



City of White Rock 2021 Annual Water Report

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Introduction

The City of White Rock (CoWR) is a unique, ocean-side community of nearly 20,000 citizens known for its sunny weather, expansive beach, historic pier, delightful restaurants, and sense of community. The City is located half an hour south of Vancouver on the shore of Semiahmoo Bay.

The City of White Rock's Water Utility Division provides safe and clean drinking water to its residents. The Engineering and Municipal Operations Department is responsible for the maintenance, repair and upgrades of the water supply and distribution system.

The Conditions of Permit issued by Fraser health was issued on August 21, 2019 (Appendix A):

1. The drinking water must be treated to provide an acceptable secondary disinfectant to the whole system that meets requirements of the Guidelines for Canadian Drinking Water Quality and is acceptable to Fraser Health Authority.
2. Arsenic and Manganese levels of the treated water must be monitored on a quarterly basis as a minimum. The results are to be provided to Fraser Health.
3. The City of White Rock has a Level 4 certified water treatment operator. The operator has been certified by Environmental Operators Certification Program (EOCP).

Overview: Water Quality Milestones

2021 was the City of White Rock's sixth year of operating the water utility. Since acquiring the water utility at the end of October 2015, the City has accomplished some substantial milestones, all of which reflect our commitment to delivering safe and clean drinking water to our residents.

- May 31, 2019 - Water Treatment Plant achieved Notice of Completion
- October 26, 2020 - The water utility was moved to be under the Operations Department to better utilize resources.

While our water quality meets Canadian Drinking Water Guidelines, we are always striving to improve water quality beyond what is mandated, enhance the reliability and resiliency of our water infrastructure, and plan for our future.

Stay up to date with water related initiatives in White Rock at www.whiterockcity.ca/230/Water.

Source Water

Drinking water is obtained from the Sunnyside Uplands Aquifer, and distributed through seven wells located throughout the City, Figure-1.

The Sunnyside Aquifer is an important natural resource that is used as the water supply source for the CoWR. Population growth, climate change, sea level rise, and other users of the aquifer may put increasing pressure on the water supply system. The CoWR developed an Aquifer Protection Plan in 2018, as a key component in protecting the community's water supply source. Groundwater protection goals include stakeholder engagement, advancing the understanding of aquifer characteristics, protecting groundwater quality from contamination, and ensuring future withdrawals sustainably meet future demands.

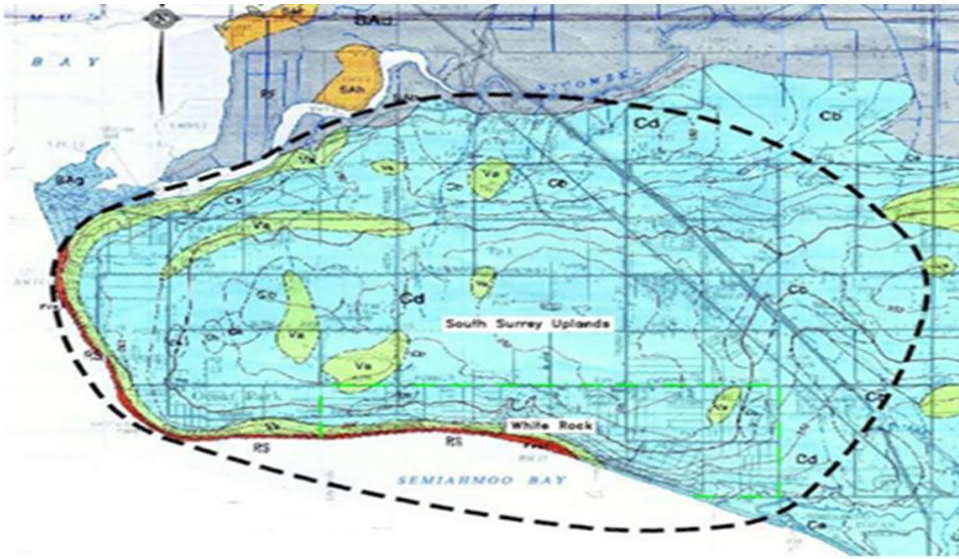


Figure-1, Sunnyside Uplands Aquifer

Water Distribution System

The existing well network includes seven pumping wells located at three different sites as shown in Figure-2. The wells can provide a combined supply of approximately 15 ML per day. These wells provide adequate water supply for the CoWR community even at peak consumption during the summer months, when consumption has risen to 11 ML per day.

Wells 1, 2, 3, and 8 are located at the Oxford Site. In previous years well 4 was a seasonal well utilized during the months of June, July and August and is located at High Street. It is now connected to the Water Treatment Plant which provides one common treatment plant for all wells. Wells 6 and 7 are located at the Merklin Site. Well 5 was taken out of service on February 16th, 2018, and Well 8 was constructed in 2018, Figure-2.



Figure-2, City of White Rock Water Wells

Maintenance Programs

The maintenance and day-to-day water operations for the water treatment plant, 2 pumping stations, 3 reservoirs, 80 km of pipes, 7 wells and 402 fire hydrants are conducted by the staff of the Water Division, Engineering and Municipal Operations, City of White Rock. All Water Operators are licensed with the Environmental Operators Certification Program (EOCP).

The City has an ongoing preventative maintenance program that includes:

- Operation and maintenance of two pumping stations (See figure 3)
- Valve exercising
- Hydrant inspection and servicing
- Flushing of water mains through UDF (uni-directional flushing) program
- Testing and calibration of WTP automated analyzers
- Regular backwash of filters at the Water Treatment Plant
- Chemicals addition and monitoring
- 2 secondary disinfection systems
- Maintain 3 PRV stations
- Annual full water chemical analysis
- Documentation of the above
- Reservoir maintenance

Other services include:

- Installation of water services for new home construction
- Water infrastructure repairs and maintenance
- Water quality sampling and testing
- Respond to resident's request and concerns (sampling may be required)
- Water meter maintenance and quarterly reading
- New fire hydrant installations. (See figure 4)
- 24/7 emergency repairs

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Maintenance upgrades during 2021 included:

- 124 water meter replacements
- 6 new fire hydrants
- 37 water service upgrades/upgrades



Figure-3



Figure-4

Facilities Security

Municipal and private water systems security measures throughout Canada are being elevated to reduce the potential for vandalism or other activities that could impact water quality or water supply to the public.

The Oxford Water facility (that includes 4 wells, reservoir and Treatment) was the last facility to be fenced. Additional security measures on the property mitigate the potential for intrusions.

Cyber security is a worldwide threat to critical infrastructure. The City has implemented a number of technologies and practices to mitigate cyber security threats and will continue to stay up to date in the current threat environment.

Pressure Monitoring System

Public infrastructure systems are complex, many are underground and therefore difficult to access and inspect. It is standard practice to differentiate between linear assets (pipes, roads, etc.) and non-linear or discrete assets (pumps, plants, etc.) since each category presents different type of management challenges. Providing services to the public requires all the components within a system to perform adequately since the robustness – and therefore the safety and quality of the service is dependent on its components working in unison.

Infrastructure assets also have very long service lives – water mains in the distribution piping are in use in many locations as long as for 80 years, or longer. Pressure is one of the primary optimization parameters for the delivery of safe drinking water. The loss of pressure in the distribution system can potentially allow outside water sources to contaminate the distribution system. Fluctuations in pressure can affect the physical integrity of pipes. Pressure surges are known to generate an increase in leaks, and water main breaks, which affects the service life of the water system. The use of pressure sensors provides a measure of what is occurring along the water distribution pipelines.

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Establishing the exposure and sensitivity of infrastructure to threats, whether from extreme climate events, earthquakes, or from uncontrolled activities such as new development, or unlawful use of water hydrants.

The City completed the work on the implementation of a remote pressure monitoring system that was deployed in the water distribution system. The system contains sensors located throughout the high and low pressure zones that relay pressure, temperature, and battery level to a secure web server. These readings are then relayed to the Water Utility SCADA system, which allows the operators to receive real-time information on water pressure.

Unidirectional Flushing Program

Unidirectional Flushing Program (UDF) is an important component of any water utility's routine distribution system maintenance. Flushing removes sediments, deposits, and biofilm build-up from the water distribution system, which improves water quality and leads to less customer complaints. Incorporating unidirectional flushing techniques allows the utility to improve the degree of water main cleaning, reduces the total time it takes to complete the program, and decreases the frequency of flushing. Flushing of the distribution system is important to the maintenance and to the preservation or improvement of water quality and control of bacterial growth. Our operators review the previous year's flushing results to evaluate the run setup for comparison of the outcomes. Results are reviewed on an annual basis to see if less or more frequent flushing is required.

Water main flushing at the City of White Rock has been conducted regularly since 2016 for a variety of reasons, including: corrosion control; sediment removal; taste and odor control; maintain low turbidity; maintain disinfectant residual; and to prevent the potential of bacterial growth. The City has been divided into 3 Areas (Figure-5 below) to divide the work into manageable areas.



Figure-5, Unidirectional Flushing Areas 1, 2 & 3

There have been significant improvements in the amount of time it takes to complete the program since the treatment plant came into operation. On average, the time to complete the program has decreased by 30 % over the last 6 UDF Programs. The program has been implemented every year, starting in 2016, in the months of October to December. The program was implemented twice in 2017 in order to have a higher improvement after noticing the results in 2016. After many years of conducting the UDF Program, a significant improvement has been noticed. In addition, since the end of March 2019, the Water Treatment Plant has been delivering a significantly improved water quality with Manganese concentration reduced to below detection limit.

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Table 1 shows the results of the UDF program over the last two years. With this reduction, water operators do not have to take as much time to flush out deposits, which in the long term should decrease flushing volumes, duration, and frequency of flushing. Other Factors influencing results include the following:

- Water system upgrades
- System residual levels
- Long-term effect of secondary disinfection
- Less frequent flushing
- Operator errors or run design errors

The cost of the UDF Program is expected to decrease over the long term with a reduction of volume and time. Operators continue to track all the data from the program.

Area 1	2020	2021
Total Water for flushing Volume	1,698 m ³	1,510 m ³
Time	669 min.	563 min.
Area 2		
Total Water for flushing Volume	3,930 m ³	3,586 m ³
Time	1,465 min.	1,345 min.
Area 3		
Total Water for flushing Volume	1,582 m ³	1,395 m ³
Time	700 min.	611 min.

Table 1 Volume of Flushing water used and Time comparisons for UDF Program in 2020 and 2021



Figure-6, The Water Division Operators conducting the Unidirectional Flushing program

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The UDF Program improved the condition of the Distribution System by removing sediment and biofilm, which reduces potential impacts on water quality delivered to the public. This also reduces the potential of having negative aesthetic impacts on the water delivered. In addition, over the long and short term, the expectation is a reduction of water used and a lower frequency of the flushing program which is an important step in water conservation and in management of water resources considering the relationship between Climate Change and Water Conservation.

Operation of the Water Treatment Plant

The quality of drinking water is of the utmost importance to the City, which is why regular water testing is conducted. The City of White Rock has taken steps to build a water treatment plant to remove arsenic and manganese, hired in-house experts and consultants who have extensive experience. The City applied for infrastructure grants funding programs by the provincial and federal governments, which is not available to private organizations. The Government of Canada and the Province of British Columbia provided funding from the Clean Water and Wastewater Fund (CWWFA) to the City of White Rock for the “Arsenic and Manganese Water Treatment Project No. C40174.”

As part of the City’s acquisition and operation of the water utility, the City is under mandate by the Fraser Health Authority to implement a secondary form of water disinfection and to reduce the arsenic concentration levels in the drinking water. The work is necessary to treat the water supply to meet the Canadian Drinking Water Guidelines. The completion of the Water Treatment Plant met that requirement being completed in 2019.

The City of White Rock has been successful in maintaining the manganese level well below the limits set by the Guidelines for Canadian Drinking Water Quality for the drinking water leaving the Water Treatment Plant (WTP). Ferric chloride was introduced as a coagulation in February 2020 in order to improve the removal of arsenic and phosphate in the Greensand Filters. This reduced the amount of arsenic and phosphate entering the E33 contactors, which helps to extend the E33 filter life.

An Arsenic EZ-Analyzer was installed and commissioned in September 2020, which provides Real-Time Arsenic results for raw water, Post green sand plus (GS+) and Post E33 filter media. This helps making changes to the system without any delays. It also helps to compare the Analyzer Data to the analysis done by the Laboratory.

Water treatment process and the technologies in the design

The White Rock Water Treatment Plant is designed to treat the City’s existing groundwater supplies to remove naturally occurring manganese and arsenic to ensure that an improved drinking water quality is supplied to the residents that meets the guidelines and aesthetic objectives. The plant is built next to the Oxford Pumping Station.

The Water Treatment Plant process is a multi-stage process and includes the following key treatment components:

- Pre-Oxidation with ozone for arsenic and manganese in the raw water supply.
- Ferric Chloride added to the process
- Removal of manganese using Greensand Plus media filters.
- Removal of arsenic using Bayoxide E33 media filters.

Ozone Pre-oxidation

Research has shown that the application of ozone for water treatment processes can enhance the ability to remove many emerging contaminants and reduce disinfectant byproducts. Ozone, a strong oxidant, is very effective in the oxidation of organic and inorganic compounds more effectively than chlorine. Arsenic present in groundwater in As(III) form needs to be oxidized to As(V). To have an optimum removal of As(III) which is neutrally charged, it should be oxidized to As(V) which is negatively charged. Strong chemical oxidants like ozone oxidize As(III) very rapidly, thus contact time generally is not a critical factor for optimizing arsenic removal. The simple oxidation reactions between ozone and arsenic, and manganese are as follows:

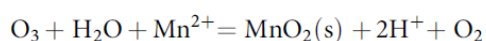
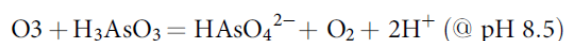
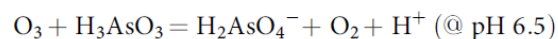


Figure-7

Manganese and Arsenic Removal

Manganese removal in groundwater supply has been practiced for many decades. Technology approaches are mature, and improvements in treatment efficiency have been only incremental. The focus on arsenic removal technologies has been increasing due to more emerging evidence of concerns over human exposure risks of arsenic that led to changes of guidelines for arsenic in drinking water. Knowledge of raw water quality is an important factor in the selection of the technology and processes to remove certain organic or inorganic compounds that might interfere in achieving the targeted effluent water quality.

The City of White Rock's groundwater has elevated, naturally occurring arsenic and manganese. The research conducted by the City of White Rock and RES'EAU WaterNet showed that the use of ozone as a pre-oxidant, followed by greensand and adsorption filter media for the removal of manganese and arsenic, respectively, is effective for groundwater sources like White Rock's water supply. NAC/Associated Engineering, the Design/Build Team developed the design to include filtration using Greensand Plus media for manganese reduction, and AdEdge E33 adsorption media, for arsenic polishing to achieve the low target levels required by the City. The use of ozone for pre-oxidation of the arsenic and manganese prior to the two-stage process; filtration and adsorption process were included in the design due to the facts that:

- Many arsenic removal technologies are more effective at removing the pentavalent form of arsenic, arsenate, As(V) than, As(III). Therefore, many treatment systems include a peroxidation step to convert Arsenite, As(III) to Arsenate As(V)
- Ozone can achieve 100% oxidation of As(III) to As(V)
- Oxidation alone does not remove arsenic from solution, and must be coupled with a removal process such as coagulation, adsorption, or ion exchange
- Manganese removal was very effective using ozone followed by Greensand Plus media

Water Treatment Objectives

Water quality parameters meet the objectives of the Guidelines for Canadian Water Quality (GCDWQ).

The Water Treatment Plant started operation in March 2019. Water quality improvement were noticeable with the removal of arsenic and manganese.

Performance changes to the water treatment plant are monitored closely. The staff of the Water Division work diligently to optimize the process to reduce operating costs.

Adjustments were made to initial ozone dosages, monitoring the impact on manganese concentration in the Greensand Plus effluent. Remarkable results were achieved, bringing manganese concentration to below detection limit. Arsenic Speciation was monitored to make sure that process change did not have an impact on arsenic oxidation. The analysis confirmed complete oxidation of As(III) to As(V) at low ozone dosages.

To improve arsenic removal, an introduction of a coagulant was recommended to NAC and AdEdge to improve the removal of arsenic and to bring the arsenic level to be within the Plant Design Objectives.

Climate Change Implications

The water quality analysis indicated a significant improvement in drinking water quality supplied to the residents of the City of White Rock after the implementation of Water Treatment Plant. Many positive comments came from residents who indicated that they are using tap water instead of bottled water, which reduces waste in landfills and plastics pollution in our water sources.

The new Water Treatment Plant delivered drinking water with significantly low manganese, which almost eliminated the addition of manganese to the distribution system. The Unidirectional Flushing (UDF) of the distribution system made a noticeable reduction in deposited manganese in the distribution system, reducing water used for flushing, and the energy used to produce and pump that amount of water.





Figure-8, Water Treatment Plant Ozone System



Figure-9, The newly constructed White Rock Water Treatment Plant

Communications and Education

Since acquiring the water utility from EPCOR in October of 2015, the City of White Rock has provided unprecedented information to the public on the state of the City's water. This includes steps the City must take as mandated by Health Canada and the Fraser Health, i.e. providing a secondary disinfection throughout the entire system, as well as important capital infrastructure work such as the new Water Treatment Plant. This information is readily available on the City's website under the Water page, which includes links to various projects and initiatives so the public is aware of City action and plans to address and improve the water quality.

The City Water Utility requires EOCPC Certified Operators to work on the drinking water system. The Water Treatment Plant requires a level 3 certified Water Treatment Operator, and a level 4 certified Water Distribution Operator for the distribution system. Staff are currently training up to this certification. There are a total of 7 staff with the following certifications:

- Water Treatment Level 4 – 1 staff
- Water Treatment Level 2 – 1 staff
- Water Treatment Level 1 – 3 staff
- Water Distribution Level 4 – 0 staff
- Water Distribution Level 3 – 1 staff
- Water Distribution Level 2 – 3 staff
- Water Distribution Level 1 – 2 staff

Water Quality Testing

The City has been consolidating all the testing data from January to December 2021. This data is included in Appendix-B: City of White Rock Water Quality Testing for 2021. In addition, testing data is updated regularly on the City of White Rock’s website: www.whiterockcity.ca/300/Water-Quality.

Water Utility staff performed 781 in-house testing for Ph, conductivity, turbidity, chlorine residuals, temperature. Additional sampling is performed at strategic points in the distribution system with the testing conducted by a 3ed party laboratory. All results are copied to Fraser Health. Testing was also conducted for; arsenic, copper, iron, lead, manganese, Chloroform, Bromodichloromethane, Dibromochloromethane, Bromoform, Total THMs, Dibromofluoromethane, Toluene-d8, Bromofluorobenzene, Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Bromochloroacetic Acid, Dibromoacetic Acid, Trichloroacetic Acid and Total HAA6 throughout 2021.

The City also recommends to residents anytime the water in a particular faucet has not been used, to flush the cold-water pipes by running the water until you notice a change in temperature. This could take a short time if there has been recent heavy water use such as showering or toilet flushing. The more time water has been sitting in your home’s pipes, the more manganese it may contain.

Conserving water is still important. Rather than just running the water down the drain, residents could use the water for their plants, garden, or lawn.

Water Consumption

Water consumption patterns are tracked to ensure that the White Rock system continues to provide sufficient water services to customers. Annual, average daily water consumptions and the highest daily consumption (peak day) are shown below, Table-2.

2021 Water Consumption (ML)¹	
Total Potable Water Produced	2,459.3
Max. Day (June 26)	11.4
Annual Average Daily Consumption	7.0

Table-2, Total Annual Water Consumption

Footnote: ¹ 1,000,000 Liters

Storage Capacity

The storage requirements for forecasted demands are as shown in the following table. It is noted that the 16% value for balancing storage is based on past studies estimating the specific balancing requirement needs for the City of White Rock’s system (Kerr Wood Leidal, 2010).

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The available storage capacity is provided in the 2017 Water Master Plan Update, which is summarized below.

DESCRIPTION		ML ¹
Required Balancing Storage	16% of MDD ²	1.99
Required Fire Storage	212 L/s for 2.6 hours	1.98
Required Emergency Storage	25% of the sum of above storage	1.12
	TOTAL REQUIRED	4.96
Available Storage:	Merklin Reservoirs	3.01
	Oxford Reservoir	1.95
	Roper Reservoir (Low Pressure Zone)	1.14
	TOTAL AVAILABLE	6.10

Table-3, Required Storage Vs Available Storage

Foot Notes:

1. 1,000,000 Liters
2. MDD: Maximum daily demand

Capital Projects

1500 Block of Chestnut Street & Stevens Street Watermain Replacement

The 2017 Water Master Plan recommended that cast iron pipe be replaced due its history of premature corrosion. Both of these streets had 100mm cast iron pipe which had a history of leaking.

Capital work, such as this, reduce the operating costs of the City and emergency interruptions in water service.

Project Cost: \$520,000

Construction Schedule: June 1 - October 1, 2021

Scope of work:

- Install new 150mm ductile iron pipe
- Additional fire hydrant added in each block.
- Abandon 100mm cast iron pipe.
- Upgrade water meters to radio frequency reader to reduce staff time when reading meters.
- An Arborist was on site during the construction to mitigate any construction impacts to trees, roots and other vegetation.



Figure-10, Stevens Street watermain construction

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Oxford Street Watermain Tie-ins

The 2017 Water Master Plan recommended the watermain on Prospect and McDonald Avenue be connected to the 200mm watermain on Oxford Street, to improve pressure and fire flows in the neighborhood.

The contractor worked with the property owner to mitigate the impacts of construction at their front door and on the steep hill of Oxford Street.

