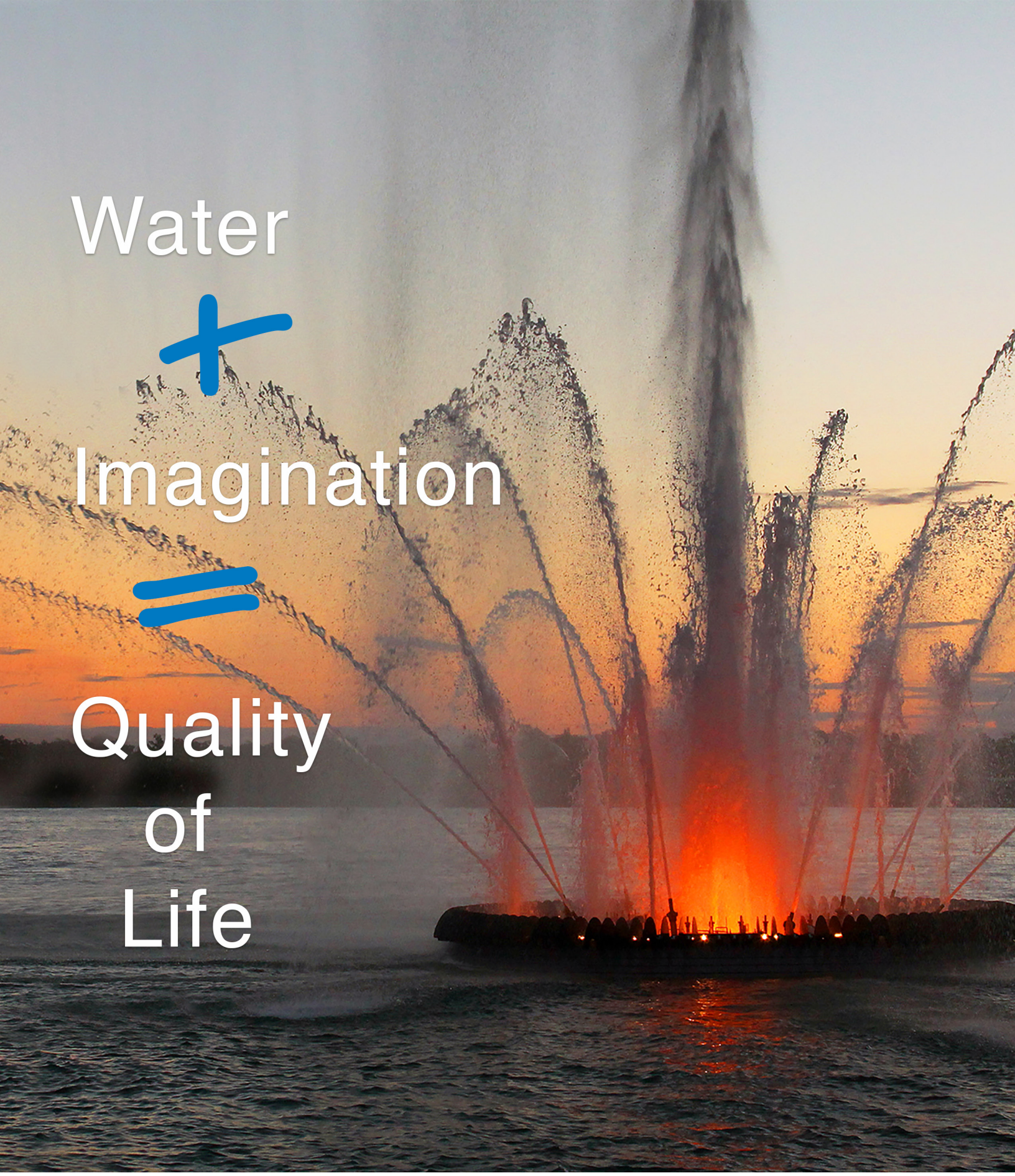

2020 Summary Report
Windsor Utilities Commission

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Water + Reliability = Essential

DELIVERING A VITAL, ESSENTIAL SERVICE TO OUR COMMUNITY IS A RESPONSIBILITY WE TAKE SERIOUSLY.

In 2020, Windsor Utilities Commission (WUC) had an opportunity to demonstrate the level and substance of our commitment to this duty as COVID-19 emerged and developed. It quickly became clear that we needed to take immediate action to ensure the safety and reliability of our water supply no matter what the pandemic might send our way.

We implemented a flexible, innovative plan – one that took into consideration a variety of potential, perhaps unthinkable, outcomes. We are proud to say that we rose to the challenge, putting in place measures to protect both employees and the public under any circumstance.

We developed COVID-19 safety protocols and work schedules; equipped, educated and protected employees; and outfitted our plant for 24-hour on-site presence, should it be required. We increased customer communications; tailored payment plans to meet the financial needs of those who struggled; and authorized ENWIN to implement two temporary moratoriums on disconnection to address community financial challenges associated with the provincial lockdowns that impacted Windsor-Essex.

As always – despite the challenges – ENWIN's leaders met their obligation to deliver a safe, reliable source of water to sustain our daily lives. Even as they devised and implemented new plans and arrangements to keep everyone safe, they successfully addressed a complex, ongoing agenda of daily duties. In doing so, they achieved 82% of the capital plan for 2020, despite the restrictions imposed by COVID-19.

We recognize that our responsibilities – to design and maintain the safety and high quality of the drinking water, and to conduct the testing needed to keep our community safe – do not end when a pandemic starts. This is why we continued to focus on capital investments that support system safety and sustainability, replacing 18.7 km of aging water mains, 1,815 water meters and 1,356 lead services this year.

Even as we implemented our pandemic measures, we analyzed 68 residential and non-residential water samples for lead content – 23 percent beyond the number required to maintain our municipal drinking water license. With support from the Commissioners and the City of Windsor, we are now two years ahead of schedule in removing the WUC-owned lead services from our system. We expect to complete this work by 2026.

Windsor, Tecumseh and LaSalle residents can rest assured that our water supply is protected by an ongoing planning process with a focus on providing safe, potable water to meet both business and residential needs. This process continues, and will continue, despite the impacts of COVID-19.

We are proud that, throughout the pandemic, we have continued to deliver water that exceeds Ontario's water quality standards. We will maintain our focus on the safety and quality of our water – and the well-being of our customers – now and in the future.

Sincerely,

Mayor Drew Dilkens
Board Chair
WUC

Garry Rossi
VP Water Operations
EWU

ENWIN water workers make repairs to underground infrastructure pre-covid.

MISSION VISION AND VALUES

At Windsor Utilities Commission our mission is to provide safe and reliable energy and water services in a cost effective, sustainable manner.

A core premise of our Strategic Direction is that our service model is undergoing significant transformation — taking on a more decentralized, customer-centric, technologically advanced and environmentally sustainable form. Throughout 2020, we focused on this mission.

Sustainability means different things to different people.

To WUC, it means ensuring that we have the human, fiscal and capital asset resources to continue to provide existing and modernized service levels to the community. We must also assess our environmental footprint to make certain that we are balanced in our use of resources.

Our Vision is to be a trusted leader in providing exceptional value and services to our customers and stakeholders.

As the energy and water needs and options of our customers and our community evolve — and as signature projects and developments proceed — WUC will play a leading role in helping our city to become a smart energy centre with a reliable, potable water system.

We embrace our role in water distribution and will continue our service to community, as we continue to develop redundancy in the system to ensure water system resiliency.

"We strive to be exceptional in all that we undertake on behalf of our stakeholders."

Our Mission

To provide safe and reliable energy and water services in a cost effective, sustainable manner.

Our Vision

To be a trusted leader in providing exceptional value and services to our customers and stakeholders.

Our Core Values

Leadership • Accountability • Integrity

Leadership + accountability + integrity = WUC

WUC = LEADERSHIP, ACCOUNTABILITY AND INTEGRITY.

We are committed to the organizational values of leadership, accountability and integrity. These values are reflected in our Employee Code of Conduct and Conflict of Interest policies, our organizational structure and our transparent reporting of results and challenges.

Our Boards of Directors and our Senior Management Team support an environment that fosters and demonstrates ethical business conduct at all levels and reflects these shared values. Every employee must lead by example.

WUC = CONSIDERATION FOR STAKEHOLDERS.

We take into account the interests of all our stakeholders, including employees, customers, suppliers, our shareholder and the communities and environment in which we operate.

WUC = VALUING EMPLOYEES.

Our strengths are the quality and diverse experiences of our workforce. We will strive to hire and retain the best qualified people available and to maximize their opportunities for success. We are committed to maintaining a safe, secure and healthy work environment, enriched by diversity and characterized by open communication, trust and fair treatment.

WUC = PUTTING CUSTOMERS FIRST.

Our continued success depends on the quality of our customer interactions and we are committed to delivering value across the entire customer experience. We are honest, open and fair in our relationships with our customers. We provide reliable, responsive and innovative products and services in compliance with legislated rights and standards for access, safety, health and environmental protection.

WUC = FAIR, HONEST RELATIONSHIPS.

We are honest and fair in our relationships with our suppliers and contractors. We purchase equipment, supplies and services on the basis of merit, utilizing our professional procurement policy. We pay suppliers and contractors in accordance with agreed terms, encourage them to adopt responsible business practices and require them to adhere to health, safety and environmental standards when working for ENWIN.

WUC = RESPECT FOR COMMUNITY AND ENVIRONMENT.

We are committed to being responsible corporate citizens and will contribute to making the communities in which we operate better places to live and do business. We are sensitive to the community's needs and dedicated to protecting and preserving the environment in which we operate.

WUC = ACCOUNTABILITY.

We are financially accountable to our shareholder and to the institutions that underwrite our operations. We communicate to them all matters that are financially material to our organization. We protect our shareholder's investment and manage risks effectively. We communicate to our shareholder all matters that are material to an understanding of our corporate governance.

