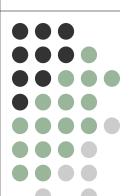
District of Port Hardy Annual Report 2018





Live
the
Adventure



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Mayor Dennis Dugas

Message from Mayor & Council

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Mayor and Council are pleased to present the 2018 District of Port Hardy Annual Report. This Annual Report will give you an accurate picture of our accomplishments over the past year.

We are pleased to report that the District of Port Hardy continues to have increased population growth, investments in property purchases and property development.

The completion of the Telus Pure Fibre Network in the Spring of this year was exciting for the last 300 homes that were waiting patiently for high speed internet. Also, it has added to our goal for attraction and retention for our business community, home base businesses and younger residents who enjoy the high speed for education and recreation opportunities.

A major accomplishment was the completion of the new Storey's Beach Water Main and Reservoir project which also included a new Reservoir at the water treatment plant site. The Federal / Provincial Grants contributed to 83% of a 5-million-dollar project. Because we were shelf ready for the grant, it was a win-win for the District of Port Hardy.

Unfortunately, we had some bad news on our tender results for the Multiplex project just before the end of the year. The tender price came in 43% over budget, so we had to apply for new grant opportunities and we will have to wait until the Fall of 2019 for the results.

Also, on the tourism side the new BC Ferries ship the Northern Sea Wolf which would have reinstated the run to Bella Coola did not arrive, which was a disappointment to both Port Hardy and the Bella Coola region. BC Ferries is positive that the Northern Sea Wolf will be ready for the 2019 season.

In October there was a Municipal Election and there were a few changes, I, Dennis Dugas became Mayor with new councillors Janet Dorward and Treena Smith added to the team, with the returning councillors Pat Corbett-Labatt, Fred Robertson, John Tidbury and Leightan Wishart. We would like to thank Hank Bood and Rick Marcotte for all their hard work and dedication to the District over their four-year term. We wish them all the best in their future endeavours and enjoying life to the fullest.

Our Municipal Office, Public Works, Recreation, Water / Wastewater staff and employees continue to provide Port Hardy with excellent service and we thank them for the excellent job that they do.

Mayor and Council look forward to 2019 and we thank you for your continued support as we endeavour to represent the desires and needs of our community. We are here to Listen to you, Learn from you and Lead for you.

Thank you on behalf of the District of Port Hardy Council, Dennis Dugas, Mayor

Appointments



Executive Committee, Finance Committee, Regional District of Mt. Waddington Board, Regional Hospital Board, Island Coastal Economic Trust, Municipal Insurance Association.

ddugas@porthardy.ca

Mayor & Council

.



Left to right: Councillor Fred Robertson, Councillor Janet Dorward, Councillor Pat Corbett-Labatt, Mayor Dennis Dugas, Councillor John Tidbury, Councillor Treena Smith, Councillor Leightan Wishart.

The Mayor and Council for the District of Port Hardy were elected for a four-year term in October of 2018. Each member of Council represents the District at large and is appointed to both Port Hardy and Regional committees. Council is committed to ensuring that policies and decisions implemented are in the best interests of Port Hardy citizens.



Council



Appointments

Executive Committee, Finance Committee, First Nations Relations Committee, Parks, Recreation, Arts & Culture Committee, Regional District Mt. Waddington Board (alternate), Regional Hospital Board (alternate), Mt. Waddington Table of Partners (Health), Mount Waddington Wellness First, Hardy Bay Senior Citizens Society, Port Hardy Twinning Society.

pcorbett-labatt@porthardy.ca

Councillor Pat Corbett-Labatt



Appointments

Executive Committee, Finance Committee, Operational Services Committee, Parks, Recreation, Arts & Culture Committee, Tourism Advisory Committee, Regional District Mt. Waddington Board, Regional Hospital Board, Job Fair Committee, Municipal Insurance Association (alternate).

jdorward@porthardy.ca

Councillor Janet Dorward



Councillor Fred Robertson

Appointments

Executive Committee, Finance Committee, First Nations Relations Committee, Parks, Recreation, Arts & Culture Committee, Vancouver Island Regional Library Board of Trustees, Marine Plan Partnership (alternate), Mt. Waddington Table of Partners (Health), Mt. Waddington Wellness First, BC Ferries Northern Advisory Committee.

frobertson@porthardy.ca



Council

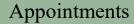


Councillor Treena Smith

Appointments

Executive Committee, Finance Committee, Community Consultative Committee, Tourism Advisory Committee, Bear Smart Port Hardy Committee, Chamber of Commerce, Port Hardy Heritage Society (Museum), Vancouver Island North Tourism (VINTAC).

tsmith@porthardy.ca





Councillor John Tidbury

Executive Committee, Finance Committee, Operational Services Committee, Emergency Planning Committee, Regional District Mt. Waddington Board (alternate), Regional Hospital Board (alternate), Mt. Waddington Regional Transportation Committee, North Island Regional Emergency Planning Committee, Vancouver Island North Woodlands Advisory Group (VINWAG).

jtidbury@porthardy.ca



Councillor Leightan Wishart

Appointments

Executive Committee, Finance Committee, Operational Services Committee, Emergency Planning Committee, Vancouver Island Regional Library Board of Trustees (alternate), Marine Plan Partnership, Municipal Insurance Association (alternate), Port Hardy Fire Rescue, Poverty Pilot Program, Scott Islands Advisory.

lwishart@porthardy.ca



Message from the Chief Administrative Officer

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Welcome and thank you for your interest in the District of Port Hardy 2018 Annual Report. Throughout this report we try to inform the public about District services and projects occurring in 2018. The District recognizes these services are provided on the Traditional Territory of the Kwakiutl First Nation.