Project Cost: \$50,000

Construction Schedule: September 2021

Scope of work:

- Tie-in 100mm Prospect Avenue watermain into the 200mm watermain on Oxford Street.
- Tie-in the existing 150mm watermain on McDonald Avenue to the 200mm Oxford Street watermain.
- Abandon the 100mm cast iron pipe that previously connected these 2 segments.



Figure-11, Oxford at Prospect Avenue and McDonald Avenue tie-ins to 200mm watermain on Oxford Street

Surrey Emergency Water Supply Connection

White Rock Water Utility connected the White Rock system to Surrey's Water Utility. Metro Vancouver water is now available in case of any emergency.

Project Cost: \$70,000

Schedule: August 2021

Scope of work:

- 200mm connection to the 250mm watermain on North Bluff Road.
- Included valves and blow-off for each municipality to flush and clean the line before use.
- Completed prior to repaving of North Bluff Road.



Figure-12, North Bluff Road/Best Street Intersection. Connection of White Rocks Water Utility to Surrey's Water Utility.

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Well Upgrades

The Oxford well field programmable logic controller (PLC) was upgraded to provide additional input/outputs for controlling each well's variable frequency drives (VFD). The well pumps push the water through the entire treatment process, through to the reservoirs. Being able to adjust the motor speeds will be easier on the equipment and provide individual control based on each well's operating characteristic such as ground water draw down, pressure, etc. This project will be completed in 2022.

Emergency Response Action Plan

The City has an emergency response plan in case the water supply is interrupted for any reason. There are procedures that City water operators follow whether it is a major or minor problem.

The Emergency Response Plan Action Plan follows five general steps:

1. Analyze the type and severity of the emergency;
2. Take any action needed to save lives;
3. Take action to reduce system damage and injuries and reduce environmental damage;
4. According to priority demand, make appropriate repairs, and
5. Return the system to normal operation.

The Emergency Response Plan was updated in 2019 to the City of White Rock website.

Next Steps for 2022

- Continue the optimization of the Water Treatment Plant processes
- Complete the 2021 approved Capital Works projects
- Work on the 2022 Capital Works projects
- Maintain and upgrade the water distribution system to realize cost savings when possible.
- Provide the training for the Water Operators to have them update/upgrade their licenses.
- Work with Communication Department and the IT Department to maintain updated information on the website

Summary

The City of White Rock has now owned the water utility for six years. During the year of 2021, Water Operations staff collected and sent samples for water quality testing. Unidirectional flushing of the water mains is seeing less accumulations of manganese as compared to 2020.

Water System improvements such as replacing older pipes, well controls and connecting to Metro Vancouver Water will reduce costs and improve resiliency of the system to meet the community demands.

The treatment plant continues to provide water that meets the Canadian Drinking Water Guidelines. City Operations staff work year round to deliver this vital service to White Rock residents.

Appendix A

Fraser Health Permit to Operate



HEALTH
PROTECTION

PERMIT TO OPERATE

A Drinking Water System with
301-10000 Connections

Water Supplier: Corporation of the City of White Rock, The
Facility Name: City of White Rock Water System

CONDITIONS OF PERMIT:

1. The drinking water must be treated to provide an acceptable secondary disinfectant to the whole system that meets requirements of the Guidelines for Canadian Drinking Water Quality and is acceptable to Fraser Health Authority.
2. Arsenic and Manganese levels of the treated water must be monitored on a quarterly basis as a minimum. The results are to be provided to Fraser Health.
3. By June 30, 2021, the City of White Rock must have a Level III certified water treatment operator. The operator must be certified by Environmental Operators Certification Program (EOCP). As an interim measure, the City must have Level II certified operator and maintenance or repair of the treatment system must be conducted following procedures approved by a person certified by EOCP.

21-Aug-2019
Effective Date


Environmental Health Officer

*This permit must be displayed
in a conspicuous place and is nontransferable*





fraserhealth Better health.
Best in health care.

February 1, 2022

Water System Operators

Re: Metals in Drinking Water – “Flush” Message in Annual Reports

Fraser Health has recently revised its metals at the tap “Flush” message and we are asking all water systems to please include the following health message with your next annual reports to your users.

Anytime the water in a particular faucet has not been used for six hours or longer, “flush” your cold-water pipes by running the water until you notice a change in temperature. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home’s pipes, the more lead it may contain.

Use only water from the cold-tap for drinking, cooking, and especially making baby formula. Hot water is likely to contain higher levels of lead.

The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

Conserving water is still important. Rather than just running the water down the drain you could use the water for things such as watering your plants.

If you have any questions, please contact our Drinking Water Program at 604-870-7903.

Sincerely,

Drinking Water Program
Fraser Health Authority
HPLand@fraserhealth.ca

Appendix B
City of White Rock Water Quality Testing Results
January-December 2021

Bacterial Results - 2021

Microbiological Analysis MPN / 100mL	Date	Guideline Limit 0 per 100 ml	# of Samples	Pass	Fail	Guideline Comments
Total Coliforms	04-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	04-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	05-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	05-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	11-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	11-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	12-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	12-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	18-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	18-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	19-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	19-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	25-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	25-Jan-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	26-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	26-Jan-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	01-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	01-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	02-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	02-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	08-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	08-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	09-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	09-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	16-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	16-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	17-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	17-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	22-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	22-Feb-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	23-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	23-Feb-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	01-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	01-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	02-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	02-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	08-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	08-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	09-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	09-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	15-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	15-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	16-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	16-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	22-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	22-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	23-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	23-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	29-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	29-Mar-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	30-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	30-Mar-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	06-Apr-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	06-Apr-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	07-Apr-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	07-Apr-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	12-Apr-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	12-Apr-21	0 per 100 mL	7	7	0	Below Guideline

Microbiological Analysis MPN / 100mL	Date	Guideline Limit 0 per 100 ml	# of Samples	Pass	Fail	Guideline Comments
Total Coliforms	27-Jul-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	27-Jul-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	03-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	03-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	04-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	04-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	09-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	09-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	10-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	10-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	16-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	16-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	17-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	17-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	23-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	23-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	24-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	24-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	30-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	30-Aug-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	31-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	31-Aug-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	07-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	07-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	08-Sep-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	08-Sep-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	13-Sep-21	0 per 100 mL	6	6	0	Below Guideline
Escherichia Coli	13-Sep-21	0 per 100 mL	6	6	0	Below Guideline
Total Coliforms	14-Sep-21	0 per 100 mL	9	9	0	Below Guideline
Escherichia Coli	14-Sep-21	0 per 100 mL	9	9	0	Below Guideline
Total Coliforms	20-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	20-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	21-Sep-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	21-Sep-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	27-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	27-Sep-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	04-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	04-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	05-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	05-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	12-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	12-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	13-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	13-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	19-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	19-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	20-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	20-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	25-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	25-Oct-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	27-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	27-Oct-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	01-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	01-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	03-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	03-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	08-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	08-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	09-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	09-Nov-21	0 per 100 mL	8	8	0	Below Guideline

Microbiological Analysis MPN / 100mL	Date	Guideline Limit 0 per 100 ml	# of Samples	Pass	Fail	Guideline Comments
Total Coliforms	15-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	15-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	16-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	16-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	22-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	22-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	23-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	23-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	29-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	29-Nov-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	30-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	30-Nov-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	07-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	07-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	08-Dec-21	0 per 100 mL	8	8	0	Below Guideline

Microbiological Analysis MPN / 100mL	Date	Guideline Limit 0 per 100 ml	# of Samples	Pass	Fail	Guideline Comments
Escherichia Coli	08-Dec-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	13-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	13-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	14-Dec-21	0 per 100 mL	8	8	0	Below Guideline
Escherichia Coli	14-Dec-21	0 per 100 mL	8	8	0	Below Guideline
Total Coliforms	20-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Escherichia Coli	20-Dec-21	0 per 100 mL	7	7	0	Below Guideline
Total Coliforms	20-Dec-21	0 per 100 mL	7	7	0	Below Guideline

Water Treatment Plant Metal Results 2021

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
WTP - Raw Water	04-Jan-21	7.0	<0.5	<0.01	6	120	<5		7.95
Treated Water	04-Jan-21	1.6	<0.5	<0.01	5	<1	<5		8.02
WTP - Raw Water	18-Jan-21	7.5	1.00	<0.1	<10	130	<5		7.97
Treated Water	18-Jan-21	2.0	<1	<0.1	<10	<5	<5		7.89
WTP - Raw Water	02-Feb-21	8.3	<0.5	0.01	<4	130	<5		8.02
Treated Water	02-Feb-21	2.3	<0.5	<0.01	<4	<1	<5		8.03
WTP - Raw Water	16-Feb-21	7.0	<1	<0.1	<10	125	<5		7.98
Treated Water	16-Feb-21	2.8	<1	<0.01	<10	<5	<5		8.00
WTP - Raw Water	01-Mar-21	7.8	<0.5	<0.01	<4	130	<5		8.00
Treated Water	01-Mar-21	2.6	<0.5	0.01	<4	<1	<5		8.03
WTP - Raw Water	15-Mar-21	6.8	3.30	0.07	26	260	<5		7.96
Treated Water	15-Mar-21	2.9	<0.5	<0.01	<4	<1	<5		7.93
WTP - Raw Water	29-Mar-21	7.2	<0.5	<0.01	<4	1	<5		8.08
Treated Water	29-Mar-21	3.3	<0.5	<0.01	<4	<1	<5		8.06
WTP - Raw Water	07-Apr-21	7.2	<0.5	<0.01	<4	15	<5		8.14
Treated Water	07-Apr-21	3.2	<0.5	<0.01	<4	<1	<5		8.06
WTP - Raw Water	12-Apr-21	7.4	<0.5	<0.01	<4	17	<5		7.98
Treated Water	12-Apr-21	3.3	<0.5	0.02	<4	<1	<5		8.07
WTP - Raw Water	19-Apr-21	6.6	<0.5	0.02	<7	190	<5		8.05
Treated Water	19-Apr-21	3.6	<0.5	<0.01	<4	<1	<5		8.10
WTP - Raw Water	26-Apr-21	7.1	<0.5	<0.01	<4	94	<5		8.12
Treated Water	26-Apr-21	3.7	<0.5	<0.01	<4	<1	<5		8.07
WTP - Raw Water	03-May-21	8.1	<0.5	<0.01	<4	150	<5		8.06
Treated Water	03-May-21	3.7	<0.5	<0.01	<4	<1	<5		8.07
WTP - Raw Water	10-May-21	6.6	<0.5	<0.01	<4	160	<5		8.24
Treated Water	10-May-21	3.7	<0.5	<0.01	<4	<1	<5		7.70
WTP - Raw Water	17-May-21	6.5	<0.5	<0.01	<6	160	<5		8.21
Treated Water	17-May-21	3.8	<0.5	<0.01	<4	<1	<5		8.23
WTP - Raw Water	25-May-21	6.5	<0.5	0.0	<4	160	<5		8.12
Treated Water	25-May-21	3.7	<0.5	<0.01	<4	<1	<5		8.09
WTP - Raw Water	31-May-21	6.4	<0.5	0.0	<4	150	<5		8.08
Treated Water	31-May-21	3.6	<0.5	<0.01	<4	<1	<5		8.08
WTP - Raw Water	08-Jun-21	7.0	<0.5	<0.01	5	130	<5		8.04
Treated Water	08-Jun-21	3.5	<0.5	<0.01	4.0	<1	<5		8.07
WTP - Raw Water	14-Jun-21	7.0	<0.5	<0.01	<4	140	<5		7.98
Treated Water	14-Jun-21	3.3	<0.5	<0.01	<4	<1	<5		8.05
WTP - Raw Water	21-Jun-21	7.3	4.0	0.02	5	150	<5		7.81
Treated Water	21-Jun-21	3.9	<0.5	<0.01	<4	<1	<5		7.87
WTP - Raw Water	28-Jun-21	6.9	<0.5	<0.01	<4	140	<5		8.17
Treated Water	28-Jun-21	4.0	<0.5	<0.01	<4	<1	<5		8.11
WTP - Raw Water	05-Jul-21	6.4	<0.5	0.01	<4	140	<5		8.11
Treated Water	05-Jul-21	4.0	<0.5	<0.01	<4	<1	<5		8.10
WTP - Raw Water	13-Jul-21	6.8	<0.5	<0.01	<4	130	<5		8.08
Treated Water	13-Jul-21	4.7	<0.5	<0.01	4.0	<1	<5		8.14
WTP - Raw Water	20-Jul-21	6.8	<0.5	<0.01	5	130	<5		8.01
Treated Water	20-Jul-21	4.5	<0.5	<0.01	<4	<1	<5		8.08
WTP - Raw Water	26-Jul-21	6.7	0.6	<0.01	<4	140	<5		8.04
Treated Water	26-Jul-21	4.6	<0.5	<0.01	<4	<1	<5		8.11
WTP - Raw Water	03-Aug-21	6.6	<0.5	<0.01	<4	130	<5		7.89
Treated Water	03-Aug-21	4.7	<0.5	<0.01	<4	1	5		7.79
WTP - Raw Water	03-Aug-21	4.7	<0.5	<0.01	<4	1	5		7.79
Treated Water	03-Aug-21	5.4	<0.5	<0.01	<4	12	<5		8.10

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
WTP - Raw Water	09-Aug-21	6.5	<0.5	<0.01	5	130	<5		8.02
Treated Water	09-Aug-21	4.7	<0.5	<0.01	<4	<1	<5		8.12
WTP - Raw Water	16-Aug-21	6.5	16.0	0.07	<4	140	<5		8.15
Treated Water	16-Aug-21	4.6	<0.5	<0.01	<4	3.0	<5		8.16
WTP - Raw Water	23-Aug-21	7.2	13.0	0.13	4	160	<5		7.98
Treated Water	23-Aug-21	4.9	<0.5	<0.01	<4	<1	<5		8.07
WTP - Raw Water	30-Aug-21	6.9	<0.5	<0.01	<4	120	<5		7.96
Treated Water	30-Aug-21	4.8	<0.5	<0.01	<4	6	<5		8.06
WTP - Raw Water	07-Sep-21	6.8	0.7	<0.01	<4	120	<5		8.09
Treated Water	07-Sep-21	4.7	0.05	<0.01	<4	3	<5		8.12
WTP - Raw Water	13-Sep-21	7.2	<1	<0.1	<10	169	<5		8.08
Treated Water	13-Sep-21	5.1	<1	<0.1	<10	5	<5		8.12
WTP - Raw Water	20-Sep-21	7.0	<0.5	<0.01	<4	150.0	<5		8.02
Treated Water	20-Sep-21	4.8	<0.5	<0.01	<4	<1	<5		8.10
WTP - Raw Water	27-Sep-21	8.7	2.0	<0.1	220	229	<5		7.95
Treated Water	27-Sep-21	5.5	<1	<0.1	<10	<5	<5		8.09
WTP - Raw Water	04-Oct-21	7.5	<0.5	0.02	<4	180	<5		8.04
Treated Water	04-Oct-21	4.9	<0.5	<0.01	<4	<1	<5		8.11
WTP - Raw Water	12-Oct-21	7.3	<0.5	<0.01	<4	170	<5		8.05
Treated Water	12-Oct-21	5.1	<0.5	<0.01	<4	1	<5		8.11
WTP - Raw Water	19-Oct-21	7.6	<0.5	<0.01	7.0	130.0	<5		8.1
Treated Water	19-Oct-21	5.1	<0.5	<0.01	<4	<1	<5		8.1
WTP - Raw Water	25-Oct-21	8.1	<0.5	<0.01	41.0	140.0	<5		8.1
Treated Water	25-Oct-21	5.7	<0.5	<0.01	<4	<1	<5		8.1
WTP - Raw Water	01-Nov-21	8.2	<0.5	<0.01	24.0	150.0	<5		8.0
Treated Water	01-Nov-21	5.8	<0.5	<0.01	<4	<1	<5		8.0
WTP - Raw Water	08-Nov-21	8.9	<0.1	<0.01	<10	136.0	<5		8.0
Treated Water	08-Nov-21	6.4	<0.1	<0.01	<10	<5	<5		8.1
WTP - Raw Water	15-Nov-21	7.1	<0.1	<0.01	10.0	93.0	<5		7.7
Treated Water	15-Nov-21	5.2	<0.1	<0.01	<10	<5	<5		7.7
WTP - Raw Water	22-Nov-21	7.1	<0.1	<0.01	<10	109.0	<5		7.9
Treated Water	22-Nov-21	5.0	<0.1	<0.01	<10	<5	<5		7.9
WTP - Raw Water	29-Nov-21	7.2	25.0	<0.01	<10	94.0	<5		7.8
Treated Water	29-Nov-21	5.3	<0.1	<0.01	<10	<5	<5		7.9
WTP - Raw Water	07-Dec-21	6.3	0.8	<0.01	<4	87.0	<5		8.0
Treated Water	07-Dec-21	4.4	<0.5	<0.01	<4	2.0	<5		8.1
WTP - Raw Water	13-Dec-21	6.8	3.9	0.0	5.0	92.0	<5		8.0
Treated Water	13-Dec-21	3.4	<0.5	<0.01	<4	3.0	<5		8.1
WTP - Raw Water	21-Dec-21	6.6	26.0	0.1	<4	91.0	<5		8.1
Treated Water	21-Dec-21	4.0	<0.5	<0.01	4.0	3.0	<5		8.1

Raw Water is the untreated water that has been combined from the wells throughout the city. It has been identified in bold.

Distribution Metal Results 2021

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
Everall Sample Station	04-Jan-21	1.6	1.5	0.11	<4	2	<5		7.97
Malabar Sample Station	04-Jan-21	1.6	3.6	0.22	<4	4	<5		8.13
Chestnut Sample Station	04-Jan-21	1.6	1.3	0.04	<4	<1	<5		8.12
Russell Avenue Sample Station	04-Jan-21	1.6	1.5	0.11	<4	<1	<5		8.13
Roper Reservoir	04-Jan-21	1.7	0.8	0.10	<4	<1	<5		8.16
Roper PRV	04-Jan-21	1.6	9.5	0.08	<4	<1	<5		8.15
Stevens Sample Station	04-Jan-21	1.7	4.1	0.21	410	57	<5		8.15
Stevens Sample Station Iron Re-test	12-Jan-21				<10				
Stevens Sample Station Manganese Re-test	06-Jan-21					<1			
Oxford & Buena Vista Station	04-Jan-21	1.7	17.0	0.43	<4	2	<5		8.01
Museum Sampling Station	04-Jan-21	1.7	3.2	<0.01	<4	<1	<5		8.08
Balsam & Marine Station	04-Jan-21	1.7	1.1	0.08	<4	<1	<5		8.09
Stayte Road Station	04-Jan-21	1.7	3.9	0.33	4	1	<5		8.10
Finlay Station	04-Jan-21	1.6	1.1	0.05	<4	1	<5		7.92
Merklin Low Reservoir	04-Jan-21	1.8	38.0	0.05	<4	<1	<5		8.07
Merklin New Reservoir	04-Jan-21	1.8	<5	<0.01	<4	<1	<5		8.11
Oxford Reservoir	04-Jan-21	1.6	13.0	0.10	<4	<1	<5		8.15
Everall Sample Station	25-Jan-21	1.9	1.3	0.08	<4	<1	<5		7.97
Malabar Sample Station	25-Jan-21	1.9	4.0	0.26	<4	1	<5		8.05
Chestnut Sample Station	25-Jan-21	1.8	0.9	0.03	12	4	<5		8.06
Russell Avenue Sample Station	25-Jan-21	1.9	11.0	0.09	<4	<1	<5		8.06
Roper Reservoir	25-Jan-21	1.9	0.6	0.06	<4	<1	<5		8.10
Roper PRV	25-Jan-21	1.9	9.6	0.06	<4	<1	<5		8.10
Stevens Sample Station	25-Jan-21	1.9	3.8	0.22	<4	<1	<5		8.10
Oxford & Buena Vista Station	26-Jan-21	2.1	14.0	0.37	<4	2	<5		7.83
Museum Sampling Station	26-Jan-21	2.2	3.0	0.01	<4	<1	<5		7.97
Balsam & Marine Station	26-Jan-21	2.1	1.3	0.09	<4	1	<5		7.98
Stayte Road Station	26-Jan-21	2.1	3.3	0.27	5	2	<5		8.00
Finlay Station	26-Jan-21	2.1	1.0	0.04	<4	2	<5		8.00
Merklin Low Reservoir	26-Jan-21	2.3	42.0	0.07	<4	<1	<5		8.02
Merklin New Reservoir	26-Jan-21	2.3	<0.5	0.01	<4	<1	<5		8.00
Oxford Reservoir	26-Jan-21	2.1	11.0	0.08	6	<1	<5		8.00
Everall Sample Station	25-Jan-21	1.9	1.3	0.08	<4	<1	<5		7.97
Malabar Sample Station	25-Jan-21	1.9	4.0	0.26	<4	1	<5		8.05
Chestnut Sample Station	25-Jan-21	1.8	0.9	0.03	12	4	<5		8.06
Russell Avenue Sample Station	25-Jan-21	1.9	11.0	0.09	<4	<1	<5		8.06
Roper Reservoir	25-Jan-21	1.9	0.6	0.06	<4	<1	<5		8.10
Roper PRV	25-Jan-21	1.9	9.6	0.06	<4	<1	<5		8.10
Stevens Sample Station	25-Jan-21	1.9	3.8	0.22	<4	<1	<5		8.10
Oxford & Buena Vista Station	26-Jan-21	2.1	14.0	0.37	<4	2	<5		7.83
Museum Sampling Station	26-Jan-21	2.2	3.0	0.01	<4	<1	<5		7.97
Balsam & Marine Station	26-Jan-21	2.1	1.3	0.09	<4	1	<5		7.98
Stayte Road Station	26-Jan-21	2.1	3.3	0.27	5	2	<5		8.00
Finlay Station	26-Jan-21	2.1	1.0	0.04	<4	2	<5		8.00
Merklin Low Reservoir	26-Jan-21	2.3	42.0	0.07	<4	<1	<5		8.02
Merklin New Reservoir	26-Jan-21	2.3	<0.5	0.01	<4	<1	<5		8.00
Oxford Reservoir	26-Jan-21	2.1	11.0	0.08	6	<1	<5		8.00
Everall Sample Station	22-Feb-21	2.7	1.0	0.09	<4	<1	<5		7.92
Malabar Sample Station	22-Feb-21	2.6	3.0	0.15	<4	2	<5		7.99
Chestnut Sample Station	22-Feb-21	2.6	0.9	0.03	<4	4	<5		8.01
Russell Avenue Sample Station	22-Feb-21	2.6	1.1	0.08	<4	<1	<5		8.03
Roper Reservoir	22-Feb-21	2.8	<5	0.04	<4	<1	<5		8.06