A.J. Brian and J.F. Cook Fuel System Upgrades - removal of underground fuel tank

WUC INTRODUCTION

In 2020, WUC produced 38,362 megalitres of potable water for use by the citizens of the City of Windsor, the Town of LaSalle and the Town of Tecumseh.

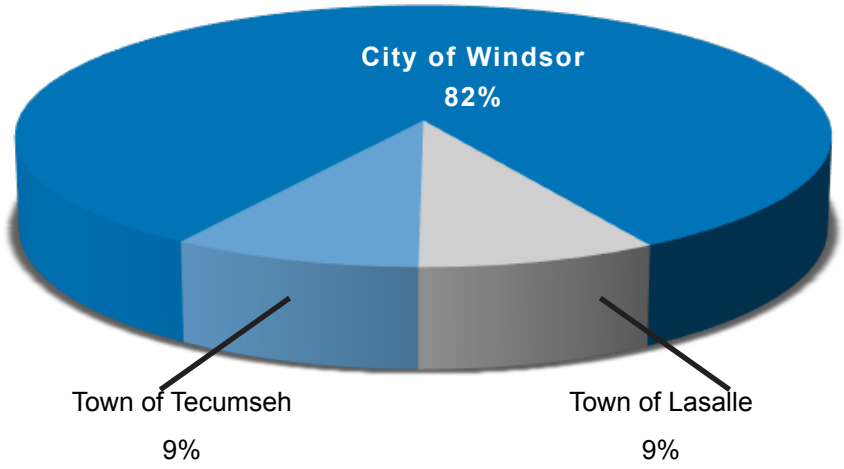
The summary contained in Appendix A, Table 1, provides a detailed breakdown of the monthly production rates, including the average day, peak day and peak hour for each of the months. The volume of water transferred to the Town of LaSalle and the Town of Tecumseh is also provided.

Under the Municipal Drinking Water License and Ontario Reg. 170/03 there are a number of Schedules that outline the requirements for compliance with the Safe Drinking Water Act (SDWA). This report highlights the requirements of the applicable section of the regulation, along with a statement of compliance or if applicable, specific areas of non-compliance with the schedule requirements.

2020 Total Treated Water by Municipality

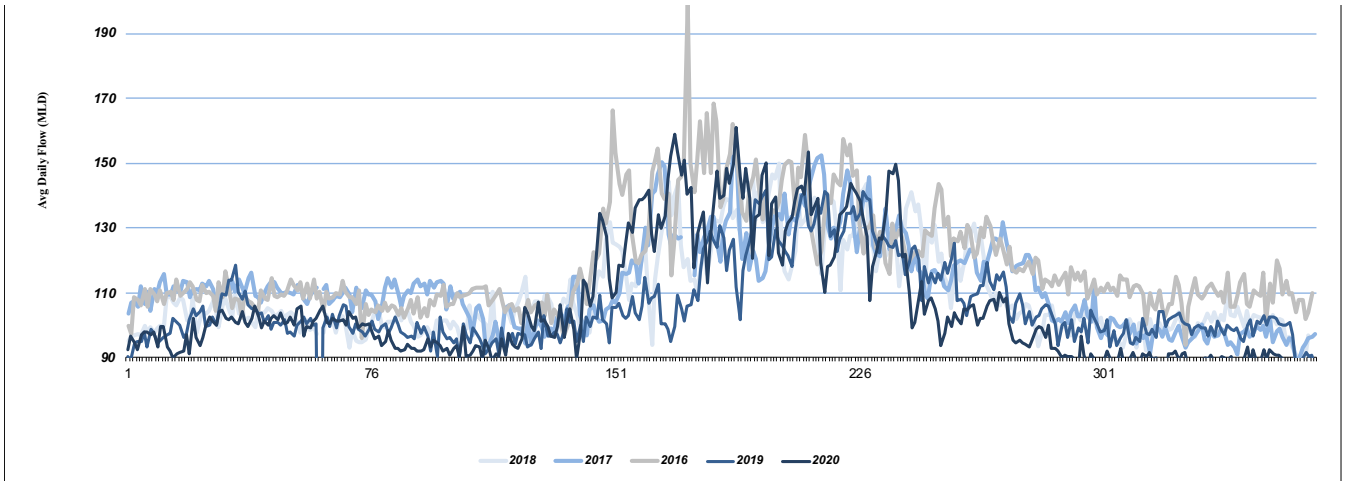
Volumes reported in megalitres (ML)

Town of Lasalle	*Town of Tecumse*	*City of Windsor*
3454.3	3405.6	31502.5



Percentage of water delivered to each served Municipality.

Chart 3: 2016-2020 Volume of Approved Capacity (349 ML Maximum Approved Capacity)



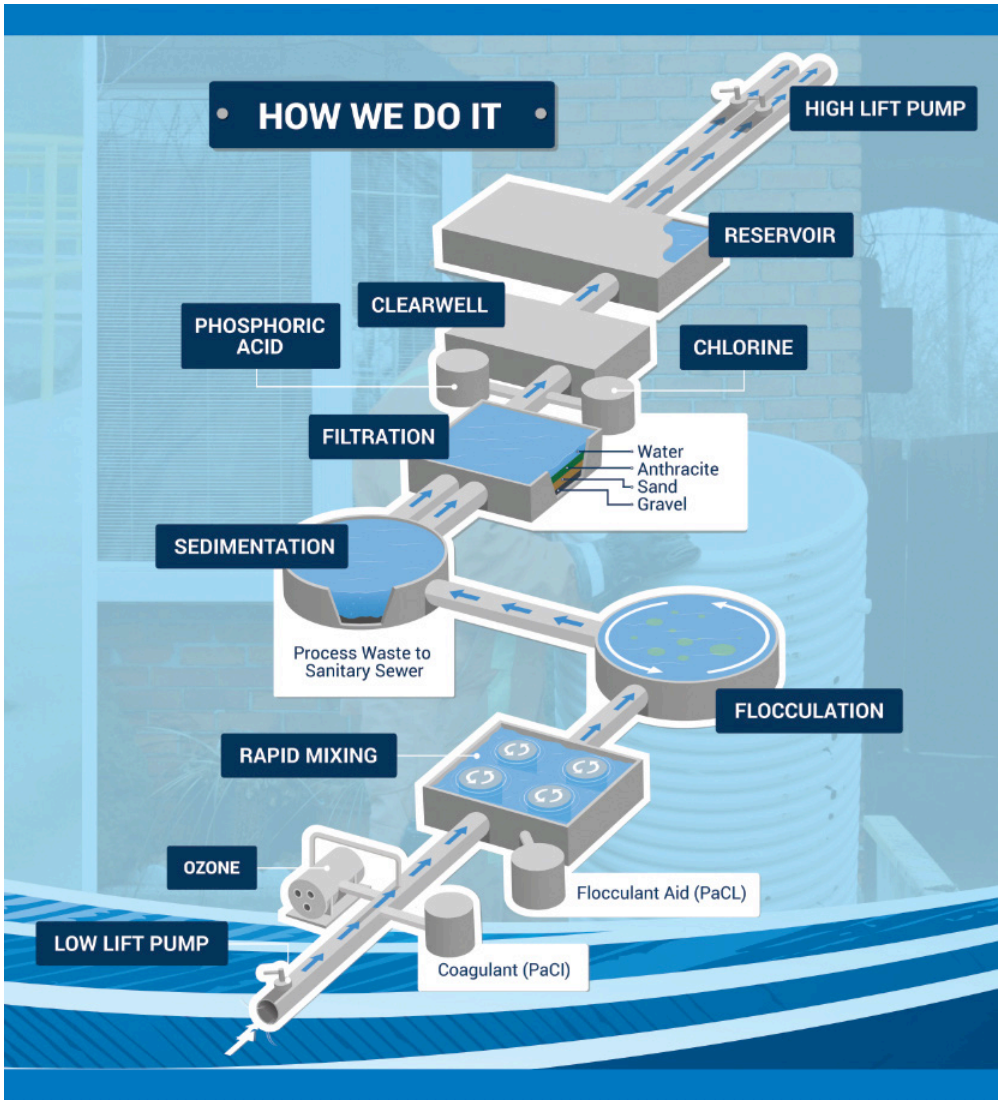
TREATMENT EQUIPMENT

O.Reg 170/04, Schedule 1 dictates that the owner of a drinking water system shall ensure that approved water treatment equipment, as specified in the Drinking Water Works Permit, is in operation whenever water is being supplied for potable use.

Further, the regulation requires that the equipment be operated in a manner that achieves its design capabilities and that only certified operators carry out operation of the system.

In the calendar year 2020, WUC complied fully with this section of the regulations.

Chart 3 (page 5) depicts WUC's average daily water flow for the 2020 calendar year. Of particular note is the approved 349 ML daily maximum treatment capacity of WUC's treatment plants. As illustrated in the chart, WUC is operating well within the approved limits of its license and permit.



An illustration of the water treatment process at the A.H. Weeks Water Treatment Plant.

OPERATIONAL CHECKS SAMPLING & TESTING

O.Reg 170/03, Schedule 6 outlines:

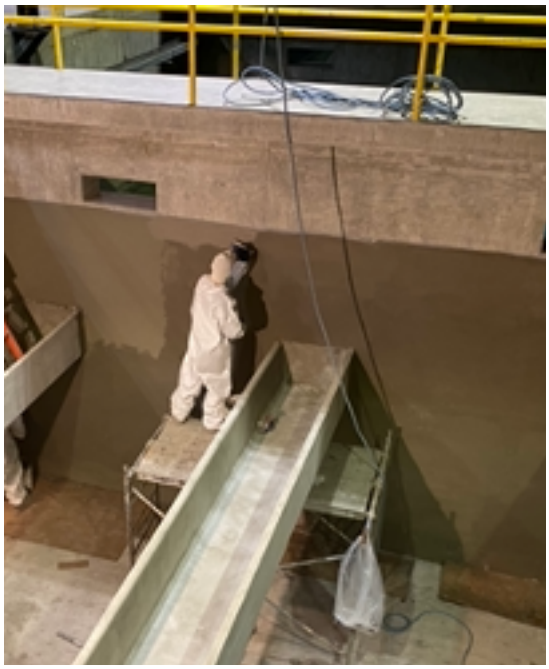
- The frequency of sampling and testing requirements;
- The requirement for chlorine residual testing to be carried out at the time microbiological samples are collected;
- The location at which samples are to be collected;
- The form of sampling to be undertaken;
- The requirements for continuous monitoring equipment;
- Clarification of how samples are to be handled and recorded;
- The need for an appropriately accredited laboratory to carry out the sample analysis.