The District said "Happy Retirement" to two employees in 2018; Leslie Driemel our Confidential Secretary with 25 years of dedicated service and Adrian Maas our Director of Financial Services for the past two years.

In 2018 we welcomed Lynda Sowerby, who undertook the Director of Financial Services position. There were a few more departures and arrivals of employees within our service departments and we wish those who moved on much success in their futures and to all our new employees a sincere welcome.

Filomi Days 2018 was a huge success and is always a community & visitor favourite! We thank the Filomi Days volunteers who put in tireless hours in making this event a stand out celebration year after year!!

A surprise donation of a Cape Scott Windmill blade was made possible by the Port Hardy Rotary Club who worked with the District to find it a home and make it a landmark at Highway 19 and the Bear Cove Highway. Thank you Rotarians!

Port Hardy Lions Club members continue to work quietly behind the scenes keeping our Civic Centre full of nightly and weekend activities. The District thanks them for providing this service to the District!

We thank all of our many volunteer groups, our ever growing seniors society and community members who make Port Hardy a wonderful place to live and work. Thank you.

Some of the Capital projects completed or in progress in 2018:

- Fort Rupert Reservoir.
- SwapLoader vehicle.
- Seagate Wharf structural improvements.
- ♦ Lost at Sea Monument completion.
- Arena safety improvements.
- Pool mechanical improvements.
- Fire Hall 1 lighting improvements.
- Bear Cove Recreational Site electrical improvements.





Image i-28374 courtesy of the Royal BC Museum and Archives

The Leadership Team

Allison McCarrickChief Administrative Officer

Heather Nelson-Smith

Director of Corporate Services

Lynda Sowerby *Director of Finance*

Abbas Farahbakhsh *Director of Operations*

Bob Schantz *Municipal Inspector*

Melinda Dennison *Aquatic Coordinator*

Vern Braun *Recreation Facility Foreman*

Anika Kelly - Aries Security *Harbour Managers*

Brent Borg *Fire Chief*

Gavin TexmoDeputy Fire Chief

Wes Olsen
RCMP Staff Sergeant



Community Partners

The District of Port Hardy recognizes and values its community partners.

The District relies on its community partners for the important day-to-day tasks involved in keeping the community safe and vibrant.

These partners include: Port Hardy Fire Rescue, Royal Canadian Mounted Police, BC Ambulance Service, Local Service Agencies, Vancouver Island Regional Library, Port Hardy & District Chamber of Commerce, and Port Hardy Museum.

Volunteers and Community groups are all valued as an important part of making our community a welcoming place to live.





Community Engagement







District Website: www.porthardy.ca

Facebook pages: District of Port Hardy.

Port Hardy Emergency.

• Port Hardy Recreation.

• Port-Hardy Animal Shelter.

Port Hardy Fire Rescue.

• Twitter: @DPortHardy.

• Instagram @DPortHardy.

• Quarterly Newsletter: distributed with utility bills.

- Regular Council Meetings.
- Open Houses.
- Local Media: The District regularly advertises items of interest to the general public through the North Island Gazette, North Island Eagle (local print media), and CFNI-Coast AM 1240 radio.
- Community Events: The District supports several key community events, including Canada Day, FILOMI Days, Ocean's Day, and many other community led events.
- Partnerships: The District co-produces materials with a variety of community partners, including Tourism Port Hardy, The Port Hardy & District Chamber of Commerce (Visitor's Centre), Vancouver Island North Tourism Association and Emergency Preparedness.
- Email and Phone: General inquiries: email general@porthardy.ca phone 250-949-6665, Monday through Friday, 8:30 a.m.- 4:30 p.m.





2018 Strategic Focus

• • • • • • • • •

Mayor and Council represent the people of Port Hardy by reviewing and assessing community needs each year. Council goes through a strategic planning process to implement a strategy of how to achieve goals that support retention and growth of our community and the North Island. This process identifies measurable goals to be achieved over the next 12 months and sometimes longer.

2018 goals included:

Recreation

Action: Multiplex initiative ~ primarily new pool complex ~ Ball Fields.

Beautification

Action: Gardens ~ Parks ~ Buildings ~ Trails.

Seniors

Action: Involvement ~ Listening ~ Caring.

Green Energy

Action: Recycle ~ Reduce emissions ~ Investigate energy efficient options on projects.

Empty Buildings

Action: Stronger bylaws ~ Act on bylaws ~ Engage with property owners.

Health and Care Services

Action: Serve on Health Committees ~ Lobby for improvement and growth of North Island health services.

Economic Development

Action: Promote Port Hardy ~ Engage with business owners ~ Develop retention strategies.





