

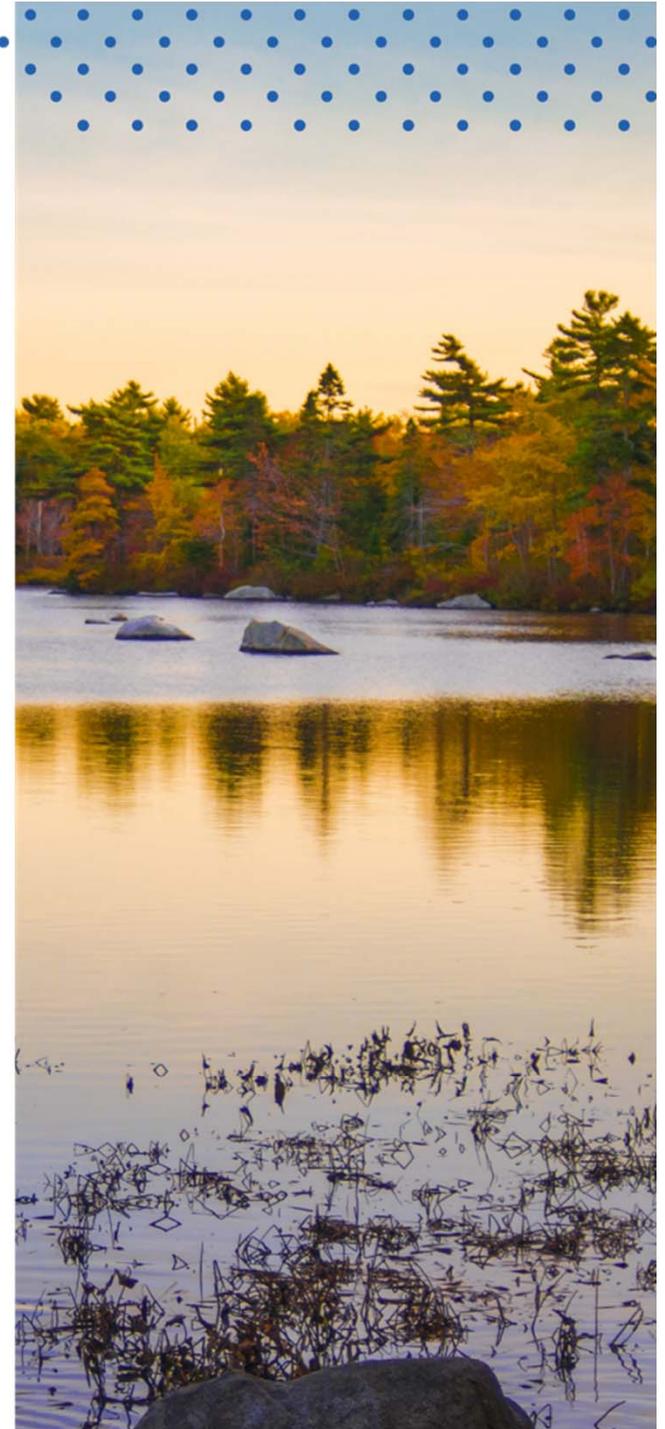


2019/20 Annual Business Plan

Presentation to Regional Council,
February 26, 2019

Carl Yates, General Manager

**STRAIGHT from
the SOURCE**



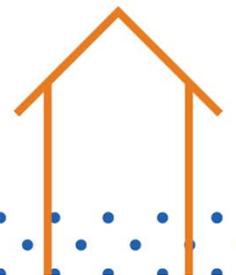
Context of 2019/20 Business Plan

- Business plan approved by the Halifax Water Board on January 31, 2019.
- With favourable Operational Results over the last four years, no rate increases planned for this year.
- A Rate Application may be submitted in the fall for rate increases in 2020, depending on year-end results and water consumption trends