Distribution Metal Results 2021

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
Roper PRV	22-Feb-21	2.8	1.4	0.07	<4	<1	<5		8.04
Stevens Sample Station	22-Feb-21	2.8	3.8	0.18	<4	<1	<5		8.05
Oxford & Buena Vista Station	23-Feb-21	2.6	10.0	0.24	<4	2	<5		7.87
Museum Sampling Station	23-Feb-21	2.6	2.7	<0.01	<4	<1	<5		7.99
Balsam & Marine Station	23-Feb-21	2.6	1.1	0.08	<4	<1	9		8.02
Stayte Road Station	23-Feb-21	2.7	3.5	0.27	<4	<1	<5		8.03
Finlay Station	23-Feb-21	2.5	1.3	0.05	<4	1	<5		8.00
Merklin Low Reservoir	23-Feb-21	2.7	17.0	0.01	<4	<1	<5		8.00
Merklin New Reservoir	23-Feb-21	2.8	<5	<0.01	<4	<1	<5		7.97
Oxford Reservoir	23-Feb-21	2.5	9.7	0.07	<4	<1	<5		8.01
Overall Sample Station	29-Mar-21	3.2	1.1	0.09	<4	<1	<5		7.96
Mann Park Sample Station	29-Mar-21	3.2	3.4	0.01	<4	1	<5		8.04
Marine Sample Station	29-Mar-21	2.9	3.7	0.19	<4	6	<5		8.04
Russell Avenue Sample Station	29-Mar-21	3.2	1.0	0.09	<4	<1	<5		8.08
Roper Reservoir	29-Mar-21	3.2	<0.5	0.05	6	<1	<5		8.08
Roper PRV	29-Mar-21	3.3	1.3	0.09	<4	<1	<5		8.08
Stevens Sample Station	29-Mar-21	3.4	4.6	0.37	<4	<1	<5		8.06
Oxford & Buena Vista Station	30-Mar-21	3.2	9.9	0.25	<4	3	<5		7.96
Museum Sampling Station	30-Mar-21	3.2	4.9	<0.01	<4	<1	<5		8.04
Balsam & Marine Station	30-Mar-21	3.2	3.2	0.16	15	<1	<5		8.06
Stayte Road Station	30-Mar-21	3.1	3.1	0.25	<4	1	<5		8.07
Finlay Station	30-Mar-21	3.2	1.2	0.05	<4	<1	<5		8.07
Merklin Low Reservoir	30-Mar-21	3.3	20.0	0.01	<4	<1	<5		8.07
Merklin New Reservoir	30-Mar-21	3.3	<0.5	<0.01	<4	<1	<5		8.08
Oxford Reservoir	30-Mar-21	3.2	13.0	0.10	<4	<1	<5		8.08
Overall Sample Station	26-Apr-21	3.7	1.7	0.09	<4	<1	<5		7.91
Mann Park Sample Station	26-Apr-21	3.7	3.6	0.10	<4	2	<5		8.02
Marine Sample Station	26-Apr-21	3.6	3.8	0.27	<4	3	<5		8.05
Russell Avenue Sample Station	26-Apr-21	3.7	1.1	0.07	<4	<1	<5		8.06
Roper Reservoir	26-Apr-21	3.6	0.7	0.07	<4	<1	<5		8.07
Roper PRV	26-Apr-21	3.7	1.4	0.08	<4	<1	<5		8.07
Stevens Sample Station	26-Apr-21	3.9	4.3	0.37	<4	<1	<5		8.08
Oxford & Buena Vista Station	27-Apr-21	3.7	12.0	<0.30	<4	<1	<5		7.89
Museum Sampling Station	27-Apr-21	3.7	2.6	<0.01	<4	<1	<5		7.99
Balsam & Marine Station	27-Apr-21	3.7	1.0	0.07	<4	<1	<5		8.04
Stayte Road Station	27-Apr-21	3.7	3.4	0.28	<4	2	<5		8.03
Finlay Station	27-Apr-21	3.6	1.3	0.06	<4	<1	<5		8.02
Merklin Low Reservoir	27-Apr-21	3.7	23.0	0.01	<4	<1	<5		8.03
Merklin New Reservoir	27-Apr-21	3.8	<0.5	<0.01	<4	<1	<5		8.03
Oxford Reservoir	27-Apr-21	3.6	11.0	0.08	5	<1	<5		8.02
Overall Sample Station	25-May-21	3.7	1.0	0.09	<4	<1	<5		8.00
Mann Park Sample Station	25-May-21	3.6	3.5	0.12	<4	1	<5		8.08
Marine Sample Station	25-May-21	3.7	4.4	0.35	7	2	<5		8.09
Russell Avenue Sample Station	25-May-21	3.7	1.1	0.08	<4	<1	<5		8.06
Roper Reservoir	25-May-21	3.8	0.6	0.07	<4	<1	<5		8.07
Roper PRV	25-May-21	3.8	1.1	0.07	5	<1	<5		8.08
Stevens Sample Station	25-May-21	3.8	5.0	0.47	<4	<1	<5		8.03
Oxford & Buena Vista Station	26-May-21	3.5	14.0	0.35	<4	2	<5		7.85
Museum Sampling Station	26-May-21	3.5	4.0	<0.01	<4	<1	<5		8.03
Balsam & Marine Station	26-May-21	3.5	1.1	0.10	4	1	<5		8.08
Stayte Road Station	26-May-21	3.5	3.9	0.33	<4	<1	<5		8.09
Finlay Station	26-May-21	3.4	0.9	0.04	<4	<1	<5		8.07
Merklin Low Reservoir	26-May-21	3.5	17.0	<0.01	<4	<1	<5		8.05

Distribution Metal Results 2021

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
Merklin New Reservoir	26-May-21	3.5	<0.5	<0.01	<4	<1	<5		8.10
Oxford Reservoir	26-May-21	3.3	11.0	0.09	6	<1	<5		8.09
Everall Sample Station	28-Jun-21	4.1	1.7	0.11	4	<1	<5		8.02
Malabar Sample Station	28-Jun-21	4.0	2.9	0.27	<4	1	<5		8.07
Chestnut & North Bluff	28-Jun-21	3.9	1.3	0.07	14	4	<5		8.07
Russell Avenue Sample Station	28-Jun-21	4.1	1.4	0.11	10	11	<5		8.08
Roper Reservoir	28-Jun-21	4.1	0.7	0.09	<4	1	<5		8.10
Roper PRV	28-Jun-21	4.2	16.0	0.13	<4	1	<5		8.10
Stevens Sample Station	28-Jun-21	4.2	3.1	0.24	<4	<1	<5		8.10
Oxford & Buena Vista Station	29-Jun-21	4.1	17.0	0.48	6	1	<5		8.05
Museum Sampling Station	29-Jun-21	4.1	2.0	<0.01	<4	2	<5		8.10
Balsam & Marine Station	29-Jun-21	4.1	0.9	0.11	<4	2	<5		7.98
Stayte Road Station	29-Jun-21	4.2	4.8	0.45	<4	2	<5		8.12
Finlay Station	29-Jun-21	4.0	1.0	0.05	<4	1	<5		8.12
Merklin Low Reservoir	29-Jun-21	4.2	22.0	0.03	<4	<1	<5		8.12
Merklin New Reservoir	29-Jun-21	4.1	<0.5	<0.01	<4	<1	<5		8.14
Oxford Reservoir	29-Jun-21	4.1	13.0	0.14	<4	<1	<5		8.14
Everall Sample Station	26-Jul-21	4.6	1.5	0.08	<4	<1	<5		8.13
Malabar Sample Station	26-Jul-21	4.6	3.4	0.33	<4	1	<5		8.13
Chestnut & North Bluff	26-Jul-21	4.5	1.7	0.10	5	2	<5		8.12
Russell Avenue Sample Station	26-Jul-21	4.6	1.7	0.11	<4	<1	<5		8.12
Roper Reservoir	26-Jul-21	4.6	0.7	0.08	<4	<1	<5		8.12
Roper PRV	26-Jul-21	4.7	8.6	0.08	<4	<1	<5		8.15
Stevens Sample Station	26-Jul-21	4.7	3.1	0.30	<4	<1	<5		8.14
Oxford & Buena Vista Station	27-Jul-21	4.4	15.0	0.42	<4	1	<5		8.02
Museum Sampling Station	27-Jul-21	4.5	2.4	<0.01	<4	<1	<5		8.10
Balsam & Marine Station	27-Jul-21	4.4	1.0	0.12	<4	<1	<5		8.10
Stayte Road Station	27-Jul-21	4.4	5.2	0.52	<4	1	<5		8.11
Finlay Station	27-Jul-21	4.5	0.9	0.05	<4	<1	<5		8.09
Merklin Low Reservoir	27-Jul-21	4.5	17.0	0.08	<4	<1	<5		8.11
Merklin New Reservoir	27-Jul-21	4.5	<0.5	<0.01	<4	<1	<5		8.12
Oxford Reservoir	27-Jul-21	4.4	11.0	0.09	<4	<1	<5		8.14
Everall Sample Station	30-Aug-21	4.9	1.4	0.09	<4	3	<5		7.89
Mann Park Sample Station	30-Aug-21	4.7	2.4	0.11	<4	2	<5		8.02
Marine Sample Station	30-Aug-21	4.7	4.0	0.35	<4	4	<5		8.04
Russell Avenue Sample Station	30-Aug-21	4.7	1.1	0.07	<4	3	<5		8.06
Roper Reservoir	30-Aug-21	4.8	0.6	0.08	<4	4	<5		8.00
Roper PRV	30-Aug-21	4.8	1.1	0.06	<4	4	<5		8.05
Stevens Sample Station	30-Aug-21	4.7	4.2	0.34	<4	5	<5		8.06
Oxford & Buena Vista Station	31-Aug-21	4.8	10.0	0.27	<4	3	<5		7.96
Museum Sampling Station	31-Aug-21	4.7	3.3	0.01	<4	3	<5		7.89
Balsam & Marine Station	31-Aug-21	4.7	1.2	0.13	<4	3	<5		8.03
Stayte Road Station	31-Aug-21	4.7	3.7	0.36	<4	3	<5		8.09
Finlay Station	31-Aug-21	4.7	1.0	0.60	<4	3	<5		8.10
Merklin Low Reservoir	31-Aug-21	4.8	13.0	0.06	<4	6	<5		8.08
Merklin New Reservoir	31-Aug-21	4.7	0.5	0.01	<4	6	<5		8.09
Oxford Reservoir	31-Aug-21	4.7	8.4	0.08	<4	4	<5		8.10
Everall Sample Station	25-Oct-21	5.7	0.7	0.07	<4	<1	<5		8.10
Mann Park Sample Station	25-Oct-21	5.6	2.6	0.10	<4	1	<5		8.05
Marine Sample Station	25-Oct-21	5.5	3.4	0.23	6	3	<5		8.05
Russell Avenue Sample Station	25-Oct-21	5.5	1.1	0.10	<4	<1	<5		8.09
Roper Reservoir	25-Oct-21	5.6	0.6	0.07	<4	<1	<5		8.10
Roper PRV	25-Oct-21	5.7	1.2	0.18	<4	<1	<5		8.12

Distribution Metal Results 2021

Sample Location	Date Sampled	Arsenic µg/L	Copper µg/L	Lead µg/L	Iron µg/L	Manganese µg/L	Colour Units	Colour Units	pH
Guideline Limit		10	2000	5	300	120			7.0-10.5
Roper Sample Station	25-Oct-21	5.7	4.4	0.37	<4	<1	<5		8.04
Oxford & Buena Vista Station	27-Oct-21	5.2	12	0.28	<4	1	<5		8.1
Museum Sampling Station	27-Oct-21	5.4	3.8	0.02	<4	<1	<5		8.15
Balsam & Marine Station	27-Oct-21	5.3	1.4	0.1	<4	<1	<5		8.16
Stayte Road Station	27-Oct-21	5.4	5	0.34	<4	2	<5		8.06
Finlay Station	27-Oct-21	5.2	1.3	0.05	<4	<1	<5		8.17
Merklin Low Reservoir	27-Oct-21	5.4	12	<0.01	<4	<1	<5		8.17
Merklin New Reservoir	27-Oct-21	5.4	<5	<0.01	<4	<1	<5		8.18
Oxford Reservoir	27-Oct-21	5.4	10	0.08	<4	<1	<5		8.18
Everall Sample Station	29-Nov-21	5.2	1.0	<0.10	<10	<5	<5		7.88
Malabar Sample Station	29-Nov-21	5.2	2.0	0.20	<10	<5	<5		7.88
Chestnut & North Bluff	29-Nov-21	5.3	2.0	<0.1	<10	<5	<5		7.90
Russell Avenue Sample Station	29-Nov-21	5.3	1.0	<0.1	<10	<5	<5		7.90
Roper Reservoir	29-Nov-21	5.2	<1.0	<0.1	<10	<5	<5		7.91
Roper PRV	29-Nov-21	5.3	2.0	0.20	<10	<5	<5		7.9
Stevens Sample Station	29-Nov-21	5.1	3.0	0.20	<10	<5	<5		7.89
Oxford & Buena Vista Station	30-Nov-21	5.1	9.0	0.20	<10	<5	<5		7.77
Museum Sampling Station	30-Nov-21	5.1	4.0	<0.1	<10	<5	<5		7.82
Balsam & Marine Station	30-Nov-21	5.1	1.0	<0.1	<10	<5	<5		7.83
Stayte Road Station	30-Nov-21	5.1	2.0	0.10	<10	<5	<5		7.85
Finlay Station	30-Nov-21	5.1	2.0	<0.1	<10	<5	<5		7.83
Merklin Low Reservoir	30-Nov-21	5.1	14.0	<0.1	<10	<5	<5		7.84
Merklin New Reservoir	30-Nov-21	5.1	<1	<0.1	<10	<5	<5		7.84
Oxford Reservoir	30-Nov-21	5.0	11.0	<0.1	<10	<5	<5		7.84
Everall Sample Station	23-Dec-21	4.0	<1	<0.1	<10	<5	<5		8.05
Mann Park Sample Station	23-Dec-21	3.7	2.0	<0.1	<10	<5	<5		8.10
Marine Drive Sampling Station	23-Dec-21	3.7	3.0	<0.1	<10	<5	<5		8.09
Russell Avenue Sample Station	23-Dec-21	3.8	<1	<0.1	<10	<5	<5		8.01
Roper Reservoir	23-Dec-21	4.5	<1	<0.1	<10	<5	<5		8.11
Roper PRV	23-Dec-21	4.4	12.0	<0.1	<10	<5	<5		8.09
Roper Avenue Sample Station	23-Dec-21	5.4	5.0	0.20	<10	<5	<5		8.09
Oxford & Buena Vista Station	23-Dec-21	4.3	13.0	0.30	<10	<5	<5		8.10
Museum Sampling Station	23-Dec-21	4.8	4.0	<0.1	<10	<5	<5		8.10
Balsam & Marine Station	23-Dec-21	4.7	1.0	<0.1	<10	<5	<5		8.12
Stayte Road Station	23-Dec-21	4.7	7.0	0.50	<10	<5	<5		8.11
Finlay Station	23-Dec-21	4.4	4.0	<0.1	<10	<5	<5		8.11
Merklin Low Reservoir	23-Dec-21	5.5	13.0	<0.1	<10	<5	<5		8.13
Merklin New Reservoir	23-Dec-21	5.6	<1	<0.1	<10	<5	<5		8.13
Oxford Reservoir	23-Dec-21	4.0	8.0	<0.1	<10	<5	<5		8.13

THM & HAA RESULTS 2021

Sample	Unit of Measure	Nominal Detection Limit	Sample Location				Sampled Date
			Marine Dr Station	Roper PRV	Stevens Station	Stayte Station	
Chloroform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	3-Feb-21
Bromodichloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	3-Feb-21
Dibromochloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	3-Feb-21
Bromoform	mg/L	0.001	<0.001	<0.001	0.001	0.001	3-Feb-21
Total THMs	mg/L	0.001	<0.001	<0.001	0.001	0.001	3-Feb-21
Dibromofluoromethane	%	50-140	106	106	105	105	3-Feb-21
Toluene-d8	%	50-140	96	94	97	96	3-Feb-21
Bromofluorobenzene	%	50-140	86	92	88	88	3-Feb-21
Monochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Monobromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Dichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Bromochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Dibromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Trichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	3-Feb-21
Total HAA6	ug/L	12.0	<12.0	<12.0	<12.0	<12.0	3-Feb-21
2,3-Dibromopropionic Acid	%	50-150	110	110	110	100	3-Feb-21
Sample	Unit of Measure	Nominal Detection Limit	Sample Location				Sampled Date
			Marine Dr Station	Roper PRV	Stevens Station	Stayte Station	
Chloroform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	19-Apr-21
Bromodichloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	19-Apr-21
Dibromochloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	19-Apr-21
Bromoform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	19-Apr-21
Total THMs	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	19-Apr-21
Dibromofluoromethane	%	50-140	90	97	95	96	19-Apr-21
Toluene-d8	%	50-140	96	95	96	96	19-Apr-21
Bromofluorobenzene	%	50-140	101	94	97	91	19-Apr-21
Monochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Monobromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Dichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Bromochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Dibromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Trichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	19-Apr-21
Total HAA6	ug/L	12.0	<12.0	<12.1	<12.0	<12.1	19-Apr-21
2,3-Dibromopropionic Acid	%	50-150	100	110	100	101	19-Apr-21
Sample	Unit of Measure	Nominal Detection Limit	Sample Location				Sampled Date
			Marine Dr Station	Roper PRV	Stevens Station	Stayte Station	
Chloroform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Jul-21
Bromodichloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Jul-21
Dibromochloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Jul-21
Bromoform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Jul-21
Total THMs	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Jul-21
Dibromofluoromethane	%	50-140	117	116	123	117	27-Jul-21
Toluene-d8	%	50-140	100	99	100	98	27-Jul-21
Bromofluorobenzene	%	50-140	104	97	103	107	27-Jul-21
Monochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Monobromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Dichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Bromochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Dibromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Trichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Jul-21
Total HAA6	ug/L	12.0	<12.0	<12.0	<12.0	<12.0	27-Jul-21
2,3-Dibromopropionic Acid	%	50-150	95	87	95	94	27-Jul-21
Sample	Unit of Measure	Nominal Detection Limit	Sample Location				Sampled Date
			Marine Dr Station	Roper PRV	Stevens Station	Stayte Station	
Chloroform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Oct-21
Bromodichloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Oct-21
Dibromochloromethane	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Oct-21
Bromoform	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Oct-21

Total THMs	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	27-Oct-21
Dibromofluoromethane	%	50-140	103	107	103	103	27-Oct-21
Toluene-d8	%	50-140	98	99	98	99	27-Oct-21
Bromofluorobenzene	%	50-140	101	102	99	100	27-Oct-21
Monochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Monobromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Dichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Bromochloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Dibromoacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Trichloroacetic Acid	ug/L	2.0	<2.0	<2.0	<2.0	<2.0	27-Oct-21
Total HAA6	ug/L	12.0	<12.0	<12.0	<12.0	<12.0	27-Oct-21
2,3-Dibromopropionic Acid	%	50-150	120	93	110	87	27-Oct-21

