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Item No. 13.3.1
Halifax Regional Council
March 19, 2024

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original Signed

Kenda MacKenzie, P. Eng, Acting General Manager and CEO, Halifax Water

DATE: March 11, 2024

SUBJECT: Halifax Water 2024/25 Business Plan

ORIGIN

Halifax Water Board Meeting of February 22, 2024.

LEGISLATIVE AUTHORITY

Annual operational requirement in accordance with Halifax Regional Water Commission Act, clause 20A(2)(b), and Halifax Regional Municipality Administrative Order 2018-001-ADM.

RECOMMENDATION

It is recommended that Regional Council approve the 2024/25 Annual Business Plan of Halifax Water as described in the attached document as Appendix A.

BACKGROUND

Halifax Water develops both long-term and short-term business plans. The 2024/25 Annual Business Plan reflects the strategic direction of the Five-Year Business Plan (2020/21 – 2024/25). The Halifax Water Board approved the 2024/25 Annual Business Plan on February 22, 2024. This Business Plan is consistent with the updated Integrated Resource Plan (IRP) approved by the Halifax Water Board in November 2019. The IRP provides the 30-year infrastructure requirements to address asset renewal, growth and compliance. Clause 20A(2)(b) of the Halifax Regional Water Commission Act and Halifax Regional Municipality Administrative Order 2018-001-ADM requires that Halifax Water submits its Annual Business Plan for approval by Regional Council.

DISCUSSION

Halifax Water is an integrated water, wastewater, and stormwater utility in its 79th year of operation, serving over 111,000 customers and an estimated population of 381,000.

Halifax Water's business plan for 2024/25 is developed with the recognition that challenges from the preceding fiscal year will continue to impact Halifax Water's customers, employees, and business partners, and Halifax Water must continue to focus on continuous improvement of our service delivery and service offerings.

In 2023/24, Halifax Water continued enhancing the Customer Connect portal and improved customer notifications around potential leaks and high consumption. Rates for all services were increased on April 1, 2023, based on the NSUARB order of November 2022.

Further, we continued the expansion of our stormwater service to customers and advanced the Cogswell District Energy System by seeking approval of an Interim Cost of Service manual and approval for funding to complete the design of the Energy Centre.

Halifax Water also initiated or completed several significant water asset renewal projects. This included the Churchill Drive transmission main renewal, infrastructure renewal related late to the Cogswell District project and significantly advanced Water Supply Enhancement program, the Biosolids Processing Facility project, and the Mill Cove WWTF Upgrade project. Halifax Water continues to succeed through cooperation and collaboration across multiple business units and workgroups. This is reflected in our annual business plan, through a focus on corporate goals and a collaborative approach to move the utility forward in the following four areas:

- People and Culture
- Health, Safety, Environment and Community
- Financial and Regulatory Accountability
- Operational Excellence

In 2024/25, Halifax Water will continue to focus on increasing our capacity to deliver services.

This annual business plan recognizes the need for further capital investment as contemplated in the updated IRP. Halifax Water's proposed 2024/25 capital budget is \$152.5 million, with 81% of the projects arising due to the need to renew existing assets. This year, the capital budget has been increased compared to last year as we grow our capacity to deliver the IRP. Several significant projects in the planning stages have come to fruition. The capital budget for the next five years reflects total spending of \$1,535.6 M, with \$738.7 M for water, \$693.5 M for wastewater, \$94.7 M for stormwater, and \$8.7M for District Energy.

Halifax Water continues to advance its Water Supply Enhancement Program. This is a 10-year program to upgrade the utility's two major water supply plants. Detailed design is currently underway for significant upgrade projects. Construction of new clarifiers at the JD Kline Water Supply plant will begin in the fall of 2025, with site preparation in late 2024/25. Construction of a new pumping station and intake at Lake Major is planned to begin in the spring of 2025.

In 2024/25, phase 2 of the multi-year Cathedral Lane/South Park sewer separation project will continue efforts to remove rainwater from the sanitary sewer and prepare this area of the city for growth.

Halifax Water will continue its program to replace aging equipment and, in some cases, provide additional capacity at several wastewater pumping stations. Halifax Water will begin constructing the Fairview Cove sewer twinning project, addressing capacity constraints in the current system.

Climate change mitigation is a core driver for implementing the Cogswell District Energy System as part of the Cogswell redevelopment. This exciting initiative will significantly reduce Greenhouse Gas (GHG) emissions for the new development. Halifax Water continues to work with the Cogswell District Redevelopment Team to renew and relocate water, wastewater, and stormwater infrastructure; the project has passed the halfway point. Halifax Water has started the procurement process to upgrade its Biosolid Process Facility.

This year will also include Phase 2 of the Sawmill Creek daylighting project. This is part of several integrated projects in this area with the municipality. Detailed design is underway, and it is slated for construction in 2024.

We continue to prioritize environmental sustainability and are finalizing both the expansion of our Environmental Management System (EMS) across the organization and our Climate Action Plan and ensuring major initiatives such as the Water Supply Enhancement Program, Water Safety Plan, Wastewater Treatment Facility Planning Study, and biosolids facility project are forward-looking and considering the environmental requirements of tomorrow. Halifax Water is taking positive actions toward climate adaptation and mitigation, and the current IRP considers climate vulnerabilities to reduce infrastructure and service delivery risk.

We will add new positions across the utility to support capital project delivery, climate change, safety, and stormwater service delivery. In addition to increasing our staffing complement and advancing attraction and retention initiatives, we will continue to focus on Halifax Water employees' physical and psychological health and our diversity, equity, and inclusion policy.

Halifax Water has completed the design validation phase for its new Burnside Operations Centre to enhance our operational efficiency. This new facility will combine four depots into one, creating more opportunities to streamline operations through our One Team, One Water initiative and will position us well for future growth areas, such as the Dartmouth to Bedford corridor along Magazine Hill and the Dartmouth to Fall River corridor. The new facility will also reduce life cycle costs compared to owning and operating the four existing facilities. It will also be designed for a diverse workforce and will meet today's standards for accessibility and environmental sustainability. This project has been submitted to the Nova Scotia Utility and Review Board for approval, with a hearing scheduled for April. Construction will start in 2024, pending approval.

Technology continues to transform our business and change how employees and customers interact. We continued to enhance the Customer Connect portal. In August 2023, Halifax Water implemented a new corporate Enterprise Resource Planning (ERP) system with an increased focus on creating a "smart utility" through data management and analytics to improve decision-making and customer service.

The 2024/25 fiscal year will see the continued advancement of existing programs and services, such as the lead service line (LSL) replacement program designed to remove all LSLs by 2038. Also, staff will engage with stakeholders to review a proposed program to promote compliance of existing service connections with Halifax Water Regulations. This program will provide additional insights into the LSL program and assist the Wet Weather Management Program (WWMP) in mitigating private-side inflow and infiltration issues in the sanitary sewer system. Overall, the program will encourage disclosure and resolution of issues regarding connections to the system when customer ownership changes.

Halifax Water is committed to continually innovating, improving, and remaining cost-effective, with the need to keep rates affordable. The 2024/25 Business Plan provides an overview of the services provided by Halifax Water, strategic objectives for next year, and the operating and capital budgets to maintain the delivery of these services. The Nova Scotia Utility and Review Board (NSUARB) approved new water, wastewater, and stormwater rates effective April 1, 2023. Base charges for water and wastewater were kept the same and have been effective since April 1, 2016. Based on the approved rates, the Business Plan projects an operating deficit of \$18.7 M. This represents an increase in the budgeted operating deficit of \$16.4 M from last year. The budgeted deficit for water operations is \$9.2 M, wastewater operations is \$7.0 M and stormwater operations is \$2.5 M. The projected deficit for water will draw down the accumulated operating surplus. The projected deficit for wastewater will fully deplete the accumulated operating surplus and overdraw it by \$0.4M. There is no accumulated operating surplus for stormwater services, and the projected deficit will further increase the accumulated operating deficit.

The main cost drivers of Halifax Water's operating budget are salaries and wages, energy, chemicals, depreciation, and debt servicing. Operating and non-operating expenditures are proposed to increase by \$19.6 M or 11.4% compared to the budget for last year.

Full details of the operating budget are provided in Appendix C.

ALIGNMENT WITH HALIFAX REGIONAL MUNICIPALITY STRATEGIC PRIORITIES FOR 2021-2025:

Halifax Water's Five-Year Business Plan and ongoing activities are developed to align with priorities established by the municipality. The following section highlights the activities where the integrated water utility aligns with the municipality's corporate priorities (for 2021-2025) and supports the betterment of the communities and residents we collectively serve.

A full copy of Halifax Water's Five-Year Business Plan 2020/21 – 2024/25 is available at: <https://halifaxwater.ca/publications-reports>.

PROSPEROUS ECONOMY

A prosperous, welcoming, and growing economy positions the municipality as a business and tourism destination of choice, with economic opportunities for all.

ECONOMIC GROWTH

Economic opportunities are seized to promote and maximize balanced growth, reduce barriers for businesses, support local economies and showcase the region's strengths to the world.

Halifax Water employs more than 550 employees and is a significant purchaser of goods and services, doing business with over 1,000 vendors. Our projects help create and support thousands of local jobs. The current five-year capital budget reflects \$1,535.6M in capital spending. The capital budget for 2024/25 is \$152.5 M, and the total operating cost to provide water, wastewater, and stormwater services will be \$150.8 M.

HOLISTIC PLANNING

Informed decisions are made about housing, municipal services, and employment and quickly directs growth to the right places in a way that furthers community goals.

Facilitation of Growth: Within Halifax Water's IRP, the infrastructure driven by growth is captured in an Infrastructure Master Plan (IMP). The IMP provides direction for the facilitation of growth and creates economic efficiencies by optimizing its systems to add customers when required.

Staff coordinate with HRM's Regional Planning team to update infrastructure needs for the opportunity sites, special planning areas, Future Serviced Communities, and overall Regional Plan.

To facilitate the delivery of the IMP, the Regional Development Charge (RDC) was established in 2014 to ensure growth paid for growth. The RDC is updated on a five-year cycle, with the next submission to the NSUARB in October 2025.

Aligning with HRM on its growth projections and planning helps inform Halifax Water's IMP. The utility then uses the IMP to calculate the capital cost requirements, which are used to establish the Regional Development Charge (RDC) and Capital Cost Contribution (CCC) charges within identified master plan communities. These instruments are foundational to facilitate growth fairly and equitably and support HRM's Regional Plan.

Service Extensions: Halifax Water also provides technical support to address water, wastewater and stormwater service deficiencies identified through HRM's Local Improvement Charge Bylaw programming.

Halifax Water also considers requests for service extensions to private communities in accordance with the NSUARB-approved Procedure for Acceptance of Private Community Water, Wastewater and Stormwater Systems.

TALENT ATTRACTION, RETENTION & DEVELOPMENT

A global and welcoming community that attracts, retains, and develops talent.

Halifax Water believes in and fully supports experiential learning for students studying at Nova Scotia Community College (NSCC) and Dalhousie University. The utility facilitates professional work terms for students and offers various scholarships to assist students with their learning journey. In addition to attracting a solid student contingent from NSCC to work at Halifax Water, the utility has an Alliance Grant through the Natural Sciences and Engineering Research Council of Canada (NSERC) and Dalhousie University. Many students participating in the research program have secured employment with local consultants, regulatory agencies, and Halifax Water.

Internally, Halifax Water continues to advance its diversity, equity, and inclusion policy.

COMMUNITIES

The municipality boasts strong social equity through meaningful engagement to build safer and more inclusive communities for all.

SAFE COMMUNITIES

Residents and visitors feel safe and are supported by a network of social and transportation infrastructure that helps community members thrive.

Lead Service Line (LSL) Replacement Program: Lead in drinking water concerns water utilities and their customers. Water leaving the treatment plants of Halifax Water is lead-free, but lead, used for service piping up to the mid-1950s, can be a source of lead in drinking water. While the water utilities serving Halifax and Dartmouth have been working since the 1970s to remove lead services, many remain and lead in drinking water continues to be a concern for customers in peninsular Halifax and central Dartmouth.

One of the complications in removing LSLs is that Halifax Water and the customer jointly own the water service. Halifax Water owns the in-street portion, while the customer owns the portion on private property. Further complicating the matter, research has shown that partial replacements (replacing only the customer or utility portion, but not the other portion) do not assist in solving the problem and can even worsen the situation.

In 2020, Halifax Water received approval from the NSUARB to replace the entire LSL at utility expense. This is consistent with an emerging best practice across North America, which removes the cost to the customer – the most significant barrier to LSL replacement. The program became effective on October 1, 2020. Since the start of the program, Halifax Water has increased the rate of LSL replacement and is on track to reach the program goal of removing all lead service lines by 2038. Lead service lines are renewed based on one of four programs:

1. Renewals are done in conjunction with the Roads and Active Transportation Capital Program. This reduces the replacement cost, limits community impact, and preserves municipal pavement quality.
2. Halifax Water will replace a number of lead service lines each year at the utility's cost for residents who are considered to be at-risk populations, namely homes with pregnant mothers or young children.
3. Customers who do not qualify for one of the above programs are eligible to replace their LSL and receive a 25% rebate from the utility.

4. Halifax Water will be developing programs to target other priority groups or communities for LSL replacement.

Wastewater Lateral Replacement Program: To facilitate the provision of wastewater service to our customers, Halifax Water owns and maintains the individual wastewater laterals between the mainline and the property line. These laterals are often compromised by tree roots and a once popular lateral pipe material (no-corrode), which has a shorter-than-expected life span.

Halifax Water provides an immediate replacement response from our operations group when a lateral fails. When the cause of the failure is within the municipality's streets, Halifax Water completes the repair/replacement with the program's cost offset by the municipality mutually agreeing to adjust water and wastewater appurtenances to grade during street rehabilitation programs. This approach is efficient as the work stays within the organization, which is best able to respond and provide the service and avoids a complex cost recovery exercise.

Halifax Water also identifies laterals approaching the end of their useful life and will replace them in conjunction with other capital projects such as a main renewal or a municipal street rehabilitation.

Small Systems: In addition to operating large systems in the urban and suburban areas of the municipality, Halifax Water operates smaller systems serving customers in rural areas. This includes 5 small water systems (Middle Musquodoboit, Silver Sands, Bomont subdivision, Collins Park, and Five Island Lake) and 7 small wastewater systems (North Preston, Frame subdivision, Wellington, Lockview Road, Springfield Lake, Uplands Park and Middle Musquodoboit).

Many rural communities of the municipality do not have centralized water and wastewater services. As a result, the wastewater systems need to be pumped and the effluent disposed of in an environmentally safe manner. Halifax Water provides septage treatment for septage haulers that serve such communities.

INVOLVED COMMUNITIES

Residents are actively involved in their communities and enjoy participating and volunteering in a wide range of leisure, learning, social, recreational, and civic opportunities.

Watershed Advisory Boards: Halifax Water coordinates and leads Watershed Advisory Committees/Boards consisting of representation from Nova Scotia Environment and Climate Change, Nova Scotia Department of Lands and Forestry, Halifax Regional Municipality and the Municipality of East Hants planning and development agencies, community groups, customers and other watershed users and stakeholders.

There are five Watershed Advisory/Management Committees/Boards that provide local support to Halifax Water. The terms of reference and minutes for each advisory board/committee are found under their respective headings in the Halifax Water Watershed Water Supply Areas section above.

High-Quality Drinking Water: A safe, reliable supply of drinking water, along with adequate fire protection, is fundamental to the health and economic prosperity of any community.

Halifax Water uses the multiple barrier approach to ensure the continued safety and reliability of the water system. Our approach includes the following:

Source Water Protection: Ensuring our water sources remain healthy and not degraded by manmade impacts. This program benefits from input from the Watershed Advisory Boards.

Optimized Treatment: We ensure that our water treatment plants produce high-quality water sustainably and at a reasonable cost.