Community Services

Corporate Services

Operational Services

Recreation Services

Protective Services

Harbour Management

Twinning

Financial Services



Park Hours-5PM-10PM LION'S CLUB Beer Gardens 7PM-9PM

Friday July 20

Saturday July 21 Park Hours- 10am-10PM LION'S CLUB BEEF GARDENS 1PM-9PM

LION'S CLUB BEEF GARDENS 1PM-8PM

SUNDAY JULY 22

Park Hours 10am-11PM

- Dawn-5PM FISHING Derby
- 6Pm KIDS events
- 7PM -PUPPLE PIPATE -PROVIDENCE PLace
- 7-10Pm music in the park
- 8:30PM-12am DeadLiest Catch teen pance

-KIDS events-

Triport speedway soapbox derby

LITERARY BUS WITH MOTHER GOOSE

magical face painting laby

Fun time inflatables

 mason's kids fishing Purple pirate

- 10Pm movie in the Park -free admission-
- Dawn-5Pm Fishing Derby 💆
- 8-10am Pancake Breakfast
- 11am Parade marshall @ THUNDERBIRD MALL
- 12PM Parade to Carrot Park
- 1-2PM OPENING CEREMONY
- 2-10PM LIVE MUSIC IN THE PARK
- 1-3PM Triport speedway A SOapbox Derby
- 1-7PM KIDS EVENTS
- 1-10PM Park Festivities
- 3:15PM PURPLE PIRATE IN PARK
- 8:30PM-1:30am DeadLiest Catch adult dance

- Dawn-2PM FISHING Derby
- 8am-noon masons kids fishing
- 10am-noon Inter-Church service
- 11am rotary Duck race TSULQUATE river
- 11:30am DUDLOP'S BOAT BUILDING contest 📤
- 10am-IIPM Park Festivities
- 10am-4Pm KIDS evenTS
- IPM PUPPLE PIPATE IN PARK
- 1-11PM LIVE MUSIC IN THE PARK
- 4PM FISHING DETBY/DUCK race

awards ceremony



music in the park

- 2-4PM -SUGAR MAPLES
- 4-6 -Larry Ho SHOW
- 6-8PM -ray Bennett Blues Band
- 8-10PM -SHOTGUN KELLY
- 1-3PM -CHARITY & THE FOUNDATIONS
- 3-5Pm -Dave & annie
- 5-7PM -MULLIGANS
- 7-9PM -THE IMPALAS
- DJ Jamie keamo



7-10PM -CenterPiece



Voter Turnout

BC 36%

Port Hardy 37.2%

Election 2018

Upon close of the nomination period on September 14, 2018, nominations for two candidates for the office of Mayor and eight nominations for the office of Councillor had been received by the Chief Election Officer. In addition, three nominations were received for the three positions of School Trustee for



Electoral Area 1 with the Board of Education of School District No. 85. As a result, on Monday, September 24, 2018, a declaration of election by voting was made with respect to the offices of Mayor and Councillor with District of Port Hardy Council, and declaration of acclamation was made with respect to the three positions for office of School Trustee.

Three advanced voting opportunities were undertaken on October 10th, 18th and 19th at the Municipal Hall, a special voting opportunity was conducted at the Port Hardy Hospital / Eagle Ridge Manor on October 17th and mail ballots were accepted during the period of October 1st to general voting day. A total of 480 electors voted during these four opportunities. With respect to general voting day on October 20th a total of 667 electors voted bringing the grand total to 1147 which is 37.2% of an estimated 3,083 eligible voters.

DISTRICT OF PORT HARDY

DETERMINATION OF OFFICIAL ELECTION RESULTS GENERAL LOCAL ELECTION - 2018

	BOOD	DUGAS	KATTLER	DORWARD	WISHART	SMITH	CORBETT- LABATT	TIDBURY	MARCOTTE	ROBERTSON
Advance Voting Opportunity: October 10, 2018 Municipal Hall	34	119	62	100	94	78	120	94	74	92
Advance Voting Opportunity: October 18, 2018 Municipal Hall	35	97	50	95	70	74	103	86	71	80
Advance Voting Opportunity: October 19, 2018 Municipal Hall	47	102	66	93	79	85	118	98	74	99
Special Voting Opportunity: Port Hardy Hospital/Eagle Ridge Manor October 17, 2018	0	5	0	0	2	0	0	0	1	0
Special Voting Opportunity: Mail Ballots	13	13	16	15	15	22	27	16	15	19
General Voting: October 20, 2018 Municipal Hall	191	470	281	440	360	394	507	406	358	413
TOTAL NUMBER OF VOTES	320	806	475	743	620	653	875	700	593	703

Mayor Elect

Councillor Elect



Social Media







244 followers

742 followers

 $165 \, \mathrm{followers}$

Telmatik Emergency Notification System

In 2018 we launched the Telmatik Emergency Notification System. This is an alerting system that allows the District to notify residents via cell phone SMS text message or voice, land line and email of emergencies affecting the District.

Bylaws

The following bylaws were amended in 2018:

- User Rates and Fees Bylaw.
- Zoning.
- Official Community Plan.
- Garbage and Recycling.
- Council Remuneration.

Bylaws are available online at www.porthardy.ca

Administration

Managed and administered matters associated with contracts (including agreements and leases) between the District and other parties for a variety of purposes including such things as the lease of equipment, the provision of services by the District to others, services provided by others to the District, the lease of District land and buildings to others, the lease of Crown lands to accommodate the District's infrastructure, etc.