Annual Samples 2021

		Sample Location		Well#1	Well #2	Well #3	Well #4	Well #6	Well #7	Well #8	Roper PRV	Roper Reservoir	Oxford Reservoir	Merklin Low Reservoir	Merklin New Reservoir	Everall Sampling
		Sampled Date		Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021
Parameter Name	Unit	Detection Limit	Guideline Limit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Inorganic Nonmetallic Parameters																
Organic Carbon	mg/L	0.5		0.5	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Ammonia - N	mg/L	0.01		<0.025	<0.025	0.048	0.041	0.159	0.112	0.072	0.093	0.096	0.113	0.09	0.081	0.115
Metals Extractable																
Aluminum	mg/L	0.001	0.1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Antimony	mg/L	0.00002	0.006	0.0001	0.0001	0.00007	0.00006	0.00005	0.00006	0.00006	0.00007	0.00007	0.00006	0.00006	0.00006	0.00006
Arsenic	mg/L	0.0001	0.010	0.005	0.0033	0.0066	0.0034	0.011	0.0079	0.0058	0.0046	0.0048	0.0045	0.0047	0.0047	0.0046
Barium	mg/L	0.0001	2.0	0.017	0.023	0.017	0.014	0.028	0.019	0.02	0.016	0.014	0.014	0.014	0.014	0.014
Boron	mg/L	0.002	5	0.017	0.018	0.016	0.012	0.05	0.022	0.016	0.018	0.017	0.017	0.017	0.018	0.019
Cadmium	mg/L	0.00001	0.005	<0.00001	<0.00001	<0.00001	<0.00001	0.00002	<0.00001	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Chromium	mg/L	0.00005	0.05	0.00051	0.00076	<0.00005	0.00012	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Copper	mg/L	0.0005	1 AO; 2 MAC	0.0012	0.0041	0.0007	0.0017	0.0013	0.0045	0.0011	0.0021	0.0009	0.0086	0.016	<0.0005	0.0013
Lead	mg/L	0.00001	0.005	0.00035	0.00013	0.00009	0.00033	0.00011	0.00027	0.00003	0.00009	0.00012	0.00007	0.00005	<0.00001	0.00008
Selenium	mg/L	0.0002	0.05	0.0036	0.012	0.0016	0.0004	<0.0002	<0.0002	0.0031	0.0012	0.0012	0.0013	0.0012	0.0012	0.0011
Strontium	mg/L	0.0001	7.0	0.11	0.12	0.096	0.083	0.15	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Uranium	mg/L	0.00001	0.02	0.00017	0.00028	0.00008	0.00019	0.00026	0.00013	0.00015	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
Vanadium	mg/L	0.00005		0.0022	0.0032	0.0027	0.0021	0.00072	0.0019	0.0021	0.0011	0.0011	0.0011	0.0012	0.0011	0.0011
Zinc	mg/L	0.0005	5.0	0.0054	0.0023	0.0019	0.018	0.0055	0.011	0.0017	0.0044	0.0048	0.0021	0.0029	0.0008	0.0036
Metals Total																
Mercury	mg/L	0.00005	0.001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Physical and Aggregate Properties																
Colour	Colour units	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Turbidity	NTU	0.1	0.1	<0.10	1.3	<0.10	0.16	0.19	<0.10	<0.10	0.13	0.17	<0.10	<0.10	<0.10	0.17
Routine Water																
pH		0.01	7.0-10.5	7.89	7.92	7.97	7.85	8.15	8.06	8.03	7.97	7.98	7.96	7.95	8.00	8.00
Electrical Conductivity	µS/cm at 25 °C	1		285	335	248	215	355	270	272	265	265	266	267	267	267
Calcium	mg/L	0.01		25	31	22	21	29	24	26	24	24	25	21	25	24
Iron	mg/L	0.004	0.3	<0.004	0.16	<0.004	0.007	0.02	0.005	0.004	<0.004	0.006	0.006	<0.004	<0.004	0.005
Magnesium	mg/L	0.02		11	14	8.9	9.4	12	9.9	11	10	10	10	8.6	10	9.8
Manganese	mg/L	0.001	0.02 AO; 0.12 MAC	0.016												
Potassium	mg/L	0.04		3.1	3.3	3	2.5	4.3	3.5	3.3	3.2	3.3	3.4	3	3.2	3.2
Silicon	mg/L	0.005		11	11	11	12	12	11	12	12	12	12	9.4	12	12
Sodium	mg/L	0.1	200	14	14	14	8.6	30	16	13	15	15	15	13	15	15
T-Alkalinity	mg/L	5		92	103	88	89	135	111	104	101	101	100	101	99	101
Chloride	mg/L	0.05	250	20.8	26.6	16.8	5.55	15.1	10.1	13	13.3	13.4	13.6	13.4	13.4	13.3
Fluoride	mg/L	0.01	1.5	<0.01	<0.01	<0.01	<0.01	0.12	0.07	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate - N	mg/L	0.01	10	0.69	1.46	0.13	<0.01	<0.01	<0.01	0.14	0.15	0.14	0.16	0.15	0.15	0.14
Nitrite - N	mg/L	0.01	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sulfate (SO4)	mg/L	0.1	500	16.4	19.6	11.2	11.3	25.7	13.8	15.6	14.5	14.2	14.4	14.6	14.4	14.7
Hardness	mg/L	1		108	135	91	92	120	100	110	102	102	104	88	103	100
Total Dissolved Solids	mg/L	1	500	180	207	160	143	228	175	178	173	173	175	161	172	172

Mann Park Sampling Stn.	Malabar Sampling Stn.	Chestnut & North Bluff Sampling	Marine Drive Sampling Stn.	Russell Ave Sampling Stn.	Stevens Sampling Stn.	Roper Ave Stn.	Finlay Sampling Stn.	Stayte Road Stn.	Balsam & Marine Sampling	Museum Sampling Stn.	Oxofrd & Buena Vista Sampling
Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021	Sep 24 2021
Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
0.107	0.129	0.102	0.097	0.112	0.085	0.071	0.103	0.088	0.98	0.116	0.092
<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
0.00006	0.00006	0.00006	0.00006	0.00006	0.00007	0.00006	0.00007	0.00008	0.00006	0.00006	0.00007
0.0047	0.0047	0.0045	0.0045	0.0046	0.0047	0.0048	0.0047	0.0049	0.0046	0.0048	0.0046
0.014	0.014	0.013	0.013	0.013	0.014	0.014	0.013	0.014	0.014	0.013	0.014
0.018	0.017	0.017	0.017	0.017	0.017	0.019	0.018	0.018	0.017	0.017	0.018
<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00006	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
0.003	0.0019	0.0015	0.0034	0.0011	0.003	0.0052	0.0007	0.0042	0.0011	0.0023	0.01
0.00011	0.00016	0.00006	0.00034	0.00007	0.00023	0.00049	0.00004	0.0004	0.00011	<0.00001	0.00027
0.0011	0.0012	0.0012	0.0011	0.0013	0.0012	0.0013	0.0013	0.0012	0.0012	0.0013	0.0012
0.11	0.11	0.11	0.11	0.1	0.11	0.11	0.11	0.12	0.11	0.1	0.11
0.00014	0.00013	0.00014	0.00013	0.00013	0.00014	0.00014	0.00014	0.00015	0.00013	0.00013	0.00013
0.0011	0.0011	0.001	0.0011	0.001	0.0012	0.0012	0.0011	0.0011	0.0011	0.0011	0.0011
0.0027	0.0023	0.0022	0.0033	0.0022	0.0028	0.0067	0.0009	0.0039	0.0013	0.0017	0.0035
<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
<0.10	0.39	0.10	0.20	0.10	0.15	<0.10	0.13	<0.10	0.24	0.14	<0.10
7.97	7.97	7.99	8.00	8.01	7.99	8.01	8.02	7.92	7.92	7.92	7.92
265	267	267	268	267	268	269	267	266	264	265	266
24	24	24	24	24	24	24	24	24	24	24	24
<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.005	<0.004	<0.004	<0.004	<0.004	<0.004
10	9.9	9.8	9.8	9.8	9.9	10	9.9	9.9	9.9	10	10
0.002	0.001	0.003	0.002	<0.001	<0.001	<0.001	0.001	0.001	<0.001	<0.001	<0.001
3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.2
12	11	11	12	12	12	12	12	12	12	11	12
14	15	15	15	15	15	15	15	15	15	15	15
99	99	101	101	102	101	100	101	100	100	100	100
12.9	13.1	13.5	13.5	13	13.5	13.6	13.3	13.6	13.6	13.6	13.6
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
0.14	0.14	0.16	0.16	0.14	0.14	0.14	0.13	0.14	0.14	0.13	0.14
<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
14.4	14.7	14.4	14.5	14.5	14.5	14.4	14.4	14.6	14.5	14.3	14.5
101	101	100	100	101	101	102	101	101	101	102	102
170	171	172	173	172	173	172	173	172	172	172	173

Non Routine Water Quality Results for Source and Distribution Water 2021

Sampling Point Name	Date Sampled	TC MPN / 100 ml	E-coli MPN / 100 ml	Comments
Stevens Sample Station	January 5 2021	<1.0	<1.0	Below MAC
Well #3	January 20 2021	<1.0	<1.0	Below MAC
14057 Blackburn Ave	January 20 2022	<1.0	<1.0	Below MAC
Well #3	January 20 2021	<1.0	<1.0	Below MAC
15491 Columbia Ave	February 18 2021	<1.0	<1.0	Below MAC
14727 Goggs Ave	May 31 2021	<1.0	<1.0	Below MAC
15610 Russell Ave	July 22 2021	<1.0	<1.0	Below MAC
14774 Oxenham Ave	July 29 2021	<1.0	<1.0	Below MAC
14263 Vine Ave	Aug 5 2021	<1.0	<1.0	Below MAC
1526 Finlay St	Aug 26 2021	<1.0	<1.0	Below MAC
1357 Johnston Rd	Sep 23 2021	<1.0	<1.0	Below MAC
15611 Marine Drive	Oct 15 2021	<1.0	<1.0	Below MAC
15761 Goggs Ave	Nov 9 2021	<1.0	<1.0	Below MAC
15620 Finlay St	Nov 16 2021	<1.0	<1.0	Below MAC
15620 Russell Ave	Nov 18 2021	<1.0	<1.0	Below MAC
Marine Dr & Stayte Rd Sampling Station	Nov 26 2021	<1.0	<1.0	Below MAC
1531 Everall St	Dec 19 2021	<1.0	<1.0	Below MAC
Amount of Times 1.0 or Higher:		0	0	



In-House Water Testing Results January 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			pS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	4-Jan-21	9:15 AM	306	7.99	0.09	0.80	0.03	9.9	25.3	JN	
Mann Park Sample Station	4-Jan-21	9:25 AM	305	7.86	0.07	0.76	0.03	8.5	26.9	JN	
Marine Dr Sample Station	4-Jan-21	9:40 AM	308	7.87	0.08	0.52	0.02	8.5	25.7	JN	
Russell Ave. Sample Station	4-Jan-21	9:50 AM	309	7.86	0.07	0.79	0.03	9.6	24.3	JN	
Roper Reservoir	4-Jan-21	11:00 AM	306	7.91	0.06	0.74	0.02	9.5	21.1	JN	
Roper PRV	4-Jan-21	11:05 AM	307	7.88	0.07	0.87	0.03	9.6	23.9	JN	
Roper Ave. Sample Station	4-Jan-21	10:45 AM	306	7.90	0.06	0.80	0.03	8.5	19.6	JN	
Oxford St. & Buena Vista STN	5-Jan-21	8:45 AM	306	7.81	0.06	0.63	0.02	9.8	24.1	JN	
Museum Sample Station	5-Jan-21	8:55 AM	309	7.88	0.07	0.78	0.01	9.5	25.8	JN	
Balsam & Marine Sample STN	5-Jan-21	9:05 AM	308	7.90	0.09	0.75	0.02	9.4	24.1	JN	
Stayle Sample Station	5-Jan-21	9:15 AM	307	7.92	0.08	0.69	0.02	8.9	24.0	JN	
Finlay St. Sample Station	5-Jan-21	9:25 AM	306	7.89	0.07	0.78	0.01	9.2	21.0	JN	
Merklin Low Reservoir	5-Jan-21	10:30 AM	309	7.88	0.07	0.87	0.03	10.0	21.5	JN	
Merklin Reservoir (New)	5-Jan-21	10:40 AM	307	7.89	0.08	0.91	0.04	9.9	21.1	JN	
Oxford Reservoir	5-Jan-21	9:40 AM	305	7.88	0.08	0.81	0.02	10.1	22.5	JN	
Week 2											
Everall St. Sample Station	11-Jan-21	8:40 AM	305	7.80	0.06	0.52	0.01	10.0	23.2	JN	
Malabar Sample Station	11-Jan-21	8:50 AM	303	7.85	0.08	0.77	0.01	9.3	23.6	JN	
Chestnut & N. Bluff Sample STN	11-Jan-21	9:05 AM	306	7.86	0.07	0.57	0.03	8.5	22.9	JN	
Russell Ave. Sample Station	11-Jan-21	9:50 AM	305	7.86	0.07	0.55	0.02	9.8	21.7	JN	
Roper Reservoir	11-Jan-21	10:30 AM	306	7.89	0.06	0.75	0.02	9.4	21.7	JN	
Roper PRV	11-Jan-21	10:40 AM	305	7.86	0.06	0.76	0.03	9.5	24.6	JN	
Stevens Sample Station	11-Jan-21	10:00 AM	305	7.86	0.07	0.82	0.02	9.9	24.0	JN	
Oxford St. & Buena Vista STN	12-Jan-21	9:15 AM	308	7.84	0.07	0.63	0.02	10.5	23.5	JN	
Museum Sample Station	12-Jan-21	9:25 AM	306	7.90	0.06	0.74	0.02	11.3	24.5	JN	
Balsam & Marine Sample STN	12-Jan-21	9:40 AM	305	7.96	0.06	0.71	0.02	9.7	23.7	JN	
Stayle Sample Station	12-Jan-21	9:50 AM	306	7.92	0.07	0.66	0.02	9.1	23.3	JN	
Finlay St. Sample Station	12-Jan-21	10:05 AM	307	7.92	0.06	0.75	0.03	10.3	23.7	JN	
Merklin Low Reservoir	12-Jan-21	10:55 AM	308	7.88	0.08	0.80	0.02	10.2	22.4	JN	
Merklin Reservoir (New)	12-Jan-21	11:05 AM	307	7.91	0.06	0.83	0.02	10.1	22.6	JN	
Oxford Reservoir	12-Jan-21	10:35 AM	303	7.94	0.08	0.81	0.01	10.4	20.9	JN	
Week 3											
Everall St. Sampling Station	18-Jan-21	8:55 AM	302	7.87	0.08	0.80	0.02	10.0	23.5	JN	
Mann Park Sample Station	18-Jan-21	9:05 AM	301	7.91	0.06	0.68	0.02	9.0	24.0	JN	
Marine Dr Sample Station	18-Jan-21	9:15 AM	307	7.88	0.08	0.30	0.02	8.3	27.0	JN	
Russell Ave. Sample Station	18-Jan-21	9:25 AM	308	7.89	0.06	0.75	0.01	9.7	25.4	JN	
Roper Reservoir	18-Jan-21	9:35 AM	306	7.94	0.07	0.73	0.02	9.6	22.0	JN	
Roper PRV	18-Jan-21	9:40 AM	308	7.91	0.07	0.82	0.02	9.7	25.1	JN	
Roper Ave. Sample Station	18-Jan-21	10:00 AM	308	7.93	0.06	0.71	0.03	8.9	22.0	JN	
Oxford St. & Buena Vista STN	19-Jan-21	8:35 AM	303	7.87	0.08	0.69	0.02	10.1	20.4	JN	
Museum Sample Station	19-Jan-21	8:50 AM	303	7.90	0.06	0.76	0.01	9.7	23.8	JN	
Balsam & Marine Sample STN	19-Jan-21	9:00 AM	304	7.93	0.08	0.72	0.02	9.7	23.1	JN	
Stayle Sample Station	19-Jan-21	9:10 AM	305	7.94	0.09	0.65	0.02	9.0	24.2	JN	
Finlay St. Sample Station	19-Jan-21	9:25 AM	309	7.86	0.08	0.72	0.02	9.3	25.1	JN	
Merklin Low Reservoir	19-Jan-21	9:50 AM	308	7.92	0.08	0.84	0.02	9.7	25.8	JN	
Merklin Reservoir (New)	19-Jan-21	10:00 AM	304	7.94	0.07	0.86	0.03	11.2	24.0	JN	
Oxford Reservoir	19-Jan-21	9:40 AM	303	7.92	0.07	0.79	0.03	10.1	25.9	JN	
Week 4											
Everall St. Sample Station	25-Jan-21	8:30 AM	300	7.94	0.08	0.73	0.01	9.3	16.3	AL	
Malabar Sample Station	25-Jan-21	8:45 AM	306	7.95	0.08	0.69	0.01	9.0	17.8	AL	
Chestnut & N. Bluff Sample STN	25-Jan-21	8:55 AM	305	8.02	0.08	0.45	0.01	8.1	18.0	AL	
Russell Ave. Sample Station	25-Jan-21	9:10 AM	302	8.01	0.06	0.76	0.01	9.7	17.5	AL	
Roper Reservoir	25-Jan-21	9:20 AM	308	8.01	0.06	0.72	0.00	9.3	19.0	AL	
Roper PRV	25-Jan-21	9:25 AM	308	7.93	0.08	0.71	0.01	9.7	20.1	AL	
Stevens Sample Station	25-Jan-21	9:35 AM	310	7.92	0.06	0.72	0.00	9.2	21.4	AL	
Oxford St. & Buena Vista STN	26-Jan-21	8:00 AM	297	7.88	0.07	0.61	0.00	9.8	14.7	AL	
Museum Sample Station	26-Jan-21	8:15 AM	305	7.90	0.07	0.68	0.02	9.4	16.3	AL	
Balsam & Marine Sample STN	26-Jan-21	8:25 AM	308	7.85	0.06	0.67	0.00	8.9	18.0	AL	
Stayle Sample Station	26-Jan-21	8:35 AM	302	7.86	0.08	0.63	0.02	8.9	16.5	AL	
Finlay St. Sample Station	26-Jan-21	8:50 AM	298	7.85	0.06	0.71	0.00	9.3	16.1	AL	
Merklin Low Reservoir	26-Jan-21	7:35 AM	308	7.78	0.06	0.72	0.02	10.0	24.1	AL	
Merklin Reservoir (New)	26-Jan-21	7:45 AM	310	7.75	0.08	0.71	0.03	9.9	28.5	AL	
Oxford Reservoir	26-Jan-21	9:15 AM	283	7.83	0.09	0.81	0.02	10.7	19.3	AL	



In-House Water Testing Results February 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldt	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	1-Feb-21	8:25 AM	286	7.84	0.06	0.80	0.03	9.5	16.1	AL	
Mann Park Sample Station	1-Feb-21	8:35 AM	294	7.90	0.06	0.71	0.03	8.3	18.1	AL	
Marine Dr Sample Station	1-Feb-21	8:50 AM	292	7.92	0.07	0.48	0.00	7.9	18.2	AL	
Russell Ave. Sample Station	1-Feb-21	9:05 AM	288	7.93	0.07	0.76	0.02	9.9	16.9	AL	
Roper Reservoir	1-Feb-21	9:15 AM	300	7.94	0.07	0.71	0.00	9.4	17.9	AL	
Roper PRV	1-Feb-21	9:20 AM	295	7.94	0.07	0.75	0.01	9.7	19.0	AL	
Roper Ave. Sample Station	1-Feb-21	9:40 AM	297	7.93	0.07	0.71	0.01	8.9	19.4	AL	
Oxford St. & Buena Vista STN	2-Feb-21	8:10 AM	290	7.83	0.06	0.60	0.00	9.7	16.5	AL	
Museum Sample Station	2-Feb-21	8:20 AM	299	7.88	0.06	0.71	0.01	9.3	19.8	AL	
Balsam & Marine Sample STN	2-Feb-21	8:35 AM	300	7.89	0.06	0.68	0.01	9.0	22.2	AL	
Stayte Sample Station	2-Feb-21	8:50 AM	290	7.94	0.07	0.63	0.00	8.4	17.8	AL	
Finlay St. Sample Station	2-Feb-21	9:00 AM	299	7.86	0.06	0.74	0.01	8.8	22.4	AL	
Merklin Low Reservoir	2-Feb-21	7:45 AM	299	7.87	0.06	0.74	0.02	9.7	23.3	AL	
Merklin Reservoir (New)	2-Feb-21	7:50 AM	302	7.83	0.06	0.70	0.00	10.0	28.0	AL	
Oxford Reservoir	2-Feb-21	9:15 AM	281	7.90	0.08	0.78	0.03	9.9	22.5	AL	
Week 2											
Everall St. Sampling Station	8-Feb-21	9:25 AM	302	7.82	0.06	0.76	0.02	9.7	20.2	AL	
Malabar Sampling Station	8-Feb-21	9:35 AM	307	7.84	0.06	0.66	0.02	10.7	24.3	AL	
Chestnut & N. Bluff Sample STN	8-Feb-21	9:45 AM	301	7.86	0.06	0.52	0.00	8.9	25.1	AL	
Russell Ave. Sample Station	8-Feb-21	10:25 AM	289	7.83	0.07	0.77	0.02	10.8	21.2	AL	
Roper Reservoir	8-Feb-21	10:35 AM	306	7.91	0.07	0.69	0.02	9.5	21.4	AL	
Roper PRV	8-Feb-21	10:40 AM	309	7.84	0.08	0.66	0.01	9.8	26.0	AL	
Stevens Sample Station	8-Feb-21	10:55 AM	306	7.84	0.06	0.72	0.02	9.3	26.6	AL	
Oxford St. & Buena Vista STN	9-Feb-21	8:15 AM	301	7.74	0.06	0.62	0.01	9.3	16.6	AL	
Museum Sample Station	9-Feb-21	9:20 AM	297	7.86	0.06	0.68	0.00	10.4	17.5	AL	
Balsam & Marine Sample STN	9-Feb-21	8:50 AM	296	7.88	0.09	0.68	0.00	9.1	16.8	AL	
Stayte Sample Station	9-Feb-21	9:35 AM	301	7.85	0.08	0.59	0.02	8.6	16.7	AL	
Finlay St. Sample Station	9-Feb-21	9:10 AM	286	7.92	0.08	0.69	0.01	10.0	15.7	AL	
Merklin Low Reservoir	9-Feb-21	9:55 AM	291	7.83	0.08	0.78	0.02	9.7	20.3	AL	
Merklin Reservoir (New)	9-Feb-21	10:00 AM	287	7.91	0.07	0.79	0.03	9.8	18.3	AL	
Oxford Reservoir	9-Feb-21	9:50 AM	289	7.82	0.09	0.79	0.01	10.1	21.4	AL	
Week 3											
Everall St. Sampling Station	16-Feb-21	8:27 AM	292	7.70	0.07	0.81	0.02	9.7	27.0	JN	
Mann Park Sample Station	16-Feb-21	8:40 AM	301	7.71	0.08	0.72	0.02	7.3	26.8	JN	
Marine Dr Sample Station	16-Feb-21	8:50 AM	294	7.74	0.07	0.41	0.02	7.1	24.6	JN	
Russell Ave. Sample Station	16-Feb-21	9:05 AM	297	7.76	0.08	0.77	0.02	9.5	24.9	JN	
Roper Reservoir	16-Feb-21	9:10 AM	297	7.79	0.07	0.77	0.02	8.7	23.2	JN	
Roper PRV	16-Feb-21	9:15 AM	298	7.76	0.06	0.79	0.01	9.1	25.7	JN	
Roper Ave. Sample Station	16-Feb-21	9:30 AM	296	7.80	0.07	0.74	0.03	7.1	23.5	JN	
Oxford St. & Buena Vista STN	17-Feb-21	9:00 AM	296	7.83	0.07	0.66	0.02	8.4	25.3	JN	
Museum Sample Station	17-Feb-21	9:20 AM	295	7.84	0.06	0.74	0.02	8.9	25.6	JN	
Balsam & Marine Sample STN	17-Feb-21	9:30 AM	297	7.81	0.09	0.71	0.02	8.3	28.0	JN	
Stayte Sample Station	17-Feb-21	9:45 AM	297	7.82	0.08	0.65	0.03	7.2	27.8	JN	
Finlay St. Sample Station	17-Feb-21	9:55 AM	294	7.82	0.06	0.76	0.02	7.8	21.9	JN	
Merklin Low Reservoir	17-Feb-21	10:30 AM	295	7.80	0.08	0.82	0.03	9.4	24.2	JN	
Merklin Reservoir (New)	17-Feb-21	10:40 AM	298	7.82	0.06	0.82	0.03	9.7	21.6	JN	
Oxford Reservoir	17-Feb-21	10:55 AM	296	7.80	0.07	0.80	0.03	9.9	23.0	JN	
Week 4											
Everall St. Sampling Station	22-Feb-21	9:00 AM	281	7.77	0.08	0.80	0.03	10.5	20.5	JN	
Malabar Sampling Station	22-Feb-21	9:20 AM	283	7.82	0.07	0.72	0.03	8.2	22.2	JN	
Chestnut & N. Bluff Sample STN	22-Feb-21	9:35 AM	280	7.82	0.09	0.64	0.02	7.3	22.3	JN	
Russell Ave. Sample Station	22-Feb-21	9:45 AM	281	7.80	0.07	0.78	0.03	9.6	23.0	JN	
Roper Reservoir	22-Feb-21	10:00 AM	285	7.86	0.08	0.76	0.02	9.1	19.8	JN	
Roper PRV	22-Feb-21	10:05 AM	285	7.82	0.09	0.79	0.04	9.4	22.1	JN	
Stevens Sample Station	22-Feb-21	10:45 AM	286	7.81	0.08	0.77	0.03	9.1	20.8	JN	
Oxford St. & Buena Vista STN	23-Feb-21	9:05 AM	286	7.80	0.07	0.67	0.03	9.6	25.3	JN	
Museum Sample Station	23-Feb-21	9:15 AM	286	7.81	0.07	0.71	0.04	9.3	27.2	JN	
Balsam & Marine Sample STN	23-Feb-21	9:25 AM	281	7.82	0.07	0.70	0.04	9.1	25.9	JN	
Stayte Sample Station	23-Feb-21	9:40 AM	285	7.81	0.09	0.69	0.03	7.6	26.7	JN	
Finlay St. Sample Station	23-Feb-21	9:55 AM	281	7.76	0.09	0.71	0.03	9.5	24.9	JN	
Merklin Low Reservoir	23-Feb-21	10:35 AM	287	7.76	0.07	0.75	0.03	9.5	26.3	JN	