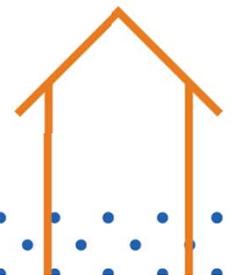
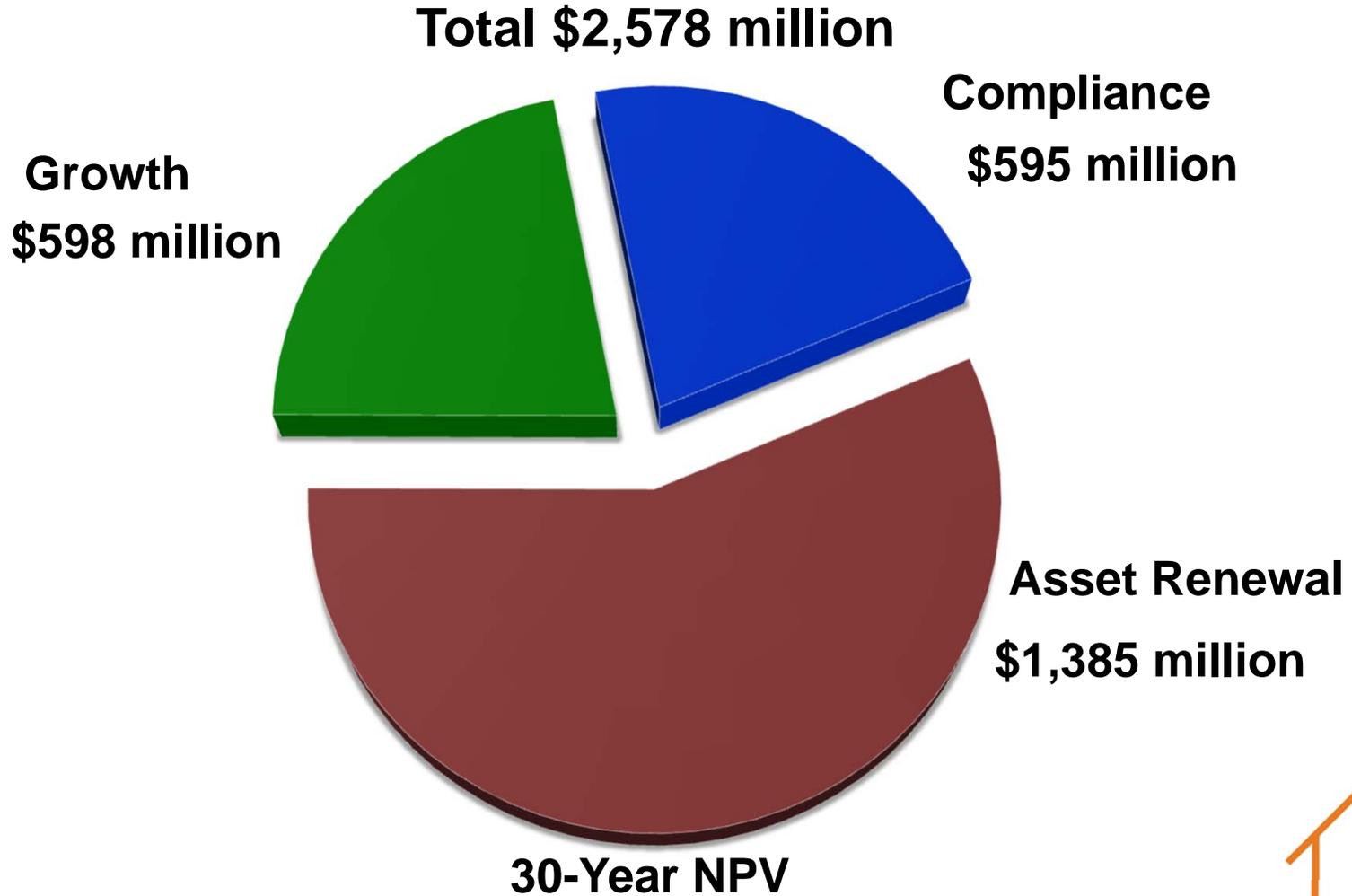


The Path to Sustainability

- As a regulated utility, Halifax Water must recover its capital and operating costs in conformance with the Public Utilities Act of Nova Scotia.
- Ensure a continued or enhanced level of service to customers.
- Halifax Water must renew aging water, wastewater and stormwater infrastructure, maintain compliance with new federal wastewater regulations and facilitate growth.
- The Integrated Resource Plan completed in 2012 indicates investments over 30 year period in the order of \$2.6 Billion [net present value].