Carried out administration associated with business licensing, dog licensing, open burning permitting, sign permitting and special occasion liquor licensing programs.



Building Inspection, Fire Inspection and Bylaw Enforcement Services

With the assistance of OPTA, a software information intelligence program, the District completed 65 fire inspections on public buildings in Port Hardy.

The District opened 83 bylaw enforcement files issued by complaint. They breakdown as follows:

17 Animal control. 4 Boulevard maintenance. 6 Building enforcement.

2 False alarms. 5 Garbage. 3 Noise.

16 Traffic. 2 Tree. 16 Unsightly property.

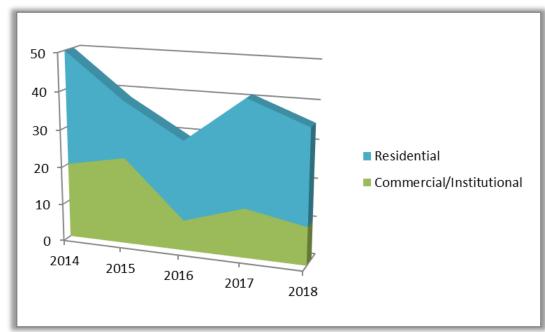
3 Vacant property. 1 Water regulation. 8 Zoning/Land.

Nature of Permit	Number of Permits	Construction Value	
	Resident	ial	
New dwelling units	1	153,600	
Mobile home installations	3	6,000	
Additions / renovations	12	228,500	
ew Accessory	7	247,800	
Relocates	1	8700	
1	Commercial / I	ndustrial	
New buildings	2	7,077,000	
Additions / renovations	8	413,973	
	Demolitic	ns	
All types	1		
TOTAL	35	\$8,135,573	

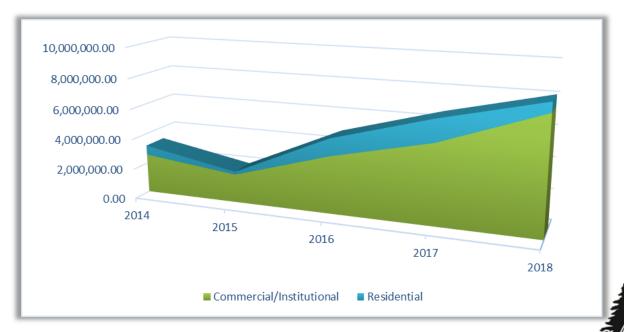


Conneatison of buildings of the periods of the period of the periods of the period of the periods of the period of

Number of Permits



Cost of Permits





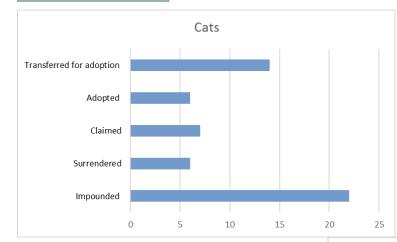


Every year hundreds, and in some years over a thousand bears are destroyed as a result of conflicts between people and bears. In rare instances, people are also injured or even killed as a result of these conflicts. Most of these problems begin when people allow bears to access non-natural food sources such as garbage. The Bear Smart Community program has been designed by the Ministry of Environment in partnership with the British Columbia Conservation Foundation and the Union of British Columbia Municipalities. It is a voluntary, preventative conservation measure that encourages communities, businesses and individuals to work together. The goal is to address the root causes of human-bear conflicts, thereby reducing the risks to human safety and private property, as well as the number of bears that have to be destroyed each year. The District has made becoming a Bear Smart Community a priority. In 2018 we launched our Bear Smart Committee with the help of Sarah Salter, Bonnie Bergeron, Patrick Lemieux, Candy Nomeland





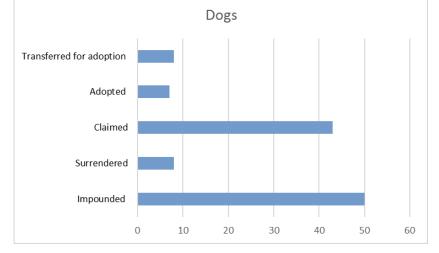
and staff we participated in outreach at FILOMI Days and won first prize at the Fall fair for our booth. We will continue to outreach in 2019 with our application for official Bear Smart status being submitted in early 2019.



Animal care and control

Aries Security Ltd. is the contracted animal control officer for the District. Aries operates the District's animal shelter located at 5060 Pioneer Way and undertakes enforcement activities governed by the District's Animal Care and Control Bylaw No.11-2012. Aries staff the animal shelter Monday to Friday 8:00am-8:30am and 3:30pm-4:00pm; Saturday and Sunday 8:30am-9:30am. Please check the District website for current hours in case of change. Animal control response service is available seven days a week, twenty-four hours a day.





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Water Treatment Plant

Throughout 2018, there were times where due to heavy rains and high river colour events, that the water treatment process was upset. In these events, the plant is taken offline and no water is pumped to the reservoir. Water is only pumped to the reservoir once the treatment plant's process quality is restored. This will result in lower than desired reservoir levels but quality will not be compromised.

Many capital projects were undertaken in 2018. The backup raw water pump was sent out for a rebuild this year. Upon its return, it was put online and the main pump sent out for its rebuild. The main pump had been in service over 10 years.

