastewater Collection operations, along with a comparison of the cost allocators used previously. Cost allocators for some of the functions were updated with the primary aim of ensuring that the allocated costs are fair and reasonable, cost-effective, predictable and reflective of the benefits provided by these functions (i.e., cost causation).

Table 3.3-1
EWS Shared Services Cost Allocators

	Shared Services Function	A 2024D	B 2024F-2027F
1	Information Services	Functional Cost Causation – EWSI Total Assets	Functional Cost Causation – EWS Headcount
2	Executive Administration	Composite - EWSI Revenue, Assets, Headcount	Composite - EWS Revenue, Assets, Headcount
3	Controller	Composite - EWSI Revenue, Assets, Headcount	Composite - EWS Revenue, Assets, Headcount
4	Communications and Public Engagement	Composite - EWSI Revenue, Assets, Headcount	Composite - EWS Revenue, Assets, Headcount
5	Health, Safety and Environment	Functional Cost Causation – EWSI Total Assets	Functional Cost Causation – EWS Headcount
6	Technical Training	Functional Cost Causation – EWSI Headcount	Functional Cost Causation – EWS Headcount
7	Human Resources	Functional Cost Causation – EWSI Headcount	Functional Cost Causation – EWS Headcount
9	Supply Chain Management	Composite - EWSI Revenue, Assets, Headcount	Functional Cost Causation – Purchase Orders and non-salary operating expenditures
10	Incentive Compensation	Average based on allocated costs above	Average based on allocated costs above

43. Table 3.3-2 provides a comparison between the approved amounts for 2024 and EWS' most recent forecast, including a comparative overview of the cost allocation percentages and allocated costs to regulated Water, Wastewater Treatment and Wastewater Collection operations.

Table 3.3-2
Allocation of EWS Shared Services
2024 Decision vs. 2024 Forecast
($ millions)

	Regulated Operations	A 2024D %	B 2024F %	C 2024D $	D 2024F $
1	Water	39%	38%	18.1	19.2
2	Wastewater Treatment	11%	18%	5.3	9.2
3	Wastewater Collection	50%	44%	23.3	22.2
4	Total	100%	100%	46.7	50.6