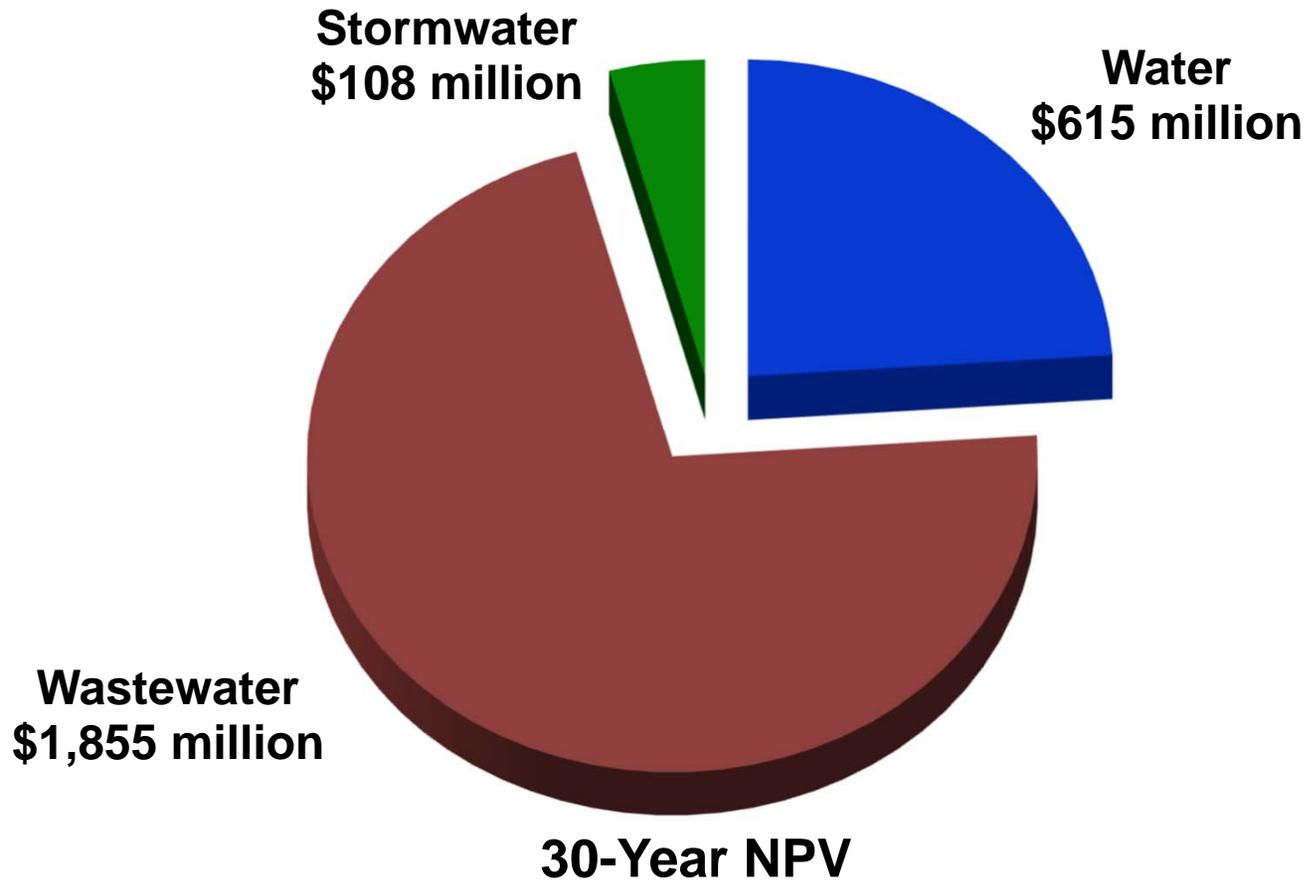


30-Year Expenditures by Driver

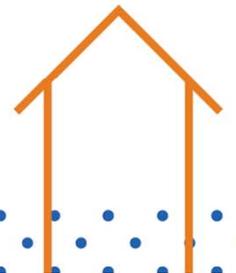


30-Year Expenditures by Asset System

Total \$2,578 million

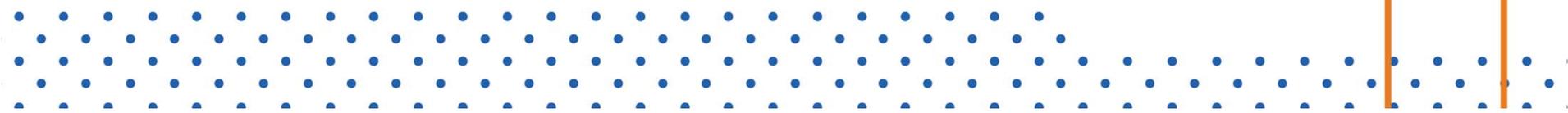
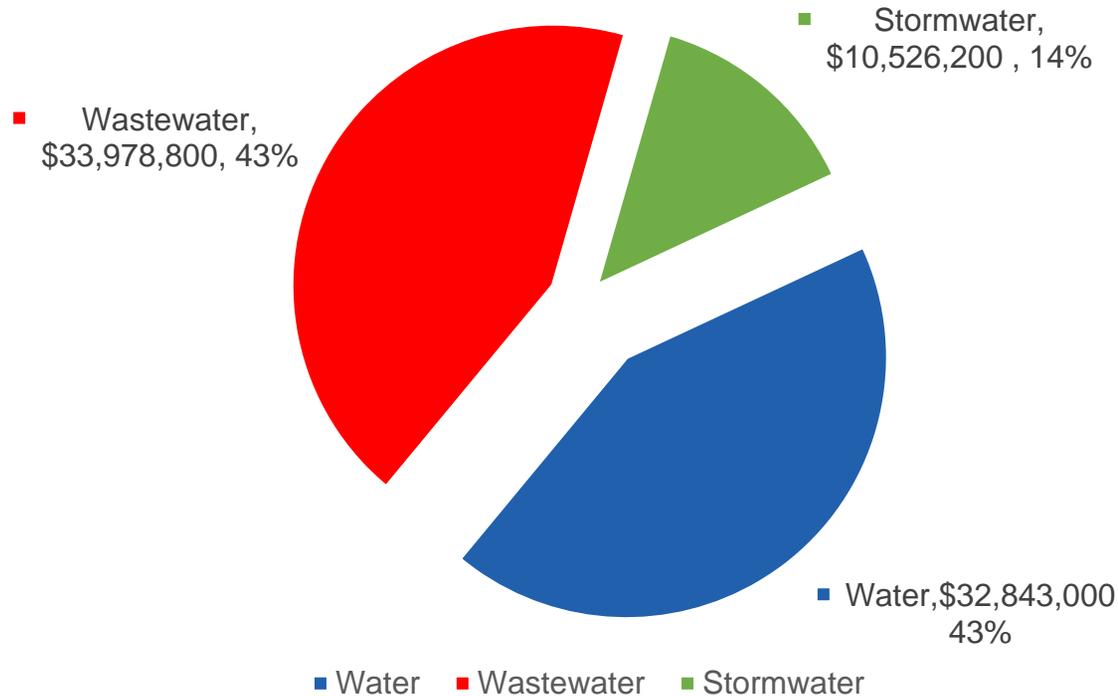