Sound Distribution System Management: This involves ensuring that once the water leaves the treatment plant, its quality is protected all the way to the water tap. A robust maintenance system accomplishes this with standard operating procedures for the water distribution system.

Continuous Monitoring and Testing: Halifax Water takes thousands of tests yearly to ensure that drinking water quality is maintained.

Cross Connection Control: Halifax Water maintains a system to ensure that high-risk industrial, commercial, and institutional customers install, maintain, and test backflow prevention devices on their services, which prevent contaminants within a building from getting back into the water system.

Emergency Management Plans: Halifax Water maintains and exercises emergency management plans to help ensure continuity of service even when things do not go as planned. Water Safety Plans consist of a risk-based, continuous improvement framework to identify operational, regulatory, and environmental risks to water quality and to identify and implement mitigative actions to address them before they impact water quality.

High-Quality Wastewater: Halifax Water takes a risk-based approach to managing its wastewater infrastructure, protecting the receiving environments and public health where contact recreation occurs. The wastewater systems are maintained to industry standards to minimize overflows from the collection and treatment facilities. Every effort is made to treat the wastewater to comply with permits issued by Nova Scotia Environment and Climate Change (NSECC) and Environment and Climate Change Canada.

Halifax Water continuously looks for opportunities to maximize its installed infrastructure capacity. This may be achieved by shifting wastewater loads across sewersheds, treatment plants and pump stations. Halifax Water is also taking proactive steps to research and treat emerging contaminants at its facilities. Although not currently required by regulations, the membrane technology utilized for the Aerotech facility can treat several emerging contaminants, such as microplastics and microfibers. This technology was also installed at the Frame WWTF, where the outfall discharges to a lake used for recreation. Halifax Water will continue to comply through continued research, infrastructure investments and industry best practices.

Halifax Water is working with Dalhousie University on wastewater research with an initial focus on improving wastewater quality at the Halifax and Dartmouth WWTFs. The research will help inform plans for how the Harbour Solutions treatment plants will meet Wastewater System Effluent Regulations by 2040, which require the equivalent of secondary treatment.

Halifax Water works collaboratively with municipal staff to ensure that the stormwater systems operate to their highest potential and minimize impacts on lakes and streams due to pollution prevention activities by both organizations. Halifax Water takes a lead role in emergency spill response. Halifax Water's pollution prevention team conducts hundreds of inspections annually to ensure compliance with Halifax Water Regulations.

Wet Weather Management: Halifax Water's WWMP strives to minimize the impacts of wet weather flows on the system and the environment. This is a long-term commitment with significant positive impacts on the environment and the quality of life for residents who frequent waterfronts and beaches. Managing wet weather flows results in reduced overflows and increased effluent compliance. Communication of these initiatives promotes public awareness of water quality and supports water-based recreational activities.

Active Transportation and Recreation Initiatives: Halifax Water has significant land holdings in communities across the municipality. Most of this land is for water supply protection. From time to time, Halifax Water has been able to work with municipal staff to make the water utilities land available to facilitate community projects. Examples of this include:

- The development of the Chain of Lakes trail through the Chain Lake watershed.
- Provided access to land along North Preston Road to establish the Preston Area community trail.
- Provided reservoir site land to establish a community field in North Preston.
- Provided land to establish trailhead parking for Long Lake Provincial Park.
- Provided access across its transmission main corridors through Mainland Common, Wedgewood Park and Bedford to support active transportation.

Halifax Water has also worked directly with other community recreation groups with low impact uses compatible with source water protection, including the Atlantic Geocaching Society, Bicycle Nova Scotia, and the Nova Scotia Federation of Anglers.

INCLUSIVE COMMUNITIES

Residents are empowered as stewards and advocates for their communities and work with the municipality and others to remove systemic barriers.

Water Rate Affordability: Halifax Water has programs that support customers:

Since 2010, Halifax Water has contracted with the Salvation Army to provide emergency assistance to low-income customers through the H2O (Help to Others) Program. This program is available once every 24 months for a maximum grant of \$250 with funds from unregulated activities.

Halifax Water has a Lateral Loan Program that helps those who need to replace their private lateral. The maximum value of the lateral loan is \$10,000 (less any rebates received for a lead lateral replacement). All Halifax Water customers are eligible for these loans if they are the registered property owner and are willing to accept a lien on the property as security. Halifax Water supports customers replacing LSL and has a program to provide favourable financing options to customers doing complete replacement of the private portion of water or wastewater laterals or private laterals connected to new deep stormwater installations in areas where none previously existed.

COMMUNITY ENGAGEMENT

Halifax Water regularly engages with the community. As facilitated through Halifax Water and NSUARB regulatory processes in conformance with the *Public Utilities Act* and through direct stakeholder and customer engagement.

ENVIRONMENTAL IMPLICATIONS

Halifax Water is committed to environmental stewardship, and environmental implications are described in the annual Business Plan, the Five-Year Business Plan, and the Annual Report.

AFFORDABLE COMMUNITIES

The municipality demonstrates leadership and fosters partnerships that provide access to a range of quality, affordable municipal amenities and services, including housing options, in safe, vibrant communities.

To support the affordability of housing, Halifax Water has enhanced the deferral program for the Regional Development Charge (RDC) to assist with developing Affordable Housing. The 2025 application to the NSUARB on the RDC will propose alternative payment timelines that may assist with the affordability aspect in purchasing of new homes.

Halifax Water also continues to compare its rates against 14 comparator Canadian cities. It monitors the total annual residential bill as a percentage of median household income for Halifax. The current combined rates are equivalent to 1.1% of the median household income and are well below industry benchmarks for affordability.

INTEGRATED MOBILITY

The municipality offers safe, sustainable and accessible travel options to move conveniently throughout the region.

SAFE & ACCESSIBLE MOBILITY NETWORK

A well-maintained network that supports all ages and abilities by providing safe, flexible, and barrier-free journeys throughout the region.

Halifax Water owns over 3,000 km of buried infrastructure along with thousands of valves, manholes, chambers, fire hydrants and pumping stations, mainly in the municipally owned street right-of-way.

Halifax Water and municipal staff coordinate work in municipal roadways to minimize disruption to the public.

Halifax Water and municipal staff are members of the Halifax Utility Coordinating Committee (HUCC), which coordinates the planning of infrastructure projects.

Halifax Water and municipal engineering staff meet as part of a well-established process to coordinate and deliver integrated capital projects, reducing overall project costs and inconvenience to residents.

Halifax Water operations staff and municipal right-of-way staff meet regularly to ensure that Halifax Water maintenance work in the right-of-way meets municipal requirements.

ENVIRONMENT

Leadership in climate change action and environmental protection – both as an organization and a region.

NET-ZERO EMISSIONS

Achieve net-zero municipal operations emissions by 2030 and strive for community-wide emission reductions of 75 percent by 2030 and net-zero by 2050.

Cogswell Redevelopment Project Including the Cogswell District Energy System: Halifax Water has significant existing infrastructure within the redevelopment area. As a result, the utility works closely with the municipal project team to optimize infrastructure relocations to minimize costs, improve construction efficiency and ensure long-term service delivery.

Halifax Water is pursuing an opportunity for an ambient temperature district energy system (DES) within the Cogswell area. The municipality amended its Charter and, in 2020, approved a DES by-law mandating connection within the Cogswell Redevelopment Area.

In June 2021, Halifax Water secured project funding of \$10.1 M (\$5.5 M Federal and \$4.6 M provincial) for the DES through the Green Infrastructure Stream of the Investing in Canada Infrastructure Plan.

For the existing infrastructure, in 2022/23, Halifax Water agreed on a cost-sharing framework with HRM and filed for regulatory approval with the NSUARB. For the DES, we filed for regulatory approval with the NSUARB to further develop the new utility and await their decision.

Halifax Water is currently seeking approval from the Nova Scotia Utility and Review Board for a cost-of-service framework for district energy, which is an important early step in setting up a regulated DES utility. Design work on the energy centre component should begin in 2024.

Solar Projects to Reduce GHG Emissions: In July 2021, Halifax Water secured approximately \$1.23 M dollars in funding (\$677 thousand Federal and \$558 thousand Provincial) to install 425 kW of solar photovoltaic (PV) panels over four projects through the Federal Government's Community Solar Project initiative.

Using solar panels at our facilities can reduce our net GHG emissions by approximately 7000 tonnes over their lifetime. This has environmental benefits for Nova Scotia and helps decrease operating expenses for Halifax Water's rate base.

The first of four projects was completed and made operational last year. The remaining three projects are expected to be completed in early 2024 at our 450 and 455 Cowie Hill Road facilities and in 2026 at our new Burnside Operations Facility.

The design of the Burnside Operations Center is in keeping with the HalifACT 2050 guideline for all new municipal buildings achieving net zero.

CLIMATE RESILIENCE

Communities, infrastructure, and natural systems are prepared to withstand and recover quickly from climate impacts.

Climate Change: Staff from Halifax Water work jointly with the municipality to understand the underlying details of climate change and the physical, planning, financial and legal implications on our collective infrastructure classes.

Halifax Water developed a Vulnerability to Climate Change rating system to rank the sensitivity and severity of climate change impacts relative to the individual asset. Halifax Water also addresses climate change in design standards and long-term planning. Both initiatives will inform the overall understanding of climate change in the municipal context and inform the municipality's next version of the Regional Plan.

In recognition that climate change adaptation and mitigation activities cross many projects, programs, and services at Halifax Water, Halifax Water's Climate Resiliency Committee is leading the development of a Climate Action Plan. The plan is expected to be completed in the spring of 2024.

PROTECTED & SUSTAINABLE ENVIRONMENT

Healthy and protected ecosystems support biodiversity habitats and enhanced quality of life.

Water Quality Monitoring: Building on its historical Water Quality Master Plan, Halifax Water is developing a Water Safety Plan (WSP). The WSP is a comprehensive and adaptive risk assessment and risk management approach to water quality from source to tap to consistently ensure the drinking water supply's safety. This approach is one of continuous improvement and ensures that the highest risks to water quality are addressed first while constantly assessing new risks and learning from incidents and emergencies. Where the municipality launched its new water quality monitoring program for lakes, Halifax Water will provide technical support and advice to the municipality as required.

Environmental Management System: Halifax Water has an ISO 14001 certified Environmental Management System (EMS) of procedures, records, and processes to manage environmental issues. Through the EMS program, Halifax Water has developed an increased awareness of compliance obligations, managed waste and energy more efficiently, reduced the risk of disaster, improved emergency management and created a culture of continuous improvement.

All Halifax Water's water and wastewater treatment plants, satellite systems, depots, and our 450 and 455 Cowie Hill Road facilities are ISO 14001 certified.

RESPONSIBLE ADMINISTRATION

The municipality enables appropriate stewardship of municipal affairs by being well-managed, financially prepared and community focused.

WELL-MANAGED

Appropriate stewardship of municipal affairs inspires the trust and confidence of residents.

Cost Containment Program: Cost containment is an ongoing focus for the utility to help maintain and stabilize rates. A formal cost containment program has been in place since 2013/14. Cost containment results for the previous fiscal year are reported to the NSUARB by June 30th. Cost containment initiatives totalled \$5.7 M at the end of February 29, 2024. This included the development of new initiatives implemented during 2023 and ongoing amounts from decisions made from 2013/14 to 2023/24. The inclusion of initiatives and amounts from prior years reflects an intentional focus on sustainable results over the long term.

Water Loss Control: Reducing non-revenue water (leakage) is crucial to managing water distribution. Halifax Water has been recognized as one of the leading utilities in this field in the world.

The methodology is designed to allow Halifax Water staff to quickly detect and repair leaks that run underground and may not surface for days, weeks or months. By doing this, Halifax Water has reduced its water system inputs, saving direct water production costs for chemicals and electricity.

Detecting leaks early means they do not become significant events that impact our reputation by disrupting transportation, causing street closures, impacting roadway quality, and leading to property damage and service interruptions.

Inflow and Infiltration (I&I) Reduction: I&I reduction is one of several tools in the overall Wet Weather Management Plan (WWMP). With guidance from the Integrated Resource Plan, the WWMP conducts several Sewer System Evaluation studies to achieve long-term goals and extraneous flow reductions.

Halifax Water completes private side inspections to determine if extraneous water enters the wastewater system. This extraneous water may impact the wastewater treatment facilities (WWTFs) ability to meet their regulatory compliance. Also, staff will engage with stakeholders to review a proposed program to promote the reduction of extraneous stormwater from entering the wastewater system. This program encourages disclosure and resolution of issues regarding connections to the system when the customer changes.

Enterprise Asset Management: Halifax Water and the municipality embrace Enterprise Asset Management as a core corporate activity to ensure the efficient and effective management of the collective suite of infrastructure that serves the municipality's residents.

Halifax Water produces an annual Asset Management Plan (AMP) covering the 14 core asset classes across the water, wastewater, and stormwater services. The AMP documents the current inventory, replacement value, condition, and recapitalization plan for each asset class, promoting a comprehensive and cross-corporate management approach to assets.

FINANCIALLY PREPARED

Finances are planned and managed to ensure sustainability, support growth, and deliver quality municipal services.

FINANCIAL IMPLICATIONS

The \$191.7 M in operating and non-operating expenditures required to fund Halifax Water's 2024/25 Business Plan is \$19.6 M or 11.4% more than the \$172.2 M required last year. The operating and non-operating expenditures are primarily funded through rates approved by the NSUARB.

The municipality provides a blanket guarantee for Halifax Water's debentures through the Provincial government, and the utility must maintain a debt service ratio of less than 35%. Halifax Water's capital financing strategy uses a mixture of financial instruments for infrastructure funding, including development-related charges, funding from other levels of government, depreciation, and debt. Based on the approved 2024/25 Operating Budget, the debt service ratio is 19.6% compared to 17.4% in 2023/24.

Halifax Water provides a grant in lieu of taxes in the form of an annual dividend to the municipality. A new agreement was signed in February 2023, covering the period of April 1, 2023, through March 31, 2028. The annual payment is calculated based on the assessed value of Halifax Water properties as assessed by the Property Valuation Service Corporation (PVSC) for that fiscal year and the yearly tax rate set by HRM. For the 2024/25 fiscal year, the agreement calls for a total dividend of \$6.6 M to be paid to the municipality.

RISK CONSIDERATION

In 2019, Halifax Water completed an Enterprise Risk Management (ERM) Framework, and the Halifax Water Board approved an ERM Policy and a risk appetite and tolerance matrix.

COMMUNITY-FOCUSED

Residents are engaged in the development of public policy and plans.

ECONOMIC DEVELOPMENT

Halifax Water employs more than 550 employees and is a significant purchaser of goods and services, doing business with over 1,000 vendors. Our projects help create and support thousands of local jobs. The current five-year capital budget reflects \$1,266.8M in capital spending. The capital budget for 2024/25 is \$146.7M, and the total operating cost to provide water, wastewater, and stormwater services will be \$135.9 M.

COMMUNITY ENGAGEMENT

Halifax Water regularly engages with the community. As facilitated through Halifax Water and NSUARB regulatory processes in conformance with the *Public Utilities Act* and through direct stakeholder and customer engagement.

COMMUNICATIONS

With a resident/customer-focused approach to communications, Halifax Water's Communications team works closely with HRM Corporate Communications staff on multiple projects and initiatives each year. These efforts can run from joint messaging regarding service matters that may impact residents and customers to more in-depth cooperation on integrated HRM/Halifax Water capital projects that can extend over months. The common goal of any joint messaging is to provide residents/customers with what they need to know and how a particular project or program will affect and benefit them and the wider community.

Keeping area Councillors informed about Halifax Water projects in their districts is a high priority for Halifax Water's Communications team. For large-scale projects, Halifax Water often involves the area Councillor(s) in the pre-public outreach phase to get advice on how best to interact with the residents. Councillor involvement helps Halifax Water staff focus their messaging on what is most important to the community and will ensure the Councillor is well-versed on the pending work. Area Councillors are invited to attend Halifax Water community information sessions in their districts. These sessions are especially important when aspects of the work directly impact residents, such as traffic or service disruptions.