New online turbidimeters were purchased to monitor raw and treated water quality. The existing turbidimeters are now obsolete and parts are becoming more difficult to find.

Spare components for the water plant's multiple Programmable Logic Controllers (PLCs) were purchased this year. The water plant incorporates 5 PLCs that monitor several hundred inputs in the process. If any portion of the PLC was to fail, the water plant process would stop, ceasing production of potable water. The original PLCs were installed in 2000 with one being replaced in 2016.

Highlights:

- No violations to permit in 2018.
- Quarterly samples for Trihalomethanes and Haloacetic acids all returned within acceptable limits.
- All bacteriological testing came back within expected parameters.
- Seasonal low river levels due to dry weather triggered a Stage 2 water use restriction as per Port Hardy Water Conservation Bylaw No. 06-2005.
- A Stage 3 water use restriction was triggered when the water reservoir #1 was removed and while a replacement was being constructed.
- 130 ML less water was treated in 2018 compared to 2017; this is the lowest production since the water treatment plant was commissioned in 2000. This is due to the utilities crew continuing to make needed repairs and the implementation of the water conservation bylaw.



The "Water Treatment Plant and Distribution System 2018 Annual Performance Report for Facility Numbers 529 & 155" is located as Appendix I, starting on page 47 of this document. The "Wastewater Treatment Plants & Collection System Annual Report 2018, MOE Certification ME-00385 & PE-04168" can be found in Appendix II, starting on page 48 of this document.



Water Distribution System

In 2018, the District of Port Hardy commenced on a major upgrade to the water distribution system in the Storey's Beach area. A new 2,000 cubic meter (m³) reservoir was constructed on Fort Rupert Road and 3,000 meters of distribution pipe was replaced. The replacement distribution pipe was also increased in size from 150mm and 250mm to 300mm and 350mm. Additional hydrants were installed insuring a fire flow of 150 litres/second where required. The Fort Rupert Reservoir site is equipped with backup power generation and chlorine disinfection booster pumps. The reservoir level is controlled by an altitude control valve which keeps the tank at a predetermined level within 1.5 meters. A rolling diaphragm pressure reducing valve is installed on site to regulate the pressure in the event the reservoir is offline. The entire site can be monitored remotely from the water treatment plant.

A new pressure reducing station (PRV) was installed at the corner of Beaver Harbour Road and Storey's Beach Road. This station reduces the mainline pressure from Storey's Beach Road to Chatham Avenue. Reservoir #1 at the water treatment plant was replaced in March and the existing reservoir was taken offline. A new concrete base was poured, and new inlet and outlet valves installed. The new tank, is a 2,700 cubic meter (m³) glass fused to steel (GFS) construction which has much lower maintenance requirements and a larger capacity. A new check valve system in the tank ensures better mixing of the water. The new tank was brought online in June.

The Holmgren Flats PRV station was rebuilt this summer. The original installation was in 1990 and was beginning to have some operational issues. Both valves, the pressure relief system and the electrical components were all rebuilt by the Utilities staff. Tree and brush removal along the water mains was a capital project this year. Keeping the watermains clear of large vegetation makes identifying and repairing leaks much easier reducing time that the community is without water. Local contractors completed this work, which involved removing trees under the power line to the water treatment plant. This clearing has resulted in less power bumps at the water plant and less operator call outs.

Staff have been working on the water distribution line mapping project. Utilities staff have been verifying the details of maps and noting changes that are needed. The maps will then be returned, and adjustments made.







Water Distribution System

Fort Rupert Reservoir–Built thanks to financial contributions from Canada, British Columbia and the District of Port Hardy.



Highlights:

- · Water meters were installed in more commercial properties in 2018.
- · In January, the Port McNeill PRV station was repaired.
- · The 2" water meter serving the Gwa'Sala-Nakwaxda'xw First Nation was replaced.
- · A new water service was installed to Fire Hall #2 at Storey's Beach in March.
- · All hydrants were serviced in 2018.
- · All Utilities operators received training on the Hydro excavation truck this year and received the required Continuing Education Unit (CEU) credits for the course.



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Tsulquate Wastewater Plant and Collection

Highlights:

- The Tsulquate wastewater plant continued to produce effluent within the parameters of the permit.
- The annual average daily flow was 2,119 m³/day.
- UV disinfection bulbs were replaced this year as part of scheduled operations & maintenance.
- Exterior building electrical plugs were replaced at the Tsulquate Plant.
- The annual receiving water monitor testing was performed. Effluent quality was within normal parameters.
- An LC50 test was also performed on the effluent with a 100% survival rate.
- A Sewer Manhole Survey was conducted by our Utilities group to determine the condition of each manhole and to prioritize where structural maintenance and flushing is needed. In all, over 200 manhole inspections were completed.
- Three of the sewage liftstations are scheduled to receive permanent standby emergency power generators. Control kiosks that encompass the new transfer switch gear will also be installed. Completion of the project will be early 2019.
- Sewer flusher truck training was provided for all operators in November. Operators were able to receive Continuing Education Units for this training.
- A sewer flushing program is ongoing with focus on areas with high grease deposits as identified by our Sewer Manhole Survey.
- An electrical engineer was contracted to troubleshoot and prepare a plan to replace some failing electrical equipment at the wastewater treatment plant. This work is scheduled for 2019.
- The Tsulquate wastewater treatment plant has an emergency generator capable of running the entire system, to ensure quality of the effluent is not compromised by power outages.