30-Year NPV



Halifax Water 2019/20 Capital Budget [\$77,348,000]

2019/2020 Capital Budget by Asset Class - All Divisions



Halifax Water 2019/20 Capital Budget

Asset Category – Water

\$32,843,000

Major projects:

- Lucasville Road Transmission Main – Phase 1 - \$7,150,000
- Water Distribution – Main Renewal Program – \$4,230,000
- Lead Service Line Replacement Program - \$1,000,000
- Water Supply Plant Upgrades - \$7,136,000



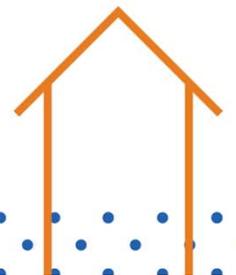
Halifax Water 2019/20 Capital Budget

Asset Category – Wastewater

\$33,978,800

Major Projects:

- Wastewater System – Trenchless Rehabilitation Program – \$2,600,000
- Integrated Wastewater Collection Projects - \$1,500,000
- Wanda Lane Sewer Replacement - \$1,050,000
- Wastewater Lateral Replacements - \$2,211,000
- Halifax North Peninsula Sewer Separation Program - \$5,365,000



Halifax Water 2019/20 Capital Budget

Asset Category – Stormwater

\$10,526,200

Major Projects:

- Integrated Stormwater Collection Projects - \$1,200,000
- Driveway and Cross Culvert Renewal Program – \$812,000
- Ellenvale Run Retaining Wall System Replacement Phase 2 - \$2,220,000



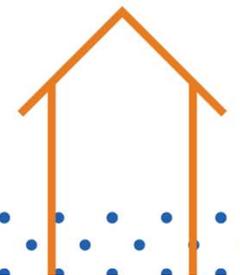
Halifax Water 2019/20 Capital Budget

Asset Category – Corporate Projects

\$22,427,000

Project Highlights:

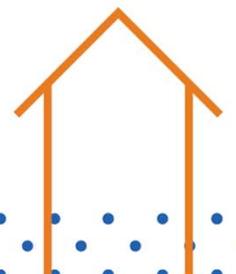
- IT Strategic Plan Implementation Year 2 – \$9,440,000
- Final Phase of Customer Connect (AMI) - \$2,600,000
- Corporate Flow Monitoring Program - \$1,760,000
- East/Central Operations Facility – Land Acquisition - \$4,000,000



2019/20 Capital Funding

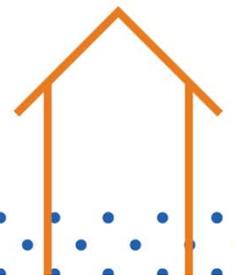
Sources of "CAPITAL" Funding	
External Funding - WW (Energy Rebate)	10,000
External Funding - WW (HRM)	150,000
External Funding - SW (HRM)	103,000
Grants (Fed & Prov) CWWF - W	4,085,000
RDC Water	10,000
RDC Wastewater	7,922,000
CCC - WW	3,000
Depreciation - W	9,631,878
Depreciation - WW	14,035,907
Depreciation - SW	1,492,323
Debt	39,904,892
Total Sources of Funds	77,348,000

- HRWC will pay \$28.2 M in debt
- \$39.9 M of debentures expected to be placed for planned 2019/20 capital
- Projected debt March 31, 2020 is \$225.8 M
- Projected debt service ratio is 20.3% [well below 35% threshold for HRM blanket guarantee]



2019/20 Operations Budget Highlights

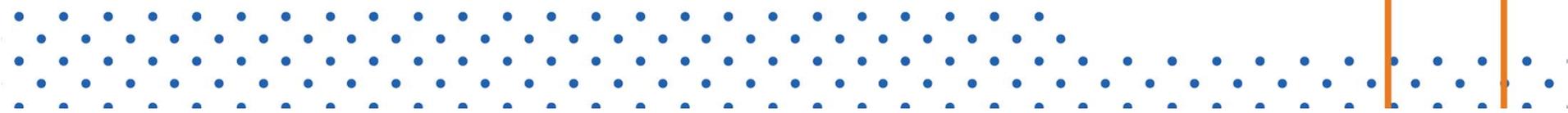
- Water and Wastewater revenue budgeted based on projected 2018/19 consumption with no decrease for next year.
- Stormwater revenue budgeted based on projected 18/19 revenues.
- The current rates for water and wastewater service took effect April 1, 2016
- Revised rates for stormwater service took effect on July 1, 2017 (note revenues requirements did not increase, but rate design changed)
- Depreciation and the water dividend increase due to completion of projects and additions to utility plant in service
- Debt servicing projected to be \$3.2 M lower than last year as Halifax Water did not issue as much new debt as anticipated in 2017/18 due to timing of delivery of capital projects.