In the calendar year 2020, WUC complied fully with this section of the regulations.

OPERATIONAL CHECKS

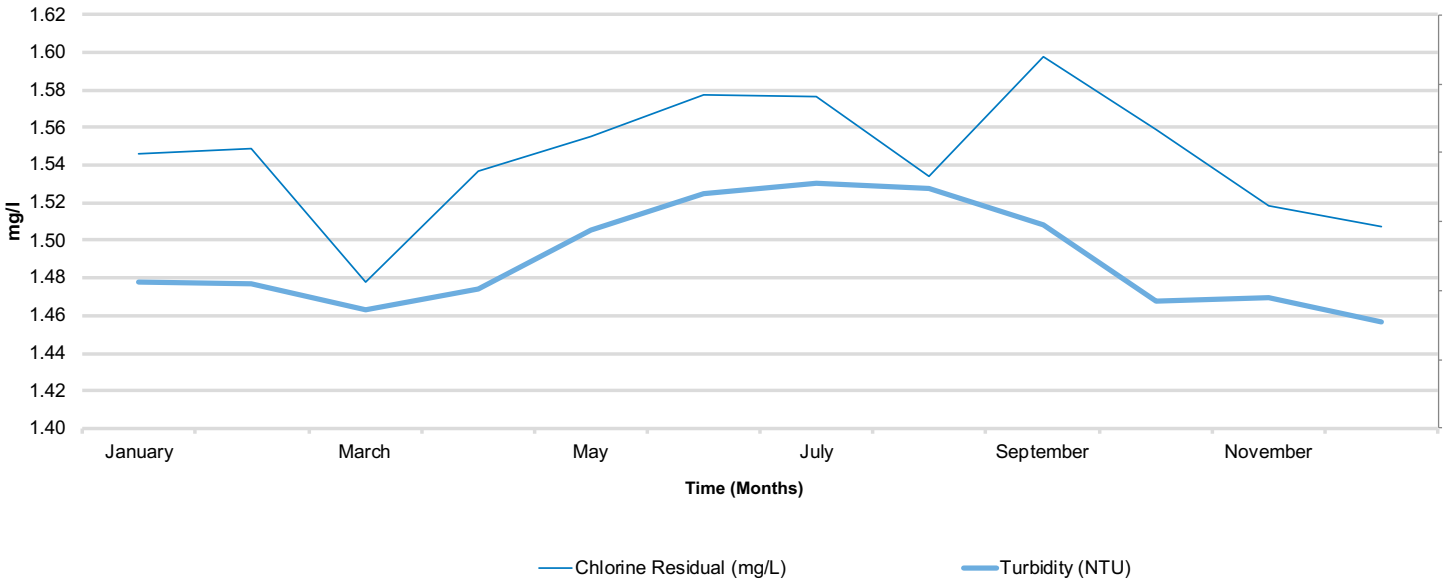
O.Reg 170/03, Schedule 7 specifies the requirements for continuous monitoring of equipment for free chlorine residual, turbidity and fluoride, and the required location for monitoring equipment. The regulation dictates the requirement for regular collection and analysis of samples by an appropriately certified individual. The chart below summarizes the results for the parameters mentioned above.

In the calendar year 2020, WUC complied fully with this section of the regulations.



A.H. Weeks Filter Bed Rehabilitation
Coating system being applied to Filter #7

Chart 4: 2020 Operational Trends



MICROBIOLOGICAL SAMPLING AND TESTING

O.Reg 170/03, Schedule 10 provides the requirements for sampling and testing of microbiological parameters.

The schedule states that for large municipal systems serving a population of more than 100,000 people the required monthly frequency of sampling is 100 distribution samples plus one additional sample for every 10,000 people served, with at least three samples being taken in each week.

Each of these samples are to be tested for Escherichia coli and total coliform, with a requirement that at least 25 per cent of the samples be tested for general bacteria population, expressed as colony counts on a heterotrophic plate count. Windsor's required sampling frequency is 130 samples monthly.

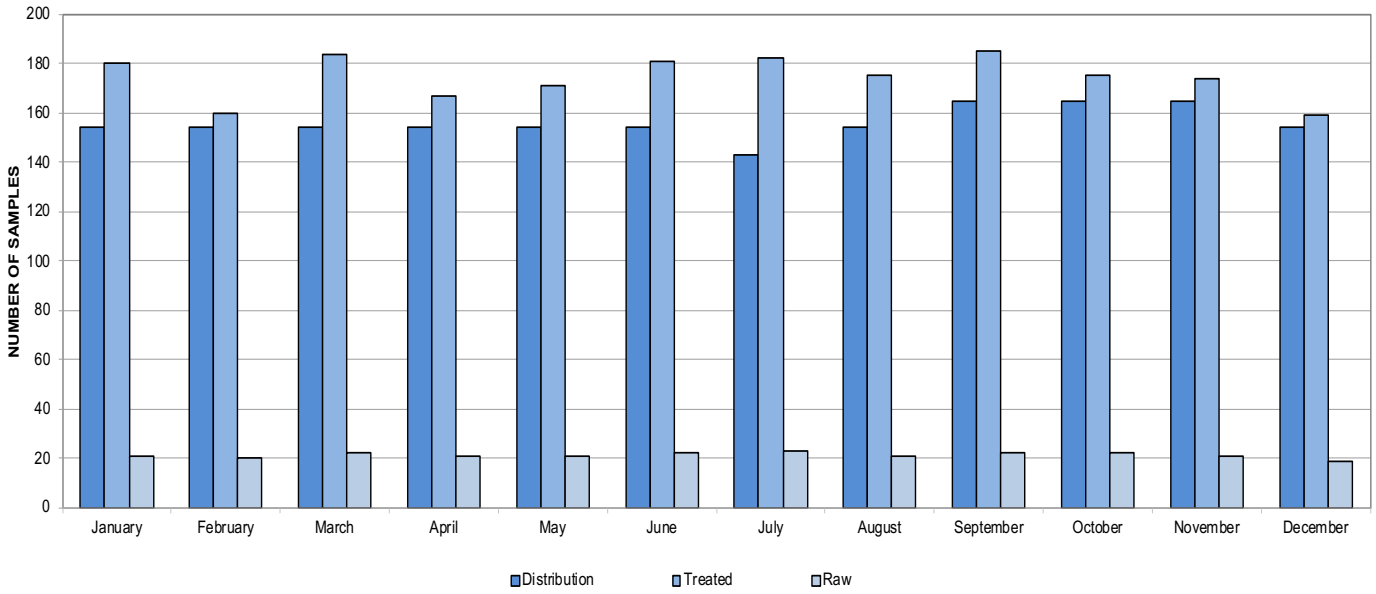
In 2020, 1,870 samples were collected and analyzed — an average of 156 samples per month. Approximately 52 per cent of the distribution samples were also analyzed for heterotrophic plate count. In addition, each sample was tested for free chlorine residual at the time the sample was taken.

Schedule 10 states that a treated water sample must be taken at least once per week and tested for Escherichia coli, total coliform and general bacteria population, expressed as colony counts on a heterotrophic plate count. Windsor's treated water samples were generally collected on a daily basis and were tested by an accredited third-party laboratory.

The schedule further states that a raw water sample must be taken at least once per week before any treatment is applied to the water, and that the sample be tested for Escherichia Coli and total coliform. Samples were collected and tested on average five days per week. Chart 5 (below) indicates the number of samples taken on a monthly basis.

Testing + Sampling = Safety

Chart 5: Microbiological Sample Count



CHEMICAL SAMPLING AND TESTING

O.Reg 170/04, Schedule 13 provides the requirements for sample collection and testing for a variety of chemical components in drinking water. Additionally, it lists the Maximum Acceptable Concentration (MAC) for each component. The requirements are outlined below, along with the status of Windsor's sampling program.

Inorganics

One sample must be collected every 12 months if the source is surface water and tested for every parameter set out in Schedule 23. (See page 10 for Table 13.2)

ENWIN, on behalf of WUC, collected samples and tested for lead in treated water and distribution samples on a quarterly basis.

In 2020, ENWIN, on behalf of WUC, collected and tested samples for every parameter set out in Schedule 23 on a quarterly basis.

Organics

One sample must be collected every 12 months, if the source is surface water, and tested for every parameter set out in Schedule 24. (See page 11 for Table 13.3)

During 2020, on behalf of WUC, ENWIN collected samples and tested for every parameter set out in Schedule 24 on a quarterly basis.

Trihalomethane (THM's)

For any system that provides chlorination, one distribution sample must be collected and tested for trihalomethanes every three months. (See page 11 for Table 13.3)

ENWIN, on behalf of WUC, collected samples and tested for trihalomethanes on a quarterly basis.

Bromates

For the system that provides ozonation as primary disinfection, one treated water sample most be collected monthly from each Water Treatment Plant. (See Table 13.1 below)

Lead

One sample must be collected and tested every 12 months for Lead. (See page 10, Table 13.2)

ENWIN, on behalf of WUC, collected samples and tested for lead in treated water and distribution samples on a quarterly basis.