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Airport Wastewater Plant and Collection

Highlights:

- The Airport wastewater plant continued to produce effluent within the parameters of the permit.
- The annual average flow was 552 m³/day with a maximum flow of 960 m³ recorded in January during a storm event.
- The headworks screening unit required a complete teardown and repair due to rocks entering the sanitary system. The screen has been functioning well after the repair.
- The air header was repaired this year.
- A new emergency generator transfer switch has been installed as part of the 2018 capital project program. The commissioning is now complete.
- Receiving water monitoring and dive of the outfall pipe were conducted as per the requirements of the Operating Certificate. The receiving water testing results were found to be within expected parameters.
- An LC50 test was performed in August on the effluent with a 100% survival rate.





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Highlights:

Capacity Building:

The Operations Department welcomed new crew member, Chad Moore-Labatt.

Energy Smart Initiatives:

All new downtown decretive lights were converted to LED lighting.

Pedestrian Safety:

A new sidewalk was constructed along Central Street.

The seawall lights were completed.

Vibrant Community:

The Beautiful Lost at Sea monument was completed with a dedication to occur in 2019.

New and improved Christmas lighting brought a cheerful and joyous atmosphere to Market Street.

The well kept flower gardens and parks continue to contribute to a vibrant and beautiful community.



















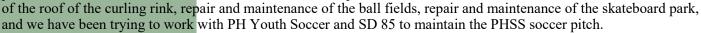


Parks, Recreation, Arts and Culture Committee

Welcome to the world of Parks, Recreation Arts and Culture.

As the name suggests the Committee has a very wide mandate. For the last while one of the focuses of the PRAC Committee has been to maintain existing recreation facilities and bring new activities to the community. Of course, the biggest example of this is Council's work toward replacing our pool. The skyrocketing costs of construction on Vancouver Island have made this a bit more of a challenge than we had hoped; however, we continue to work toward a successful project. As always, we will continue to update the community, as information is available.

One of our guiding principles is that if we do not adequately maintain existing facilities then we will lose facilities we cannot afford to replace. To that end, we have committed funds toward the replacement



We have recently facilitated the space and purchased the equipment for Pickle Ball, and after a presentation from a senior's group we are in the process of facilitating the opportunity for shuffleboard. These are just a few of the initiatives undertaken by the PRAC.

We are always open to new ideas. We encourage any person or group to come to a PRAC Committee and present any of your ideas for Parks, Recreation, Arts and Culture in our Community.

Fred

Fred Robertson, Councillor

Chair of the Parks, Recreation, Arts and Culture Committee

The purpose and mandate of the Parks, Recreation, Arts and Culture Committee is to:

- a) Advise in the operation, maintenance and improvement of District recreational facilities.
- b) Maintain and strengthen relationships with local recreational and arts and culture organizations.
- c) Work with local recreational organizations and users to plan and improve recreational activities and facilities within the District of Port Hardy.
- d) Research matters that are referred to the Committee by Council and provide recommendations to Council on such matters.
- e) Consult, on a regular basis, the recreational and arts and cultural priorities of individuals, groups, agencies and organizations.







Don Cruickshank Memorial Arena

During 2018 the Don Cruickshank Memorial Arena hosted a variety of Hockey Tournaments. Ice use by private rentals and user groups totaled 956.75 hours. Public/Family Skates, Stick Times and special events hosted by the Recreation Department attracted 1,714 skaters, with approximately 335 attending the holiday skates and stick times.

There was an approximate additional 60 hours of dry floor rentals in the off season. We were excited to host the Harvey Walkus Memorial Floor Hockey Tournament again. This in an annual event that is growing each year and brings many visitors to the community. This event had great community involvement and was an enjoyable time for all participants and attendants.

In 2018 there were some safety upgrades done to the ammonia plant of the arena. The most significant of these is the new vent stack on the outside of the building. This was done to comply with the safety standards set forth by Technical Safety BC (TSBC).





Don Cruickshank Memorial Arena

2018 Events

January 2-5 Port Hardy Holiday skate schedule January 19-21 Port Hardy Minor Hockey Novice Tournament January 26-28 Port Hardy Minor Hockey Midget Tournament February 10 Port Hardy Minor Hockey Initiation Jamboree March 16-18 North Island Eagles Atom Development Tournament March 19 Ice out April 20-22 Harvey Walkus Memorial Floor Hockey Tournament September 7-9 Mount Waddington Fall Fair September 23 Ice in for First Skate November 8-11 Port Hardy Wild Women's Tournament November 16-18 Port Hardy Minor Hockey Atom Tournament November 23-25 Port Hardy Minor Hockey Peewee Tournament December 15 Triport Wild Female Jamboree

Christmas schedule



Maintenance

December 27

Arena

- Compressor #1 rebuild.
- Compressor #2 oil change.
- Compressor room upgrades.
- Painted dressing rooms.
- Completed general plumbing, and facility repair and maintenance.
- Safety upgrades as required by Technical Safety BC and WorkSafe BC.

Pool

- Performed general plumbing and facility repair and maintenance.
- Installed ammonia leak warning system on pool deck.