2019/20 Operations Budget Summary

- The deficit of \$5.0 M currently projected for 18/19, plus the Accumulated Operating Surplus facilitate a deficit budget of \$14.0 M and another year without rate increases.

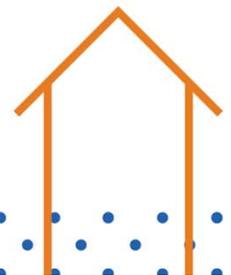
	Actual 2017/18	Approved Budget 2018/19	Proposed Budget 2019/20
Operating Revenues	\$138,146	\$135,182	\$138,727
Operating Expenditures	\$104,452	\$111,710	\$120,756
Operating Profit	\$33,694	\$23,472	\$17,971
Non-Operating Revenues	\$4,486	\$1,006	\$1,369
Non-Operating Expenditures	\$34,376	\$36,564	\$33,374
Net Surplus (Deficit)	\$3,804	(\$12,086)	(\$14,034)



2019/20 Operating Budget

DESCRIPTION	ACTUAL APR 1/17 MAR 31/18	APPROVED BUDGET * APR 1/18 MAR 31/19	PROPOSED BUDGET APR 1/19 MAR 31/20
OPERATING REVENUES	\$138,145	\$135,182	\$138,727
OPERATING EXPENDITURES	\$104,452	\$111,710	\$120,756
OPERATING PROFIT	\$33,694	\$23,472	\$17,971
FINANCIAL REVENUES (NON-OPERATING)	\$4,486	\$1,006	\$1,369
FINANCIAL EXPENDITURES (NON-OPERATING)	\$34,376	\$36,564	\$33,374
NET PROFIT (LOSS) AVAILABLE FOR CAPITAL EXPENDITURES	\$3,804	(\$12,086)	(\$14,034)

W (\$3.6 M)
 WW (\$7.5 M)
 SW (\$3.0 M)



Regulated vs Unregulated Activity

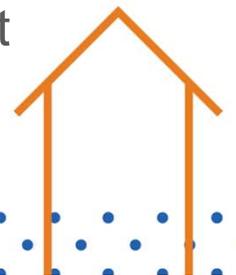
DESCRIPTION	ACTUAL	APPROVED BUDGET *	PROPOSED BUDGET
	APR 1/17 MAR 31/18	APR 1/18 MAR 31/19	APR 1/19 MAR 31/20
REGULATED ACTIVITIES			
REVENUES	\$140,180	\$134,019	\$138,005
EXPENDITURES	\$137,977	\$146,818	\$152,643
REGULATED NET PROFIT (LOSS)	\$2,203	(\$12,799)	(\$14,638)
UNREGULATED ACTIVITIES			
REVENUES	\$2,451	\$2,168	\$2,091
EXPENDITURES	\$850	\$1,455	\$1,487
UNREGULATED NET PROFIT (LOSS)	\$1,601	\$713	\$604
TOTAL NET PROFIT (LOSS)	\$3,804	(\$12,086)	(\$14,034)