In-House Water Testing Results February 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Merklin Reservoir (New)	23-Feb-21	10:45 AM	285	7.79	0.08	0.82	0.03	9.8	24.8	JN	
Oxford Reservoir	23-Feb-21	11:00 AM	282	7.77	0.09	0.75	0.02	10.1	25.1	JN	



In-House Water Testing Results March 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	1-Mar-21	9:30 AM	315	7.71	0.08	0.79	0.03	9.9	27.0	JN	
Mann Park Sample Station	1-Mar-21	9:40 AM	307	7.75	0.08	0.69	0.03	8.2	25.0	JN	
Marine Dr Sample Station	1-Mar-21	9:50 AM	304	7.71	0.08	0.47	0.02	8.1	26.7	JN	
Russell Ave. Sample Station	1-Mar-21	10:00 AM	313	7.71	0.06	0.75	0.03	9.6	25.6	JN	
Roper Reservoir	1-Mar-21	10:35 AM	305	7.74	0.07	0.72	0.03	9.2	22.2	JN	
Roper PRV	1-Mar-21	10:45 AM	307	7.74	0.06	0.76	0.03	9.4	24.1	JN	
Roper Ave. Sample Station	1-Mar-21	10:55 AM	306	7.72	0.06	0.71	0.02	9.1	23.4	JN	
Oxford St. & Buena Vista STN	2-Mar-21	8:55 AM	304	7.75	0.08	0.63	0.01	9.8	28.5	JN	
Museum Sample Station	2-Mar-21	9:15 AM	305	7.76	0.07	0.69	0.03	9.3	26.7	JN	
Balsam & Marine Sample STN	2-Mar-21	9:25 AM	306	7.79	0.07	0.67	0.03	12.3	27.6	JN	
Stayte Sample Station	2-Mar-21	9:35 AM	310	7.76	0.08	0.64	0.04	8.1	28.5	JN	
Finlay St. Sample Station	2-Mar-21	9:50 AM	302	7.83	0.08	0.72	0.03	9.9	23.1	JN	
Merklin Low Reservoir	2-Mar-21	10:05 AM	305	7.76	0.06	0.80	0.03	9.9	23.3	JN	
Merklin Reservoir (New)	2-Mar-21	10:25 AM	305	7.75	0.07	0.80	0.03	9.9	22.2	JN	
Oxford Reservoir	2-Mar-21	10:40 AM	308	7.71	0.07	0.78	0.03	9.9	22.9	JN	
Week 2											
Everall St. Sampling Station	8-Mar-21	8:50 AM	321	7.74	0.07	0.82	0.04	9.6	18.3	AL	
Malabar Sampling Station	8-Mar-21	9:05 AM	326	7.79	0.07	0.70	0.03	9.1	20.3	AL	
Chestnut & N. Bluff Sample STN	8-Mar-21	9:15 AM	325	7.81	0.08	0.62	0.05	8.9	19.6	AL	
Russell Ave. Sample Station	8-Mar-21	9:25 AM	329	7.79	0.07	0.79	0.03	9.9	20.7	AL	
Roper Reservoir	8-Mar-21	9:35 AM	317	7.82	0.07	0.76	0.02	9.6	19.6	AL	
Roper PRV	8-Mar-21	9:40 AM	317	7.80	0.08	0.73	0.03	9.5	19.6	AL	
Stevens Sample Station	8-Mar-21	9:50 AM	323	7.78	0.08	0.72	0.02	10.5	21.9	AL	
Oxford St. & Buena Vista STN	9-Mar-21	8:05 AM	318	7.95	0.07	0.67	0.05	10.2	17.1	AL	
Museum Sample Station	9-Mar-21	8:15 AM	319	7.88	0.07	0.74	0.03	9.9	19.3	AL	
Balsam & Marine Sample STN	9-Mar-21	8:30 AM	321	7.81	0.07	0.74	0.02	9.6	20.6	AL	
Stayte Sample Station	9-Mar-21	8:45 AM	312	7.81	0.07	0.77	0.03	8.7	18.9	AL	
Finlay St. Sample Station	9-Mar-21	9:00 AM	304	7.83	0.07	0.73	0.03	9.3	16.9	AL	
Merklin Low Reservoir	9-Mar-21	9:30 AM	310	7.82	0.07	0.79	0.03	9.6	19.1	AL	
Merklin Reservoir (New)	9-Mar-21	9:35 AM	316	7.75	0.06	0.77	0.03	10.0	22.4	AL	
Oxford Reservoir	9-Mar-21	9:10 AM	304	7.80	0.07	0.79	0.02	10.2	20.8	AL	
Week 3											
Everall St. Sampling Station	15-Mar-21	8:20 AM	310	7.81	0.06	0.75	0.05	9.5	17.4	AL	
Mann Park Sample Station	15-Mar-21	8:30 AM	307	7.85	0.08	0.67	0.03	9.1	21.4	AL	
Marine Dr Sample Station	15-Mar-21	8:45 AM	309	7.85	0.07	0.49	0.04	8.7	23.7	AL	
Russell Ave. Sample Station	15-Mar-21	8:55 AM	298	7.91	0.07	0.73	0.02	9.9	18.9	AL	
Roper Reservoir	15-Mar-21	9:05 AM	306	7.84	0.07	0.72	0.03	9.7	19.6	AL	
Roper PRV	15-Mar-21	9:10 AM	309	7.84	0.07	0.69	0.04	10.1	22.7	AL	
Roper Ave. Sample Station	15-Mar-21	9:30 AM	306	7.88	0.07	0.77	0.07	9.3	24.4	AL	
Oxford St. & Buena Vista STN	16-Mar-21	7:50 AM	308	8.05	0.06	0.67	0.02	10.2	17.2	AL	
Museum Sample Station	16-Mar-21	8:15 AM	307	7.96	0.07	0.73	0.10	9.9	21.0	AL	
Balsam & Marine Sample STN	16-Mar-21	8:30 AM	307	7.92	0.06	0.67	0.05	9.9	23.8	AL	
Stayte Sample Station	16-Mar-21	8:45 AM	294	7.89	0.09	0.78	0.05	9.1	20.1	AL	
Finlay St. Sample Station	16-Mar-21	8:55 AM	300	7.90	0.06	0.74	0.05	9.7	19.5	AL	
Merklin Low Reservoir	16-Mar-21	9:20 AM	307	7.84	0.08	0.88	0.06	9.5	22.9	AL	
Merklin Reservoir (New)	16-Mar-21	9:25 AM	307	7.79	0.07	0.83	0.06	10.5	24.5	AL	
Oxford Reservoir	16-Mar-21	9:10 AM	312	7.81	0.07	0.76	0.06	10.0	20.4	AL	
Week 4											
Everall St. Sampling Station	22-Mar-21	8:55 AM	306	7.64	0.08	0.77	0.02	9.9	21.7	JN	
Malabar Sampling Station	22-Mar-21	9:05 AM	313	7.87	0.08	0.66	0.02	9.9	26.6	JN	
Chestnut & N. Bluff Sample STN	22-Mar-21	9:20 AM	308	7.90	0.12	0.57	0.03	9.6	25.3	JN	
Russell Ave. Sample Station	22-Mar-21	9:30 AM	310	7.87	0.06	0.74	0.02	9.8	25.1	JN	
Roper Reservoir	22-Mar-21	9:40 AM	302	7.94	0.06	0.70	0.02	9.7	24.7	JN	
Roper PRV	22-Mar-21	9:45 AM	302	7.90	0.06	0.80	0.02	9.7	24.9	JN	
Stevens Sample Station	22-Mar-21	10:00 AM	303	7.88	0.07	0.75	0.03	9.9	24.4	JN	
Oxford St. & Buena Vista STN	23-Mar-21	9:05 AM	304	7.76	0.06	0.64	0.02	10.3	26.4	JN	
Museum Sample Station	23-Mar-21	9:20 AM	302	7.93	0.06	0.71	0.02	10.1	23.3	JN	
Balsam & Marine Sample STN	23-Mar-21	9:30 AM	303	7.81	0.07	0.67	0.03	10.0	25.6	JN	
Stayte Sample Station	23-Mar-21	9:40 AM	303	7.81	0.06	0.65	0.03	9.5	26.0	JN	
Finlay St. Sample Station	23-Mar-21	9:50 AM	301	7.84	0.06	0.72	0.03	9.8	24.3	JN	
Merklin Low Reservoir	23-Mar-21	10:05 AM	304	7.78	0.07	0.80	0.03	9.6	22.3	JN	
Merklin Reservoir (New)	23-Mar-21	10:15 AM	303	7.77	0.07	0.81	0.03	9.9	22.7	JN	
Oxford Reservoir	23-Mar-21	11:00 AM	312	7.77	0.06	0.82	0.04	10.1	21.7	JN	
Week 5											



In-House Water Testing Results March 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldd	Temp. Tested	OP	Remarks
			$\mu\text{S/cm}$			Total	Free				
Everall St. Sampling Station	29-Mar-21	8:45 AM	300	7.69	0.07	0.72	0.03	10.0	21.8	JN	
Mann Park Sample Station	29-Mar-21	8:55 AM	298	7.78	0.07	0.66	0.03	9.5	24.5	JN	
Marine Dr Sample Station	29-Mar-21	9:10 AM	308	7.76	0.09	0.28	0.02	8.7	25.0	JN	
Russell Ave. Sample Station	29-Mar-21	9:25 AM	298	7.76	0.06	0.70	0.02	9.7	25.9	JN	
Roper Reservoir	29-Mar-21	9:35 AM	304	7.77	0.06	0.69	0.02	9.9	22.8	JN	
Roper PRV	29-Mar-21	9:40 AM	302	7.73	0.07	0.77	0.03	9.9	25.6	JN	
Roper Ave. Sample Station	29-Mar-21	9:55 AM	303	7.74	0.09	0.73	0.01	9.8	25.4	JN	
Oxford St. & Buena Vista STN	30-Mar-21	9:20 AM	301	7.50	0.09	0.61	0.02	10.8	24.8	JN	
Museum Sample Station	30-Mar-21	9:30 AM	299	7.69	0.07	0.66	0.02	10.1	28.5	JN	
Balsam & Marine Sample STN	30-Mar-21	9:40 AM	303	7.86	0.07	0.56	0.02	10.3	28.8	JN	
Stayte Sample Station	30-Mar-21	9:55 AM	299	7.94	0.07	0.65	0.01	10.1	24.9	JN	
Finlay St. Sample Station	30-Mar-21	10:05 AM	296	7.98	0.07	0.68	0.02	10.7	24.6	JN	
Merklin Low Reservoir	30-Mar-21	10:35 AM	296	7.96	0.06	0.83	0.02	9.9	22.2	JN	
Merklin Reservoir (New)	30-Mar-21	10:45 AM	297	7.96	0.06	0.82	0.03	9.9	23.0	JN	
Oxford Reservoir	30-Mar-21	11:00 AM	297	7.98	0.06	0.71	0.02	10.1	19.1	JN	



In-House Water Testing Results April 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldt	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	6-Apr-21	8:55 AM	300	7.53	0.07	0.78	0.03	10.0	26.5	JN	
Malabar Sampling Station	6-Apr-21	9:05 AM	296	7.82	0.07	0.59	0.02	10.4	23.9	JN	
Chestnut & N. Bluff Sample STN	6-Apr-21	9:20 AM	306	7.88	0.07	0.55	0.02	10.9	25.1	JN	
Russell Ave. Sample Station	6-Apr-21	10:00 AM	299	7.92	0.06	0.78	0.01	10.1	25.6	JN	
Roper Reservoir	6-Apr-21	9:30 AM	303	7.98	0.07	0.69	0.02	10.1	23.4	JN	
Roper PRV	6-Apr-21	9:35 AM	303	7.97	0.07	0.82	0.03	10.5	24.4	JN	
Stevens Sample Station	6-Apr-21	9:50 AM	303	7.98	0.07	0.81	0.04	10.6	24.4	JN	
Oxford St. & Buena Vista STN	7-Apr-21	8:25 AM	304	7.98	0.07	0.53	0.03	11.6	23.3	JN	
Museum Sample Station	7-Apr-21	7:15 AM	303	7.62	0.07	0.65	0.02	10.6	27.6	JN	
Balsam & Marine Sample STN	7-Apr-21	7:25 AM	303	7.79	0.07	0.62	0.02	10.9	28.2	JN	
Stayte Sample Station	7-Apr-21	7:35 AM	303	7.94	0.07	0.66	0.02	10.6	25.9	JN	
Finlay St. Sample Station	7-Apr-21	7:45 AM	303	7.95	0.07	0.72	0.02	10.9	26.1	JN	
Merklin Low Reservoir	7-Apr-21	8:05 AM	301	8.00	0.06	0.84	0.02	10.0	21.1	JN	
Merklin Reservoir (New)	7-Apr-21	8:15 AM	297	8.30	0.06	0.84	0.02	10.1	20.8	JN	
Oxford Reservoir	7-Apr-21	7:55 AM	301	7.97	0.06	0.77	0.01	10.3	23.3	JN	
Week 2											
Everall St. Sampling Station	12-Apr-21	8:42 AM	305	7.47	0.09	0.71	0.00	10.1	24.0	JN	
Mann Park Sample Station	12-Apr-21	8:50 AM	301	7.71	0.07	0.74	0.00	9.9	23.4	JN	
Marine Dr Sample Station	12-Apr-21	9:45 AM	303	7.88	0.08	0.48	0.03	9.2	21.3	JN	
Russell Ave. Sample Station	12-Apr-21	8:33 AM	304	7.91	0.09	0.71	0.02	10.1	26.8	JN	
Roper Reservoir	12-Apr-21	8:15 AM	303	7.94	0.07	0.56	0.04	10.1	27.1	JN	
Roper PRV	12-Apr-21	8:20 AM	303	7.99	0.09	0.70	0.02	10.7	22.4	JN	
Roper Ave. Sample Station	12-Apr-21	9:55 AM	301	7.96	0.07	0.46	0.00	10.7	24.3	JN	
Oxford St. & Buena Vista STN	13-Apr-21	9:00 AM	302	7.50	0.08	0.53	0.00	11.4	24.7	JN	
Museum Sample Station	13-Apr-21	9:10 AM	303	7.72	0.08	0.59	0.03	10.7	25.1	JN	
Balsam & Marine Sample STN	13-Apr-21	9:20 AM	302	7.81	0.07	0.56	0.03	11.1	27.3	JN	
Stayte Sample Station	13-Apr-21	9:35 AM	298	7.81	0.07	0.42	0.02	10.9	28.0	JN	
Finlay St. Sample Station	13-Apr-21	9:45 AM	301	7.90	0.08	0.65	0.03	11.0	24.0	JN	
Merklin Low Reservoir	13-Apr-21	10:20 AM	302	7.93	0.07	0.47	0.02	9.9	24.9	JN	
Merklin Reservoir (New)	13-Apr-21	10:45 AM	300	7.97	0.06	0.49	0.03	10.2	22.7	JN	
Oxford Reservoir	13-Apr-21	9:55 AM	300	7.94	0.10	0.76	0.02	10.1	24.5	JN	
Week 3											
Everall St. Sampling Station	19-Apr-21	9:15 AM	304	7.48	0.06	0.66	0.03	10.3	26.8	JN	
Malabar Sampling Station	19-Apr-21	9:25 AM	300	7.69	0.07	0.66	0.02	11.6	27.4	JN	
Chestnut & N. Bluff Sample STN	19-Apr-21	9:35 AM	304	7.83	0.09	0.45	0.03	14.4	28.6	JN	
Russell Ave. Sample Station	19-Apr-21	9:50 AM	306	7.86	0.08	0.65	0.01	10.9	31.1	JN	
Roper Reservoir	19-Apr-21	10:00 AM	304	7.95	0.07	0.65	0.02	11.1	26.0	JN	
Roper PRV	19-Apr-21	10:05 AM	299	8.02	0.08	0.80	0.02	10.9	25.2	JN	
Stevens Sample Station	19-Apr-21	10:40 AM	302	7.97	0.06	0.77	0.03	11.6	26.4	JN	
Oxford St. & Buena Vista STN	20-Apr-21	8:00 AM	301	7.82	0.06	0.65	0.01	12.5	20.8	AL	
Museum Sample Station	20-Apr-21	8:15 AM	304	7.83	0.06	0.71	0.03	11.6	24.9	AL	
Balsam & Marine Sample STN	20-Apr-21	8:25 AM	304	7.86	0.06	0.67	0.03	12.9	28.0	AL	
Stayte Sample Station	20-Apr-21	8:40 AM	290	7.97	0.07	0.62	0.01	12.8	23.1	AL	
Finlay St. Sample Station	20-Apr-21	8:50 AM	297	8.00	0.06	0.71	0.03	12.5	22.8	AL	
Merklin Low Reservoir	20-Apr-21	9:15 AM	304	7.99	0.06	0.80	0.05	10.1	25.7	AL	
Merklin Reservoir (New)	20-Apr-21	9:25 AM	304	7.99	0.06	0.81	0.00	10.4	27.7	AL	
Oxford Reservoir	20-Apr-21	9:00 AM	290	8.07	0.12	0.75	0.04	10.5	21.8	AL	
Week 4											
Everall St. Sampling Station	26-Apr-21	8:50	304	7.22	0.08	0.78	0.02	10.2	22.1	JN	
Mann Park Sample Station	26-Apr-21	9:00	305	7.66	0.07	0.65	0.02	11.8	24.8	JN	
Marine Dr Sample Station	26-Apr-21	9:15	305	7.89	0.09	0.43	0.02	12.8	26.9	JN	
Russell Ave. Sample Station	26-Apr-21	9:35	305	7.96	0.07	0.75	0.01	10.5	25.0	JN	
Roper Reservoir	26-Apr-21	10:20	303	7.99	0.08	0.69	0.02	11.1	24.1	JN	
Roper PRV	26-Apr-21	10:25	303	7.99	0.09	0.76	0.02	11.0	22.8	JN	
Roper Ave. Sample Station	26-Apr-21	10:05	304	7.97	0.08	0.67	0.03	13.5	26.1	JN	
Oxford St. & Buena Vista STN	27-Apr-21	8:05	299	8.02	0.09	0.65	0.02	12.7	20.7	AL	
Museum Sample Station	27-Apr-21	8:25	301	8.08	0.07	0.64	0.02	11.7	23.8	AL	
Balsam & Marine Sample STN	27-Apr-21	8:40	301	8.16	0.07	0.65	0.03	12.7	26.4	AL	
Stayte Sample Station	27-Apr-21	8:50	293	8.22	0.08	0.45	0.02	14.0	23.7	AL	
Finlay St. Sample Station	27-Apr-21	9:05	290	8.22	0.07	0.71	0.02	12.7	23.5	AL	
Merklin Low Reservoir	27-Apr-21	9:40	290	8.28	0.09	0.75	0.02	10.2	24.0	AL	