Aquatic Centre

The Port Hardy Pool and Recreation Center hosted special event swims in 2018, including a Family Day swim and many Hot Dog Pro-D day swims. Over the summer we hosted UBC's Gearing Up Science Camp where students learned about science through experiments. Our ever-popular Summer Fun Swim day camps were offered in August along with a lifesaving camp.

Pool maintenance included painting the front building railings, repairing sauna boards and power washing the front of the building. There were 15 certified lifeguard/instructors and 4 cashiers employed by the District in 2018.

Port Hardy Recreation is still in high demand throughout our community and surrounding communities. The total pool attendance for 2018 was 16,275.



2018 Pool Attendance Totals				
Program	# of participants			
Noon lengths	2,529			
Evening lengths	548			
Family/Senior swim daytime	647			
Family swim evening	3,448			
Public swim daytime	2,730			
Public swim evening	3,402			
Aqua fit day/evening	2,971			
Total	16,275			



First Nations Relations Committee

Since the November election, the First Nations Relations Committee has been meeting regularly. Thank-you to all who have been attending the meetings, and we are looking forward to increased participation and joint projects.

Increased friendship and trust between the councils is one of the goals and subsequent outcomes that are occurring.

In showing respect and friendship, the District of Port Hardy Council officially acknowledges the Kwakiutl traditional territory in all the meetings.

Gilakas'la,

Pat

Pat Corbett-Labatt, Councillor

Chair of the First Nations Relations Committee

The purpose and mandate of the First Nations Relations Committee is to:

- a) Assist Council in becoming more knowledgeable about local First Nations culture.
- b) Seek means to improve communications and foster, maintain and strengthen relationships with local First Nations.
- c) Work with local First Nations to implement the North Island Regional Protocol Agreement (March 17, 2010).
- d) Research matters that are referred to it by Council and assist by providing recommendations to Council on such matters.





Department

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Mission Statement

"To provide the citizens of Port Hardy with proactive, effective and efficient delivery of fire, rescue, public education and fire prevention services; through a unified forward thinking, organization with good morale and with the highest standards of personnel safety, fairness and professionalism."

Port Hardy Fire Rescue (PHFR), provides firefighting, road rescue and other emergency services to an area encompassing 42 square kilometres. PHFR responds to an average 175 emergency calls on the North Island including Mutual Aid calls to Coal Harbour, Port Alice, Port McNeill and the Regional District of Mount Waddington electoral areas.

Port Hardy has fire service agreements with the Kwakiutl and Gwa'sala-'Nakwaxkda'xw Reserves. PHFR also responds to requests from the Coastal Fire Centre for fire protection services.

Port Hardy Fire Rescue is a paid-on-call fire department consisting of approximately 30 members who meet weekly for regularly scheduled training to maintain a high-level of protective emergency services.





Membership

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Port Hardy Fire Rescue was established in 1968, and since its establishment has relied on local men and women to answer the call, day or night, when an emergency happens.

Today, 50 years later, the equipment has changed, firefighting has evolved, and the training has improved, but the need for dedicated members remains the same.

With a volume of 175+ calls per year, two stations, and six apparatus, Port Hardy Fire Rescue is the busiest department on the North Island. New members are always needed to help maintain the fire protection needs of the area.









Training

Our members are trained to the National Fire Protection Association (NFPA) 1001 firefighting standards administered through the Justice Institute of British Columbia to provide you with service you can count on.

Our members meet weekly on Thursday nights from 7:00pm-9:00pm to undertake routine practice, and participate in many weekend training events, often with professional-level experts from the field. Our members also regularly participate in training events across Vancouver Island and British Columbia to broaden the scope of practice and standard of safety to which we operate.





Pictures are from training sessions

Public Education

Education is the best prevention. "WORKING SMOKE ALARMS SAVE LIVES"

Education is the keystone of fire prevention, and one of the important cornerstones of our department's mandate. Throughout the year, our members volunteer to provide fire station tours to children in the community and deliver fire prevention seminars to schools throughout the District of Port Hardy.

Throughout the year, we also host a variety of events including an open house with live fire demonstrations. These events not only provide a realistic perspective on the consequences of fire in the home but provide us with an opportunity to engage both children and adults and discuss how they can increase their fire prevention practices in the home.





Port Hardy Volunteer Firefighters Association

The Port Hardy Volunteer Firefighters Association (PHVFA) is a not-for-profit organization incorporated in British Columbia and funded in part by grants-in-aid through the District of Port Hardy and independent fundraising initiatives.

The PHVFA represents the membership of Port Hardy Fire Rescue and has several purposes. Most important, the PHVFA serves to strengthen relationships among members, and to thank them for their service. Throughout the year, the PHVFA plans several events including an annual camp-out and fishing derby which provide members with an opportunity to socialize outside of their firefighting role.

The PHVFA is also passionate about supporting Muscular Dystrophy Canada, an organization that firefighters across Canada loyally support. A portion of fundraising efforts throughout the year is dedicated towards MD Canada.

The PHVFA also includes fire prevention education in its mandate and works closely with Port Hardy Fire Rescue to improve prevention education in the community.