Unregulated Revenue a % of Total Revenue 1.7% 1.6% 1.5%



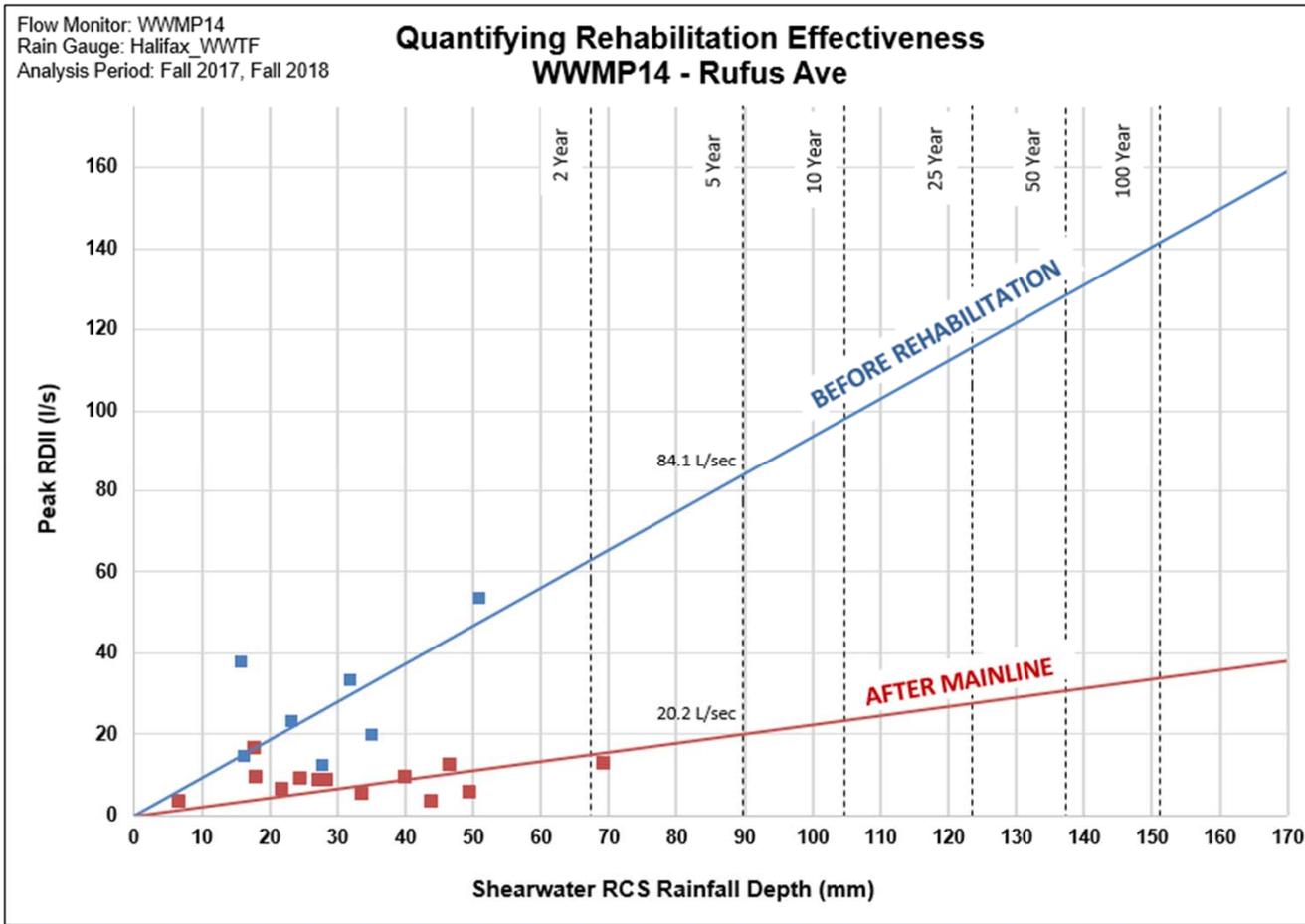
Key Strategic Initiatives

- **Finalize Integrated Resource Plan:**
[Last IRP completed in October, 2012; the 2019 IRP will include Infrastructure Master Plans and Climate Change assessment]
- **Expand Natural Sciences and Engineering Research Council [NSERC] Industrial Research Chair:** partnership with Dalhousie to include Wastewater focus
- **Partnership with Municipality on Cogswell Redevelopment Project:**
[Opportunity for District Energy System and Integrated Infrastructure projects]
- **Wet Weather Management:**
[Reduction of inflow and infiltration in sanitary collection system to improve level of service and create system capacity; significant focus in Fairview/Old Clayton Park areas]

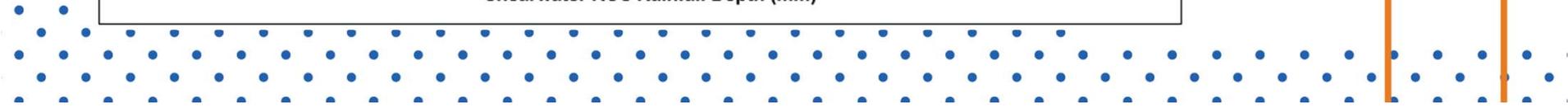
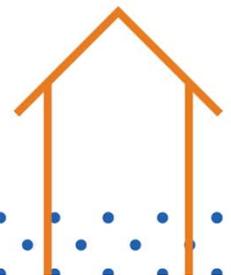


World Class Wet Weather Management Projects

Fairview/Old Clayton Park
Rufus Avenue – WWMP14 (FG366)



- Overall Rain Derived Inflow & Infiltration [RDII] reduction of 76% (63.9 L/sec) achieved



Key Strategic Initiatives

- **Advanced Metering Infrastructure:**
[In final year of three year program to replace or upgrade 84,000 meters]
- **Customer Care:**
[Implement new customer satisfaction strategy; new telephony system; web portal]
- **Computerized Maintenance Management:**
[Continued implementation of City Works, in partnership with Halifax municipality.]
- **Lead Service Line Replacement Program**
- **Sanitary Service Lateral Replacement Program**
- **Continue to embed a Safety Culture across the organization**