This information flow to Councillors occurs more frequently for routine activities such as water main repairs, traffic disruptions or other Halifax Water-related matters that can have a short-term impact on residents.

The municipality also has a high-quality print, sign and graphic design services, and Halifax Water utilizes these cost-effective services whenever possible.

PUBLIC ENGAGEMENT

Source Water Committees: Halifax Water maintains source water protection plans for twelve separate water supplies across the municipality. As part of the plan, every source water area has a Watershed Advisory Board to liaise with Halifax Water on issues related to the water supply. Each committee has members representing the utility, HRM, the Province of Nova Scotia, and private landowners. Watershed Advisory Boards are an opportunity for engagement with residents and a mechanism for keeping the community apprised of Halifax Water's activity and help keep the utility in touch with the community.

Stakeholder Engagement: Halifax Water engages with stakeholders formally and informally. Formal stakeholder engagement includes NSUARB public hearings either in person or through paper processes regarding any changes in rates, development charges, regulations, and capital expenditures greater than \$1.0 M. Some groups that participate in these formal public hearing processes include the Consumer Advocate, Urban Development Institute, Investment Property Owners Association of Nova Scotia (IPOANS), Building Operators and Maintainers Association (BOMA), Nova Scotia Homebuilders Association, Construction Association of Nova Scotia, Ecology Action Centre, Conserve Nova Scotia, Sierra Club and Retail Association of Canada.

Halifax Water also conducts stakeholder consultation processes as part of major capital projects and strategic initiatives, such as updating the IRP or RDC and developing new programs and services. In 2023/24, Halifax Water conducted stakeholder engagement regarding stormwater, the RDC, and planned Capital Investment projects throughout the municipality.

There are many committees where Halifax Water participates in regular stakeholder consultation, such as the Halifax Utility Coordination Committee and the Development Liaison Group.

OUR PEOPLE

The municipality is committed to diversity, inclusion, and equity and to providing an engaging, healthy, and safe work environment.

ENGAGED & SKILLED PEOPLE

People are engaged and have the required skills and experience to provide excellent service to our communities.

Halifax Water recognizes that attracting and retaining critical skills is increasingly challenging. As an integrated water utility, we are committed to building a skilled, engaged workforce that feels supported and empowered. To support a more positive work environment, the utility focuses on

employee retention and bridging skills gaps through upskilling and empowering existing talent to adapt their skills to what we are looking for.

By enabling cross-functional talent mobility, we are identifying stepping-stones to skills to bridge skills gaps across the organization. We aim to attract and engage employees with the right skills and development and build a workforce that continues to proudly serve our communities and customers.

DIVERSE, INCLUSIVE & EQUITABLE ENVIRONMENT

Diversity, inclusion and equity are fostered to support all our people in reaching their full potential.

Halifax Water is committed to an inclusive environment that reflects the communities for which it serves. As an employer, we recognize that inclusion occurs when employment opportunities, services, and benefits are equitably accessible for all employees.

As an integrated water utility serving a fast-growing municipality, a diverse workplace acknowledges the individual strengths of each employee and the potential they bring. That is why we value the differences in others and the strength they provide to the organization as it becomes a more prosperous, thriving workplace with a workplace culture of fairness.

By bringing out the very best of our employees, it allows them to reach their full potential, and in doing so, we are encouraging a more varied and innovative talent pool.

HEALTHY & SAFE WORKPLACE

A commitment to health, safety and wellness is demonstrated to our people.

The Health and Safety of our employees, contractors and the public is a top priority for Halifax Water. We are focused on a safety-first culture, working to provide healthy, safe and reliable services for our community.

To build on this commitment, Halifax Water has been transitioning its current occupational health and safety program to a Safety Management System with a goal of obtaining ISO 45001 certification in the coming years. The structure of our committees has been enhanced slightly by introducing a Safety Excellence Committee to provide strategic direction and support to the Joint Occupational Health and Safety Committee. The new structure has seen more collaboration amongst the various levels of management and non-management employee groups.

In addition to this work, Halifax Water is also advancing a Psychological Healthy Workplace program.

SERVICE EXCELLENCE

The municipality innovates and makes evidence-based decisions to meet or exceed the expectations of the people we serve.

EXCEPTIONAL CUSTOMER SERVICE

Residents receive exceptional accessible and inclusive service provided through customer-centric planning and continuous improvement.

Halifax Water implemented a customer portal that allows customers to access information on their account, the services provided by Halifax Water and for water customers, it provides detailed information about their consumption and alerts when there is a significant change in water consumption. Over 30 percent of Halifax Water customers have registered for the portal and there will be continued focus on enhancing the information and services provided through the portal.

Halifax Water collaborates with the business community as partners and strives to find ways to enhance service delivery. Halifax Water has processes to enter into direct servicing agreements and contracts with businesses to support their operations.

Utility Locates: Locating buried infrastructure is necessary for any construction project requiring excavation. Locates are needed to protect workers and infrastructure and minimize the opportunity for interruptions in service caused by contractors striking buried infrastructure. As awareness of the necessity for locates has increased, utilities have seen rapidly escalating demands for infrastructure locations, placing a strain on resources and business processes. Timely and accurate locates allow construction projects to proceed on time and within budget.

Halifax Water has taken several steps in recent years to meet the demand for locates and respond to the concerns of the municipality and the contractor community. Halifax Water is now part of a one-locate-requesting process. This step reduces the barriers to contractors and developers seeking excavation work in the municipality. Considering the significant construction activity in the city, the demand for this service continues to grow. In response, Halifax Water continues to expand its staff resources to meet the demand.

Permitting: In late 2019, Halifax Water participated in implementing a new permitting system led by the municipality that significantly streamlines and improves the permit process and timely sharing of information between the municipality and Halifax Water. In January of 2023, staff expanded the module to include subdivision applications to streamline the application process further.

INNOVATIVE PERFORMANCE EXCELLENCE

Current and future needs are met through forward-thinking, innovation and collaboration.

Advanced Meter Infrastructure (AMI): In 2016, Halifax Water launched a program to convert 85,000 water meters to AMI. AMI is a system where water meters are equipped with an electronic communication device to capture real-time data. Rather than reading meters quarterly by walking or driving routes, meters are read hourly through a fixed radio network installed throughout the service area.

Over 98.9% of meters were converted, and the Customer Connect portal lets customers view and manage their water consumption information through a web-based customer portal. It also enables Halifax Water to provide better information to customers to manage their accounts and water consumption. There will be continued enhancements to realize the benefits of improved business processes and enhanced data. The system also provides Halifax Water with better information about water use patterns, which will aid in system design and operation.

Artificial Intelligence and Machine Learning: Halifax Water is exploring new technology that will improve our level of service by using artificial intelligence to provide early notice of flow and pressure anomalies before they turn into events which could disrupt service. Halifax Water is also conducting a pilot using machine learning to help analyze data and relationships between variables to help predict the likelihood of lead service lines. The proliferation of new innovative technology in the water sector has prompted Halifax Water to develop a roadmap for “intelligent water” in 2021/22 that has been used to refine the current IT Strategic Plan and develop a digital water strategy in 2022/23.

Active Research Program: Halifax Water pursues innovation through practice and research. Halifax Water conducts industry-leading research in collaboration with Dalhousie University through an NSERC Alliance grant, “Partnership for Innovation in Climate Change Adaptation in Water & Wastewater Treatment.” Building on the research successes of the last 15 years in drinking water, this 5-year grant awarded in 2022 now includes water and wastewater treatment. Drinking water research through this grant is focused on informing the implementation of the Water Supply Enhancement Program to address current and future needs based on source water quality changes occurring due to both climate change and lake recovery processes. Through innovation and

optimization practices, Halifax Water continues to improve environmental compliance with the federal Wastewater System Effluent Regulations at every wastewater treatment facility. Halifax Water employs innovative practices in the delivery of operational and capital projects; this facilitates efficient execution of the projects in terms of cost reduction and schedule control.

Halifax Water is also a member of the Water Research Foundation and, through this relationship, has pursued innovation by active engagement in research projects. Halifax Water staff also take advantage of opportunities to participate as project advisory committee members for relevant Water Research Foundation projects. This way, Halifax Water staff can learn best practices from some of the most innovative utilities.

Customer Care Strategy: Halifax Water has a long tradition of high customer satisfaction, as confirmed through annual surveys. In 2023, customers' overall satisfaction with service quality was 95%. Although it is gratifying to receive this feedback, Halifax Water continues to look for opportunities to improve service delivery. Halifax Water implemented the Customer Connect portal in November 2020. In 2023/24, further enhancements were implemented to improve business processes and inform customers of high consumption or possible leaks.

Halifax Water works closely with municipal staff in areas with a shared responsibility to ensure that business processes are clear. This includes responding to customers on various water and roadway-related topics.

Bulk Fill Stations and Portable Water Stations: Halifax Water has seven bulk fill stations throughout the service area to support water haulers who deliver potable water to rural residents or for construction-related purposes. Halifax Water has supported significant public events throughout the summer with portable water stations for many years.

Integrated Stormwater Policy: The municipality and Halifax Water continue working together to assess and respond to service requests from residents relating to stormwater management. Staff within both agencies at the customer service and operational levels have developed protocols to manage issues behind the scenes to optimize service to residents, minimizing “transfers” of calls.

With increased awareness of climate change and stormwater's impact on public and private infrastructure and the environment, Regional Council and the Halifax Water Board approved the framework for an Integrated Stormwater Policy in 2018. Staff continue to finalize the components of this Policy, which is structured around seven main themes, establishing roles and responsibilities for our respective organizations, the province, and the private property owner.

Integrated Capital Program for Halifax Water Infrastructure and Municipal Streets: A significant portion of Halifax Water's annual capital program involves the renewal of water distribution and wastewater and stormwater collection infrastructure in an integrated approach with the municipality's annual Roads and Active Transportation Capital Program. Water, wastewater, stormwater pipes, and appurtenances are replaced or rehabilitated when approaching or exceeding their useful life. The most cost-effective way to do this is while the municipal street is being renewed. The integration reduces the total project cost and minimizes the overall disturbance of neighbourhoods. The various project designs and specifications are coordinated into a single construction tender administered by HRM or Halifax Water.

In 2020/21, Halifax Water launched an enhanced Lead Service Line Replacement Program, resulting in a more effective approach to ensure the private lead service laterals are replaced in conjunction with the municipal Roads and Active Transportation Capital Programs.

In 2024/25, we will integrate with municipal projects on 10 streets in Halifax to remove LSLs. These streets are listed below. All streets that are on the paving list within Dartmouth for this year were investigated and there are no lead service lines on these streets:

- Victoria Rd. Halifax
- Davison St
- Liverpool St.
- Bauer St.
- Newton Ave.
- Gladstone St.
- Almon St.
- Duffus St.
- South St.
- Vienna St.

An additional five projects are being investigated or were pushed from the paving program for the year:

- Bayers Rd.
- Lawrence St.
- Oxford St.
- Cunard St.
- Hennessy St.

ALTERNATIVES

N/A

ATTACHMENTS

Appendix A – Halifax Water 2024/25 Business Plan
Appendix B – Halifax Water Service Overview
Appendix C - Halifax Water Operating Budget for 2023/24

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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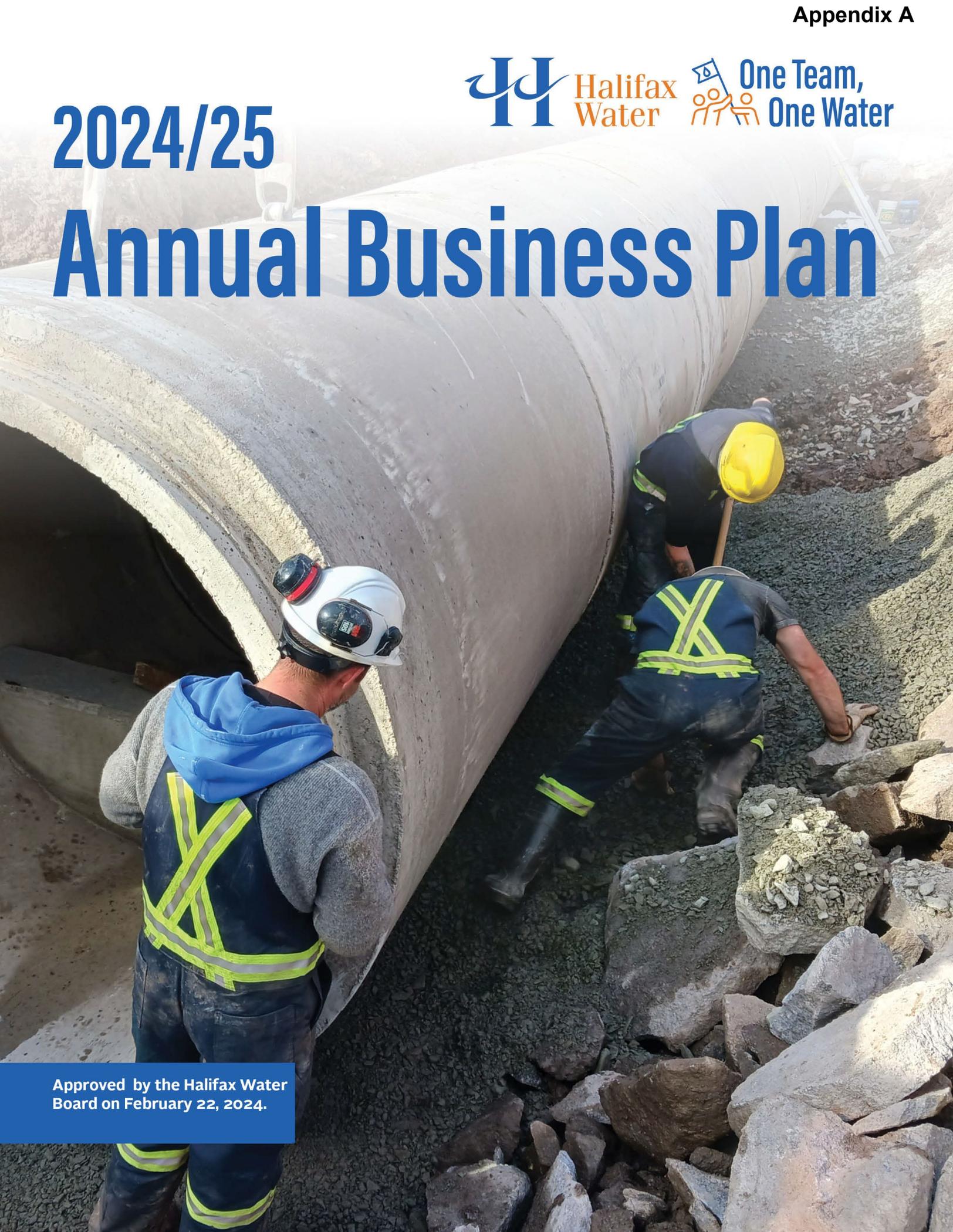
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2024/25

Annual Business Plan



Approved by the Halifax Water Board on February 22, 2024.

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INTRODUCTION

Halifax Water is an integrated water, wastewater, and stormwater utility that serves more than 106,000 customers and an estimated population of 412,000.

This document outlines the utility's fiscal 2024/25 business plan, which officially begins on April 1, 2024.

For 2024/25, Halifax Water has developed a plan that addresses the challenges of growth, aging infrastructure, and the increasing demands of customers. In addition to addressing these challenges, this plan focuses on ensuring Halifax Water customers continue receiving quality service and that the utility's employees are supported and empowered with the required resources.

PURPOSE

Our purpose is to supply and safeguard sustainable, high-quality water services.

VISION

We will provide our customers with high-quality water, wastewater, and stormwater services. Through adoption of best practices, we will place the highest value on public health, customer service, fiscal responsibility, workplace safety and security, asset management, regulatory compliance, and stewardship of the environment. We will fully engage employees through teamwork, innovation, and professional development.