Table 13.1 - Bromate Sample Results

Date of legal instrument issued	Parameter	Date Sampled	Running Annual Average Result	Unit of Measure
MDWL 025-101	Bromate - Treated	1-Jan-20 to 31-Dec-20	0.004	mg/L
MDWL 025-101	Bromate - Distribution	1-Jan-20 to 31-Dec-20	0.004	mg/L

Nitrates and Nitrites

The owner of a drinking water system (WUC) and the operating authority for the system (ENWIN) must ensure that at least one water sample is taken every three months and tested for nitrate and nitrite. (See Table 13.2 below)

ENWIN, on behalf of WUC, collected samples and tested for nitrates and nitrites on a quarterly basis.

Sodium

Schedule 13 stipulates that at least one water sample is taken every 60 months and tested for sodium. (See Table 13.2 below)

ENWIN, on behalf of WUC, collected samples and tested for sodium on January 8, 2020.

New 24" Horizontal Gate Valve in a concrete chamber at the intersection of California and College.

Table 13.2 – Inorganics, Lead, Nitrates, and Sodium Sample Results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedence
Antimony	14-Oct-20	0.00014	mg/L	NO
Arsenic	14-Oct-20	0.0004	mg/L	NO
Barium	14-Oct-20	0.0155	mg/L	NO
Boron	14-Oct-20	0.014	mg/L	NO
Cadmium	14-Oct-20	0.000003 <MDL	mg/L	NO
Chromium	14-Oct-20	0.00014	mg/L	NO
*Lead	14-Oct-20	0.00001 <MDL	mg/L	NO
Mercury	14-Oct-20	0.00001 <MDL	mg/L	NO
Selenium	14-Oct-20	0.00012	mg/L	NO
Sodium	8-Jan-20	7.33	mg/L	NO
Uranium	14-Oct-20	0.000068	mg/L	NO
Fluoride	8-Jan-20	0.1	mg/L	NO
Nitrite	14-Oct-20	0.003 <MDL	mg/L	NO
Nitrate	14-Oct-20	0.226	mg/L	NO

Vigilance + Diligence
= Results

Table 13.3 – Organics, THM's and HAA's Sample Results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedence
Alachlor	14-Oct-20	0.00002 <MDL	mg/L	NO
Atrazine + N-dealkylated metobolites	14-Oct-20	0.00002	mg/L	NO
Azinphos-methyl	14-Oct-20	0.00005 <MDL	mg/L	NO
Benzene	14-Oct-20	0.00032 <MDL	mg/L	NO
Benzo(a)pyrene	14-Oct-20	0.000004 <MDL	mg/L	NO
Bromoxynil	14-Oct-20	0.00033 <MDL	mg/L	NO
Carbaryl	14-Oct-20	0.00005 <MDL	mg/L	NO
Carbofuran	14-Oct-20	0.00001 <MDL	mg/L	NO
Carbon Tetrachloride	14-Oct-20	0.00017 <MDL	mg/L	NO
Chlorpyrifos	14-Oct-20	0.00002 <MDL	mg/L	NO
Diazinon	14-Oct-20	0.00002 <MDL	mg/L	NO
Dicamba	14-Oct-20	0.00020 <MDL	mg/L	NO
1,2-Dichlorobenzene	14-Oct-20	0.00041 <MDL	mg/L	NO
1,4Dichlorobenzene	14-Oct-20	0.00036 <MDL	mg/L	NO
1,2-Dichloroethane	14-Oct-20	0.00035 <MDL	mg/L	NO
1,1-Dichloroethylene (vinylidene chloride)	14-Oct-20	0.00033 <MDL	mg/L	NO
Dichloromethane	14-Oct-20	0.00035 <MDL	mg/L	NO
2,4-Dichlorophenol	14-Oct-20	0.00015 <MDL	mg/L	NO
2,4-Dichlorophenoxy acetic acid (2,4-D)	14-Oct-20	0.00019 <MDL	mg/L	NO
Diclofop-methyl	14-Oct-20	0.0004 <MDL	mg/L	NO
Dimethoate	14-Oct-20	0.00006 <MDL	mg/L	NO
Diquat	14-Oct-20	0.001 <MDL	mg/L	NO
Diuron	14-Oct-20	0.00003 <MDL	mg/L	NO
Glyphosate	14-Oct-20	0.001 <MDL	mg/L	NO

Parameter	Sample Date	Result Value	Unit of Measure	Exceedence
Haloacetic Acids (HAA5)		Avg.	mg/L	NO
(Note: show latest running annual average)				
Q1 2020 = <0.0053 mg/L	8-Jan-20	<0.0053		
Q2 2020 = <0.0053 mg/L	8-Apr-20			
Q3 2020 = <0.0053 mg/L	8-Jul-20			
Q4 2020 = <0.0053 mg/L	14-Oct-20			
Malathion	14-Oct-20	0.00002 <MDL	mg/L	NO
MCPA	14-Oct-20	0.00012 <MDL	mg/L	NO
Metolachlor	14-Oct-20	0.00001 <MDL	mg/L	NO
Metribuzin	14-Oct-20	0.00002 <MDL	mg/L	NO
Monochlorobenzene	14-Oct-20	0.0003 <MDL	mg/L	NO
Paraquat	14-Oct-20	0.001 <MDL	mg/L	NO
Pentachlorophenol	14-Oct-20	0.00015 <MDL	mg/L	NO
Phorate	14-Oct-20	0.00001 <MDL	mg/L	NO
Picloram	14-Oct-20	0.001 <MDL	mg/L	NO
Polychlorinated Biphenyls (PCB)	14-Oct-20	0.00004 <MDL	mg/L	NO
Prometryne	14-Oct-20	0.00003 <MDL	mg/L	NO
Simazine	14-Oct-20	0.00001 <MDL	mg/L	NO
THM		Avg.	mg/L	NO
(Note: show latest running annual average				
Q1 2020 = 0.0073 mg/L	8-Jan-20	0.0123		
Q2 2020 = 0.011 mg/L	8-Apr-20			
Q3 2020 = 0.017 mg/L	8-Jul-20			
Q4 2020 = 0.014 mg/L	14-Oct-20			
Terbofos	14-Oct-20	0.00001 <MDL	mg/L	NO
Tetrachlorethylene	14-Oct-20	0.00035 <MDL	mg/L	NO
2,3,4,6-Tetrachlorophenol	14-Oct-20	0.00020 <MDL	mg/L	NO
Triallate	14-Oct-20	0.00001 <MDL	mg/L	NO
Trichloroethylene	14-Oct-20	0.00044 <MDL	mg/L	NO

SAMPLING & TESTING: LEAD

The Municipal Drinking Water License requires 60 samples annually to monitor corrosion control effectiveness. Sample sources include residential, non-residential and distribution locations. Each of these samples are to be tested for lead.

A total of 68 lead samples were collected and tested in residential and non-residential locations in 2020, along with 55 samples in the distribution system.

In the calendar year 2020, WUC complied fully with the requirements of the License

REPORTING TEST RESULTS

If a sample collected and tested indicates an adverse result as outlined in the regulations, the owner of a drinking water system must report the result to the Medical Officer of Health (MOH) and the Spills Action Centre (SAC) of the Ministry of Environment, Parks and Conservation (MECP). If an observation other than an adverse test result indicates that a drinking water system is directing water that may not be adequately disinfected to users of the water system, the observation must be reported to the MOH and the SAC.

If a report is required under this section, a verbal report must be provided to the MOH by speaking directly to a designated on-call representative at the Windsor Essex County Health Unit (WECHU). In addition, a verbal report must be provided to the Ministry by contacting the SAC.

These verbal reports of adverse water conditions must be verified by written notice within 24 hours to the MOH and the SAC specifying the nature of the adverse result, observations and the corrective actions being undertaken.

Within seven days of resolution of a problem, a follow up written notice is to be provided outlining the incident that gave rise to the adverse result report.

In 2020, there was one adverse incident requiring notification of the MOH and the SAC. Details are as follows:

- Lead sampling result greater than 10 µg/L at a hydrant.

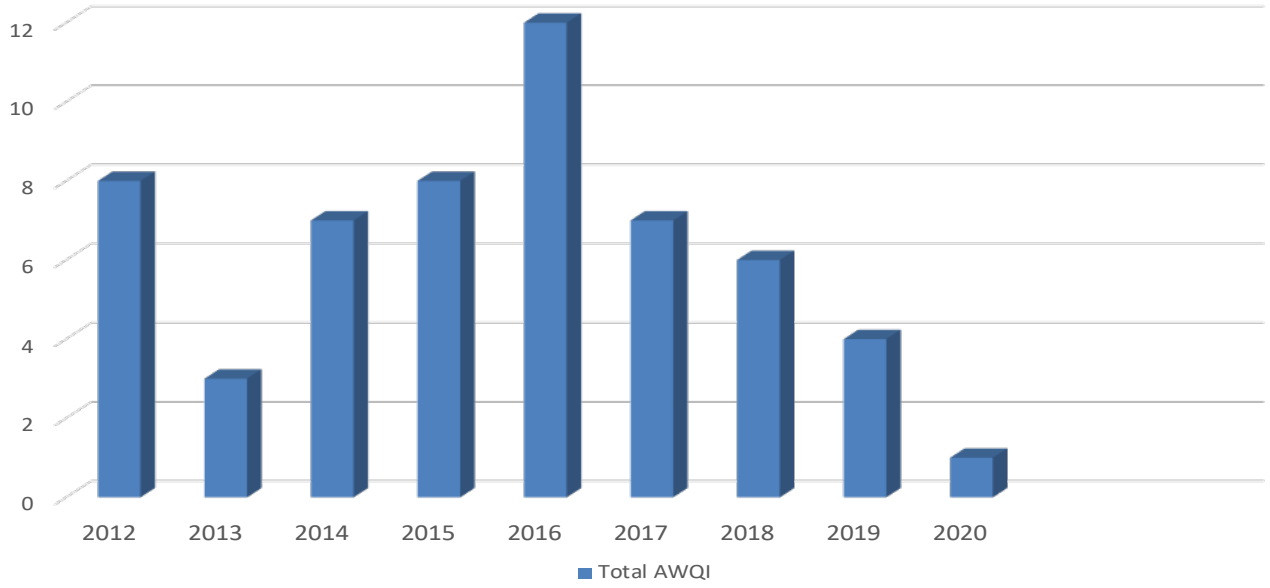
Notification was made to the MOH and the SAC.