Key Strategic Initiatives

- **Expand Environmental Management System** to major wastewater treatment facilities [Herring Cove WWTF certified to ISO 14001 in 2017] and establish framework for entire operations.
- **Asset Management Program** to incorporate better data capture and risk analysis [formal plans in place for 14 distinct asset classes]
- **Implement IT Projects in conformance with Strategic Plan** [Year 2 of Five Year Plan]
- **Develop Enterprise Risk Management System** [project underway]
- **Focus on Renewal of Aging Infrastructure:** [all wastewater treatment facilities became compliant in 2018 and mature processes in place to facilitate growth]



It Is Not Easy Being Green

Wastewater Treatment Facility	Wastewater Treatment Facility Compliance Summary																	Toxicity	Trend
	Rolling Averages - October, November and December 2018																		
	CBOD ₅ (mg/L)		TSS (mg/L)		E. coli (counts/100mL)		pH		Ammonia (mg/L)		Phosphorous (mg/L)		TRC (mg/L)		Dissolved Oxygen (mg/L)				
NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.	NSE Limit	Avg.		
Halifax	50	35	40	33	5000	746	6-9	6.8	-	-	-	-	-	-	-	-	-	Not acutely lethal	Improved
Dartmouth	50	29	40	34	5000	586	6-9	6.9	-	-	-	-	-	-	-	-	-	Not acutely lethal	Improved
Herring Cove	50	23	40	15	5000	104	6-9	6.9	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Eastern Passage	25	8	25	6	200	47	6-9	6.8	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Mill Cove	25	12	25	17	200	17	6-9	6.6	-	-	-	-	-	-	-	-	-	Not acutely lethal	Continued
Springfield	20	10	20	10	200	10	6-9	6.8	-	-	-	-	-	-	-	-	-	-	Continued
Frame	20	8	20	1	200	10	6-9	7.2	-	-	-	-	-	-	-	-	-	-	Continued
Middle Musq.	20	8	20	3	200	49	6-9	7.5	-	-	-	-	-	-	-	-	-	-	Continued
Uplands	20	8	20	9	200	13	6-9	7.1	-	-	-	-	-	-	-	-	-	-	Continued
Aerotech	5	BDL	5	1	200	10	6-9	7.1	5.7 W 1.2 S	0.7	0.13	0.09	-	6.5	8.0	-	-	Not acutely lethal	Declined
North Preston	10	8	10	7	200	13	6-9	6.9	3	1.2	1.5	0.3	-	-	-	-	-	-	Continued
Lockview	20	5	20	7	200	32	6.5-9	6.9	8.0 S	0.9	1.2 S	0.4	-	-	-	-	-	-	Continued
Steeves (Wellington)	20	5	20	10	200	10	6.5-9	7.5	14.4 S	0.1	1.0 S	0.3	-	-	-	-	-	-	Continued
BLT	15	7	20	14	200	24	6-9	7.1	5 W 3 S	2	3 W 1 S	2	0.02 *	0.10	-	-	-	Not acutely lethal	Improved
Avg. of all Facilities	13		12		119		7.0		0.9		0.5		0.18		8.0				

NOTES & ACRONYMS:

CBOD₅ - Carbonaceous 5-Day Biochemical Oxygen Demand

TSS - Total Suspended Solids

* TRC - Total Residual Chlorine - Maxxam can only measure 0.10 mg/L residual; results of 0.1 mg/L are compliant

BDL - Below Detection Limit

W / S - Winter / Summer compliance limits

NSE requires monthly averages be less than the NSE Compliance Limit for each parameter (Dartmouth, Eastern Passage, Halifax, Herring Cove, Mill Cove)

NSE requires quarterly averages be less than the NSE Compliance Limit for each parameter (Aerotech, Lockview, Mid. Musq., Frame, BLT, Uplands, North Preston, Steeves, Springfield)

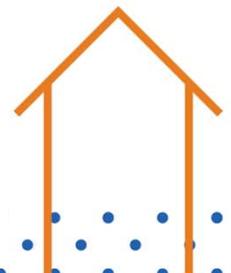
Continued - All parameters remain essentially unchanged since the last report

Improved - One or more parameter(s) became compliant since the last report

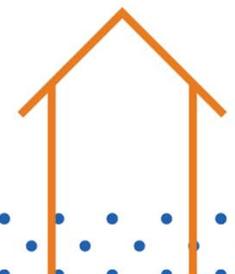
Declined - One or more parameters(s) became non-compliant since the last report

LEGEND

	NSE Compliant
	NSE Non-Compliant



World Class Trenchless Technology: North West Arm



Lake Major Dam Replacement



Ellenvale Run Renewal Project



Alignment with Municipality Priorities

- Report highlights many areas of alignment in relation to Council Priority Areas for the 2017-2021 Strategic Plan