In-House Water Testing Results April 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colld	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Merlin Reservoir (New)	27-Apr-21	9:45	294	8.26	0.08	0.76	0.03	10.4	25.5	AL	
Oxford Reservoir	27-Apr-21	9:20	278	8.24	0.10	0.76	0.02	10.5	23.0	AL	



In-House Water Testing Results May 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	3-May-21	8:45 AM	303	7.55	0.07	0.80	0.01	10.3	24.8	JN	
Malabar Sampling Station	3-May-21	8:55 AM	304	7.86	0.07	0.71	0.02	12.1	25.6	JN	
Chestnut & N. Bluff Sample STN	3-May-21	9:25 AM	303	7.96	0.07	0.53	0.02	15.4	25.5	JN	
Russell Ave. Sample Station	3-May-21	9:45 AM	303	7.97	0.07	0.70	0.02	11.1	26.7	JN	
Roper Reservoir	3-May-21	9:55 AM	303	8.03	0.07	0.74	0.02	11.3	26.0	JN	
Roper PRV	3-May-21	10:00 AM	299	8.02	0.07	0.80	0.02	11.4	24.8	JN	
Stevens Sample Station	3-May-21	10:10 AM	304	7.98	0.08	0.75	0.03	12.1	29.8	JN	
Oxford St. & Buena Vista STN	4-May-21	8:35 AM	304	7.60	0.09	0.63	0.02	13.5	26.0	JN	
Museum Sample Station	4-May-21	8:50 AM	304	7.80	0.09	0.70	0.03	11.8	27.1	JN	
Balsam & Marine Sample STN	4-May-21	9:00 AM	305	7.93	0.09	0.66	0.03	13.0	29.1	JN	
Stayte Sample Station	4-May-21	9:10 AM	304	7.99	0.08	0.52	0.01	14.6	28.3	JN	
Finlay St. Sample Station	4-May-21	9:20 AM	303	8.03	0.08	0.70	0.02	13.4	23.8	JN	
Merklin Low Reservoir	4-May-21	9:50 AM	305	8.00	0.07	0.83	0.02	10.0	24.5	JN	
Merklin Reservoir (New)	4-May-21	10:00 AM	304	8.01	0.06	0.80	0.02	10.3	25.4	JN	
Oxford Reservoir	4-May-21	9:35 AM	303	8.03	0.08	0.72	0.03	10.3	23.6	JN	
Week 2											
Everall St. Sampling Station	10-May-21	9:00 AM	297	7.61	0.07	0.80	0.03	10.4	23.0	JN	
Mann Park Sample Station	10-May-21	9:10 AM	295	7.87	0.07	0.71	0.03	12.1	24.9	JN	
Marine Dr Sample Station	10-May-21	9:25 AM	296	7.97	0.08	0.55	0.02	14.1	25.1	JN	
Russell Ave. Sample Station	10-May-21	9:40 AM	295	8.00	0.09	0.81	0.04	10.9	25.7	JN	
Roper Reservoir	10-May-21	9:50 AM	297	8.03	0.08	0.75	0.02	11.4	23.2	JN	
Roper PRV	10-May-21	9:55 AM	296	8.04	0.10	0.82	0.03	11.2	23.2	JN	
Roper Ave. Sample Station	10-May-21	10:10 AM	296	8.03	0.07	0.73	0.03	14.3	25.5	JN	
Oxford St. & Buena Vista STN	11-May-21	8:40 AM	293	7.68	0.08	0.68	0.03	13.2	22.1	JN	
Museum Sample Station	11-May-21	9:05 AM	290	7.96	0.07	0.73	0.02	11.9	22.8	JN	
Balsam & Marine Sample STN	11-May-21	9:15 AM	292	8.02	0.07	0.72	0.03	13.1	24.0	JN	
Stayte Sample Station	11-May-21	9:25 AM	296	8.04	0.08	0.54	0.03	15.3	24.3	JN	
Finlay St. Sample Station	11-May-21	9:35 AM	297	7.96	0.08	0.70	0.03	13.5	24.9	JN	
Merklin Low Reservoir	11-May-21	10:20 AM	297	8.03	0.08	0.85	0.03	10.3	25.2	JN	
Merklin Reservoir (New)	11-May-21	10:30 AM	297	8.02	0.08	0.87	0.03	10.4	24.2	JN	
Oxford Reservoir	11-May-21	9:55 AM	296	7.97	0.07	0.77	0.02	10.3	24.9	JN	
Week 3											
Everall St. Sampling Station	17-May-21	9:00 AM	297	7.61	0.06	0.74	0.02	10.6	25.7	JN	
Malabar Sampling Station	17-May-21	9:10 AM	298	7.85	0.07	0.67	0.03	13.1	27.7	JN	
Chestnut & N. Bluff Sample STN	17-May-21	9:25 AM	298	7.85	0.07	0.50	0.03	17.3	29.7	JN	
Russell Ave. Sample Station	17-May-21	9:35 AM	297	7.92	0.08	0.73	0.03	11.3	28.9	JN	
Roper Reservoir	17-May-21	9:45 AM	296	8.02	0.07	0.75	0.03	12.0	22.9	JN	
Roper PRV	17-May-21	9:50 AM	295	8.02	0.08	0.79	0.03	11.9	22.2	JN	
Stevens Sample Station	17-May-21	10:00 AM	297	7.99	0.09	0.81	0.04	12.7	23.5	JN	
Oxford St. & Buena Vista STN	18-May-21	9:15 AM	296	7.68	0.08	0.61	0.02	14.6	26.1	JN	
Museum Sample Station	18-May-21	9:25 AM	299	7.95	0.09	0.70	0.04	12.5	27.1	JN	
Balsam & Marine Sample STN	18-May-21	9:35 AM	298	8.02	0.08	0.65	0.06	14.3	28.4	JN	
Stayte Sample Station	18-May-21	9:45 AM	299	8.03	0.11	0.53	0.01	16.7	29.0	JN	
Finlay St. Sample Station	18-May-21	9:55 AM	297	8.05	0.08	0.69	0.03	14.9	24.6	JN	
Merklin Low Reservoir	18-May-21	10:40 AM	298	8.04	0.06	0.82	0.03	10.3	23.1	JN	
Merklin Reservoir (New)	18-May-21	10:50 AM	298	8.11	0.08	0.82	0.03	10.4	21.5	JN	
Oxford Reservoir	18-May-21	10:10 AM	297	8.06	0.07	0.76	0.02	10.3	22.3	JN	
Week 4											
Everall St. Sampling Station	25-May-21	9:20 AM	299	7.68	0.07	0.77	0.05	10.3	24.4	JN	
Mann Park Sample Station	25-May-21	9:30 AM	300	7.92	0.07	0.68	0.02	12.9	25.4	JN	
Marine Dr Sample Station	25-May-21	9:45 AM	295	8.02	0.08	0.47	0.02	16.2	26.8	JN	
Russell Ave. Sample Station	25-May-21	10:00 AM	300	8.03	0.07	0.73	0.02	11.3	27.0	JN	
Roper Reservoir	25-May-21	10:30 AM	301	8.13	0.07	0.69	0.03	11.7	23.6	JN	
Roper PRV	25-May-21	10:35 AM	298	8.07	0.07	0.77	0.04	11.2	23.7	JN	
Roper Ave. Sample Station	25-May-21	10:50 AM	299	8.06	0.07	0.69	0.02	15.7	26.5	JN	
Oxford St. & Buena Vista STN	26-May-21	9:05 AM	294	7.77	0.08	0.65	0.02	13.8	22.5	JN	
Museum Sample Station	26-May-21	9:35 AM	298	7.92	0.07	0.72	0.01	12.3	23.5	JN	
Balsam & Marine Sample STN	26-May-21	9:50 AM	299	8.02	0.07	0.68	0.01	13.5	24.9	JN	
Stayte Sample Station	26-May-21	10:00 AM	300	7.96	0.11	0.48	0.02	17.0	26.2	JN	
Finlay St. Sample Station	26-May-21	10:10 AM	294	7.92	0.06	0.73	0.03	13.9	27.5	JN	
Merklin Low Reservoir	26-May-21	10:40 AM	292	7.95	0.07	0.72	0.02	10.4	25.1	JN	



In-House Water Testing Results May 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			$\mu\text{S/cm}$			Total	Free				
Merlin Reservoir (New)	26-May-21	10:50 AM	294	7.95	0.07	0.74	0.03	10.5	24.3	JN	
Oxford Reservoir	26-May-21	10:25 AM	291	7.96	0.07	0.76	0.03	10.3	22.7	JN	



In-House Water Testing Results June 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	1-Jun-21	8:00 AM	298	7.84	0.09	0.75	0.03	10.4	22.6	AL	
Malabar Sampling Station	1-Jun-21	8:15 AM	308	7.94	0.07	0.77	0.05	12.5	26.3	AL	
Chestnut & N. Bluff Sample STN	1-Jun-21	8:25 AM	302	8.01	0.08	0.45	0.00	17.6	30.0	AL	
Russell Ave. Sample Station	1-Jun-21	8:40 AM	294	8.08	0.09	0.82	0.03	11.4	24.3	AL	
Roper Reservoir	1-Jun-21	8:50 AM	306	8.12	0.08	0.76	0.03	11.7	26.3	AL	
Roper PRV	1-Jun-21	8:55 AM	306	8.10	0.08	0.78	0.03	11.7	27.5	AL	
Stevens Sample Station	1-Jun-21	9:10 AM	302	8.10	0.08	0.80	0.03	12.5	26.6	AL	
Oxford St. & Buena Vista STN	2-Jun-21	8:40 AM	302	7.64	0.07	0.71	0.03	10.7	259.0	JN	
Museum Sample Station	2-Jun-21	7:45 AM	306	7.77	0.07	0.73	0.03	12.5	27.7	JN	
Balsam & Marine Sample STN	2-Jun-21	7:55 AM	303	7.90	0.08	0.72	0.02	14.0	28.8	JN	
Stayte Sample Station	2-Jun-21	8:05 AM	304	7.91	0.08	0.57	0.02	17.2	29.4	JN	
Finlay St. Sample Station	2-Jun-21	8:15 AM	305	8.01	0.07	0.78	0.02	13.9	25.0	JN	
Merklin Low Reservoir	2-Jun-21	9:10 AM	302	8.01	0.06	0.80	0.02	10.5	24.5	JN	
Merklin Reservoir (New)	2-Jun-21	9:20 AM	302	8.05	0.07	0.82	0.03	10.5	24.6	JN	
Oxford Reservoir	2-Jun-21	9:00 AM	301	8.02	0.07	0.77	0.02	10.4	25.5	JN	
Week 2											
Everall St. Sampling Station	8-Jun-21	8:20 AM	292	7.90	0.08	0.75	0.03	10.4	20.4	AL	
Mann Park Sample Station	8-Jun-21	8:30 AM	301	8.07	0.09	0.74	0.02	13.0	22.6	AL	
Marine Dr Sample STN	8-Jun-21	8:40 AM	302	8.08	0.08	0.59	0.02	17.7	24.5	AL	
Russell Ave. Sample Station	8-Jun-21	8:55 AM	287	8.22	0.07	0.74	0.04	11.9	21.4	AL	
Roper Reservoir	8-Jun-21	9:05 AM	304	8.23	0.07	0.73	0.03	11.7	23.2	AL	
Roper PRV	8-Jun-21	9:10 AM	299	8.22	0.08	0.75	0.04	11.6	23.6	AL	
Roper Ave. Sample Station	8-Jun-21	9:20 AM	300	8.22	0.07	0.65	0.03	16.3	24.3	AL	
Oxford St. & Buena Vista STN	9-Jun-21	8:00 AM	304	8.02	0.08	0.64	0.02	14.1	24.3	AL	
Museum Sample Station	9-Jun-21	8:15 AM	303	7.94	0.08	0.71	0.02	12.3	27.4	AL	
Balsam & Marine Sample STN	9-Jun-21	8:25 AM	290	8.25	0.08	0.71	0.01	14.2	22.9	AL	
Stayte Sample Station	9-Jun-21	8:35 AM	300	8.19	0.08	0.60	0.02	17.9	26.9	AL	
Finlay St. Sample Station	9-Jun-21	8:45 AM	297	8.23	0.07	0.75	0.01	14.6	22.6	AL	
Merklin Low Reservoir	9-Jun-21	9:10 AM	304	7.88	0.08	0.65	0.03	10.6	25.6	AL	
Merklin Reservoir (New)	9-Jun-21	9:15 AM	304	8.21	0.08	0.74	0.02	10.5	28.2	AL	
Oxford Reservoir	9-Jun-21	8:55 AM	288	8.17	0.06	0.72	0.02	10.7	24.4	AL	
Week 3											
Everall St. Sampling Station	14-Jun-21	8:50 AM	301	7.59	0.08	0.76	0.02	10.7	25.5	JN	
Malabar Sampling Station	14-Jun-21	9:00 AM	300	7.90	0.07	0.75	0.03	13.3	23.7	JN	
Chestnut & N. Bluff Sample STN	14-Jun-21	9:15 AM	305	7.90	0.09	0.51	0.02	18.1	25.8	JN	
Russell Ave. Sample Station	14-Jun-21	9:25 AM	301	7.90	0.06	0.75	0.02	11.6	26.7	JN	
Roper Reservoir	14-Jun-21	10:25 AM	304	8.02	0.07	0.73	0.02	12.1	23.4	JN	
Roper PRV	14-Jun-21	10:30 AM	300	8.01	0.08	0.78	0.03	11.5	23.8	JN	
Stevens Sample Station	14-Jun-21	10:10 AM	301	8.03	0.06	0.76	0.03	13.1	24.2	JN	
Oxford St. & Buena Vista STN	15-Jun-21	8:35 AM	305	7.74	0.07	0.68	0.03	14.4	25.5	JN	
Museum Sample Station	15-Jun-21	7:50 AM	304	7.90	0.07	0.72	0.01	12.8	25.0	JN	
Balsam & Marine Sample STN	15-Jun-21	8:00 AM	306	7.96	0.06	0.69	0.03	14.1	25.8	JN	
Stayte Sample Station	15-Jun-21	8:10 AM	302	8.01	0.07	0.52	0.02	18.1	26.7	JN	
Finlay St. Sample Station	15-Jun-21	8:20 AM	304	7.99	0.07	0.72	0.02	15.1	26.3	JN	
Merklin Low Reservoir	15-Jun-21	9:05 AM	305	8.01	0.06	0.80	0.02	10.6	24.1	JN	
Merklin Reservoir (New)	15-Jun-21	9:15 AM	304	8.03	0.07	0.81	0.03	10.5	24.3	JN	
Oxford Reservoir	15-Jun-21	8:50 AM	301	7.98	0.08	0.77	0.03	10.5	25.3	JN	
Week 4											
Everall St. Sampling Station	21-Jun-21	8:10 AM	300	7.84	0.08	0.77	0.02	10.5	23.8	AL	
Mann Park Sample Station	21-Jun-21	8:20 AM	307	7.92	0.08	0.68	0.01	14.1	27.1	AL	
Marine Dr Sample STN	21-Jun-21	8:40 AM	296	8.11	0.08	0.50	0.03	18.1	25.9	AL	
Russell Ave. Sample Station	21-Jun-21	8:50 AM	296	8.18	0.07	0.77	0.01	11.4	23.7	AL	
Roper Reservoir	21-Jun-21	9:00 AM	301	8.22	0.08	0.68	0.02	12.9	23.0	AL	
Roper PRV	21-Jun-21	9:05 AM	308	8.21	0.07	0.67	0.02	12.5	27.1	AL	
Roper Ave. Sample Station	21-Jun-21	9:15 AM	308	7.91	0.08	0.62	0.02	17.1	28.2	AL	
Oxford St. & Buena Vista STN	22-Jun-21	7:15 AM	309	7.89	0.07	0.55	0.02	14.8	27.2	AL	
Museum Sample Station	22-Jun-21	7:25 AM	309	8.03	0.06	0.63	0.02	12.7	32.3	AL	
Balsam & Marine Sample STN	22-Jun-21	7:35 AM	305	8.05	0.07	0.61	0.02	14.7	33.1	AL	



In-House Water Testing Results June 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colld	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Stayte Sample Station	22-Jun-21	7:45 AM	294	8.15	0.07	0.55	0.00	18.8	28.5	AL	
Finlay St. Sample Station	22-Jun-21	7:55 AM	296	8.15	0.07	0.68	0.02	14.1	26.5	AL	
Merklin Low Reservoir	22-Jun-21	8:10 AM	308	8.14	0.07	0.66	0.02	10.6	31.6	AL	
Merklin Reservoir (New)	22-Jun-21	8:15 AM	302	7.87	0.07	0.71	0.00	10.6	31.2	AL	
Oxford Reservoir	22-Jun-21	6:55 AM	294	8.19	0.07	0.71	0.03	11.0	28.2	AL	
Week 5											
Overall St. Sampling Station	28-Jun-21	7:25 AM	308	7.90	0.09	0.64	0.03	10.9	32.4	AL	
Malabar Sampling Station	28-Jun-21	7:35 AM	309	7.90	0.09	0.65	0.07	15.8	33.6	AL	
Chestnut & N. Bluff Sample STN	28-Jun-21	7:45 AM	302	8.03	0.12	0.34	0.04	20.0	34.9	AL	
Russell Ave. Sample Station	28-Jun-21	8:00 AM	295	8.11	0.14	0.72	0.03	11.3	30.7	AL	
Roper Reservoir	28-Jun-21	8:35 AM	309	7.90	0.09	0.61	0.04	13.1	37.3	AL	
Roper PRV	28-Jun-21	8:40 AM	303	7.12	0.08	0.69	0.02	13.4	36.4	AL	
Stevens Sample Station	28-Jun-21	8:15 AM	295	7.14	0.09	0.67	0.02	13.0	31.9	AL	
Oxford St. & Buena Vista STN	29-Jun-21	6:50 AM	309	7.79	0.08	0.67	0.02	15.7	29.7	AL	
Museum Sample Station	29-Jun-21	7:10 AM	307	7.74	0.07	0.67	0.04	13.6	33.8	AL	
Balsam & Marine Sample STN	29-Jun-21	7:20 AM	305	7.82	0.08	0.66	0.01	16.0	33.8	AL	
Stayte Sample Station	29-Jun-21	7:35 AM	294	7.86	0.08	0.64	0.02	19.9	29.8	AL	
Finlay St. Sample Station	29-Jun-21	7:50 AM	301	7.86	0.08	0.75	0.02	15.2	28.0	AL	
Merklin Low Reservoir	29-Jun-21	8:35 AM	308	7.82	0.08	0.75	0.03	10.9	32.4	AL	
Merklin Reservoir (New)	29-Jun-21	8:45 AM	307	7.85	0.07	0.74	0.02	11.0	33.7	AL	
Oxford Reservoir	29-Jun-21	8:05 AM	293	7.93	0.09	0.71	0.02	11.1	28.3	AL	