CORRECTIVE ACTION

This schedule outlines the action to be followed with the determination of an adverse result requiring notification.

In all cases, the required corrective action was followed, as directed by the Medical Officer of Health.

Chart 6: Adverse Water Quality Incidents



SUMMARY REPORT FOR MUNICIPALITIES

Not later than March 31 of each year, a summary report must be prepared for the preceding calendar year and submitted to members of municipal council and members of a municipal services board, if one exists.

The submission of this report fulfills the requirement for this section of the regulations.

Summarising tables are attached for review:

Table 1 - 2020 Treated Water Volume (page 18)

Table 2 – 2020 Volume as a Percentage of Approved Plant Capacity (pages 19-20)

Table 3 - 2020 Microbiological Sample Count (page 21)

Table 4 - 2020 Distribution Chlorine Residuals (page 22-23)

Table 5 - 2020 Operational Parameters (page 24-25)

A copy of Schedule 23 (Inorganic Test Parameters) and Schedule 24 (Organic Test Parameters) are attached for information, as previously submitted and as required by the regulation. (pages 26-27)

1500mm Steel Casing on provincial for future Feedermain

CAPITAL RENEWAL PROGRAM

WATER METER REPLACEMENT PROGRAM

The goal of WUC's Water Meter Replacement Program is to replace all damaged, frozen, defective, aging and obsolete water meters in residential and industrial, commercial and institutional (ICI) settings.

New meters provide benefits that include:

- Increased accuracy in billing for our customers;
- Improved efficiency in meter reading, as reads can be obtained via radio frequency (RF); and
- Enhanced ability to identify the sources and manage the causes of non-revenue water, thereby limiting revenue loss for both WUC and its ratepayers.

WUC installed 1,815 new meters in 2020. A very small number of non-RF meters remained in the field at year end. The remaining meters are either located in vacant properties or conditions at the customer site require additional attention prior to replacement. These replacements will be coordinated with customers on a case-by-case basis going forward.

At year end, the average age of WUC's total meter population is four years. For ICIs only, the average age is 6.6 years.

All meter reading routes are now using the drive-by (RF) method to collect meter data.

Aside from the exceptions noted, the Water Meter Replacement Program is now considered complete.

WATERMAIN REPLACEMENT PROGRAM

The 2020 WUC capital renewal program involved the replacement of approximately 18.7 km of existing cast and ductile iron watermains, as well as water services with new PVC pipelines and polyethylene/copper tubing, respectively.

Water services are typically replaced from the new main to the property line.

The projects included watermains that no longer provided adequate service, which were deemed to have the highest risk to public health.

The MECP and Ontario Fire Codes (OFC) mandate minimum levels of performance required for hydrants throughout the water distribution system. In 2020, 133 water hydrants were installed and 134 old public use hydrants were removed.

WUC capital projects such as renewal of cast iron watermain are prioritized based on a scoring system algorithm. A point score is assigned to the seven criteria listed below to determine the priority of the project.

The higher the risk to public health and safety, the higher the score and the assigned priority status. The algorithm uses the following priority:

- Anticipated percentage or total number of lead services;
- Deficient hydrant spacing;
- Low fire flow;
- Pipe diameter;
- Breaks per 100m with an emphasis on recency;
- Disturbed water per 100m;
- Age (life cycle of pipe type).

FEEDER VALVE REPLACEMENT

As a result of our regular preventative maintenance work, we found the valve at this location would not turn. Investigations found that the stem on the valve was broken and not engaging. We hired a contractor to replace this valve. We removed the chamber lid and the defective valve and installed a new horizontal gate valve with two couplers to connect to the existing pipe. During this

job, we shut down the feeder main from Huron Line to Curry on College. We took advantage of the shut-down to replace four air valves on the feeder main, along with two drain valves that were all wrapped in Denso to stop corrosion..

RESERVOIR 'D'

Rehabilitation engineering work started for construction in 2020. The refurbishment of Reservoir 'D' will provide important additional disinfection, storage and redundancy for the drinking water system. The redundancy allows for reservoir maintenance to occur without affecting treatment, quality and supply.

FILTER BED REHABILITATION - FILTER #7 & FILTER #8

ENWIN continues to rehabilitate the original multi-media filters at the A.H. Weeks WTP. The old plastic underdrain system was removed and the filter beds and walls were coated to protect the concrete. New stainless steel underdrains are scheduled for installation and new anthracite and sand filter media will be placed into the bed in early 2021. The new underdrain system and media will increase the overall filter performance.

FLUORIDE IMPLEMENTATION - PIPE LOOP STUDY

ENWIN is conducting a fluoride pipe loop study utilizing the existing pipe loop at the A. H. Weeks WTP. The study aims to determine possible interference, if any, with the effectiveness of the existing Corrosion Control Plan. The study will facilitate the dosage optimization, prior to large scale implementation. Lead service lines were harvested from the distribution system, installed into the existing pipe loop and dosed with hydrofluorosilic acid solution similar to the dosage rate that will be implemented in the distribution system. The study will be on-going for approximately 10 months.

A.J. BRIAN AND J.F. COOK FUEL SYSTEM UPGRADES

ENWIN removed the existing below grade diesel fuel tanks at both the A.J. Brian and J.F. Cook facilities. At the J. F. Cook facility, we also installed a new exterior above-ground storage tank and a new fuel system complete with pump skid, day tanks and controls. The new fuel system replaced the existing outdated fuel system and supplies fuel to the two diesel generators that provide backup power for controls, SCADA monitoring and high lift pumping capability. The new fuel system is compliant with the current TSSA regulation and MECP recommendations.

WATER SCADA NETWORK UPGRADE

ENWIN engaged the services of Rockwell for the design and implementation of an upgraded SCADA network at the A.H. Weeks WTP. The project will update and improve the current SCADA network infrastructure adding increased security measures in line with current industry best practices. The design for the network upgrade was conducted in 2020 with implementation scheduled for 2021.

Renewal + Innovation = Efficacy

Removal of the Generator #2 alternator for repair at A.H. Weeks WTP

APPENDIX A — OPERATIONAL CHARTS

WINDSOR UTILITIES COMMISSION

Table 1 - 2020 Treated Water Volume

	Total Pumped Volume	Daily Average Volume		Maximum Daily Volume		Minimum Daily Volume		Instantaneous Peak Volume	Town of Lasalle Volume	Town of Tecumseh Volume	City of Windsor Volume
MONTH	ML	ML		ML		ML		ML	ML	ML	ML
JANUARY	2833.5	96.8	30	104.8	15	90.2	17	152.4	246.1	205.5	2381.9
FEBRUARY	2672.5	101.7	9	105.9	24	96.7	29	175.5	181.6	185.9	2305.0
MARCH	2867.1	97.8	1	105.8	30	91.9	7	155.5	224.8	203.2	2439.0
APRIL	2713.8	93.0	13	99.8	19	89.1	16	146.4	217.8	201.0	2295.1
MAY	3143.4	106.8	25	134.5	18	89.4	24	198.7	267.8	256.9	2618.7
JUNE	4271.4	135.7	17	158.9	27	113.0	17	210.3	485.4	379.2	3406.7
JULY	4545.1	138.7	6	160.9	20	118.7	6	258.9	459.1	424.7	3661.4
AUGUST	3935.1	126.9	24	149.8	29	99.1	21	193.1	383.7	400.7	3150.7
SEPTEMBER	3107.6	103.6	1	113.4	7	93.7	14	210.4	323.8	364.6	2419.2
OCTOBER	2861.0	92.4	10	99.9	22	86.4	9	142.8	242.5	291.4	2327.2
NOVEMBER	2685.4	89.5	1	93.1	13	83.5	4	170.6	226.5	255.3	2203.7
DECEMBER	2726.6	88.1	10	93.2	25	80.3	24	151.5	195.4	237.3	2294.0
TOTAL	**38362.4**								**3454.3**	**3405.6**	**31502.5**
AVERAGE	**3196.9**								**287.9**	**283.8**	**2625.2**

Note: Volumes reported in megalitres (ML)