VALUES

Relationships - We nurture relationships with our customers, our team members, and the environment. We are engaged in the neighbourhoods we serve, and we support continual learning across our team.

Innovation - We are among the top utilities across the continent and are known on the global stage. We always ask, "How can we improve efficiency, sustainability, creativity and the customer experience?"

Accountability - We refuse to cut corners. We check in with our excellence standards regularly and look to one another for support. Safety steers our decision-making. We are driven to make our policies, decisions, and projects as clear as our drinking water.

Protection - Halifax Water protects the health and well-being of our population. We exist to guard natural resources, finding ways to sustain our communities and environment.

EXECUTIVE SUMMARY

In the fiscal year 2024/25, Halifax Water is confidently confronting challenges arising from growth, aging infrastructure, and escalating environmental compliance and protection costs.

Our strategic focus includes addressing growth needs, implementing robust asset management practices, delivering value for our customers, and actively engaging in initiatives to combat climate change and engage the communities we serve.

Internally, we are committed to aligning and enhancing business processes, fortifying modernized and secure systems, empowering our workforce, and supporting them with cost-effective and integrated financial systems. We continue to prioritize health and safety and partnerships with key stakeholders.

Our employees continue to be our most important asset, which is why we are placing even greater emphasis on our people and culture this year. This includes focusing on retention, succession planning, and attracting the technical skills required for a modern-day water utility.

We will update our Integrated Resource Plan to achieve these objectives, targeting completion by December 2025. This comprehensive plan, last updated in 2019, outlines the programs and resources needed over a 30-year period to address compliance, asset renewal, and growth.

With an increased focus on capital infrastructure delivery in the coming year, many of our initiatives are designed for implementation over multiple years. Halifax Water will continually advance plans, studies, and programs to enhance customer service. Initiatives such as the Water Supply Enhancement Program, Water Safety Plan, Wastewater Treatment Facility Study, and Biosolids Project will persist throughout this fiscal year.

Anticipating and adapting to changing environmental conditions and rigorous requirements, we diligently work on implementing our corporate-wide Environmental Management System and a robust Climate Action Plan.

Maintaining a positive financial position is imperative, and accordingly, we will file a General Rate Application with the Nova Scotia Utility and Review Board later this year.

With rapid growth within the municipality, workforce capacity remains a pivotal focus. As increased service demands necessitate adding skilled individuals, our unwavering commitment to our employees' physical and psychological health and safety remains steadfast.

As we embark on this journey, we look forward to a year of resounding success for Halifax Water.

Kenda MacKenzie

Acting General Manager



One Team, One Water

Working together with mutual trust, respect and shared values that focus on our commitment to customers, community, and the environment.



People & Culture



Health, Safety, Environment & Community



Financial & Regulatory Accountability



Operational Excellence

STRATEGIC INITIATIVES AND PROGRAMS 2024/25

People & Culture

Enhance the overall Employee Experience	Objectives(s)	<ul style="list-style-type: none"> Foster an inclusive employee workplace culture by creating greater connections to all employees at Halifax Water by the end of Q3.
	Rationale	<ul style="list-style-type: none"> Halifax Water can be viewed as an Employer of Choice.
	Impact	<ul style="list-style-type: none"> Positively influence our employment brand. Act on employee insights through listening strategies, including annual surveys. Enable internal mobility and focus on career growth and development.

Develop a Flexible Talent Management Strategy	Objectives(s)	<ul style="list-style-type: none"> Develop and launch a Flexible Talent Management Strategy at Halifax Water by the end of Q3.
	Rationale	<ul style="list-style-type: none"> Enable Halifax Water to attract, engage, develop, and retain critical skills to ensure a robust pipeline of talent who will effectively deliver business objectives.
	Impact	<ul style="list-style-type: none"> Create robust succession plans for all critical roles in the organization. Provide access to development opportunities and career progression. Engage in meaningful and ongoing talent discussions. Facilitate integrated strategic planning between People and culture and business leaders.

Develop a transition plan to support an integrated service delivery model from the Burnside Operations Centre	Objectives(s)	<ul style="list-style-type: none"> Develop a comprehensive change management plan for mobilization to the new Burnside Operations Centre by the end of Q4.
	Rationale	<ul style="list-style-type: none"> Ensure smooth and seamless transfer of staff and service delivery to the new location.
	Impact	<ul style="list-style-type: none"> Minimize business disruption and ensure service level deliverables continue to be provided. Ensure staff continues to be engaged to support the transition and have buy-in of the integrated service delivery model.

Continue to strengthen a positive and diverse workplace	Objectives(s)	<ul style="list-style-type: none"> Halifax Water will complete initiatives outlined in the Diversity, Equity, and Inclusion (DEI) framework for 2024/25 and establish performance measures for DEI reporting by the end of Q2. New hires will receive unconscious bias training upon hire.
	Rationale	<ul style="list-style-type: none"> Halifax Water is committed to a workforce reflective of the communities in which we live and work. Continuing to enhance our focus on creating a diverse and inclusive workforce that values equity and inclusion will create a culture where respect and civility are valued, and psychological health and safety are promoted.
	Impact	<ul style="list-style-type: none"> Stimulate business innovation. Benefit from a broader range of perspectives. Understand our customers better. Improve overall business performance.

Continue building institutional capacity to meet the challenges of growth in our infrastructure and operations	Objectives(s)	<ul style="list-style-type: none"> Working with key business partners to deliver this initiative to ensure best hiring practices are implemented, and business operations are fully staffed and supported.
	Rationale	<ul style="list-style-type: none"> Halifax Water's Integrated Resource Plan (IRP) requires that Halifax Water deliver, on average, a capital budget of \$135 million per year. This is a significant increase over several years ago. Halifax Water needs to be appropriately staffed and resourced to deliver this program. Halifax Water has the appropriate people, processes, and technology to deliver the IRP level of capital spending.
	Impact	<ul style="list-style-type: none"> Halifax Water is staffed and resourced appropriately to deliver our programs and services effectively in an integrated and effective manner.

Health, Safety, Environment & Community

Continue to develop and enhance Source Water Protection Plans as needed for our watersheds	Objectives(s)	<ul style="list-style-type: none"> Complete plan for Middle Musquodoboit Q1, commence review and update Pockwock Q3 and Bennery Q3.
	Rationale	<ul style="list-style-type: none"> The creation of a consolidated document for the current management of the source water, risk assessment and the management and monitoring plan for the protection of the source water provides a holistic view for planning.
	Impact	<ul style="list-style-type: none"> Mitigates the risks to the water supply areas. Provides tactics for detection of potential contaminants and impacts.

Initiate integration of ISO 45001, focusing on continued enhancements to safety culture	Objectives(s)	<ul style="list-style-type: none"> Update and transform the current Occupational Health and Safety Manual to a Safety Management System. Creating a more consistent document for employee use and training by Q4.
	Rationale	<ul style="list-style-type: none"> The ISO 45001 standards will guide the program for consistent practices across the utility.
	Impact	<ul style="list-style-type: none"> Provides greater clarity and consistency for employees in safe work practices and management of potential risks. Enhances the overall safety culture across the Utility.

Complete a multi-year roadmap to monitor wastewater system flows.	Objectives(s)	<ul style="list-style-type: none"> The project will identify existing monitoring and measurement information gaps and develop a plan for addressing them by the end of Q4.
	Rationale	<ul style="list-style-type: none"> Halifax Water is required to limit Combined Sewer Overflows (CSOs) and prevent Sanitary Sewer Overflows (SSOs). To do this effectively, Halifax Water will develop better tools and processes to detect and respond to overflow events.
	Impact	<ul style="list-style-type: none"> Prioritizes capital plans for addressing CSO/SSO monitoring and response. In the long term, Halifax Water will have a reliable overflow monitoring and reporting system to serve as the basis for potential real-time control and mitigation.

Deliver the Climate Action Plan and transition to a five-year capital roadmap	Objectives(s)	<ul style="list-style-type: none"> Deliver the Climate Action Plan (CAP) in Q1 and develop a list of projects to incorporate into the capital budgets over the next five years. The CAP implementation strategy will be produced by the end of Q2.
	Rationale	<ul style="list-style-type: none"> Halifax Water will align its climate action plan with HRM's HalifACT 2050 climate action plan.
	Impact	<ul style="list-style-type: none"> A Halifax Water climate action plan will maintain alignment with HRM on climate action. It will allow Halifax Water to plan for climate adaptation measures responsibly and sustainably.

Build a strategic and proactive plan for communications and stakeholder engagement	Objectives(s)	<ul style="list-style-type: none"> Proactively tell our story through expanded communications channels (beyond PSAs), allowing Halifax Water to inform and educate the broader community about the work and mandates of the utility. Increase proactive stakeholder engagement activities in the communities where we live and operate by Q4. Begin streamlining the issue management process to ensure greater integration between Communications, Operations and Customer Care by Q4.
	Rationale	<ul style="list-style-type: none"> Proactively promote Halifax Water's work in the community and shine a positive light on its contributions beyond everyday work (asset repairs, renewal, extensions, etc.). Helps improve Halifax Water's overall reputation and how all stakeholders perceive the Utility.
	Impact	<ul style="list-style-type: none"> Creates greater internal integration to support the One Water vision. Streamlines processes. Enhances overall reputation with all stakeholders and our customers.

Financial & Regulatory Accountability

Update the long-term financial models using the latest projections and forecasting to reflect operational and infrastructure requirements	Objectives(s)	<ul style="list-style-type: none"> While the next IRP is being developed, use the projected 5-year capital budget to update the long-term financial model by Q2. Complete the rate application to ensure rates are sufficient to fund the infrastructure and operational requirements for the next 2 to 3 years by Q1, a decision by early Q4.
	Rationale	<ul style="list-style-type: none"> A rate application is required to approve any rate increases required to fund the infrastructure and operational costs. Long-term financial model allows the estimation of rate increases to customers beyond the next rate application.
	Impact	<ul style="list-style-type: none"> A rate application will support the utility's financial viability. Information concerning the expected long-term financial plan will support the operational decisions for the next 5-year period.

Execute contract and gain funding approval for the Biosolids Processing Facility	Objectives(s)	<ul style="list-style-type: none"> Complete the biosolids processing facility procurement and execute a contract with the preferred vendor by Q3.
	Rationale	<ul style="list-style-type: none"> Halifax Water's current biosolids processing facility requires upgrades and will exceed its capacity by 2027. This project will replace the current facility and provide processing capacity for 25 years.
	Impact	<ul style="list-style-type: none"> In addition to providing a management system for wastewater biosolids, the new facility should provide revenue streams from resource recovery related to soil amendment products and renewable natural gas.

Continue to enhance our approach to Capital Delivery and Project Management	Objectives(s)	<ul style="list-style-type: none"> Develop a Project Management practice and reporting group in the Capital Delivery Business unit by the end of Q4.
	Rationale	<ul style="list-style-type: none"> Halifax Water lacks the formal controls and business practices commensurate with a utility delivering \$135 million per year in capital spending. Developing these processes and reporting capabilities is the next phase in the ongoing development of the engineering function at Halifax Water.
	Impact	<ul style="list-style-type: none"> Successfully done, this unit will ensure that all projects are well-defined with sufficient reporting and a system for identifying and reporting on budget, scope, schedule, and risk.

Update Integrated Resource Plan	Objectives(s)	<ul style="list-style-type: none"> Execute a procurement initiative to obtain an IRP consultant to complete the IRP by the end of Q3.
	Rationale	<ul style="list-style-type: none"> The Nova Scotia Utility and Review Board requires Halifax Water to have a 30-year plan for Halifax Water infrastructure, planned through the lenses of Asset renewal, growth, and compliance. The IRP is at the core of Halifax Water’s long-term spending plan.
	Impact	<ul style="list-style-type: none"> The IRP will ensure that Halifax Water is a sustainable utility from an asset management perspective.

Operational Excellence

Commence detailed design for the Cogswell District Project Energy Centre	Objectives(s)	<ul style="list-style-type: none"> Hire a design consultant and commence a detailed design for the Cogswell District Energy System (DES) energy centre by the end of Q1.
	Rationale	<ul style="list-style-type: none"> The Energy Centre, located at the Halifax Wastewater Treatment Facilities (WWTF), is a key component of the DES and will transfer ambient heat energy to buildings in the Cogswell District.
	Impact	<ul style="list-style-type: none"> Designing the Energy Centre will put Halifax Water in a good position to supply heating and cooling energy to the new building developments in the Cogswell District when the lots are sold, and the buildings are ready for occupancy.
Continue the Water Supply Enhancement Program	Objectives(s)	<ul style="list-style-type: none"> Maintain progress on upgrading Halifax Waters' two large water supply plants by advancing the clarifier design at the JD Kline plant and pumping station/intake design at the Lake Major plant. Lake Major – Intake and Low Lift Pump Station <ul style="list-style-type: none"> Detailed design procurement by Q1. JD Kline – Pretreatment and Clarification <ul style="list-style-type: none"> Optimize and finalize preliminary design by Q2.
	Rationale	<ul style="list-style-type: none"> Both large water supply plants need upgrades to deal with obsolescence issues and changes in source water quality due to lake recovery and climate change.
	Impact	<ul style="list-style-type: none"> Successful execution of the Water Supply Enhancement Program (WSEP) will ensure that Halifax Water has resilient and reliable plants that can adapt to changes in source water quality.
Develop a framework for ongoing maintenance plans meeting defined asset service standards	Objectives(s)	<ul style="list-style-type: none"> Review and confirm operation and maintenance standards by the end of Q1. Generate annual asset maintenance plans for Water and Wastewater Operations by the end of Q2.
	Rationale	<ul style="list-style-type: none"> Establishes the resources necessary to meet Halifax Water's service standards and informs the operating and capital budgets in future years.
	Impact	<ul style="list-style-type: none"> Executed maintenance plans will help to mitigate risks to critical infrastructure.

Develop Standard Operating Procedures to support regulatory compliance and the Environmental Management System Program	Objectives(s)	<ul style="list-style-type: none"> Develop and implement standard operating procedures (SOPs) for the operation, maintenance, and emergency response of CSO structures by the end of Q4.
	Rationale	<ul style="list-style-type: none"> Clear SOPs will mitigate or eliminate CSOs and improve/ensure regulatory compliance.
	Impact	<ul style="list-style-type: none"> Reduce the frequency and quantity of CSOs.

Expand Operational Readiness	Objectives(s)	<ul style="list-style-type: none"> Develop an emergency management plan to provide the procedures to follow and resources required to continue services in the wake of an emergency by Q1.
	Rationale	<ul style="list-style-type: none"> Provides a road map for continuing required operations. Provides support for the overall Business Continuity Plan (BCP) for Halifax Water, which supports staff in overseeing and addressing system upsets or failures of significant equipment for extended periods.
	Impact	<ul style="list-style-type: none"> Optimize time of recovery and return to service of critical infrastructure. Enhance customer confidence by maintaining high-quality water service.

Continue to expand the utilization of systems to improve operational efficiency	Objectives(s)	<ul style="list-style-type: none"> Expand the utilization of the Enterprise Resource Planning (ERP) system, including finalizing the rollout of Connect Vendor to support vendors and Connect Finance to enhance accessibility to the ERP and streamline approval processes by Q3. Review additional functionality and enhancements to the new ERP system, including increased functionality in stores related to inventory tracking and additional dashboards, and integrations with Capital Project Management and Information Systems (CPM&IS) and the Halifax Water Insights Initiatives, which will be assessed by the end of Q4.
	Rationale	<ul style="list-style-type: none"> Expanding utilization will streamline processes, improve financial accountability, and improve organizational efficiencies.
	Impact	<ul style="list-style-type: none"> Improves efficiency, enhances financial accountability, and information to vendors and staff.