In-House Water Testing Results July 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
											Resampled on July 8, 2021
Everall St. Sampling Station	5-Jul-21	8:35 AM	299	7.70	0.09	0.74	0.02	10.8	27.4	JN	8:30 - 10.8
Mann Park Sample Station	5-Jul-21	8:45 AM	307	7.88	0.11	0.75	0.02	14.1	29.1	JN	8:40 - 13.4
Marine Dr Sample Station	5-Jul-21	8:55 AM	307	7.94	0.10	0.54	0.00	20.4	30.4	JN	8:50 - 20.2
Russell Ave. Sample Station	5-Jul-21	9:10 AM	305	7.97	0.08	0.73	0.02	11.7	29.8	JN	9:00 - 11.5
Roper Reservoir	5-Jul-21	9:29 AM	300	8.06	0.07	0.69	0.02	12.9	26.1	JN	9:10 - 13.0
Roper PRV	5-Jul-21	9:25 AM	305	8.07	0.09	0.74	0.03	12.3	24.1	JN	9:15 - 11.9
Roper Avenue Sample Station	5-Jul-21	9:35 AM	301	8.12	0.09	0.65	0.01	19.1	24.5	JN	9:30 - 18.9
Oxford St. & Buena Vista STN	6-Jul-21	8:35 AM	306	7.97	0.07	0.69	0.02	15.3	26.6	JN	
Museum Sample Station	6-Jul-21	8:55 AM	306	8.23	0.06	0.70	0.02	13.6	27.5	JN	
Balsam & Marine Sample STN	6-Jul-21	9:10 AM	306	8.11	0.07	0.69	0.03	15.9	28.6	JN	
Stayle Sample Station	6-Jul-21	9:20 AM	301	8.14	0.10	0.55	0.02	21.1	28.5	JN	
Finlay St. Sample Station	6-Jul-21	9:30 AM	306	8.14	0.07	0.75	0.01	16.1	25.9	JN	
Merklin Low Reservoir	6-Jul-21	10:05 AM	303	8.18	0.07	0.80	0.03	10.9	23.4	JN	
Merklin Reservoir (New)	6-Jul-21	10:15 AM	300	8.19	0.07	0.79	0.03	10.7	22.9	JN	
Oxford Reservoir	6-Jul-21	9:50 AM	304	8.15	0.07	0.74	0.02	10.9	25.2	JN	
Week 2											
											Resampled on July 16, 2021
Everall St. Sampling Station	12-Jul-21	8:30 AM	298	7.87	0.10	0.80	0.03	10.8	25.8	JN	8:20 - 10.5
Malabar Sampling Station	12-Jul-21	8:40 AM	307	7.96	0.06	0.76	0.02	15.4	27.3	JN	8:35 - 13.6
Chestnut & N. Bluff Sample STN	12-Jul-21	8:55 AM	306	8.02	0.08	0.56	0.02	20.3	28.4	JN	8:55 - 20.7
Russell Ave. Sample Station	12-Jul-21	9:05 AM	300	8.05	0.08	0.76	0.03	11.8	27.9	JN	9:05 - 11.5
Roper Reservoir	12-Jul-21	9:15 AM	306	8.15	0.09	0.76	0.03	12.9	23.6	JN	9:15 - 13.1
Roper PRV	12-Jul-21	9:20 AM	301	8.17	0.07	0.82	0.03	12.1	23.3	JN	9:20 - 14.5
Stevens Sample Station	12-Jul-21	9:35 AM	306	8.16	0.08	0.82	0.03	13.9	23.3	JN	9:25 - 14.5
Oxford St. & Buena Vista STN	13-Jul-21	8:05 AM	300	7.83	0.07	0.71	0.02	15.4	25.1	JN	
Museum Sample Station	13-Jul-21	8:15 AM	305	7.96	0.07	0.74	0.02	13.4	27.6	JN	
Balsam & Marine Sample STN	13-Jul-21	8:30 AM	300	8.06	0.07	0.74	0.03	15.6	28.0	JN	
Stayle Sample Station	13-Jul-21	8:40 AM	305	8.06	0.07	0.56	0.01	21.0	29.6	JN	
Finlay St. Sample Station	13-Jul-21	8:50 AM	300	8.11	0.07	0.77	0.03	15.4	26.2	JN	
Merklin Low Reservoir	13-Jul-21	9:30 AM	300	8.14	0.07	0.81	0.03	10.9	24.9	JN	
Merklin Reservoir (New)	13-Jul-21	10:00 AM	303	8.15	0.08	0.83	0.02	10.9	22.6	JN	
Oxford Reservoir	13-Jul-21	9:05 AM	300	8.14	0.07	0.77	0.02	10.6	24.4	JN	
Week 3											
Everall St. Sampling Station	20-Jul-21	7:45 AM	304	7.94	0.09	0.78	0.03	10.8	25.5	JN	
Mann Park Sample Station	20-Jul-21	7:55 AM	307	7.99	0.08	0.75	0.03	13.7	26.2	JN	
Marine Dr Sample Station	20-Jul-21	8:10 AM	307	8.06	0.14	0.52	0.01	20.1	27.2	JN	
Russell Ave. Sample Station	20-Jul-21	8:20 AM	304	8.12	0.08	0.78	0.03	11.4	26.0	JN	
Roper Reservoir	20-Jul-21	8:30 AM	303	8.17	0.08	0.70	0.03	12.7	24.8	JN	
Roper PRV	20-Jul-21	8:35 AM	300	8.24	0.07	0.74	0.03	11.7	24.1	JN	
Roper Ave. Sample Station	20-Jul-21	8:50 AM	301	8.24	0.08	0.64	0.03	18.8	24.7	JN	
Oxford St. & Buena Vista STN	21-Jul-21	8:15 AM	300	7.88	0.08	0.66	0.02	16.1	24.4	JN	
Museum Sample Station	21-Jul-21	8:35 AM	301	8.00	0.10	0.70	0.03	13.4	24.6	JN	
Balsam & Marine Sample STN	21-Jul-21	8:45 AM	304	8.00	0.08	0.70	0.02	15.4	26.2	JN	
Stayle Sample Station	21-Jul-21	8:55 AM	302	8.07	0.07	0.54	0.01	21.2	26.6	JN	
Finlay St. Sample Station	21-Jul-21	9:05 AM	305	8.10	0.07	0.74	0.02	14.9	23.2	JN	
Merklin Low Reservoir	21-Jul-21	9:35 AM	305	8.12	0.07	0.84	0.02	10.7	24.2	JN	
Merklin Reservoir (New)	21-Jul-21	9:45 AM	305	8.19	0.07	0.81	0.03	10.6	23.0	JN	
Oxford Reservoir	21-Jul-21	9:25 AM	305	8.20	0.09	0.80	0.03	10.6	23.0	JN	
Week 4											
Everall St. Sampling Station	26-Jul-21	7:45 AM	307	7.85	0.08	0.71	0.03	10.7	27.9	AL	
Malabar Sampling Station	26-Jul-21	8:00 AM	309	7.97	0.09	0.64	0.02	17.2	31.3	AL	
Chestnut & N. Bluff Station	26-Jul-21	8:10 AM	309	8.04	0.11	0.39	0.02	21.8	33.8	AL	
Russell Ave. Sample Station	26-Jul-21	8:25 AM	292	8.08	0.09	0.71	0.01	11.7	28.8	AL	
Roper Reservoir	26-Jul-21	8:35 AM	309	8.09	0.08	0.64	0.00	12.9	31.1	AL	
Roper PRV	26-Jul-21	8:40 AM	307	8.08	0.09	0.64	0.02	13.0	32.7	AL	
Stevens Sample Station	26-Jul-21	8:55 AM	295	8.12	0.09	0.69	0.03	13.6	28.2	AL	
Oxford St. & Buena Vista STN	27-Jul-21	7:05 AM	307	7.70	0.09	0.59	0.03	16.4	26.8	AL	
Museum Sample Station	27-Jul-21	7:35 AM	308	7.77	0.06	0.61	0.02	13.5	31.5	AL	
Balsam & Marine Sample STN	27-Jul-21	7:45 AM	297	7.87	0.09	0.64	0.03	15.5	28.9	AL	
Stayle Sample Station	27-Jul-21	7:55 AM	298	7.91	0.09	0.54	0.03	21.2	27.7	AL	
Finlay St. Sample Station	27-Jul-21	8:05 AM	308	7.89	0.09	0.69	0.03	15.7	30.7	AL	
Merklin Low Reservoir	27-Jul-21	8:35 AM	309	7.91	0.10	0.69	0.03	11.2	31.0	AL	
Merklin Reservoir (New)	27-Jul-21	8:45 AM	308	7.94	0.08	0.67	0.02	11.1	33.1	AL	
Oxford Reservoir	27-Jul-21	9:00 AM	293	8.00	0.09	0.74	0.00	10.9	26.6	AL	



In-House Water Testing Results August 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	3-Aug-21	7:25 AM	301	7.91	0.07	0.73	0.03	10.8	22.3	AL	
Mann Park Sample Station	3-Aug-21	7:35 AM	311	7.97	0.07	0.74	0.03	14.5	27.3	AL	
Marine Dr Sample Station	3-Aug-21	7:45 AM	303	8.04	0.09	0.59	0.03	20.2	27.9	AL	
Russell Ave. Sample Station	3-Aug-21	8:00 AM	303	8.07	0.08	0.71	0.01	11.5	27.5	AL	
Roper Reservoir	3-Aug-21	8:10 AM	304	8.11	0.09	0.72	0.02	12.7	27.4	AL	
Roper PRV	3-Aug-21	8:15 AM	296	8.13	0.09	0.73	0.02	13.9	25.4	AL	
Roper Ave. Sample Station	3-Aug-21	8:30 AM	303	8.15	0.10	0.70	0.01	18.9	25.3	AL	
Oxford St. & Buena Vista STN	4-Aug-21	7:10	309	7.89	0.09	0.59	0.01	15.6	25.5	AL/AN	Samples were tested the following day due to water main break
Museum Station	4-Aug-21	7:25	309	8.10	0.09	0.56	0.01	14.8	27.1	AL/AN	
Stayte Sampling Station	4-Aug-21	7:40	306	8.15	0.09	0.58	0.02	15.5	27.8	AL/AN	
Balsam & Marine	4-Aug-21	7:50	300	8.05	0.09	0.52	0.00	20.9	26.8	AL/AN	
Finlay St. Sampling Station	4-Aug-21	8:00	304	8.04	0.09	0.63	0.00	15.5	26.6	AL/AN	
Merklin Low Reservoir	4-Aug-21	8:35	304	8.06	0.10	0.58	0.02	10.9	26.6	AL/AN	
Merklin Reservoir (New)	4-Aug-21	8:45	305	8.09	0.09	0.63	0.00	10.9	27.4	AL/AN	
Oxford Reservoir	4-Aug-21	8:15	296	8.11	0.17	0.62	0.03	10.9	25.6	AL/AN	
Week 2											
Everall St. Sampling Station	9-Aug-21	7:40 AM	310	7.94	0.08	0.67	0.02	10.60	28.4	AL	
Malabar Sampling Station	9-Aug-21	7:50 AM	313	8.00	0.09	0.63	0.00	17.80	33.7	AL	
Chestnut & N. Bluff Station	9-Aug-21	8:00 AM	306	8.11	0.12	0.32	0.01	22.50	31.4	AL	
Russell Ave. Sample Station	9-Aug-21	8:15 AM	297	8.12	0.08	0.74	0.03	11.50	26.6	AL	
Roper Reservoir	9-Aug-21	8:25 AM	310	8.16	0.09	0.63	0.00	12.80	27.6	AL	
Roper PRV	9-Aug-21	8:30 AM	310	8.17	0.08	0.54	0.02	13.10	29.4	AL	
Stevens Sample Station	9-Aug-21	8:45 AM	297	8.22	0.09	0.52	0.02	14.30	26.9	AL	
Oxford St. & Buena Vista STN	10-Aug-21	8:15	309	7.92	0.10	0.64	0.02	16.1	24.8	JN	
Museum Station	10-Aug-21	8:30	310	8.00	0.08	0.66	0.03	13.6	26.0	JN	
Stayte Sampling Station	10-Aug-21	8:45	305	8.02	0.08	0.65	0.03	15.3	28.7	JN	
Balsam & Marine	10-Aug-21	8:55	303	8.04	0.09	0.51	0.02	20.9	28.9	JN	
Finlay St. Sampling Station	10-Aug-21	9:05	303	8.08	0.08	0.66	0.03	16.5	24.6	JN	
Merklin Low Reservoir	10-Aug-21	10:25	303	8.07	0.09	0.72	0.03	11.1	23.2	JN	
Merklin Reservoir (New)	10-Aug-21	10:35	304	8.10	0.09	0.70	0.03	10.9	23.0	JN	
Oxford Reservoir	10-Aug-21	9:20	308	8.07	0.08	0.74	0.03	10.7	24.6	JN	
Week 3											
Everall St. Sampling Station	16-Aug-21	7:45 AM	308	8.01	0.08	0.67	0.04	10.6	27.8	AL	
Mann Park Sample Station	16-Aug-21	7:55 AM	310	8.08	0.10	0.63	0.02	15.5	31.7	AL	
Marine Dr Sample Station	16-Aug-21	8:10 AM	293	8.16	0.10	0.51	0.02	20.1	25.4	AL	
Russell Ave. Sample Station	16-Aug-21	8:25 AM	309	8.15	0.08	0.77	0.01	12.6	28.5	AL	
Roper Reservoir	16-Aug-21	8:35 AM	302	8.20	0.11	0.62	0.02	13.2	27.5	AL	
Roper PRV	16-Aug-21	8:40 AM	307	8.19	0.12	0.62	0.02	14.0	28.2	AL	
Roper Ave. Sample Station	16-Aug-21	8:55 AM	295	8.27	0.13	0.61	0.02	13.5	23.8	AL	
Oxford St. & Buena Vista STN	17-Aug-21	7:40 AM	310	7.96	0.10	0.59	0.03	15.5	26.0	AL	
Museum Station	17-Aug-21	7:50 AM	310	7.97	0.11	0.59	0.03	13.5	31.7	AL	
Stayte Sampling Station	17-Aug-21	8:00 AM	304	8.03	0.11	0.60	0.02	15.8	30.7	AL	
Balsam & Marine	17-Aug-21	8:10 AM	295	8.06	0.10	0.50	0.02	21.0	24.9	AL	
Finlay St. Sampling Station	17-Aug-21	8:20 AM	307	8.05	0.11	0.67	0.00	16.6	25.2	AL	
Merklin Low Reservoir	17-Aug-21	8:55 AM	310	8.02	0.14	0.65	0.04	10.9	29.5	AL	
Merklin Reservoir (New)	17-Aug-21	9:00 AM	306	8.07	0.13	0.64	0.02	10.8	28.7	AL	
Oxford Reservoir	17-Aug-21	8:35 AM	296	8.10	0.10	0.71	0.02	10.7	23.5	AL	
Week 4											
Everall St. Sampling Station	23-Aug-21	7:40 AM	303	8.00	0.08	0.67	0.02	10.5	26.4	AL	
Malabar Sampling Station	23-Aug-21	7:50 AM	307	8.09	0.09	0.55	0.03	17.0	33.1	AL	
Chestnut & N. Bluff Station	23-Aug-21	8:05 AM	303	8.18	0.11	0.33	0.02	21.6	33.3	AL	
Russell Ave. Sample Station	23-Aug-21	8:20 AM	290	8.22	0.07	0.57	0.00	12.1	25.9	AL	
Roper Reservoir	23-Aug-21	8:30 AM	305	8.24	0.08	0.64	0.02	12.6	27.1	AL	
Roper PRV	23-Aug-21	8:35 AM	306	8.24	0.09	0.56	0.02	13.5	31.4	AL	
Stevens Sample Station	23-Aug-21	9:05 AM	298	8.26	0.10	0.61	0.04	14.1	29.3	AL	
Oxford St. & Buena Vista STN	24-Aug-21	7:10 AM	306	8.02	0.09	0.61	0.01	14.6	24.3	AL	
Museum Station	24-Aug-21	7:25 AM	306	8.07	0.09	0.60	0.03	12.9	29.4	AL	
Stayte Sampling Station	24-Aug-21	7:40 AM	299	8.13	0.09	0.59	0.05	15.1	28.1	AL	
Balsam & Marine	24-Aug-21	7:50 AM	293	8.17	0.08	0.52	0.04	19.9	25.3	AL	
Finlay St. Sampling Station	24-Aug-21	8:00 AM	297	8.20	0.09	0.70	0.03	16.7	23.4	AL	
Merklin Low Reservoir	24-Aug-21	8:40 AM	306	8.17	0.08	0.65	0.04	10.7	28.2	AL	
Merklin Reservoir (New)	24-Aug-21	8:50 AM	301	8.19	0.09	0.62	0.06	10.6	27.9	AL	
Oxford Reservoir	24-Aug-21	8:15 AM	288	8.20	0.08	0.71	0.03	10.5	24.9	AL	
Week 5											
Everall St. Sampling Station	30-Aug-21	8:25 AM	301	7.81	0.11	0.75	0.03	10.5	21.6	JN	
Mann Park Sample Station	30-Aug-21	8:40 AM	308	7.96	0.11	0.71	0.03	13.9	22.6	JN	
Marine Dr Sample Station	30-Aug-21	8:55 AM	301	8.02	0.13	0.56	0.02	18.8	25.1	JN	
Russell Ave. Sample Station	30-Aug-21	9:40 AM	306	8.02	0.10	0.74	0.04	11.3	23.7	JN	
Roper Reservoir	30-Aug-21	9:50 AM	304	8.10	0.14	0.70	0.02	12.3	22.1	JN	



In-House Water Testing Results August 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Roper PRV	30-Aug-21	10:00 AM	306	8.10	0.14	0.77	0.04	11.6	22.6	JN	
Roper Ave. Sample Station	30-Aug-21	10:15 AM	304	8.06	0.19	0.66	0.03	18.3	25.4	JN	
Oxford St. & Buena Vista STN	31-Aug-21	9:55 AM	309	7.93	0.14	0.67	0.03	16.0	23.6	JN	
Museum Station	31-Aug-21	8:30 AM	309	8.06	0.14	0.69	0.03	13.2	23.1	JN	
Stayte Sampling Station	31-Aug-21	8:40 AM	306	8.10	0.14	0.67	0.03	14.7	23.9	JN	
Balsam & Marine	31-Aug-21	8:55 AM	309	8.08	0.14	0.54	0.02	19.5	24.8	JN	
Finlay St. Sampling Station	31-Aug-21	10:15 AM	307	8.11	0.16	0.71	0.02	16.8	23.3	JN	
Merklin Low Reservoir	31-Aug-21	10:25 AM	304	8.13	0.13	0.83	0.03	11.1	21.1	JN	
Merklin Reservoir (New)	31-Aug-21	10:35 AM	305	8.14	0.15	0.80	0.03	10.3	22.5	JN	
Oxford Reservoir	31-Aug-21	9:25 AM	303	8.14	0.12	0.76	0.02	10.5	23.0	JN	



In-House Water Testing Results September 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldt	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sampling Station	7-Sep-21	7:25 AM	308	7.94	0.10	0.69	0.04	10.8	26.5	AL	
Malabar Sampling Station	7-Sep-21	7:35 AM	311	7.98	0.09	0.66	0.03	13.0	32.0	AL	
Chestnut & N. Bluff Sample STN	7-Sep-21	7:45 AM	311	8.00	0.12	0.35	0.03	20.4	35.1	AL	
Russell Ave. Sample Station	7-Sep-21	8:00 AM	293	8.08	0.09	0.69	0.03	11.2	28.1	AL	
Roper Reservoir	7-Sep-21	8:15 AM	315	8.11	0.11	0.66	0.05	12.7	30.4	AL	
Roper PRV	7-Sep-21	8:20 AM	309	8.11	0.13	0.84	0.02	12.5	30.3	AL	
Stevens Sample Station	7-Sep-21	8:30 AM	308	8.13	0.16	0.64	0.00	13.5	28.8	AL	
Oxford St. & Buena Vista STN	8-Sep-21	7:10 AM	314	7.88	0.12	0.59	0.00	14.7	27.5	AL	
Museum Station	8-Sep-21	7:25 AM	314	7.98	0.11	0.62	0.00	12.9	32.7	AL	
Balsam & Marine	8-Sep-21	7:35 AM	314	8.05	0.11	0.63	0.03	14.8	33.3	AL	
Stayte Sampling Station	8-Sep-21	7:50 AM	300	8.08	0.12	0.56	0.02	18.9	27.4	AL	
Finlay St. Sampling Station	8-Sep-21	8:00 AM	307	8.08	0.11	0.70	0.02	16.1	26.4	AL	
Merklin Low Reservoir	8-Sep-21	8:40 AM	315	8.06	0.14	0.70	0.02	10.9	30.7	AL	
Merklin Reservoir (New)	8-Sep-21	8:50 AM	308	8.11	0.12	0.70	0.02	10.8	30.9	AL	
Oxford Reservoir	8-Sep-21	8:20 AM	297	8.11	0.12	0.72	0.03	10.7	27.4	AL	
Week 2											
Everall St. Sampling Station	13-Sep-21	7:25 AM	302	7.90	0.10	0.64	0.02	10.50	27.20	AL	
Mann Park Sample Station	13-Sep-21	7:35 AM	307	7.92	0.08	0.62	0.03	14.5	30.3	AL	
Marine Dr Sample Station	13-Sep-21	7:50 AM	307	8.02	0.11	0.44	0.02	18.9	31.2	AL	
Russell Ave. Sample Station	13-Sep-21	8:05 AM	296	8.09	0.09	0.71	0.03	11.4	26.2	AL	
Roper Reservoir	14-Sep-21	8:00 AM	306	7.90	0.08	0.63	0.02	13.3	26.0	AL	
Roper PRV	13-Sep-21	8:30 AM	307	8.09	0.10	0.64	0.02	11.8	29.9	AL	
Roper Ave. Sample Station	13-Sep-21	8:15 AM	305	8.13	0.11	0.60	0.00	17.8	28.4	AL	
Oxford St. & Buena Vista STN	14-Sep-21	7:00 AM	306	7.99	0.10	0.58	0.03	15.1	30.0	AL	
Museum Station	14-Sep-21	7:10 AM	307	8.06	0.10	0.61	0.02	12.8	33.7	AL	
Balsam & Marine	14-Sep-21	7:25 AM	298	8.06	0.09	0.64	0.02	14.3	31.0	AL	
Stayte Sampling Station	14-Sep-21	7:35 AM	294	8.09	0.10	0.57	0.00	18.9	26.4	AL	
Finlay St. Sampling Station	14-Sep-21	7:50 AM	300	8.09	0.09	0.70	0.01	17.9	25.9	AL	
Merklin Low Reservoir	14-Sep-21	8:25 AM	304	8.06	0.09	0.70	0.03	11.3	31.1	AL	
Merklin Reservoir (New)	14-Sep-21	8:35 AM	309	8.08	0.08	0.70	0.02	11.0	35.9	AL	
Oxford Reservoir	14-Sep-21	8:10 AM	282	8.14	0.07	0.72	0.02	10.6	28.1	AL	
Week 3											
Everall St. Sampling Station	20-Sep-21	7:40 AM	297	7.87	0.09	0.68	0.03	10.3	25.7	AL	
Malabar Sampling Station	20-Sep-21	7:55 AM	297	7.90	0.09	0.65	0.00	13.3	32.3	AL	
Chestnut & N. Bluff Sample STN	20-Sep-21	8:05 AM	296	7.94	0.12	0.23	0.02	18.8	32.4	AL	
Russell Ave. Sample Station	20-Sep-21	8:20 AM	282	7.99	0.08	0.68	0.01	15.6	26.2	AL	
Roper Reservoir	20-Sep-21	8:30 AM	298	8.00	0.08	0.58	0.01	11.9	29.1	AL	
Roper PRV	20-Sep-21	8:40 AM	298	8.00	0.09	0.61	0.00	11.9	31.4	AL	
Stevens Sample Station	20-Sep-21	8:50 AM	297	8.01	0.07	0.60	0.02	13.1	30.9	AL	
Oxford St. & Buena Vista STN	21-Sep-21	7:10 AM	298	7.92	0.08	0.53	0.01	14.6	28.5	AL	
Museum Station	21-Sep-21	7:25 AM	297	7.96	0.09	0.59	0.01	12.3	32.0	AL	
Balsam & Marine	21-Sep-21	7:35 AM	295	7.99	0.08	0.57	0.02	13.6	32.7	AL	
Stayte Sampling Station	21-Sep-21	7:45 AM	282	8.02	0.08	0.52	0.02	18.0	27.1	AL	
Finlay St. Sampling Station	21-Sep-21	7:55 AM	286	8.03	0.08	0.61	0.04	16.3	26.0	AL	
Merklin Low Reservoir	21-Sep-21	8:30 AM	299	8.00	0.12	0.64	0.03	10.7	31.1	AL	
Merklin Reservoir (New)	21-Sep-21	8:40 AM	291	8.03	0.08	0.64	0.03	10.5	30.8	AL	
Oxford Reservoir	21-Sep-21	8:10 AM	288	8.05	0.10	0.68	0.01	10.6	28.9	AL	
Week 4											
Everall St. Sampling Station	27-Sep-21	8:30 AM	309	7.91	0.08	0.76	0.05	10.4	22.6	JN	
Mann Park Sample Station	27-Sep-21	8:40 AM	310	7.99	0.09	0.68	0.05	14.6	23.7	JN	
Marine Dr Sample Station	27-Sep-21	8:50 AM	311	7.97	0.08	0.47	0.03	17.7	25.8	JN	
Russell Ave. Sample Station	27-Sep-21	9:05 AM	309	8.04	0.08	0.72	0.04	11.7	25.2	JN	
Roper Reservoir	27-Sep-21	9:55 AM	306	8.04	0.08	0.55	0.03	11.9	23.2	JN	
Roper PRV	27-Sep-21	10:05 AM	306	8.05	0.08	0.62	0.03	11.3	22.8	JN	
Roper Ave. Sample Station	27-Sep-21	9:45 AM	308	8.07	0.08	0.37	0.02	17.0	22.0	JN	
Oxford St. & Buena Vista STN	29-Sep-21	9:10 AM	309	7.90	0.08	0.54	0.01	14.2	20.6	JN	
Museum Station	29-Sep-21	8:15 AM	313	7.96	0.08	0.57	0.03	12.5	24.7	JN	
Balsam & Marine	29-Sep-21	8:30 AM	309	8.00	0.08	0.56	0.00	13.7	25.7	JN	
Stayte Sampling Station	29-Sep-21	8:45 AM	309	8.06	0.09	0.45	0.02	17.6	26.3	JN	
Finlay St. Sampling Station	29-Sep-21	8:55 AM	308	8.08	0.08	0.60	0.02	15.8	24.1	JN	
Merklin Low Reservoir	29-Sep-21	10:30 AM	310	8.05	0.09	0.74	0.04	11.0	22.9	JN	