Table 2 - 2020 Volume as a Percentage of Approved Plant Capacity

Date	January		February		March		April		May		June	
	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %
1	92.7	27%	101.5	29%	105.8	30%	92.7	27%	95.8	27%	118.0	34%
2	96.7	28%	102.4	29%	101.1	29%	95.7	27%	105.7	30%	125.4	36%
3	94.5	27%	100.8	29%	100.5	29%	93.3	27%	104.0	30%	131.5	38%
4	92.7	27%	100.3	29%	102.0	29%	95.5	27%	99.7	29%	128.6	37%
5	97.0	28%	104.1	30%	101.1	29%	94.6	27%	98.5	28%	136.3	39%
6	97.8	28%	100.8	29%	101.2	29%	93.6	27%	107.0	31%	138.6	40%
7	97.8	28%	99.5	29%	101.9	29%	92.2	26%	101.3	29%	138.6	40%
8	97.3	28%	102.3	29%	100.3	29%	93.0	27%	101.8	29%	139.4	40%
9	98.1	28%	105.9	30%	104.4	30%	90.8	26%	99.8	29%	141.6	41%
10	93.3	27%	102.5	29%	102.2	29%	93.1	27%	96.8	28%	128.4	37%
11	99.8	29%	99.1	28%	102.6	29%	93.5	27%	96.2	28%	122.7	35%
12	99.8	29%	101.2	29%	99.3	28%	90.4	26%	99.6	29%	134.3	38%
13	93.4	27%	100.2	29%	100.3	29%	99.8	29%	106.2	30%	130.0	37%
14	92.1	26%	102.3	29%	100.2	29%	90.3	26%	96.2	28%	133.6	38%
15	90.2	26%	103.0	30%	100.5	29%	90.8	26%	101.1	29%	145.3	42%
16	91.2	26%	101.5	29%	97.8	28%	92.3	26%	105.1	30%	152.2	44%
17	91.5	26%	103.7	30%	95.8	27%	93.8	27%	98.8	28%	158.9	46%
18	92.2	26%	100.6	29%	96.8	28%	93.5	27%	89.4	26%	153.7	44%
19	97.0	28%	101.0	29%	93.6	27%	89.1	26%	98.2	28%	146.5	42%
20	91.3	26%	102.8	29%	95.2	27%	95.5	27%	113.9	33%	150.8	43%
21	102.1	29%	100.2	29%	98.2	28%	92.4	26%	112.6	32%	140.3	40%
22	96.3	28%	105.1	30%	95.5	27%	89.3	26%	106.1	30%	142.7	41%
23	93.9	27%	105.8	30%	93.1	27%	91.3	26%	108.8	31%	117.6	34%
24	96.2	28%	96.7	28%	92.8	27%	90.3	26%	124.2	36%	128.5	37%
25	99.7	29%	99.7	29%	92.0	26%	96.0	28%	134.5	39%	132.2	38%
26	102.5	29%	99.1	28%	92.6	27%	90.9	26%	132.3	38%	135.1	39%
27	101.3	29%	101.1	29%	94.2	27%	97.6	28%	127.3	36%	113.0	32%
28	100.1	29%	102.3	29%	92.8	27%	94.1	27%	114.4	33%	126.0	36%
29	104.3	30%	104.7	30%	93.0	27%	93.2	27%	108.4	31%	134.8	39%
30	104.8	30%			91.9	26%	92.9	27%	110.3	32%	147.6	42%
31	102.0	29%			92.1	26%			118.4	34%		

Table 2 - 2020 Volume as a Percentage of Approved Plant Capacity

Date	July						October		November		December	
	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %	Average Daily Flow (MLD)	Plant Capacity %
1	139.3	40%	119.4	34%	113.4	32%	95.4	27%	93.1	27%	88.6	25%
2	140.1	40%	110.3	32%	103.3	30%	94.4	27%	88.6	25%	90.6	26%
3	148.6	43%	118.3	34%	107.5	31%	94.1	27%	88.0	25%	89.8	26%
4	144.0	41%	118.6	34%	108.7	31%	93.3	27%	90.1	26%	89.3	26%
5	149.5	43%	121.3	35%	105.2	30%	95.6	27%	91.5	26%	90.2	26%
6	**160.9**	**46%**	126.9	36%	101.1	29%	98.6	28%	89.5	26%	88.0	25%
7	145.9	42%	134.0	38%	93.7	27%	99.5	29%	88.6	25%	88.2	25%
8	139.3	40%	135.3	39%	97.4	28%	99.0	28%	91.2	26%	89.1	26%
9	148.4	43%	136.6	39%	102.4	29%	96.4	28%	90.5	26%	89.3	26%
10	139.4	40%	143.9	41%	99.8	29%	99.9	29%	91.7	26%	93.2	27%
11	120.5	35%	142.2	41%	103.7	30%	92.8	27%	89.6	26%	88.3	25%
12	133.3	38%	140.8	40%	102.4	29%	92.8	27%	90.2	26%	92.5	27%
13	133.9	38%	138.4	40%	100.3	29%	92.1	26%	83.5	24%	88.1	25%
14	146.4	42%	133.3	38%	105.2	30%	89.8	26%	88.5	25%	88.1	25%
15	149.9	43%	127.4	36%	104.6	30%	90.7	26%	85.1	24%	92.3	26%
16	121.6	35%	107.7	31%	106.1	30%	90.4	26%	91.0	26%	89.5	26%
17	137.5	39%	118.1	34%	106.3	30%	90.3	26%	91.2	26%	92.5	27%
18	139.6	40%	123.0	35%	100.1	29%	89.4	26%	91.9	26%	91.1	26%
19	122.3	35%	127.1	36%	102.1	29%	86.5	25%	89.1	26%	90.7	26%
20	118.7	34%	126.8	36%	102.1	29%	96.9	28%	91.1	26%	90.6	26%
21	129.0	37%	135.7	39%	106.1	30%	90.9	26%	91.8	26%	89.6	26%
22	131.7	38%	147.4	42%	107.6	31%	86.4	25%	86.4	25%	88.6	25%
23	133.4	38%	146.6	42%	108.0	31%	91.1	26%	88.4	25%	87.2	25%
24	138.5	40%	149.8	43%	104.5	30%	90.0	26%	88.2	25%	86.4	25%
25	142.0	41%	144.6	41%	110.1	32%	88.3	25%	88.7	25%	80.3	23%
26	142.8	41%	121.1	35%	107.3	31%	88.1	25%	89.0	26%	81.9	23%
27	140.5	40%	122.0	35%	108.4	31%	89.6	26%	89.9	26%	82.7	24%
28	153.4	44%	109.9	32%	100.3	29%	92.0	26%	89.7	26%	82.0	23%
29	134.2	38%	99.1	28%	95.4	27%	90.0	26%	91.0	26%	81.6	23%
30	136.1	39%	101.1	29%	94.6	27%	89.0	26%	88.7	25%	82.6	24%
31	139.1	40%	108.6	31%			87.9	25%			83.7	24%

Table 3 - 2020 Microbiological Sample Count

Month	January	February	March	April	May	June	July	August	September	October	November	December
DISTRIBUTION	154	154	154	154	154	154	143	154	165	165	165	154
TREATED	180	160	184	167	171	181	182	175	185	175	174	159
RAW	21	20	22	21	21	22	23	21	22	22	21	19
TOTAL	355	334	360	342	346	357	348	350	372	362	360	332

Table 4 - 2020 Distribution Chlorine Residuals

JANUARY TO MARCH 2020

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D20	D21	D22
Jan	LOW	1.14	1.18	0.93	0.98	0.83	1.19	0.87	1.12	0.97	1.41	1.15	1.10	1.04	1.10	1.13	1.04	1.17	1.15	1.11	0.88	0.88
	HIGH	1.49	1.36	1.32	1.13	1.08	1.38	1.17	1.38	1.26	1.61	1.39	1.34	1.19	1.33	1.35	1.38	1.31	1.47	1.21	1.19	1.08
	AVG	1.29	1.29	1.15	1.05	1.00	1.29	1.02	1.28	1.13	1.51	1.23	1.19	1.14	1.20	1.23	1.24	1.24	1.33	1.14	1.06	0.99
Feb	LOW	1.11	1.08	0.91	0.89	0.78	1.08	0.74	0.95	0.84	1.33	0.94	0.97	0.87	0.98	0.92	1.08	0.95	1.02	0.71	0.81	0.69
	HIGH	1.28	1.25	1.23	1.27	1.05	1.41	1.06	1.29	1.19	1.67	1.25	1.22	1.15	1.24	1.19	1.46	1.21	1.31	1.15	1.42	1.04
	AVG	1.22	1.18	1.02	1.05	0.91	1.32	0.94	1.17	1.06	1.48	1.08	1.12	1.07	1.09	1.07	1.23	1.10	1.20	0.98	1.06	0.87
Mar	LOW	1.04	1.00	0.88	0.65	0.77	0.98	0.63	0.90	0.86	1.14	0.91	1.00	0.67	0.82	0.98	0.88	1.05	1.05	0.93	0.77	0.81
	HIGH	1.46	1.51	1.19	1.41	1.09	1.49	1.05	1.36	1.17	1.86	1.26	1.37	1.35	1.34	1.27	1.28	1.43	1.49	1.31	1.18	1.28
	AVG	1.24	1.22	1.02	0.96	0.98	1.18	0.87	1.08	0.99	1.45	1.09	1.15	0.99	1.11	1.09	1.11	1.22	1.24	1.09	0.96	1.08
Quarterly Avg		1.25	1.23	1.07	1.02	0.96	1.26	0.94	1.18	1.06	1.48	1.13	1.15	1.07	1.13	1.13	1.19	1.18	1.26	1.07	1.03	0.98

NOTE: All values in mg/l unless otherwise stated

APRIL TO JULY 2020

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D20	D21	D22
Apr	LOW	1.03	1.03	0.85	0.61	0.77	0.88	0.68	0.89	0.84	1.18	0.84	0.90	0.83	0.94	0.87	0.97	0.94	1.04	0.85	0.91	0.87
	HIGH	1.42	1.55	1.24	1.03	1.27	1.53	0.98	1.23	1.23	1.44	1.11	1.29	1.45	1.34	1.32	1.31	1.17	1.41	1.36	1.29	1.11
	AVG	1.19	1.20	1.04	0.89	0.94	1.12	0.82	1.05	1.00	1.33	1.03	1.07	1.12	1.10	1.09	1.14	1.10	1.21	1.01	1.04	0.95
May	LOW	1.04	0.99	0.85	0.70	0.74	0.99	0.71	0.92	0.86	1.25	0.88	0.78	0.90	0.90	0.68	0.95	0.92	1.02	0.87	0.89	0.75
	HIGH	1.25	1.31	1.04	1.07	1.02	1.38	0.89	1.39	1.18	1.47	1.32	1.29	1.26	1.20	1.27	1.53	1.30	1.39	1.23	1.22	1.08
	AVG	1.13	1.14	0.95	0.91	0.89	1.17	0.79	1.10	1.02	1.33	1.08	1.05	1.12	1.07	1.05	1.17	1.09	1.15	1.03	1.05	0.91
Jun	LOW	1.17	1.16	1.20	0.94	0.83	0.89	0.85	1.05	0.97	1.27	1.02	1.05	0.99	0.97	0.96	1.15	1.24	1.08	1.06	1.04	0.88
	HIGH	1.54	1.58	1.35	1.23	1.17	1.55	1.17	1.49	1.34	1.67	1.33	1.69	1.40	1.38	1.20	1.35	1.48	1.36	1.23	1.28	1.18
	AVG	1.40	1.37	1.25	1.10	1.01	1.27	0.96	1.25	1.13	1.47	1.24	1.27	1.14	1.22	1.05	1.27	1.40	1.26	1.16	1.20	1.08
Quarterly Avg		1.24	1.24	1.08	0.97	0.95	1.19	0.85	1.14	1.05	1.38	1.12	1.13	1.13	1.13	1.06	1.20	1.20	1.21	1.07	1.10	0.98