Update enterprise risk management models	Objectives(s)	<ul style="list-style-type: none"> Operationalize the framework to proactively identify, assess, and mitigate risk exposures by Q4. Continue to promote a risk management culture and communication across the organization by Q3.
	Rationale	<ul style="list-style-type: none"> A robust risk management system is essential to manage the utility effectively. Effective risk management requires risks to be identified and the development of plans to mitigate the risks.
	Impact	<ul style="list-style-type: none"> Improved responses and mitigation strategies to respond to known and emerging risks.

Strengthen Halifax Water's Cybersecurity	Objectives(s)	<ul style="list-style-type: none"> Complete the implementation of the accepted recommendations from the Municipal Auditor General's Report by the end of Q4. Continue strengthening Halifax Water's cyber security systems and ability to respond to incidents by Q4.
	Rationale	<ul style="list-style-type: none"> Critical infrastructure, including water, is a known target of cybercriminals, and Halifax Water must be prepared to address and respond to this risk.
	Impact	<ul style="list-style-type: none"> Halifax Water customers, services, systems, and data are appropriately protected from cyber incidents.

BUDGET SUMMARY

Capital Budget

Halifax Water's 2024/25 capital budget is at a total value of \$152,497,000, and detailed information on the capital budget is provided in Appendix B.

Halifax Water's 2019 IRP identifies a 30-year capital investment plan valued at \$2.7 billion (net present value) and a requirement to achieve an average level of spend of \$135 million per year. In relation to the IRP, the capital budget program focuses on providing the required infrastructure for asset renewal, regulatory compliance, and growth.

The 2024/25 capital budget recognizes Halifax Water's significant challenge in increasing a capital budget from approximately \$30 million ten years ago to an average annual IRP target of \$135 million and, in some years, exceeding \$200 million.

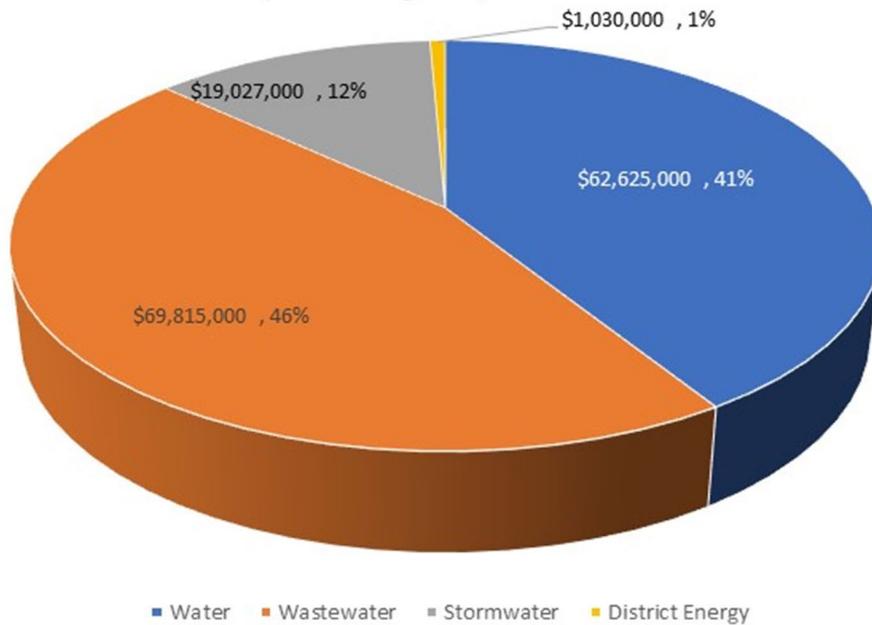
Preparation of the 2023/24 capital budget was founded on the May 2023 re-alignment of the Engineering and Technology Services department and initial steps in creating the capacity to deliver the IRP program. The department realignment provides for improved planning for larger projects and improved project governance to ensure projects align fully with utility objectives throughout the project life cycle. Developing a budget based on our developing workforce and improving business process constraints will help improve our performance tracking to the capital budget targets. At the same time, delivering on our recommended annual IRP capital program target provides improved service sustainability and a reduced risk of service interruption.

The proposed capital budget for 2024/25 is a slight increase from last year's budget of \$146,692,000 as several large strategic projects move closer to the construction stage.

The funding plan for the capital budget comprises the following funding sources; depreciation, debt, regional development charge reserve, Federal/Provincial infrastructure funding, HRM cost sharing and energy rebates.

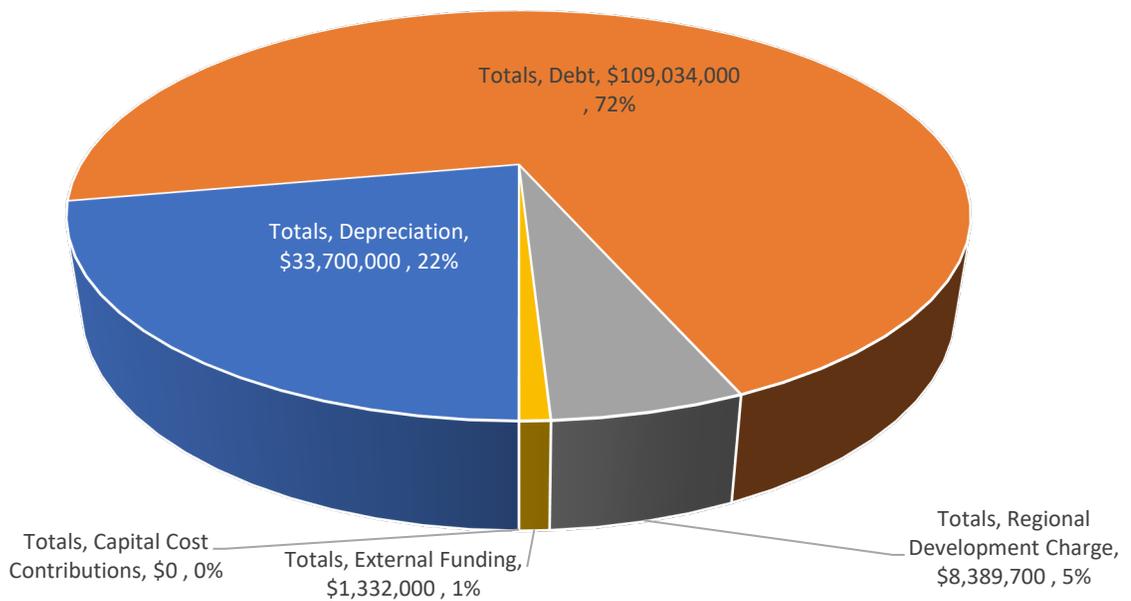
2024/25 Capital Budget Funding Sources					
Funding Source	Water	Wastewater	Stormwater	District Energy	Totals
Depreciation	\$13,293,000	\$17,835,000	\$2,572,000	\$0	\$33,700,000
Debt	\$46,138,500	\$45,451,800	\$16,455,000	\$1,030,000	\$109,075,300
Regional Development Charge	3,183,500	\$5,206,200	\$0	\$0	\$8,389,700
External Funding	\$10,000	\$1,322,000	\$0	\$0	\$1,332,000
Capital Cost Contributions	\$0	\$0	\$0	\$0	\$0
SUB-TOTAL	\$62,625,000	\$69,815,000	\$19,027,000	\$1,030,000	\$152,497,000

2024/25
Capital Budget by Asset Class



2024/25
Capital Budget Funding Sources

■ Depreciation ■ Debt ■ Regional Development Charge ■ External Funding ■ Capital Cost Contributions



Operating Budget

The operating budget for 2024/25 which shows a projected deficit of \$18.7 million. The budget reflects requirements to maintain current levels of service, deliver projects already in progress or approved, and address any changing environmental or regulatory requirements.

Operating Budget Summary

	Approved	Proposed	From 2023/24 Budget	
	Budget 2023/24 '000	Budget 2024/25 '000	\$ Change	% Change
Operating revenues	\$ 168,897	\$ 172,059	\$ 3,162	1.87%
Operating expenditures	135,956	150,837	14,881	10.95%
Earnings from operations before financial and other revenues and expenditures	32,941	21,222	(11,719)	(35.58%)
Financial and other revenues				
Interest	324	383	59	18.21%
Other	627	615	(12)	(1.91%)
	951	998	47	4.94%
Financial and other expenditures				
Interest on long term debt	7,051	9,375	2,324	32.96%
Repayment on long term debt	22,191	24,077	1,886	8.50%
Amortization of debt discount	202	244	42	20.79%
Dividend/grant in lieu of taxes	6,589	7,031	442	6.71%
Other	175	175	0	0.00%
	36,208	40,902	4,694	12.96%
Loss for the year	\$ (2,316)	\$ (18,682)	\$ (16,366)	706.65%

All three services (water, wastewater, and stormwater) are budgeting a deficit for 2023/24. Halifax Water is planning to file a rate application in 2024/25 for rate increases to offset these deficits.

Operating Budget Key Assumptions

Halifax Water's main revenue sources are derived from rate-regulated activities, with approximately 76% of water and wastewater revenues coming from consumption/discharge rates and 24% from base charges. The 2024/25 Operating Budget is based on regulated rates and charges approved by the NSUARB effective April 1, 2023. Base charges for both water and wastewater have remained unchanged since April 1, 2016. The water and wastewater consumption rate, stormwater non-residential per square meter, and residential properties rates per tier have not been increased in the operating budget. For 2024/25, a 1% increase in total consumption was used to budget revenue compared to a 0% increase in the prior year. New customer connections are estimated at 680 for water services and 640 for wastewater services based on historical trends.

Halifax's Consumer Price Index is currently at 4.3%. The increase in Halifax Water's operating costs is related to an increase in new positions to support customer growth, regulatory requirements, capital delivery, and infrastructure. Increases in salary rates will be determined through contract negotiations with our two union locals and the non-union compensation policy.

Significant operations have increased in 2024/25. For energy costs, the rate increases are as follows:

Electricity	7.0%
Furnace Oil	20.0%
Natural Gas	15.0%
Chemicals	5.0%

The budgets for depreciation and non-operating expenses, such as debt servicing and the dividend/grant in lieu of taxes paid to the municipality, are developed based on capital spending and additions to utility plants in service.

PERFORMANCE MEASUREMENT

At the end of the 2024/25 fiscal year, Halifax Water's overall performance will be assessed against the Corporate Balanced Scorecard (CBS). Halifax Water has been utilizing a CBS to measure utility performance since 2001. The Halifax Water Board sets organizational indicators each year and reviews performance results. For 2024/25, these indicators will be revisited and presented to the board for approval.

People & Culture	Health, Safety, Environment & Community
<ul style="list-style-type: none"> • Customer satisfaction about water quality - Percentage from the annual customer survey. • Customer satisfaction with service - Percentage from the customer survey. • Number of arbitrations divided by total number of grievances. • Percentage of jobs filled with internal candidates. • Employee satisfaction survey result. • Average number of days of absenteeism. 	<ul style="list-style-type: none"> • Average score on internal safety audits • NS Labour and Advanced Education compliance – Number of Incidents with written compliance orders. • Lost time accidents -Number of accidents resulting in lost time per 100 employees. • Safe driving - Number of traffic Accidents per 1,000,000 km driven (maximum of 5). • Training - Number of employees trained or re-certified before due date. • Percentage of completed safety talks. • Percentage of public health and environmental regulatory infractions resulting in summary offence tickets. • Percentage of WWTFs complying with NSE approval permits. • Number of ICI properties engagements by Pollution Prevention each year.
Financial & Regulatory Accountability	Operational Excellence
<ul style="list-style-type: none"> • Operating expense/revenue ratio percentage. • Operating expense/revenue ratio percentage (excluding depreciation). • Annual cost per customer connection – Water. • Annual cost per customer connection – Water (excluding depreciation). • Annual cost per customer connection – Wastewater. • Annual cost per customer connection – Wastewater (excluding depreciation). • Capital budget expenditures - Percentage of budget spent by the end of the fiscal year. 	<ul style="list-style-type: none"> • Adherence with five objectives of the Water Safety Plan for all water systems - Percentage of sites achieving targets. • Bacteriological tests - Percentage free from Total Coliform. • Water service outages - Number of connection hours/1000 customers. • Wastewater service outages – Number of connection hours/1000 customers. • Average speed of answer – Percentage of calls answered within 20 seconds. • Response time for service connection permits – the percentage of formal responses provided from Halifax Water within 3 days or less.

	<ul style="list-style-type: none">• Response time for subdivisions involving system extensions – the percentage of formal responses from Halifax Water provided within 4 weeks or less review.• Water leakage control – target leakage allowance of 160 litres/service connection/day• I&I reduction - Number of inspections to identify private property discharge of stormwater into the wastewater system.• Peak flow reduction from wet weather management capital projects• Percentage of time GIS and Cityworks are available.• Energy management kwh/m3 reduction associated with capital projects.• Bio-solids residual handling - percentage of sludge meeting bio-solids concentration targets
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Appendix A: 2023/24 Capital Budget

HALIFAX WATER
Capital Budget 2024/25
Summary

Asset Category	Project Costs
<i>Water - Land -- T O T A L</i>	\$125,000
<i>Water - Transmission -- T O T A L</i>	\$9,042,000
<i>Water - Distribution -- T O T A L</i>	\$19,814,000
<i>Water - Structures -- T O T A L</i>	\$7,465,000
<i>Water - Treatment Facilities -- T O T A L</i>	\$4,197,000
<i>Water - Energy -- T O T A L</i>	\$250,000
<i>Water - Equipment -- T O T A L</i>	\$120,000
<i>Water - Corporate Projects - T O T A L</i>	\$21,612,000
TOTAL - Water	\$62,625,000
<i>Wastewater - Collection System -- T O T A L</i>	\$16,810,000
<i>Wastewater - Forcemains -- T O T A L</i>	\$780,000
<i>Wastewater Structures -- T O T A L</i>	\$15,590,000
<i>Wastewater - Treatment Facility -- T O T A L</i>	\$13,010,000
<i>Wastewater - Energy -- T O T A L</i>	\$800,000
<i>Wastewater - Equipment -- T O T A L</i>	\$575,000
<i>Wastewater - Corporate Projects -- T O T A L</i>	\$22,250,000
TOTAL - Wastewater	\$69,815,000
<i>Stormwater - Pipes -- T O T A L</i>	\$9,752,000
<i>Stormwater - Culverts -- T O T A L</i>	\$4,550,000
<i>Stormwater - Equipment -- T O T A L</i>	\$25,000
<i>Stormwater - Corporate Projects -- T O T A L</i>	\$4,700,000
TOTAL - Stormwater	\$19,027,000
<i>District Energy - TOTAL</i>	\$1,030,000
TOTAL - District Energy	\$1,030,000
GRAND TOTAL	\$152,497,000

HALIFAX WATER
Capital Budget 2024/25
Water

Project Number	Project Name	Project Cost
<u>Water - Land</u>		
3.033	Watershed Land Acquisition	\$125,000
<i>Water - Land -- T O T A L</i>		\$125,000
<u>Water - Transmission</u>		
3.554	North End Feeder Replacement	\$300,000
3.553	Peninsula Intermediate Looping - Quinpool Rd to Young St (Newton Ave 2023)	\$3,246,000
3.559	Lucasville Road Twinning Ph 2	\$200,000
3.436	Pockwock Transmission Main Twinning - WSP to Hammonds Plains Rd	\$200,000
3.399	Cogswell Interchange - Water Transmission Main Realignments	\$1,830,000
3.744	Lacewood Drive Looping-Geizer 158 Looping (IMP W02)	\$200,000
3.743	Spruce Hill Transmission Main Replacement	\$200,000
3.748	Bayers Road 27 Transmission Main Replacement Connaught Ave to Windsor	\$200,000
3.752	Quinpool Road Transmission Main Upgrades-Quinn St to Beech St (W6.1 and 6.2)	\$100,000
3.571	Highway 118 Crossing - Shubie Park to Dartmouth Crossing	\$2,361,000
3.761	Highway 118 Crossing - Shubie Park to Dartmouth Crossing	\$65,000
3.045	Highway 118 Crossing - Shubie Park to Dartmouth Crossing	\$10,000
3.261	Highway 118 Crossing - Shubie Park to Dartmouth Crossing	\$10,000
3.232	Highway 118 Crossing - Shubie Park to Dartmouth Crossing	\$120,000
<i>Water - Transmission -- T O T A L</i>		\$9,042,000
<u>Water - Distribution</u>		
3.022	Water Distribution - Main Renewal Program	\$10,400,000
3.067	~ Valves Renewals	\$425,000
3.068	~ Hydrants Renewals	\$75,000
3.069	~ Service Lines Renewals	\$75,000
3.390	Lead Service Line Replacement Program	\$2,000,000
3.296	Water Sampling Station Relocation Program	\$10,000
3.696	Tower Road CN Bridge - Watermain Replacement	\$500,000
3.584	Silversands WSP-Linear Main Extension Cow Bay Rd	\$5,859,000
3.688	Little Salmon River Bridge Watermain Replacement	\$40,000
3.746	Young Avenue CN Bridge-Watermain Replacement	\$100,000
3.751	Lake Major Road Culvert Replacement-Watermain Relocation	\$130,000
3.686	Robie Street Upsizing	\$100,000
3.555	Young Street Upsizing	\$100,000
<i>Water - Distribution -- T O T A L</i>		\$19,814,000