In-House Water Testing Results September 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colld	Temp. Tested	OP	Remarks
			$\mu\text{S/cm}$			Total	Free				
Merlin Reservoir (New)	29-Sep-21	10:45 AM	316	8.10	0.07	0.63	0.03	10.6	24.7	JN	
Oxford Reservoir	29-Sep-21	9:25 AM	307	8.11	0.10	0.71	0.03	10.5	24.9	JN	



In-House Water Testing Results October 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Coltd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sample Station	4-Oct-21	8:45 AM	303	8.03	0.08	0.75	0.02	10.2	22.4	JN	
Malabar Sample Station	4-Oct-21	8:55 AM	305	8.06	0.09	0.70	0.02	12.5	26.3	JN	
Chestnut & N. Bluff Sample STN	4-Oct-21	9:10 AM	308	8.10	0.08	0.55	0.01	17.5	23.2	JN	
Russell Ave. Sample Station	4-Oct-21	9:25 AM	304	8.12	0.08	0.71	0.05	11.3	24.0	JN	
Roper Reservoir	4-Oct-21	9:35 AM	309	8.16	0.09	0.72	0.03	11.5	24.0	JN	
Roper PRV	4-Oct-21	9:45 AM	310	8.14	0.08	0.83	0.04	10.9	22.4	JN	
Stevens Sample Station	4-Oct-21	9:55 AM	311	8.15	0.08	0.83	0.02	12.6	24.5	JN	
Oxford St. & Buena Vista STN	5-Oct-21	9:20 AM	311	8.01	0.07	0.66	0.01	13.7	23.2	JN	
Museum Sample Station	5-Oct-21	8:10 AM	308	8.09	0.08	0.70	0.02	12.1	23.2	JN	
Balsam & Marine Sample STN	5-Oct-21	8:20 AM	313	8.09	0.07	0.67	0.03	13.6	26.2	JN	
Stayte Sample Station	5-Oct-21	8:35 AM	312	8.11	0.09	0.55	0.02	16.9	27.6	JN	
Finlay St. Sample Station	5-Oct-21	8:45 AM	313	8.12	0.08	0.68	0.02	15.5	24.6	JN	
Merklin Low Reservoir	5-Oct-21	10:05 AM	314	8.14	0.07	0.92	0.04	10.7	23.6	JN	
Merklin Reservoir (New)	5-Oct-21	10:15 AM	310	8.14	0.08	0.88	0.04	10.5	23.0	JN	
Oxford Reservoir	5-Oct-21	9:10 AM	312	8.15	0.08	0.72	0.02	10.3	26.5	JN	
Week 2											
Everall St. Sample Station	12-Oct-21	8:05 AM	307	8.08	0.08	0.75	0.03	10.1	22.4	JN	
Mann Park Sample Station	12-Oct-21	8:15 AM	312	8.09	0.09	0.69	0.03	12.6	22.9	JN	
Marine Dr Sample Station	12-Oct-21	8:30 AM	307	8.11	0.08	0.55	0.02	13.9	25.0	JN	
Russell Ave. Sample Station	12-Oct-21	8:40 AM	311	8.13	0.08	0.71	0.02	10.6	24.3	JN	
Roper Reservoir	12-Oct-21	8:50 AM	312	8.16	0.08	0.73	0.00	10.8	23.0	JN	
Roper PRV	12-Oct-21	8:55 AM	305	8.13	0.09	0.82	0.02	10.6	25.2	JN	
Roper Ave. Sample Station	12-Oct-21	9:35 AM	306	8.15	0.08	0.74	0.02	14.3	25.2	JN	
Oxford St. & Buena Vista STN	13-Oct-21	9:25 AM	306	8.06	0.07	0.66	0.02	12.7	23.8	JN	
Museum Sample Station	13-Oct-21	8:30 AM	306	8.10	0.08	0.71	0.01	11.3	23.4	JN	
Balsam & Marine Sample STN	13-Oct-21	8:40 AM	308	8.10	0.10	0.69	0.03	12.5	25.2	JN	
Stayte Sample Station	13-Oct-21	8:55 AM	306	8.11	0.07	0.56	0.02	15.4	26.5	JN	
Finlay St. Sample Station	13-Oct-21	10:05 AM	306	8.17	0.10	0.73	0.03	14.3	23.7	JN	
Merklin Low Reservoir	13-Oct-21	10:15 AM	307	8.18	0.07	0.94	0.03	10.4	22.9	JN	
Merklin Reservoir (New)	13-Oct-21	10:25 AM	309	8.15	0.08	0.87	0.03	10.1	25.7	JN	
Oxford Reservoir	13-Oct-21	9:45 AM	308	8.15	0.07	0.75	0.03	10.0	27.9	JN	
Week 3											
Everall St. Sample Station	19-Oct-21	7:55 AM	316	7.98	0.08	0.68	0.04	10.0	25.6	AL	
Malabar Sample Station	19-Oct-21	8:05 AM	313	8.00	0.07	0.45	0.02	11.8	28.8	AL	
Chestnut & N. Bluff Sample STN	19-Oct-21	8:15 AM	317	8.02	0.11	0.27	0.03	14.7	30.6	AL	
Russell Ave. Sample Station	19-Oct-21	8:25 AM	301	8.06	0.08	0.68	0.02	10.6	25.5	AL	
Roper Reservoir	19-Oct-21	8:35 AM	317	8.10	0.08	0.66	0.00	10.9	27.8	AL	
Roper PRV	19-Oct-21	8:40 AM	316	8.08	0.08	0.71	0.03	11.6	29.1	AL	
Stevens Sample Station	19-Oct-21	8:50 AM	309	8.09	0.08	0.65	0.00	12.1	29.4	AL	
Oxford St. & Buena Vista STN	20-Oct-21	8:00 AM	317	7.86	0.08	0.62	0.03	12.6	243.0	AL	
Museum Sample Station	20-Oct-21	8:10 AM	315	7.88	0.06	0.65	0.00	11.5	28.6	AL	
Balsam & Marine Sample STN	20-Oct-21	8:20 AM	309	7.94	0.08	0.69	0.03	12.3	27.8	AL	
Stayte Sample Station	20-Oct-21	8:30 AM	302	7.96	0.08	0.65	0.00	14.5	24.4	AL	
Finlay St. Sample Station	20-Oct-21	8:40 AM	311	8.01	0.07	0.70	0.00	13.8	23.8	AL	
Merklin Low Reservoir	20-Oct-21	9:10 AM	316	7.92	0.13	0.74	0.07	10.5	29.2	AL	
Merklin Reservoir (New)	20-Oct-21	9:20 AM	315	7.94	0.07	0.75	0.03	10.4	29.5	AL	
Oxford Reservoir	20-Oct-21	8:50 AM	305	7.94	0.13	0.72	0.02	10.4	27.6	AL	
Week 4											
Everall St. Sample Station	25-Oct-21	9:05 AM	314	8.00	0.06	0.76	0.03	10.0	22.8	JN	
Mann Park Sample Station	25-Oct-21	9:15 AM	309	8.03	0.06	0.70	0.03	11.9	25.4	JN	
Marine Dr Sample Station	25-Oct-21	9:30 AM	316	8.08	0.06	0.47	0.03	14.1	24.2	JN	



In-House Water Testing Results October 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Russell Ave. Sample Station	25-Oct-21	9:45 AM	315	8.10	0.13	0.72	0.03	10.3	24.7	JN	
Roper Reservoir	25-Oct-21	10:10 AM	315	8.12	0.10	0.75	0.03	10.6	22.9	JN	
Roper PRV	25-Oct-21	10:20 AM	316	8.10	0.09	0.88	0.03	10.3	24.4	JN	
Roper Ave. Sample Station	25-Oct-21	10:00 AM	316	8.15	0.07	0.74	0.03	13.2	23.5	JN	
	27-Oct-21	10:50 AM	316	7.93	0.07	0.64	0.03	12.2	28.6	JN	
Museum Sample Station	27-Oct-21	8:50 AM	314	7.99	0.07	0.66	0.03	11.7	28.2	JN	
Balsam & Marine Sample STN	27-Oct-21	9:05 AM	313	8.05	0.06	0.69	0.02	11.9	25.5	JN	
Stayte Sample Station	27-Oct-21	9:20 AM	314	8.08	0.07	0.56	0.02	14.0	23.5	JN	
Finlay St. Sample Station	27-Oct-21	9:40 AM	320	7.95	0.08	0.66	0.02	13.1	26.1	JN	
Merklin Low Reservoir	27-Oct-21	11:25 AM	311	8.03	0.06	0.84	0.04	10.3	23.6	JN	
Merklin Reservoir (New)	27-Oct-21	11:35 AM	312	8.05	0.05	0.83	0.03	10.1	23.4	JN	
Oxford Reservoir	27-Oct-21	11:00 AM	309	8.09	0.06	0.70	0.02	10.2	22.9	JN	



In-House Water Testing Results November 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldt	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Week 1											
Everall St. Sample Station	1-Nov-21	8:50 AM	311	7.96	0.05	0.74	0.02	9.9	22.7	JN	
Malabar Sample Station	1-Nov-21	9:00 AM	315	8.02	0.05	0.71	0.03	11.4	26.4	JN	
Chestnut & N. Bluff Sample STN	1-Nov-21	9:15 AM	310	8.08	0.06	0.52	0.02	13.0	23.6	JN	
Russell Ave. Sample Station	1-Nov-21	9:25 AM	310	8.10	0.06	0.72	0.03	10.2	23.8	JN	
Roper Reservoir	1-Nov-21	10:00 AM	309	8.03	0.09	0.68	0.02	10.2	24.3	JN	
Roper PRV	1-Nov-21	10:10 AM	310	8.03	0.05	0.76	0.03	10.2	25.1	JN	
Stevens Sample Station	1-Nov-21	10:20 AM	311	8.05	0.07	0.75	0.02	11.3	25.6	JN	
Oxford St. & Buena Vista STN	3-Nov-21	8:30 AM	310	7.98	0.06	0.62	0.01	12.0	25.8	JN	
Museum Sample Station	3-Nov-21	7:30 AM	309	8.06	0.07	0.66	0.03	10.8	25.3	JN	
Balsam & Marine Sample STN	3-Nov-21	7:45 AM	312	8.10	0.06	0.61	0.01	12.0	28.5	JN	
Stayte Sample Station	3-Nov-21	7:55 AM	310	8.10	0.06	0.56	0.02	13.1	25.4	JN	
Finlay St. Sample Station	3-Nov-21	10:15 AM	310	8.09	0.08	0.67	0.01	13.4	26.6	JN	
Merklin Low Reservoir	3-Nov-21	10:30 AM	310	8.09	0.05	0.74	0.01	10.3	24.2	JN	
Merklin Reservoir (New)	3-Nov-21	10:40 AM	311	8.11	0.05	0.75	0.02	10.1	23.4	JN	
Oxford Reservoir	3-Nov-21	8:15 AM	311	8.09	0.05	0.69	0.02	11.2	25.5	JN	
Week 2											
Everall St. Sampling Station	8-Nov-21	9:00 AM	309	8.17	0.05	0.78	0.02	9.9	23.3	JN	
Mann Park Sample Station	8-Jan-21	9:10 AM	308	8.23	0.06	0.73	0.02	11.2	22.5	JN	
Marine Dr Sample Station	8-Nov-21	9:20 AM	311	8.26	0.05	0.62	0.00	11.7	24.7	JN	
Russell Ave. Sample Station	8-Nov-21	9:30 AM	309	8.23	0.05	0.73	0.02	10.0	27.0	JN	
Roper Reservoir	8-Nov-21	10:00 AM	309	8.28	0.05	0.71	0.02	10.0	22.9	JN	
Roper PRV	8-Nov-21	10:10 AM	311	8.26	0.10	0.81	0.02	10.0	24.4	JN	
Roper Ave. Sample Station	8-Nov-21	10:20 AM	311	8.30	0.07	0.70	0.02	11.8	24.1	JN	
Oxford St. & Buena Vista STN	9-Nov-21	7:10 AM	303	8.14	0.50	0.59	0.02	11.5	26.3	AL	
Museum Sample Station	9-Nov-21	7:30 AM	327	7.23	0.07	0.53	0.03	10.6	18.7	AL	
Balsam & Marine Sample STN	9-Nov-21	7:40 AM	318	8.15	0.05	0.74	0.03	11.0	32.3	AL	
Stayte Sample Station	9-Nov-21	7:50 AM	303	8.18	0.06	0.54	0.03	12.6	25.8	AL	
Finlay St. Sample Station	9-Nov-21	8:05 AM	308	8.25	0.06	0.66	0.02	11.9	23.9	AL	
Merklin Low Reservoir	9-Nov-21	8:30 AM	317	8.22	0.09	0.61	0.00	10.2	32.1	AL	
Merklin Reservoir (New)	9-Nov-21	8:40 AM	315	8.20	0.06	0.77	0.02	10.1	32.8	AL	
Oxford Reservoir	9-Nov-21	8:15 AM	304	8.17	0.11	0.59	0.00	10.3	29.8	AL	
Week 3											
Everall St. Sample Station	15-Nov-21	8:40 AM	311	7.89	0.07	0.63	0.02	10.1	30.0	JN	
Malabar Sample Station	16-Nov-21	9:20 AM	312	7.90	0.06	0.69	0.00	10.7	30.3	JN	
Chestnut & N. Bluff Sample STN	16-Nov-21	9:30 AM	311	7.94	0.06	0.52	0.02	11.3	28.3	JN	
Russell Ave. Sample Station	16-Nov-21	10:00 AM	311	7.98	0.05	0.73	0.02	10.1	24.3	JN	
Roper Reservoir	15-Nov-21	8:15 AM	314	7.95	0.05	0.55	0.00	10.4	29.1	JN	
Roper PRV	15-Nov-21	8:20 AM	311	7.94	0.05	0.63	0.02	10.5	28.1	JN	
Stevens Sample Station	16-Nov-21	9:05 AM	311	7.99	0.05	0.72	0.01	10.9	25.5	JN	
Oxford St. & Buena Vista STN	15-Nov-21	9:05 AM	313	8.01	0.05	0.60	0.02	11.9	24.2	JN	
Museum Sample Station	16-Nov-21	8:25 AM	311	8.08	0.07	0.63	0.01	11.1	25.4	JN	
Balsam & Marine Sample STN	16-Nov-21	8:35 AM	312	8.00	0.07	0.60	0.01	13.1	26.2	JN	
Stayte Sample Station	16-Nov-21	8:45 AM	313	8.05	0.07	0.53	0.02	11.9	25.9	JN	
Finlay St. Sample Station	16-Nov-21	8:55 AM	312	8.00	0.28	0.73	0.01	11.3	26.6	JN	Flushing
Merklin Low Reservoir	15-Nov-21	8:50 AM	311	7.99	0.05	0.62	0.01	10.3	23.6	JN	
Merklin Reservoir (New)	15-Nov-21	8:55 AM	311	8.00	0.05	0.62	0.02	10.2	24.4	JN	
Oxford Reservoir	15-Nov-21	8:30 AM	310	7.98	0.06	0.65	0.02	10.8	27.1	JN	
Week 4											
Everall St. Sampling Station	22-Nov-21	8:55 AM	305	7.84	0.05	0.72	0.03	9.9	21.9	JN	
Mann Park Sample Station	22-Nov-21	9:05 AM	306	7.94	0.06	0.73	0.03	10.4	24.3	JN	
Marine Dr Sample Station	22-Nov-21	9:15 AM	307	7.96	0.06	0.55	0.02	11.3	22.7	JN	
Russell Ave. Sample Station	22-Nov-21	9:25 AM	305	7.94	0.06	0.73	0.03	11.4	23.9	JN	
Roper Reservoir	22-Nov-21	10:35 AM	306	8.03	0.06	0.72	0.02	11.2	22.1	JN	
Roper PRV	22-Nov-21	10:45 AM	306	8.02	0.07	0.77	0.02	11.6	22.8	JN	
Roper Ave. Sample Station	22-Nov-21	10:25 AM	307	8.00	0.07	0.67	0.03	12.7	23.9	JN	
Oxford St. & Buena Vista STN	23-Nov-21	10:00 AM	306	7.92	0.11	0.63	0.02	10.8	24.7	JN	
Museum Sample Station	23-Nov-21	8:30 AM	306	7.95	0.10	0.65	0.03	10.3	25.9	JN	
Balsam & Marine Sample STN	23-Nov-21	8:40 AM	306	7.99	0.11	0.62	0.03	10.8	27.2	JN	
Stayte Sample Station	23-Nov-21	8:50 AM	309	8.02	0.09	0.46	0.03	11.3	29.1	JN	
Finlay St. Sample Station	23-Nov-21	9:00 AM	306	7.99	0.08	0.67	0.03	10.8	21.4	JN	
Merklin Low Reservoir	23-Nov-21	10:15 AM	305	8.01	0.05	0.77	0.03	10.8	22.9	JN	



In-House Water Testing Results November 2021

Sampling Point Name	DATE	TIME	Conductivity	pH	NTU	Chlorine		Temp. Colldd	Temp. Tested	OP	Remarks
			µS/cm			Total	Free				
Merklin Reservoir (New)	23-Nov-21	10:25 AM	307	8.02	0.06	0.75	0.03	10.1	23.4	JN	
Oxford Reservoir	23-Nov-21	9:25 AM	304	8.03	0.05	0.73	0.05	10.1	23.2	JN	
Week 5											
Everall St. Sample Station	29-Nov-21	9:00 AM	305	7.88	0.06	0.74	0.02	10.2	22.0	JN	
Malabar Sample Station	29-Nov-21	9:10 AM	308	7.92	0.06	0.72	0.00	11.0	25.5	JN	
Chestnut & N. Bluff Sample STN	29-Nov-21	9:25 AM	306	7.95	0.06	0.59	0.02	11.5	24.4	JN	
Russell Ave. Sample Station	29-Nov-21	10:30 AM	303	7.98	0.05	0.74	0.01	12.2	23.3	JN	
Roper Reservoir	29-Nov-21	11:00 AM	305	8.00	0.06	0.65	0.02	10.1	24	JN	
Roper PRV	29-Nov-21	11:10 AM	304	7.99	0.19	0.74	0.03	10.2	25.5	JN	
Stevens Sample Station	29-Nov-21	10:45 AM	306	8.00	0.07	0.71	0.03	10.8	24.7	JN	
Oxford St. & Buena Vista STN	30-Nov-21	7:25 AM	310	7.86	0.07	0.49	0.00	11.0	26.4	AL	
Museum Sample Station	30-Nov-21	8:00 AM	311	7.91	0.06	0.57	0.02	10.5	32.3	AN/AL	
Balsam & Marine Sample STN	30-Nov-21	8:10 AM	312	7.91	0.06	0.57	0.01	10.9	32.8	AN/AL	
Stayte Sample Station	30-Nov-21	8:25 AM	298	7.97	0.07	0.47	0.03	11.1	27.6	AN/AL	
Finlay St. Sample Station	30-Nov-21	8:40 AM	305	7.95	0.06	0.66	0.00	11.0	26.7	AN/AL	
Merklin Low Reservoir	30-Nov-21	9:05 AM	311	7.93	0.09	0.66	0.02	10.5	30.8	AN/AL	
Merklin Reservoir (New)	30-Nov-21	9:10 AM	312	7.98	0.07	0.70	0.02	10.8	32.0	AN/AL	
Oxford Reservoir	30-Nov-21	8:55 AM	300	7.94	0.05	0.69	0.03	11.3	28.9	AN/AL	