NOTE: All values in mg/l unless otherwise stated

Table 4 - 2020 Distribution Chlorine Residuals

JULY TO SEPTEMBER 2020

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D20	D21	D22
Jul	LOW	1.19	1.17	1.08	0.80	0.81	1.20	0.90	1.21	1.00	1.41	1.03	0.98	1.06	1.18	0.84	1.13	1.28	1.12	0.94	1.01	1.00
	HIGH	1.51	1.33	1.28	1.32	1.12	1.44	1.06	1.27	1.24	1.64	1.32	1.42	1.39	1.34	1.32	1.36	1.63	1.34	1.20	1.20	1.13
	AVG	1.37	1.24	1.17	1.08	0.99	1.38	0.99	1.25	1.14	1.54	1.19	1.23	1.21	1.26	1.09	1.28	1.43	1.26	1.09	1.15	1.07
Aug	LOW	1.22	1.11	0.88	0.80	0.73	1.02	0.66	0.91	0.88	1.25	0.98	1.04	1.02	1.01	0.72	1.08	1.03	1.19	0.95	0.93	0.85
	HIGH	1.33	1.34	1.12	1.02	1.04	1.34	1.02	1.22	1.19	1.57	1.18	1.26	1.57	1.28	1.19	1.17	1.29	1.34	1.11	1.25	1.00
	AVG	1.27	1.23	1.03	0.94	0.87	1.19	0.86	1.06	1.04	1.40	1.10	1.13	1.17	1.15	1.00	1.14	1.14	1.26	1.03	1.11	0.92
Sep	LOW	1.12	1.17	1.06	0.87	0.73	1.07	0.75	1.01	0.97	1.36	1.04	1.01	0.98	0.90	0.81	1.08	0.99	1.11	0.99	1.07	0.79
	HIGH	1.55	1.50	1.33	1.10	1.24	1.49	0.98	1.45	1.27	1.65	1.37	1.38	1.37	1.51	1.39	1.36	1.33	1.54	1.21	1.31	1.25
	AVG	1.41	1.37	1.24	1.01	0.94	1.29	0.88	1.23	1.14	1.49	1.21	1.20	1.16	1.18	1.14	1.22	1.20	1.36	1.10	1.17	0.97
Quarterly Avg		1.35	1.28	1.15	1.01	0.93	1.28	0.91	1.18	1.10	1.48	1.17	1.19	1.18	1.19	1.08	1.22	1.26	1.29	1.07	1.14	0.99

NOTE: All values in mg/l unless otherwise stated

OCTOBER TO DECEMBER 2020

		D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D20	D21	D22
Oct	LOW	1.16	1.17	1.07	0.88	0.99	1.27	0.74	1.16	1.04	1.29	1.07	1.06	0.92	1.07	0.75	0.77	0.99	1.10	0.96	1.02	0.83
	HIGH	1.45	1.40	1.30	1.10	1.15	1.48	0.95	1.43	1.29	1.60	1.43	1.39	1.32	1.40	1.33	1.40	1.41	1.46	1.26	1.29	1.26
	AVG	1.32	1.32	1.22	0.95	1.05	1.36	0.85	1.28	1.18	1.45	1.25	1.26	1.20	1.29	1.12	1.21	1.28	1.33	1.15	1.16	1.04
Nov	LOW	1.10	0.98	1.06	0.82	0.96	1.18	0.84	1.16	1.12	1.35	1.18	1.12	1.18	1.10	1.17	1.20	1.25	1.21	1.13	0.89	0.96
	HIGH	1.40	1.40	1.24	1.24	1.06	1.49	1.20	1.53	1.25	1.47	1.33	1.30	1.35	1.36	1.34	1.37	1.34	1.38	1.21	1.36	1.12
	AVG	1.31	1.25	1.15	1.09	1.01	1.35	1.00	1.28	1.18	1.42	1.26	1.21	1.25	1.21	1.28	1.28	1.30	1.34	1.18	1.19	1.04
Dec	LOW	1.19	1.23	1.09	1.04	0.70	0.97	0.91	1.23	0.93	1.34	1.15	1.06	1.13	1.06	1.11	1.20	1.18	1.30	0.93	1.04	0.91
	HIGH	1.65	1.37	1.36	1.45	1.21	1.47	1.12	1.51	1.29	1.65	1.39	1.30	1.41	1.31	1.36	1.51	1.44	1.47	1.34	1.24	1.21
	AVG	1.44	1.30	1.22	1.27	1.02	1.27	1.07	1.34	1.17	1.49	1.24	1.21	1.20	1.17	1.21	1.33	1.28	1.36	1.18	1.15	1.03
Quarterly Avg		1.36	1.29	1.20	1.10	1.03	1.33	0.97	1.30	1.18	1.45	1.25	1.23	1.21	1.22	1.20	1.27	1.28	1.34	1.17	1.17	1.04

NOTE: All values in mg/l unless otherwise stated

(0.05 mg/L - minimum standard per Ministry of Environment)
(0.20 mg/L - miminum WUC standard)

Table 5 - 2020 Operating Parameters

		JANUARY			FEBRUARY			MARCH			PLANT PARAMETERS HIGH LOW VALUES		MINISTRY MAC	
		HIGH	LOW	AVG.	HIGH	LOW	AVG.	HIGH	LOW	AVG.			HIGH(*1)	LOW
COLOUR (*2)	TCU	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	5.00	0.00	N/A	
ALUMINUM (*3)	µg/l	18	9	14	17	11	13	21	12	17	100.0	0.0	N/A	
pH (*2)		7.11	6.89	7.00	7.15	6.97	7.06	7.16	6.94	7.07	7.30	6.50	N/A	
TURBIDITY (*1)	NTU	0.06	0.03	0.04	0.08	0.03	0.04	0.05	0.03	0.03	1.00	0.00	1.00	0.00
HARDNESS (*2)	mg/L	138	98	112	160	100	117	154	100	118	100	80	N/A	
TEMPERATURE	°C	4.0	1.7	2.8	2.8	1.3	2.0	7.8	1.7	4.7			N/A	
ODOUR/TASTE		(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	in-offensive		N/A	
ALKALINITY (*2 and *3)	mg/L	94	72	81	106	70	80	112	78	92	500	30	N/A	
CHLORINE RESIDUAL (*1)	mg/L	1.67	1.47	1.55	1.68	1.45	1.55	1.65	1.34	1.48	1.50	0.80	N/A	0.05

		APRIL			MAY			JUNE			PLANT PARAMETERS HIGH LOW VALUES		MINISTRY MAC	
		HIGH	LOW	AVG.	HIGH	LOW	AVG.	HIGH	LOW	AVG.			HIGH(*1)	LOW
COLOUR (*2)	TCU	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	5.00	0.00	N/A	
ALUMINUM (*3)	µg/l	29	12	19	48	13	27	72	37	54	100.0	0.0	N/A	
pH (*2)		7.14	6.96	7.05	7.12	6.96	7.05	7.16	6.96	7.04	7.30	6.50	N/A	
TURBIDITY (*1)	NTU	0.06	0.03	0.04	0.08	0.05	0.06	0.13	0.05	0.07	1.00	0.00	1.00	0.00
HARDNESS (*2)	mg/L							112	82	94	100	80	N/A	
TEMPERATURE	°C	10.7	6.8	8.5	16.0	12.5	14.3	22.1	19.2	20.4			N/A	
ODOUR/TASTE		(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	in-offensive		N/A	
ALKALINITY (*2 and *3)	mg/L	100	80	90	100	80	85	92	76	82	500	30	N/A	
CHLORINE RESIDUAL (*1)	mg/L	1.75	1.40	1.54	1.70	1.38	1.56	1.67	1.50	1.58	1.50	0.80	N/A	0.05

Table 5 - 2020 Operating Parameters

		JULY			AUGUST			SEPTEMBER			PLANT PARAMETERS HIGH LOW VALUES		MINISTRY MAC	
		HIGH	LOW	AVG.	HIGH	LOW	AVG.	HIGH	LOW	AVG.			HIGH(*1)	LOW
COLOUR (*2)	TCU	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	5.00	0.00	N/A	
ALUMINUM (*3)	µg/l	204	49	99	143	24	63	81	23	45	100.0	0.0	N/A	
pH (*2)		7.17	6.96	7.06	6.99	7.00	7.05	7.16	7.04	7.09	7.30	6.50	N/A	
TURBIDITY (*1)	NTU	0.11	0.04	0.07	0.11	0.05	0.07	0.10	0.05	0.06	1.00	0.00	1.00	0.00
HARDNESS (*2)	mg/L	112	90	100	98	98	94	110	96	101	100	80	N/A	
TEMPERATURE	°C	26.0	24.1	25.1	23.8	23.5	23.9	20.2	17.9	19.0			N/A	
ODOUR/TASTE		(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	in-offensive		N/A	
ALKALINITY (*2 and *3)	mg/L	84	76	79	70	76	82	88	76	82	500	30	N/A	
CHLORINE RESIDUAL (*1)	mg/L	1.73	1.47	1.58	1.70	1.41	1.53	1.73	1.51	1.60	1.50	0.80	N/A	0.05