HALIFAX WATER
Capital Budget 2024/25
Water

Project Number	Project Name	Project Cost
<u>Water - Structures</u>		
3.601	Control Chamber Valve Replacement Program	\$125,000
3.263	District Metered Areas (DMA) Program	\$100,000
3.623	Booster Station - Building Envelope - Capital Upgrade Program	\$30,000
3.709	White Hills Meter Chamber Replacement	\$300,000
3.701	Leaman Dr. Emergency Booster Station	\$2,130,000
3.719	Geizer 158 - New Reservoir	\$200,000
3.651	Riverside Drive PRV Chamber Replacement	\$40,000
3.589	Aerotech Booster Station Replacement	\$500,000
3.454	Robie Street Reservoir Rehabilitation	\$150,000
3.747	Aerotech Booster Station-Communication System Upgrades	\$300,000
3.508	Beaver Bank Reservoir Rehabilitation	\$3,100,000
3.749	Bedford South Booster Station - New Pump Control Panel	\$150,000
3.750	Topsail Control Chamber - New Diesel Back-up Generator	\$130,000
3.753	Waverley Road PRV CSE Retrofit	\$110,000
3.712	Mount Edward Reservoir #1 Replacement	\$100,000
<u>Water - Structures -- T O T A L</u>		\$7,465,000
<u>Water - Treatment Facilities</u>		
J D Kline Water Supply Plant:		
3.608	JD Kline WSP - Clearwell, reservoir and storage - WSEP JDK-800.25	\$800,000
Lake Major Water Supply Plant:		
3.162	Lake Major WSP - Butterfly Valve Replacement Program	\$425,000
3.557	Lake Major WSP - Sludge Drying Beds Improvements	\$350,000
3.755	Lake Major WSP - Low Lift Access Road Gate Upgrade	\$70,000
3.618	Lake Major WSP - Clarification/Pretreatment - WSEP MAJ 800.15	\$550,000
3.619	Lake Major WSP - Intake/low lift Pump Station - WSEP MAJ-800.20	\$519,000
3.621	Lake Major WSP - Filter upgrades - WESP MAJ-800.45	\$382,000
Bennery Lake Water Supply Plant:		
3.756	Bennery Lake WSP - New High Lift Pump	\$225,000
3.757	Bennery Lake WSP - Replace Process Residual Sludge Pumps	\$40,000
Non-Urban Core WSP		
3.731	Small Systems - Filter Column Replacement Program	\$10,000
3.754	Water Supply Plants Asset Renewal and Emergency Repairs	\$300,000
3.690	WSP Plants - Instrumentation and Controls Equipment Program	\$130,000
3.691	Pump and Equipment Overhauls Program for WSPs	\$250,000
3.759	Tomahawk Outlet Bridge	\$64,000
3.760	Bennery Lake Road Culvert	\$32,000
3.740	Receiving Environment Assessment - Bomont	\$50,000
<u>Water - Treatment Facilities -- T O T A L</u>		\$4,197,000
<u>Water - Energy</u>		
3.635	Energy Management Capital Program (Water)	\$150,000
3.107	Chamber HVAC Retro-Commissioning Program	\$100,000
<u>Water - Energy -- T O T A L</u>		\$250,000
<u>Water - Equipment</u>		
3.101	Miscellaneous Equipment Replacement (Water)	\$60,000
3.738	Water Quality Lab Infrastructure	\$60,000
<u>Water - Equipment -- T O T A L</u>		\$120,000
<u>Water - Corporate Projects - T O T A L</u>		\$21,612,000
GRAND TOTAL - WATER		\$62,625,000

HALIFAX WATER
Capital Budget 2024/25
Wastewater

Project Number	Project Name	Project Cost
<u>Wastewater - Collection System</u>		
2.168	Wastewater System - Trenchless Rehabilitation Program	\$3,000,000
2.504	Collection System Asset Renewal Program	\$150,000
2.357	Manhole Renewals WW	\$60,000
2.358	Lateral Replacements WW (non-tree roots)	\$1,800,000
2.563	Lateral Replacements WW (tree roots)	\$600,000
2.223	Wet Weather Management Program	\$400,000
2.052	Integrated Wastewater Projects - Program	\$1,600,000
2.692	Cogswell Redevelopment - Sewer Relocation	\$1,840,000
2.356	Auburn Avenue PS Elimination	\$60,000
2.1072	Sewer Separation Program	\$200,000
2.836	Wyse Road Separation Phase 1	\$100,000
2.837	Wyse Road Separation Phase 2	\$100,000
2.674	SSP - South Park Street - Sewer Separation	\$4,400,000
2.679	College Street - Sewer Separation	\$250,000
2.107	SSP - Spring Garden Road Pocket	\$250,000
2.982	Young Street Pocket - Sewer Separation - Route to Harbour	\$800,000
2.672	Young Street - Sewer Separation	\$100,000
2.678	Robie Street - Sewer Separation	\$250,000
2.942	North Preston Lateral Connection Rehabilitation	\$100,000
2.830	Eastern Passage RDII Reduction Program FMZ24 - Lake Loon	\$100,000
2.832	Mill Cove RDII Reduction Program FMZ07 & FMZ40 - Lower Sackville	\$500,000
2.833	Mill Cove RDII Reduction Program FMZ10 - Bedford Common	\$50,000
2.834	Ellenvale Area RDII Reduction Program FMZ27	\$100,000
<u>Wastewater - Collection System -- T O T A L</u>		\$16,810,000
<u>Wastewater - Forcemains</u>		
2.1117	ARV Replacement – Eastern Passage Gravity Pressure Sewer	\$130,000
2.608	New Timberlea Pump Station Forcemain System	\$600,000
2.578	Armdale Pumping Station Forcemain Replacement	\$50,000
<u>Wastewater - Forcemains -- T O T A L</u>		\$780,000
<u>Wastewater - Structures</u>		
2.420	Emergency Pumping Station Pump Replacements	\$300,000
2.442	Wastewater Pumping Station Component Replacement Program - West Region	\$200,000
2.443	Wastewater Pumping Station Component Replacement Program - East Region	\$200,000
2.444	Wastewater Pumping Station Component Replacement Program - Central Region	\$200,000
2.108	Pump Station Quick Connects for Generators and Bypass pumps	\$320,000
2.476	Wastewater Pumping Station Asset Renewal Program	\$300,000
2.1093	Fish Hatchery PS Upgrade	\$815,000
2.92	Herring Cove Pumping Station - Pump Replacements	\$2,900,000
2.111	Farmers PS Temporary Rebuild	\$1,140,000
2.1115	Fall Protection Retro-Fit - Pumping Stations	\$35,000
2.1008	Roach's Pond Pumping Station - New Screen	\$200,000
2.978	Majestic Avenue PS Upgrades	\$200,000
2.1030	Duffus Street Pumping Station - Mechanical & Electrical Upgrades	\$1,500,000
2.740	Duffus Pumping Station Replacement and CSO Modification	\$200,000
2.1032	Pier A Pumping Station - Mechanical Upgrades	\$100,000
2.654	PS Control Panel / Electrical Replacement	\$860,000
2.005	Autoport Pleasant Street PS Replacement	\$5,900,000
2.609	New Timberlea Pumping Station	\$220,000
<u>Wastewater Structures -- T O T A L</u>		\$15,590,000

HALIFAX WATER
Capital Budget 2024/25
Wastewater

Project Number	Project Name	Project Cost
<u>Wastewater - Treatment Facility</u>		
2.056	Plant Optimization Program	\$150,000
2.522	Emergency Wastewater Treatment Facility equipment replacements	\$600,000
2.668	Wastewater Treatment Research Program Pilot Plant	\$250,000
2.699	HHSPs - Outfall Inspection Program	\$35,000
2.108	WWTF - Bay Door Replacements	\$175,000
2.1078	HHSP WWTFs - Raw Water Pump Variable Frequency Drive (VFD's)	\$230,000
2.1079	HHSP WWTFs - Polymer Batching System Replacement - Phase 1 Scoping	\$60,000
2.1080	HHSP WWTFs - Air Quality Improvement Project (Internal) - Phase 1 Scoping	\$60,000
2.1081	HHSPs - Critical Spares Program 2024-2028	\$250,000
Halifax WWTF		
2.506	Halifax WWTF - Asset Renewal Program	\$775,000
2.765	Halifax WWTF - Raw Water Pump Refurbishment	\$65,000
2.1083	Halifax WWTF - Female Locker Room	\$50,000
2.1084	Halifax WWTF - Wetwell Hatch Modifications	\$90,000
2.1085	Halifax WWTF - Grit Discharge Line Replacement	\$100,000
2.1086	Halifax WWTF - Coarse Climber Screen Replacement & Main Gate Isolation – Phase 1 Scoping	\$60,000
Dartmouth WWTF		
2.507	Dartmouth WWTF - Asset Renewal Program	\$150,000
2.790	Dartmouth WWTF - Fournier Press - Sludge Dewatering Upgrade	\$1,200,000
2.8760	Dartmouth WWTF - Raw Water Pump Refurbishment Program	\$65,000
2.7880	Dartmouth WWTF - UV Disinfection System - New Modules and PLC Upgrade	\$5,000,000
2.1087	Dartmouth WWTF - Outfall Liner and Multiport Diffuser Repair	\$150,000
2.1088	Dartmouth WWTF - Odour Control Damper Replacement	\$200,000
2.1089	Dartmouth WWTF - Forklift Replacement	\$60,000
Herring Cove WWTF		
2.5080	Herring Cove WWTF - Asset Renewal Program	\$150,000
2.1090	Herring Cove WWTF - Hatchway (Hoistway) Cover Replacement	\$75,000
2.1091	Herring Cove WWTF - Boiler room mechanical ventilation and Basement Electrical (Phase 1 Scoping)	\$25,000
Mill Cove WWTF		
2.505	Mill Cove WWTF - Asset Renewal Program	\$100,000
2.903	Mill Cove WWTF - Dewatering - Centrifuge Rebuild Program	\$35,000
2.110	Mill Cove WWTF - UV AC Unit Replacements	\$25,000
2.1100	Mill Cove WWTF - Replacement Gas Booster	\$45,000
2.1101	Mill Cove WWTF - Wet Well Wizards (x2)	\$70,000
Eastern Passage WWTF		
2.907	Eastern Passage WWTF - Centrifuge Rebuild	\$50,000
2.908	Eastern Passage WWTF - UV Bank Rebuilds	\$15,000
2.1095	Eastern Passage WWTF - Primary Clarifier Refurbishment Program	\$160,000
2.1096	Eastern Passage WWTF - Return Activated Sludge Pump Refurbishment Program	\$50,000
2.1097	Eastern Passage WWTF - Headworks Duct Replacement	\$80,000
2.1098	Eastern Passage WWTF - Scum Pump Refurbishment Program	\$20,000

HALIFAX WATER
Capital Budget 2024/25
Wastewater

Project Number	Project Name	Project Cost
Aerotech WWTF		
2.667	Aerotech WWTF - Asset Renewal Program	\$75,000
2.1102	Aerotech WWTF - Caustic Tank Cleaning	\$20,000
2.1103	Aerotech WWTF - Lagoon Cleaning and Rehabilitation	\$1,500,000
2.1104	Aerotech WWTF - Central Hatch for Sludge Tank	\$50,000
Timberlea WWTF		
2.509	Timberlea WWTF - Asset Renewal Program	\$50,000
2.1092	Timberlea WWTF - Grit Gearbox Elevated Walkway	\$50,000
2.1094	Timberlea WWTF - Female Locker Room	\$30,000
Community WWTFs		
2.1107	Fall River WWTF - Replace EQ Pumps	\$45,000
2.1110	Fall River WWTF - Blower Replacement	\$120,000
2.1113	Fall River WWTF - Ventilation and Lighting Upgrade	\$25,000
2.1108	Middle Musquodoboit WWTF – Replace WWTF LS Control Panel and SCADA Panel	\$90,000
2.1109	Frame WWTF - Generator with ATS	\$70,000
2.1111	North Preston WWTF - Replace Factory Talks with VTScada- Phase 1 Scoping	\$15,000
Biosolids Processing Facility		
2.126	Biosolids Processing Facility - Asset Renewal Program	\$50,000
2.919	Biosolids Processing Facility - Gas Sensor Upgrade Program	\$15,000
2.1105	Biosolids Processing Facility - Stairs in LBB Pit - Eliminate Confined Space	\$30,000
2.111	Biosolids Processing Facility - Bio-Filter Media Replacement	\$100,000
Wastewater - Treatment Facility -- T O T A L		\$13,010,000
Wastewater - Energy		
2.362	Energy Management Capital Program (Wastewater)	\$500,000
2.491	Pump Station HVAC Retro-Commissioning Program	\$200,000
2.1075	Wastewater Heat Recovery Study	\$100,000
Wastewater - Energy -- T O T A L		\$800,000
Wastewater - Equipment		
2.161	I&I Reduction (SIR) Program Flow Meters and Related Equipment	\$25,000
2.1038	FOG software	\$50,000
2.1041	Two new fridge / sampling units	\$10,000
2.451	Miscellaneous Equipment Replacement	\$120,000
2.1021	Trenchless Lining Equipment	\$320,000
2.1116	Odour Control Dosing Systems - Central Operations	\$50,000
Wastewater - Equipment -- T O T A L		\$575,000
Wastewater - Corporate Projects -- T O T A L		\$22,250,000
GRAND TOTAL - WASTEWATER		\$69,815,000

HALIFAX WATER
Capital Budget 2024/25
Stormwater

Project Number	Project Name	Project Cost
<u>Stormwater - Pipes</u>		
1.108	Stormwater Pipe Asset Renewal Program	\$300,000
1.038	Integrated Stormwater Projects - Program	\$1,200,000
1.102	Manhole Renewals SW Program	\$21,000
1.103	Catchbasin Renewals SW Program	\$63,000
1.135	Lateral Replacements SW Program	\$18,000
1.145	Sullivan's Pond Storm Sewer System Replacement - Phase 2 Irishtown Rd to Harbour	\$6,220,000
1.188	Cogswell Redevelopment - SW Sewer Relocation	\$1,930,000
<u>Stormwater - Pipes -- T O T A L</u>		\$9,752,000
<u>Stormwater - Culverts/Ditches</u>		
1.104	Driveway Culvert Replacement Program	\$1,200,000
1.279	Cross Culvert Replacement Program - Field Investigation & Operations Replacements	\$100,000
1.288	Cross Road Culvert Replacement Program - Engineering Design	\$100,000
1.109	Cross Culvert Renewal Program	\$200,000
1.109	154 Kaye Street	\$350,000
1.109	6771 St,Margaret's bay Road	\$375,000
1.109	121 Jamieson Drive	\$400,000
1.109	Hammonds Plains Road (Stillwater Lake area)	\$450,000
1.109	139 Ferguson's Cove Road	\$200,000
1.109	26 Foster Avenue	\$200,000
1.109	103 Southwood	\$75,000
1.109	2884 Lawrencetown Road	\$400,000
1.109	519 Old Sackville Road	\$300,000
1.109	23 Old Post Road	\$200,000
<u>Stormwater - Culverts/Ditches -- T O T A L</u>		\$4,550,000
<u>Stormwater - Equipment</u>		
1.318	Excavator Mulching Head	\$25,000
<u>Stormwater - Equipment -- T O T A L</u>		\$25,000
<u>Stormwater - Corporate Projects -- T O T A L</u>		\$4,700,000
<u>GRAND TOTAL - STORMWATER</u>		\$19,027,000