Strategic Plan 2017 - 21

VISION HRM's vision for the future is to enhance our quality of life by fostering the growth of healthy and vibrant communities, a strong and diverse economy, and sustainable environment.		MISSION We take pride in providing high-quality public services to benefit our citizens. We make a difference.		VALUES • Respect • Collaboration • Diversity & Inclusion • Integrity • Accountability • Sustainability • Evidence-Based Decision Making	
COUNCIL PRIORITY AREAS					
ECONOMIC DEVELOPMENT HRM is a sought after business destination that encourages entrepreneurial spirit and is responsive to the needs of the business community.	SERVICE DELIVERY HRM meets the needs of the people it serves, resulting in greater satisfaction with, and confidence in the municipality.	HEALTHY, LIVEABLE COMMUNITIES HRM is a safe, livable and sustainable community that encourages public engagement and participation in civic life.	SOCIAL DEVELOPMENT HRM's communities have access to social infrastructure that supports all segments of the community.	GOVERNANCE & ENGAGEMENT HRM's governance structures and communications approach provide maximum opportunity for public engagement in and enables appropriate stewardship of municipal affairs.	TRANSPORTATION Integrated, multi-modal, long range plan to move people and goods in HRM in support of neighbourhoods, communities & economic growth.
COUNCIL PRIORITY OUTCOMES					
ECONOMIC DEVELOPMENT		HEALTHY, LIVEABLE COMMUNITIES		GOVERNANCE & ENGAGEMENT	
ATTRACT & RETAIN TALENT HRM is a welcoming community where the world's talent can find great opportunities.		PUBLIC SAFETY HRM citizens and visitors are safe where they live, work, and play.		MUNICIPAL GOVERNANCE HRM citizens have confidence in the governance structures of the municipality.	
PROMOTE & MAXIMIZE GROWTH HRM promotes a business climate that drives and sustains growth by improving competitiveness, minimizing barriers and leveraging our strengths.		ENERGY & ENVIRONMENT HRM builds resiliency by providing leadership in energy management, sustainability and environmental risk management both as an organization and in the community we serve.		COMMUNICATIONS HRM citizens and communities participate in open and transparent communication with the municipality.	
RURAL ECONOMIC DEVELOPMENT The economic viability of rural communities is included as an integral aim of regional economic growth strategies and their implementation.		RECREATION & LEISURE HRM citizens have access to facilities and natural assets that enable a range of choices for structured and unstructured leisure and recreation activities.		PUBLIC ENGAGEMENT HRM citizens and communities are engaged in the development of public policy and plans.	
FOCUS ON THE REGIONAL CENTRE HRM has a vibrant, animated and economically healthy Regional Centre that is a cultural, business and education hub with a growing population.		COMMUNITY HEALTH HRM shall be an active partner in supporting community health program such as food security initiatives.		FISCAL RESPONSIBILITY HRM manages municipal resources with integrity and considers the impact on taxpayers when making decisions.	
SUPPLY OF INDUSTRIAL, COMMERCIAL & INSTITUTIONAL LANDS Ensure that there are sufficient industrial, commercial and institutional lands available to provide economic opportunities.		COMMUNITY HEALTH HRM shall be an active partner in supporting community health program such as food security initiatives.		TRANSPORTATION	
MAKE HALIFAX A BETTER PLACE TO LIVE AND WORK Recognize and support heritage, cultural activities, and arts to bolster the creative economy and the vitality of the region.		SOCIAL DEVELOPMENT		INTERCONNECTED & STRATEGIC GROWTH HRM will implement an integrated mobility strategy that supports growth, development and the transportation of goods and people of all ages and abilities, using all modes including walking, cycling, transit, and motor vehicles, consistent with the Regional Plan.	
SERVICE DELIVERY		SOCIAL INFRASTRUCTURE HRM communities, families, youth and seniors have access to social infrastructure that enables them to participate fully in their community.		A WELL MAINTAINED TRANSPORTATION NETWORK The Halifax Transportation Network is comprised of well-maintained assets.	
SERVICE TO OUR BUSINESS HRM simplifies processes and delivers service to promote and encourage a vibrant business environment.		ACCESSIBLE COMMUNITY HRM is a leader in building an accessible community where everyone can participate fully in life, including persons with disabilities and seniors.		A SAFE & ACCESSIBLE TRANSPORTATION NETWORK The Halifax Transportation Network is designed to be operated to be safe, accessible and supportive of enhanced user experience and focused on service improvements.	
SERVICE TO OUR PEOPLE HRM understands the needs and perspectives of the people they serve, and provides quality service through a person focused approach.		HOUSING & NEIGHBOURHOOD HRM is a leader in fostering partnerships that provide access to a full range of quality, affordable housing options in safe and vibrant neighborhoods.		A SAFE & ACCESSIBLE TRANSPORTATION NETWORK The Halifax Transportation Network is designed to be operated to be safe, accessible and supportive of enhanced user experience and focused on service improvements.	
INNOVATION HRM will foster a corporate culture that values innovation and bold ideas and supports the rapid deployment of experimental pilot projects and civic innovation project teams.		EQUITY & INCLUSION HRM is a diverse and inclusive community that supports everybody.		PEDESTRIAN SAFETY Drivers, cyclists and pedestrians all share responsibility for travelling safely together. Through education, enforcement, and improved infrastructure (engineering), engagement and evaluation, pedestrians in Halifax are provided with a safe environment in which to walk.	

Questions or
Comments?