		OCTOBER			NOVEMBER			DECEMBER			PLANT PARAMETERS HIGH LOW VALUES		MINISTRY MAC	
		HIGH	LOW	AVG.	HIGH	LOW	AVG.	HIGH	LOW	AVG.			HIGH(*1)	LOW
COLOUR (*2)	TCU	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	5.00	0.00	N/A	
ALUMINUM (*3)	µg/l	52	14	21	20	10	13	11	3	7	100.0	0.0	N/A	
pH (*2)		7.05	7.10	7.05	7.10	6.97	7.03	7.10	6.90	6.95	7.30	6.50	N/A	
TURBIDITY (*1)	NTU	0.05	0.03	0.04	0.06	0.03	0.04	0.04	0.02	0.03	1.00	0.00	1.00	0.00
HARDNESS (*2)	mg/L	108	96	106	138	96	104	128	96	110	100	80	N/A	
TEMPERATURE	°C	11.8	11.7	11.4	11.7	3.0	17.5	6.3	3.0	8.5			N/A	
ODOUR/TASTE		(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	(---)	in-offensive		N/A	
ALKALINITY (*2 and *3)	mg/L	78	80	94	90	78	83	98	78	86	500	30	N/A	
CHLORINE RESIDUAL (*1)	mg/L	1.72	1.42	1.56	1.65	1.40	1.52	1.64	1.35	1.51	1.50	0.80	N/A	0.05

(*1) MAC - Maximum Allowable Concentration
(*2) Health Canada Operational Guidline (O.G.)
(*3) Recommended in coagulant treated drinking water

Schedule 23
Inorganic Parameters

Item	Parameter
1	Antimony
2	Arsenic
3	Barium
4	Boron
5	Cadmium
6	Chromium
7	Mercury
8	Selenium
9	Uranium

Schedule 24
Organic Parameters

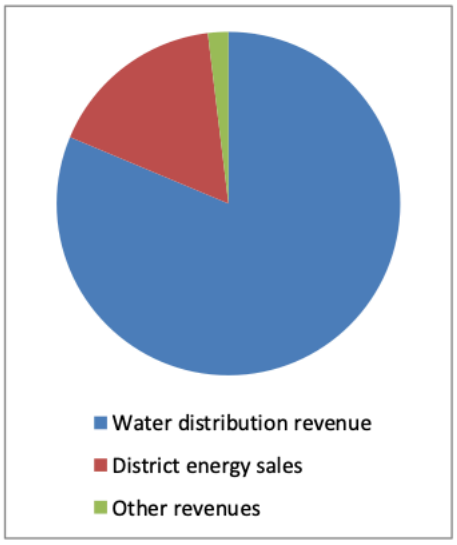
Item	Parameter
1	Alachlor
2	Atrazine + N-dealkylated metabolites
3	Azinphos-methyl
4	Benzene
5	Benzo(a)pyrene
6	Bromoxynil
7	Carbaryl
8	Carbofuran
9	Carbon Tetrachloride
10	Chlorpyrifos
11	Diazinon
12	Dicamba
13	1,2-Dichlorobenzene
14	1,4-Dichlorobenzene
15	1,2-dichloroethane
16	1,1-Dichloroethylene (vinylidene chloride)
17	Dichloromethane
18	2,4-Dichlorophenol
19	2,4-Dichlorophenoxy acetic acid (2,4-D)
20	Diclofop-methyl
21	Dimethoate
22	Diquat
23	Diuron
24	Glyphosate
25	Malathion
26	2-Methyl-4-chlorophenoxyacetic acid
27	Metolachlor
28	Metribuzin
29	Monochlorobenzene
30	Paraquat
31	Pentachlorophenol
32	Phorate
33	Picloram
34	Polychlorinated Biphenyls (PCB)
35	Prometryne
36	Simazine
37	Terbufos
38	Tetrachloroethylene (perchloroethylene)
39	2,3,4,6-Tetrachlorophenol
40	Triallate
41	Trichloroethylene
42	2,4,6-Trichlorophenol
43	Trifluralin
44	Vinyl Chloride

FINANCIAL HIGHLIGHTS

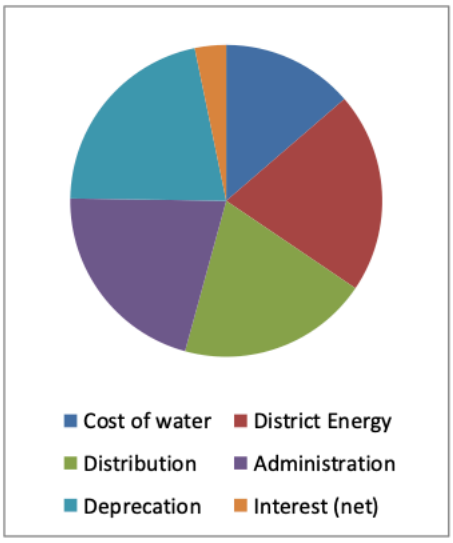
Fiscal Year ending December 31, 2020

(in thousands of dollars)	2020	2019	2018	2017	2016
Operations					
Total revenue	67,892	64,833	64,146	62,237	62,126
Water distribution revenue	55,213	53,653	52,193	50,792	50,341
Operating expenses (excluding deprecation)	35,735	36,559	37,439	37,128	36,906
EBITDA	32,157	28,274	26,707	25,109	25,220
Depreciation	10,214	9,639	8,556	8,715	7,180
Net Income	20,400	17,317	16,410	14,735	16,177
Balance Sheet					
Cash and investments	31,934	24,461	25,181	28,854	33,051
Property, plant and equipment	329,706	312,697	297,680	279,242	258,837
Total Assets	374,907	350,074	334,326	319,511	301,792
Long-term borrowings	51,397	51,381	51,365	51,350	51,332
Equity	292,816	272,682	254,501	237,680	223,287
Cashflows					
Operating	30,601	23,352	21,543	26,134	25,074
Investment in infrastructure	22,895	23,981	25,094	29,509	23,098

Revenue by Type



Expenses by Type



FINANCIAL RESULTS

Fiscal Year ending December 31, 2020

STATEMENT OF INCOME

Net income in 2020 was $20.4 million compared to $17.3 million in 2019. The $3.1 million improvement in earnings is primarily due to higher levels of distribution revenue in 2020 compared to 2019. Distribution revenue increased $1.6 million in 2020 to $55.2 million from $53.6 million in 2019 as a result of a rate increase implemented to support our capital and maintenance programs.

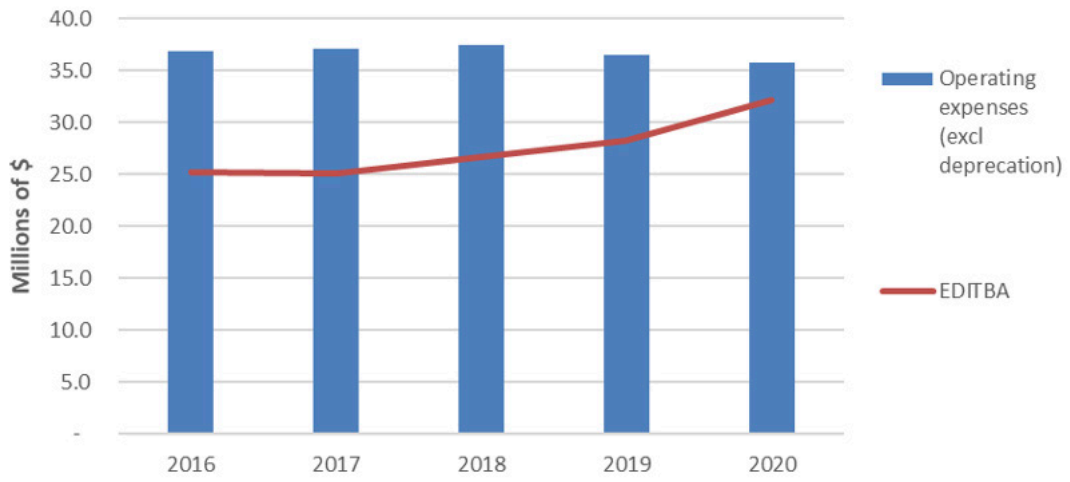
During 2020, WUC invested $22.9 million in property, plant and equipment to ensure sustainability of Windsor's drinking water system.

Operating expenses excluding depreciation of $35.7 million were lower than the $36.6 million spent in 2019.

By controlling operating expenses at current levels for the past 5 years (2020 = $35.7 million, 2016 = $36.9 million), WUC has been able to grow Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) from $25.2 million in 2016 to $32.2 million in 2020.

All earnings were reinvested into the water system.

EDITBA and Operating Expenses



BALANCE SHEET

Strong operating cash flows allowed WUC to maintain adequate liquidity to fund future watermain replacement and water infrastructure renewal. Cash and investment balances at the end of 2020 totaled $31.9 million.

Consistent operating performance and continued investment in infrastructure over recent years has resulted in a 27% increase in WUC property, plant and equipment, and a 31% increase in equity since 2015.

WINDSOR UTILITIES COMMISSIONERS

Drew Dilkens (Chair), LL.B, MBA, DBA, CHRL
Mayor, City of Windsor

Egidio Sovran (Vice-Chair), MBA, CPA, CA
Owner, E L Sovran Professional Corp.
Associate, Grant Thornton

Jeewen Gill
Councillor, City of Windsor, Ward 7

Julian (Jules) Hawkins, CPA, CA
Partner, Hawkins & Co. Accounting Professional Corp.

J. Douglas Lawson, O.Ont. QC, LL.D
Counsel, Willis Business Law

Kieran McKenzie, BA
Councillor, City of Windsor, Ward 9

Jim Morrison, PFP
Councillor, City of Windsor, Ward 10

Mario Sonego, P.Eng.
Retired City Engineer, City of Windsor
President, Sonego Management Inc.

ENWIN UTILITIES LTD. EXECUTIVE MANAGEMENT

Helga Reidel
President & CEO

Matt Carlini
VP Corporate Services & CFO

Paul Gleason
VP Customer Care and Corporate Operations (December 2020)

Jim Brown
VP Hydro Operations

Garry Rossi
Vice President Water Operations

John Wladarski, C.E.T.
Vice President Customer Operations and Business Development & COO (Retired December 2020)