HALIFAX WATER
Capital Budget 2024/25
Corporate Projects

Project Number	Project Name	Project Cost
Corporate - Information Technology		
4.314	Organizational PMO Strategy and Governance	\$400,000
4.105	Cityworks Upgrade	\$50,000
4.206	Cayenta Upgrades	\$200,000
4.255	General IT System Upgrades	\$500,000
4.208	DA3 – Program & Project	\$800,000
4.218	EE- ITSM Process	\$500,000
4.219	EE - Electrical Safety Program	\$100,000
4.222	Case Management	\$350,000
4.228	Enterprise Architecture	\$250,000
4.231	Detection Equipment SCADA Wan Update	\$150,000
4.232	Strategic Planning Business Cases	\$150,000
4.239	TS Work Tracking	\$150,000
4.261	Electrical Planned Maintenance Program	\$450,000
4.265	EMIS Replacement Project	\$50,000
4.280	CCFN version 5.5 with ISM	\$350,000
4.283	Digital Twin - Virtual Facility Tours	\$100,000
4.262	Enterprise Risk Management	\$400,000
4.263	Business Continuity Management	\$400,000
4.288	PASS Project	\$500,000
4.289	E-Signature Project	\$300,000
4.205	Workspaces	\$960,000
4.284	IS Equipment Replacement	\$700,000
4.295	CAD/BIM	\$75,000
4.294	Cityworks Strategy & Governance Model	\$100,000
4.309	Pollution Prevention Inspection	\$400,000
4.311	Technical Services Capital Tools	\$300,000
4.303	Teams Records	\$960,000
4.264	Cradlepoint deployment project	\$250,000
4.281	Contract Management and Vendor Performance	\$250,000
4.286	Data Quality Tool and Process	\$670,000
4.287	VIP- Recruitment	\$500,000
4.259	Health and Safety	\$50,000
4.012	Network Upgrades	\$280,000
4.195	New Service Account Compliance Program	\$500,000
3.602	Control Chamber - Electrical Panel Replacement Program	\$60,000
4.189	Central Spread Spectrum Radio Network Replacement Program	\$150,000
4.191	ICS Cyber-Security Enhancements	\$100,000
4.192	PI System Enhancements	\$250,000
4.193	AMI Communications Upgrade	\$150,000
4.19	SCADA Equipment Renewals	\$200,000
4.306	SCADA Alarm Management	\$50,000
4.040	GIS Data Program	\$150,000
4.105	GIS/Cityworks Upgrade Program	\$50,000
4.01	Service Gap Project	\$250,000
4.293	Ditch Inventory Build	\$100,000
4.302	Aerial Imagery Acquisition	\$250,000
4.301	CAD/Electrical Drawing	\$25,000
4.297	Emergency Management Office	\$50,000
4.038	GIS Hardware/Software Program	\$50,000

HALIFAX WATER
Capital Budget 2024/25
Corporate Projects

Project Number	Project Name	Project Cost
4.296	Get the Lead Out Program (EI Support)	\$100,000
4.299	PUCA Hot Sheet Integration	\$25,000
4.300	ArcMap to ArcGIS Pro Migration	\$50,000
4.313	Standardize P&ID's for Vertical Assets	\$100,000
Corporate - Information Technology -- T O T A L		\$14,305,000

HALIFAX WATER
Capital Budget 2024/25
Corporate Projects

Project Number	Project Name	Project Cost
<u>Corporate - Asset Management</u>		
4.020	Asset Management Program Development	\$100,000
2.872	Wastewater Sewer Condition Assessment	\$505,000
1.254	Storm Sewer Condition Assessment	\$215,000
2.043	Corporate Flow Monitoring Program	\$2,600,000
4.158	Condition Assessment Program	\$500,000
4.163	Annual Asset Management Plan Update	\$20,000
4.165	Asset Management Awareness Program	\$20,000
4.113	Climate Change Management Program	\$200,000
4.17	Integrated Resource Plan Update	\$1,250,000
4.308	Growth Servicing Strategy	\$125,000
2.1074	SSO and CSO Management Program	\$257,000
3.644	Water Efficiency Strategy	\$80,000
Corporate - Asset Management -- T O T A L		\$5,872,000
<u>Corporate - Facility</u>		
4.187	Burnside Operations Centre	\$23,300,000
4.077	Building Capital Improvements	\$600,000
3.221	Energy Management Capital Program	\$150,000
4.304	Solar PV Facility Assessment Study	\$50,000
4.009	Security Upgrade Program	\$240,000
Corporate - Facility -- T O T A L		\$24,340,000
<u>Corporate - SCADA & Other Equipment</u>		
4.154	Customer Meters - New and Replacement	\$400,000
Corporate - SCADA & Other Equipment -- T O T A L		\$400,000
<u>Corporate - Fleet</u>		
4.006	Fleet Upgrade Program Stormwater	\$539,000
4.006	Fleet Upgrade Program Wastewater	\$2,156,000
4.007	Fleet Upgrade Program Water	\$950,000
Corporate - Fleet -- T O T A L		\$3,645,000
GRAND TOTAL - Corporate Projects		\$48,562,000
ALLOCATION BREAKDOWN:		
Water - Corporate Projects - T O T A L		\$21,612,000
Wastewater - Corporate Projects -- T O T A L		\$22,250,000
Stormwater - Corporate Projects -- T O T A L		\$4,700,000
GRAND TOTAL - Corporate Projects		\$48,562,000

HALIFAX WATER
Capital Budget 2024/25
District Energy

Project Number	Project Name	Project Cost
<u>District Energy</u>		
4.307	Cogswell DES - Cogswell Street Extension	\$1,000,000
4.312	District Energy Data Model	\$30,000
<i>Stormwater - District Energy -- T O T A L</i>		<u>\$1,030,000</u>
<i>GRAND TOTAL - STORMWATER</i>		<u>\$1,030,000</u>

HALIFAX WATER
Capital Budget 2024/25

Summary of Routine Capital Expenditures included within Capital Budget

Project Number	Project Name	Project Cost	Asset Class
<u>Routine Capital Projects</u>			
3.067	Valves Renewals	\$425,000	Water
3.068	Hydrants Renewals	\$75,000	Water
3.069	Service Lines Renewals	\$75,000	Water
3.39	Lead Service Line Replacement Program	\$2,000,000	Water
3.101	Miscellaneous Equipment Replacement (Water)	\$60,000	Water
4.007	Fleet Upgrade Program (Water)	\$950,000	Water
2.357	Manhole Renewals WW	\$60,000	Wastewater
2.358	Lateral Replacements WW (non-tree roots)	\$1,800,000	Wastewater
2.563	Lateral Replacements WW (tree roots)	\$600,000	Wastewater
2.451	Miscellaneous Equipment Replacement (WW)	\$320,000	Wastewater
4.006	Fleet Upgrade Program (WW)	\$2,156,000	Wastewater
1.102	Manhole Renewals SW Program	\$21,000	Stormwater
1.103	Catchbasin Renewals SW Program	\$63,000	Stormwater
1.135	Lateral Replacements SW Program	\$18,000	Stormwater
4.006	Fleet Upgrade Program (SW)	\$539,000	Stormwater
4.154	Customer Meters - New and Replacement	\$400,000	Corporate
4.012	Network Upgrades	\$280,000	Corporate
GRAND TOTAL - Routine Capital Projects		\$9,842,000	

Appendix B: 2024/25 Operating Budget

**HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - ALL SERVICES - NSUARB**

	APR 1/23 MAR 31/24 BUDGET '000	APR 1/24 MAR 31/25 BUDGET '000
Operating revenues		
Water	\$ 53,669	\$ 54,867
Wastewater	87,450	89,367
Stormwater site generated service	8,873	8,865
Stormwater right of way service	6,515	6,515
Fire protection (public and private)	9,735	9,779
Other services and fees	1,472	1,546
Late payment and other connection fees	627	644
Miscellaneous	556	476
	168,897	172,059
Operating expenditures		
Water supply and treatment	12,621	13,661
Water transmission and distribution	13,203	14,060
Wastewater collection	13,554	14,346
Stormwater collection	5,382	5,816
Wastewater treatment	25,065	26,353
Engineering and technology services	14,009	17,757
Regulatory services	5,060	5,922
Customer services	4,526	4,507
Corporate services	3,655	3,743
Administration services	6,197	10,267
Depreciation and amortization	32,684	34,405
	135,956	150,837
Earnings from operations before financial and other revenues and expenditures	32,941	21,222
Financial and other revenues		
Interest	324	383
Other	627	615
	951	998
Financial and other expenditures		
Interest on long term debt	7,051	9,375
Repayment on long term debt	22,191	24,077
Amortization of debt discount	202	244
Dividend/grant in lieu of taxes	6,589	7,031
Other	175	175
	36,208	40,902
Loss for the year	\$ (2,316)	\$ (18,682)

**HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - WATER - NSUARB**

	APR 1/23 MAR 31/24 BUDGET '000	APR 1/24 MAR 31/25 BUDGET '000
Operating revenues		
Water	\$ 53,669	\$ 54,867
Public fire protection	8,083	8,083
Private fire protection	1,652	1,696
Bulk water stations	338	364
Late payment and other connection fees	252	248
Miscellaneous	258	222
	64,252	65,480
Operating expenditures		
Water supply and treatment	12,621	13,661
Water transmission and distribution	13,203	14,060
Engineering and technology services	4,703	6,412
Regulatory services	1,521	1,647
Customer services	2,308	2,299
Corporate services	1,864	1,909
Administration services	3,160	5,236
Depreciation and amortization	12,594	12,959
	51,974	58,183
Earnings from operations before financial and other revenues and expenditures	12,278	7,297
Financial and other revenues		
Interest	259	372
Other	465	458
	724	830
Financial and other expenditures		
Interest on long term debt	2,767	4,109
Repayment on long term debt	6,077	6,997
Amortization of debt discount	79	112
Dividend/grant in lieu of taxes	5,664	6,005
Other	130	130
	14,717	17,353
Loss for the year	\$ (1,715)	\$ (9,226)

**HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - WASTEWATER - NSUARB**

	APR 1/23 MAR 31/24 BUDGET '000	APR 1/24 MAR 31/25 BUDGET '000
Operating revenues		
Wastewater	\$ 87,450	89,367
Leachate and other contract revenue	494	507
Septage tipping fees	535	570
Airplane effluent	105	105
Late payment and other connection fees	234	216
Miscellaneous	223	187
	89,041	90,952
Operating expenditures		
Wastewater collection	13,554	14,346
Wastewater treatment	25,065	26,353
Engineering and technology services	7,096	9,335
Regulatory services	1,733	1,889
Customer services	2,029	2,029
Corporate services	1,612	1,651
Administration services	2,733	4,528
Depreciation and amortization	17,310	18,396
	71,132	78,527
Earnings from operations before financial and other revenues and expenditures	17,909	12,425
Financial and other revenues		
Interest	104	139
Other	162	157
	266	296
Financial and other expenditures		
Interest on long term debt	3,385	4,122
Repayment on long term debt	13,790	14,587
Amortization of debt discount	99	104
Dividend/grant in lieu of taxes	786	844
Other	45	45
	18,105	19,702
Earnings (loss) for the year	\$ 70	\$ (6,981)

**HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - STORMWATER - NSUARB**

	APR 1/23 MAR 31/24 BUDGET '000	APR 1/24 MAR 31/25 BUDGET '000
Operating revenues		
Stormwater site generated service	\$ 8,873	\$ 8,865
Stormwater right of way service	6,515	6,515
Late payment and other connection fees	141	180
Miscellaneous	75	67
	15,604	15,627
Operating expenditures		
Stormwater collection	5,382	5,816
Engineering and technology services	2,210	2,010
Regulatory services	1,806	2,386
Customer services	189	179
Corporate services	179	183
Administration services	304	503
Depreciation and amortization	2,780	3,050
	12,850	14,127
Earnings from operations before financial and other revenues and expenditures	2,754	1,500
Financial and other revenues		
Interest	(39)	(128)
	(39)	(128)
Financial and other expenditures		
Interest on long term debt	899	1,144
Repayment on long term debt	2,324	2,493
Amortization of debt discount	24	28
Dividend/grant in lieu of taxes	139	182
	3,386	3,847
Loss for the year	\$ (671)	\$ (2,475)

**HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - REGULATED AND UNREGULATED ACTIVITIES
NSUARB**

	APR 1/23 MAR 31/24 BUDGET '000	APR 1/24 MAR 31/25 BUDGET '000
REGULATED ACTIVITIES		
Operating revenues		
Water	\$ 53,669	\$ 54,867
Wastewater	87,450	89,367
Stormwater	15,388	15,380
Public fire protection	8,083	8,083
Private fire protection	1,652	1,696
Miscellaneous	1,521	1,484
	167,763	170,877
Operating expenditures		
Water supply and treatment	12,621	13,661
Water transmission and distribution	13,203	14,060
Wastewater collection	13,473	14,284
Stormwater collection	5,382	5,816
Wastewater treatment	24,288	25,556
Engineering and technology services	14,009	17,757
Regulatory services	5,060	5,922
Customer services	4,486	4,467
Corporate services	3,642	3,730
Administration services	6,067	10,130
Depreciation and amortization	32,650	34,371
	134,881	149,754
Earnings from operations before financial and other revenues and expenditures	32,882	21,123
Financial and other revenues		
Interest	324	383
Other	37	36
	361	419
Financial and other expenditures		
Interest on long term debt	7,051	9,375
Repayment on long term debt	22,191	24,077
Amortization of debt discount	202	244
Dividend/grant in lieu of taxes	6,589	7,031
	36,033	40,727
Loss for the year - Regulated	\$ (2,790)	\$ (19,185)

HALIFAX WATER
UNAUDITED STATEMENT OF EARNINGS - REGULATED AND UNREGULATED ACTIVITIES
NSUARB

	APR 1/23	APR 1/24
	MAR 31/24	MAR 31/25
	BUDGET	BUDGET
	'000	'000
UNREGULATED ACTIVITIES		
Operating revenues		
Septage tipping fees	\$ 535	\$ 570
Leachate and other contract revenue	494	507
Airplane effluent	105	105
Miscellaneous	0	0
	1,134	1,182
Operating expenditures		
Water supply and treatment	0	0
Wastewater treatment	777	797
Wastewater collection	81	62
Sponsorships and donations	73	80
Corporate services	13	13
Administration services	97	97
Depreciation and amortization	34	34
	1,075	1,083
Earnings from operations before financial and other revenues and expenditures	59	99
Financial and other revenues		
Other - leases and rentals	365	360
Other - energy projects	225	219
	590	579
Financial and other expenditures		
Other	175	175
	175	175
Earnings for the year - Unregulated	\$ 474	\$ 503
Total loss for the year (Regulated and Unregulated)	\$ (2,316)	\$ (18,682)

Appendix C: 2023/24 Business Plan on a Page

2024/25 Business Plan

Our Purpose

Our purpose is to supply and safeguard sustainable, high-quality water services.

Our Vision

We will provide our customers with high quality water, wastewater, and stormwater services. Through adoption of best practices, we will place the highest value on public health, customer service, fiscal responsibility, workplace safety and security, asset management, regulatory compliance, and stewardship of the environment. We will fully engage employees through teamwork, innovation, and professional development.

Our Values

Relationships

We nurture relationships with our customers, our team members and the environment. We are engaged in the neighbourhoods we serve and we support continual learning across our team.

Innovation

We are among the top utilities across the continent and we are known on the global stage. We always ask, "how can we improve efficiency, sustainability, creativity and the customer experience?"

Accountability

We refuse to cut corners. We check in with our excellence standards regularly and look to one another for support. Safety steers our decision-making. We are driven to make our policies, decisions and projects as clear as our drinking water.

Protection

Halifax Water protects the health and well-being of our population. We exist to guard natural resources, finding ways to sustain our communities and environment.

Our Goals



People & Culture

- Enhance the overall Employee Experience.
- Develop a Talent Management Strategy.
- Develop a transition plan to support the Burnside Operations Centre.
- Continue to strengthen a positive and diverse workplace.
- Build institutional capacity to meet the challenges of growth.



Health, Safety, Environmental & Social Responsibility

- Develop and enhance Source Water Protection Plans for our watershed.
- Initiate integration of ISO 45001, to enhance our safety culture.
- Complete a multi-year roadmap to monitor wastewater system flows.
- Deliver the Climate Action Plan and transition to a five-year roadmap.
- Build a proactive communications and stakeholder engagement plan.



Financial & Regulatory Compliance

- Update financial models to reflect operational and infrastructure requirements.
- Execute contract and gain funding approval for Biosolids Processing Facility.
- Continue to enhance our approach to Capital Delivery and Project Management.
- Update Integrated Resource Plan.



Operational Excellence

- Commence detailed design for the Cogswell District Project Energy Centre.
- Continue the Water Supply Enhancement Program.
- Develop a framework for ongoing asset maintenance plans and service standards.
- Develop Procedures to support the Environmental Management System Program.
- Expand Operational Readiness.
- Expand the use of systems to improve operational efficiency.
- Update enterprise risk management models.
- Strengthen Halifax Water's Cybersecurity.



HALIFAX REGIONAL WATER COMMISSION

SERVICE OVERVIEW

Operations

The Operations Department provides water, wastewater, and stormwater services. While respectfully managing the system to ensure each is independently financed based on the user pay model, all activities are organized through a "one team, one water" approach that makes it more seamless for customers.

Water Services

The Water Services division's mandate is to ensure a safe supply of water to Halifax Water's customers from "Source to Tap." The activities include operating and maintaining various systems:

- *Water Supply Plant Operations:* responsible for operation and maintenance of three large water supply plants (JD Kline/Pockwock, Lake Major and Bennery Lake), six small systems, six dams, two emergency water supplies and 35 chlorine monitoring devices and re-chlorination stations.
- *Distribution System Operations:* responsible for operating and maintaining the water distribution and transmission systems. The system is managed according to three geographic regions responsible for over 1,574 km of transmission and distribution mains, 8,500 fire hydrants, 86,500 service connections, 143 pressure control/flow metering facilities, 20 pumping stations, 16,000 valves and 19 water storage facilities. This also includes responding to third-party requests for buried infrastructure locates.

Wastewater Services

The Wastewater and Stormwater Services division's activities include operating and maintaining municipal systems. In this regard, the Wastewater and Stormwater Services division has the mandate to protect the environment while providing essential collection and treatment services to its customers. These essential services are delivered in sections responsible for stormwater and wastewater activities in three regions and 14 treatment facilities.

Wastewater Services strives to provide uninterrupted delivery of the following services:

- *Wastewater Treatment Facility Operations:* responsible for operation and maintenance of 14 WWTFs and associated infrastructure, regulatory reporting, and implementing and coordinating capital upgrades with other Halifax Water departments. These facilities treat approximately 75 million cubic meters of wastewater annually. The department also operates four additional small treatment facilities under contract from HRM and the province.

- **Biosolids Processing:** responsible for liquid transport, dewatering and processing of sludge, operation, and maintenance of various dewatering equipment at WWTFs, administering trucking contracts for dewatered biosolids and BPF operations contract, and processing of biosolids from on-site septic systems. The BPF, located at the Aerotech Industrial Park, produces a soil amendment for beneficial use in agriculture.
- **Collection System Operations:** responsible for the operation, repair and maintenance of the wastewater collection and trunk sewer system. The system is managed according to three geographic regions responsible for over 1,425 km of collection pipes, 165 pump stations, 21 CSO facilities, and 83,000 service connections.
- **Septage Treatment Services:** This is an unregulated activity for Halifax Water, but it provides an essential service to residents who do not have a centralized wastewater service. The septage from septic hauling companies is treated at the Aerotech WWTF.

Stormwater Services

The Stormwater Services division operates and maintains stormwater infrastructure within the public right-of-way and easements. This service has undergone significant changes over the past few years and continues to progress to achieve a higher LOS.

- **Collection System Operations** provides operation, repair and maintenance of the stormwater collection and trunk sewer system. Shared crews manage the system within the three geographic regions with responsibility for approximately 900 km of stormwater collection pipes, 46 stormwater retention facilities, over 1,200 km of ditches, 3,288 cross culverts and 16,700 driveway culverts. This section provides proactive maintenance of the pipes, ditches, and other systems to ensure uninterrupted flow within Halifax Water infrastructure. Staff also replace driveway and cross culverts on a priority basis to manage the infrastructure with sound asset management practices. In June 2022, Halifax Water became responsible for providing stormwater in new areas that include parts of the communities of Boutilliers Point, Ingrauport, Head of St Margaret's Bay, Lewis Lake, Hubley and Upper Tantallon, East Preston, Lake Echo, Mineville, and Lawrencetown.

Engineering and Technology Services

The Engineering and Technology Services (ETS) Department provides engineering and asset management services for planning, designing, constructing, and maintaining water, wastewater, and stormwater infrastructure. It is also responsible for all of Halifax Water's digital infrastructure services, including information management, geographic information systems, and operational technology.

The ETS Department has six specific operational sections delivering programs.

- **Asset Management:** responsible for developing the Asset Management (AM) Program, including the overall strategy, inventories, condition and performance assessments, and the development and delivery of the annual Asset Management Plan. This section is also responsible for flow modelling and monitoring, developing and long-term infrastructure

master planning, including implementing the IRP and developing the five-year and one-year capital budget.

- *Infrastructure Planning*: responsible for planning and scheduling significant Halifax Water asset construction and replacement projects. They are also responsible for planning the development of water and wastewater networks and establishing Halifax Water design standards for Halifax Water infrastructure.
- *Capital Project Delivery*: responsible for the design, construction and commissioning of most Halifax Water capital projects. They are also responsible for monitoring and reporting on capital project performance and establishing and training staff in capital project management methodology and construction management and administration.
- *Energy Management & Business Development*: responsible for projects involving resource recovery or energy generation, developing energy sales and servicing customers for these services. They are also responsible for engineering services related to energy efficiency and GHG emission reduction, strategic energy planning and climate change mitigation.
- *Strategic Projects*: Responsible for managing and executing Halifax Water projects and programs deemed strategic due to their cost, risk or technical complexity. They are responsible for their projects' strategic procurement and risk management plans.
- Information and Technology Services consisting of:
 - *Engineering Information*: responsible for the corporate GIS, including maintaining and distributing digital records relevant to our infrastructure. The section is responsible for ongoing GIS development, including desktop and mobile GIS applications and supports capital projects and other initiatives through Computer Aided Drafting (CAD) and map production.
 - *Information Services (IS)*: responsible for the administration of services relating to network resources (storage, servers, printers, etc.), users, access control and network security, server hardware and operating systems, all computer equipment (including desktops, laptops, monitors, printers, and servers), corporate desktop software, and updating and delivery of the Information Technology (IT) Strategic Plan including all IT project delivery services.
 - *Technical Services*: responsible for operation and maintenance of the SCADA system, the process communications network, and the AMI collection network; implementation of the SCADA master plan, process control, cyber security, instrumentation maintenance, electrical maintenance, water pumping stations, and operation and development of the process data warehouse.

Regulatory Compliance Services

The Regulatory Compliance Services Department supports the utility through the following sections: Corporate Environmental Compliance, Regulatory Approvals, Source Water Protection Management and Water Quality.

Corporate Environmental Compliance

- *Environmental Management System (EMS)*: provides a system of procedures, records, and processes to manage environmental issues and assist with regulatory compliance. It

also makes day-to-day operations more sustainable and engages employees in these operational activities. The EMS program can be audited against ISO 14001 standards and, if found to comply, receives certification through ISO. The ISO standard focuses on organizational leadership and identifying risks and the associated influences, both internal and external, on an organization.

Regulatory Compliance: Supports updating NSECC permits to operate and withdraw water and oversee projects related to contaminated sites and impacts on Halifax Water's infrastructure. The group is also responsible for sampling the water treatment and distribution systems for bacteria and residual chlorine, ensuring compliance with Canadian Drinking Water Guidelines and operational permits issued by NSECC. Similar sampling is completed for wastewater effluent parameters for compliance with permits issued by NSECC, consistent with federal regulations. The group is also tasked with compiling and submitting reports associated with the sampling results to NSECC. Regulatory Compliance has completing work with the Water Quality Management section and Wastewater Treatment to implement new permit tracking, data management, and reporting software, KLIR.

- ***Safety & Security:*** responsible for providing overall support and delivery of Halifax Water's safety program and oversight of the security systems and programs to protect Halifax Water's critical infrastructure.
 - Also coordinates permit renewals and amendments related to NSECC, DFO and Environment Canada and Climate Change (ECCC) approvals.

Regulatory Approvals

- ***Environmental Customer Compliance:*** Responsible for two key programs, pollution prevention and the private side of I&I reduction.
 - ***Pollution Prevention:*** responsible for promoting compliance of waste discharges with Halifax Water's Rules and Regulations through education and inspections.
 - ***Inflow and Infiltration:*** assist the Wet Weather Management Program in locating and addressing private side sources of I&I.
- ***Engineering Approvals:*** responsible for ensuring connections to and expansions of our system adhere to the Halifax Water Design Specifications, the Supplementary Standard Specification, and the Halifax Water Regulations. In addition, the group oversees the administration of the Backflow Prevention Program, which provides a layer of protection to the water distribution system from potential contamination events (cross-connections) from medium to high-risk customers. The group also administers new service connections, including inspecting new services and renewals and administering Regional Development Charges and Capital Cost Contribution Charges.
- ***Stormwater Engineering:*** responsible for conducting drainage investigations, stormwater billing exemption requests, and operations support. Drainage investigations may be triggered by a customer inquiry on private property or an operational issue on Halifax Water-owned infrastructure. The Stormwater Engineering team reviews the drainage issues and renders a position which may involve an operational fix or a capital improvement. Complaints stemming from stormwater billing are vetted through the

Stormwater Engineer, and a decision is provided to the customer and supports other areas of the Operations Department.

Source Water Protection: responsible for managing and protecting watershed land, developing and maintaining source water plans, enforcement of Protected Water Areas and other relevant source water regulations, source water community relations including working with and developing watershed advisory boards, real property maintenance of source water lands, and forestry management of watershed lands.

Water Quality Management: responsible for water quality planning, water quality monitoring, process support to treatment plants, customer inquiries and investigations, water quality support to capital projects, policy development, research, and collaboration with Dalhousie University in Natural Sciences and Engineering Research Council's (NSERC) Alliance Grant Program at Dalhousie University.

Corporate Services

The Corporate Services Department consists of five sections, serving internal and external customers.

- *Finance:* responsible for developing operating budgets, funding plans for the capital budget, rate applications and financial modelling for business plans. This group assists in preparing the capital budgets and confirms the availability of funding sources. The group is responsible for forecasting revenues and expenditures, including associated trend analysis, administering the pension plan, internal control testing, and quality assurance activities around financial transactions, including payroll.
- *Accounting:* responsible for timely and accurate financial reporting, financial accounting, fixed asset accounting, financial analyses, and preparing financial statements. This group is also responsible for revenue, budgeting and forecasting, predicting cash flows, developing and implementing accounting procedures and internal controls, managing the billing and collection of non-customer charges, and coordinating and supporting the annual external financial statement audit. Accounting also assists in preparing capital budgets.
- *Procurement:* responsible for planning and delivering procurement services to the organization, ensuring compliance with corporate policies, legislation, and trade agreements. This section develops and implements reporting and monitoring systems, programs and procedures for inventory and procurement. Procurement also supports and guides internal departments in acquiring goods, services, and construction to meet Halifax Water's objectives and capital programs.
- *Customer Care:* responsible for managing customer contacts, establishing corporate customer service standards, goals, and objectives, and coordinating the improvement of business processes in Customer Care and other departments.

- *Metering and Billing*: responsible for installing, maintaining, reading, sampling, and testing meters, establishing standards and billing customers for Water, Wastewater and Stormwater Services in a timely and accurate manner.
- *Facilities, Fleet & Logistics Services*: responsible for supplying, maintaining, and repairing approximately 270 pieces of mobile equipment and vehicles ranging from trailers and small utility service vehicles to large excavation, construction, and transportation equipment. Responsible for replacing vehicles and equipment on a life cycle costing basis, vehicle records management, and regulatory compliance. This section also operates and maintains corporate facilities at the Cowie Hill campus and provides logistical and service support to operations and treatment facilities to facilitate efficient operations.

Administration

- *General Manager's Office*: responsible for the overall administration of the utility. Some initiatives led by the General Manager's Office include governance, business planning, public and stakeholder relationships, and employee relations. Communications, Governance, and Human Resources fall directly under the General Manager's Office.
- *Communications and Public Affairs*: responsible for external and internal communications, maintaining the internet and intranet sites, media relations, and social media, and providing support to operations and capital delivery to ensure the public is kept informed of significant projects, service disruptions, and initiatives.
- *Legal Services*: includes the legal function, corporate records management, FOIPOP administration, and land administration. The General Counsel acts as the Corporate Secretary to the Halifax Water Board and helps ensure that board governance processes function smoothly.
- *People and Culture*: responsible for effectively delivering all human resource initiatives, including effective workforce planning, organizational change and development, recruitment functions, disability management, health and wellness initiatives, labour/employee relations, compensation and benefits functions, pension administration, and employment equity.

Unregulated Business

Halifax Water conducts some lines of business that are ancillary to the core water, wastewater, and stormwater services. These activities constitute approximately 1% of the utility's business. They include leasing land for telecommunications, cell phone and radio towers, and some energy-related initiatives such as leasing land for wind turbines and generating electricity through in-line turbines in the water system. The most material lines of un-regulated business are the treatment of septage from waste haulers dealing with private septic systems and the treatment of airline effluent. Halifax Water can also provide some services such as contract operations, consulting or leak detecting on a fee-for-service basis. Halifax Water offers consulting services to the Atlantic First Nations Water Authority. Unregulated business is conducted for the benefit of the regulated rate base.



Appendix C

	Approved	Proposed	From 2023/24 Budget	
	Budget 2023/24 '000	Budget 2024/25 '000	\$ Change	% Change
Operating revenues	\$ 168,897	\$ 172,059	\$ 3,162	1.87%
Operating expenditures	135,956	150,837	14,881	10.95%
Earnings from operations before financial and other revenues and expenditures	32,941	21,222	(11,719)	(35.58%)
Financial and other revenues				
Interest	324	383	59	18.21%
Other	627	615	(12)	(1.91%)
	951	998	47	4.94%
Financial and other expenditures				
Interest on long term debt	7,051	9,375	2,324	32.96%
Repayment on long term debt	22,191	24,077	1,886	8.50%
Amortization of debt discount	202	244	42	20.79%
Dividend/grant in lieu of taxes	6,589	7,031	442	6.71%
Other	175	175	0	0.00%
	36,208	40,902	4,694	12.96%
Loss for the year	\$ (2,316)	\$ (18,682)	\$ (16,366)	706.65%