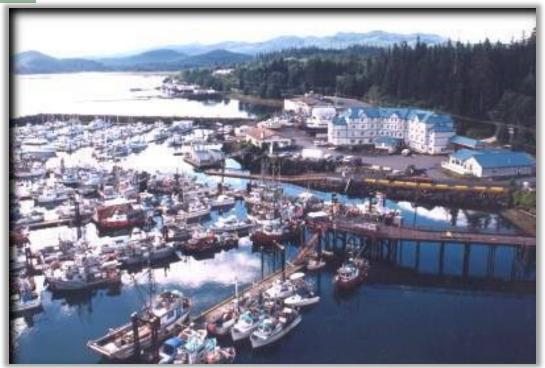
The District of Port Hardy manages four harbour facilities; Seagate Pier, Fisherman's Wharf, Seine Floats and Bear Cove Recreational Park. The Seine Floats and Fisherman's Wharf are Federal Small Craft Harbours Infrastructure which the District manages, while the Seagate Pier and Bear Cove are District assets. The Harbour manager, Aries Security, manages three of the four facilities, while District staff manage Bear Cove.

Seagate Pier, the Seine Floats and Fisherman's Wharf together welcomed 2,929 vessels in 2018, for a combined total of 38,468 boat days. We anticipate seeing this number climb in 2019 as we welcome the Van Isle 360 in June 2019 for another destination stop as they circumnavigate the island.

The winter brings some gusty winds, as we have become accustomed to in the North Island. Last year was certainly no exception! In April, Fisherman's Wharf experienced a major infrastructure failure on H Dock, when a hefty wind forced a break in an entire set of piles, leaving the dock at the mercy of the wind, waves and weight of the vessels.

The fast action of harbour staff; the quick response of our local Canadian Coast Guard; with the financial support of Small Craft Harbours, and under the direction of one of their project engineers, the situation was swiftly brought under control. Thankfully, Joe McAlister of Tuff Marine happened to be around the corner, in Port McNeill, with a few extra pilings in tow!

H-Dock now sports newly driven piles with an extra set on the north tip, for good measure. Further, the Small Craft Harbours Program Officer appointed to the North Island sourced funding to provide the facility with fire extinguishers.



Fisherman's Wharf 6600 Hardy Bay Road



The tidal grid, located at Fisherman's Wharf, was repaired after one of the beams gave way in the summer 2018. For some vessel owners, it is the only option to inspect or repair their vessels, and it is a valuable piece of infrastructure to maintain.





In response to several emergencies at the harbour, the harbour staff designed an emergency cart to hold all the necessary equipment that may be required for a single staff member to aid in the event of a sinking vessel. It was deployed several times in 2018, all with positive results.





In 2018 the District of Port Hardy in conjunction with funding from Small Craft Harbours replaced the bumper tires protecting the Seine float infrastructure and vessels moored to the float system. New galvanized steel tie rails were installed along the main Seine float dock and the metal drive-on ramp was repaired. Anodes were installed on each of the steel piles to add longevity to the structure.







Seine Floats 8555 Glenview Road



Seagate Pier and T-Floats 8500 Granville

"Image i-28375 courtesy of the Royal BC Museum and Archives."



The Seagate Pier received beautification in 2018 that we hope will highlight the seaside paradise that we all get to call home! Three art signs were mounted on the lookout along the pier which provides continuity to the seawall along Carrot Park to Tsulquate Park.





A Personal Flotation Device shack with fish scale, was mounted on the summer T-Floats. This allows our recreational fishers to lead their own fun fishing derby off the pier while keeping everyone safe, in case they forget to bring their own flotation to the seashore.

Harbour

Seagate Pier and T-Floats 8500 Granville

"Image i-28374 courtesy of the Royal BC Museum and Archives."



The Seagate Pier Welcome Banner provides a lovely photo opportunity for guests and locals, alike. It also draws attention to the communication boards mounted on the posts. The District of Port Hardy invested further into the facility by installing two steel piles to stabilize the seasonal T-Float structure during high wind events.





Every step of the way has presented new challenges, for Harbour management, but with challenge comes opportunity. The harbour management team are eager to build on the momentum that we have gained, and we look forward to continuing to be ambassadors for our community.



Harbour

Bear Cove Recreational Site ~ Port Hardy's Hidden Jewel



District care-takers continue to manage the Bear Cove Recreational Site. This seasonal facility is open from June 1st to September Labour Day weekend.

Bear Cove continues to offers free launching and day parking. Reserved moorage is available at rates published in the District User Rates and Fees Bylaw.







Twinning

PORT HARDY TWINNING SOCIETY Port Hardy, BC - Numata, Hokkaido Canada - Japan



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2018 was a quiet year for the Twinning Society with only one major event planned for the year, the October visit of a delegation from Numata. The focus of the Society was to look at ways and means of fostering greater awareness of the sister-city / twinning program in our community, gaining new members and reconnecting with those not as active in the past few years. The Society thanks our members and the many other volunteers in the community who helped make 2018 a good year.

Highlights:



Twinning Garden at Carrot Park

Throughout 2018 the garden was maintained by Society members with garden clean up and trimming of plants ongoing throughout the year.

Filomi Days

2018 was the first time in many, many years that the Twinning Society was not able to turn out and participate in the parade and Filomi Days activities.





Twinning

Torri Gate

Visitors are often seen posing for photographs and there has been no vandalism to the gate to date. We are happy and proud that the citizens of Port Hardy cherish this remarkable addition to Carrot Park.

Media

The Port Hardy Twining Society Facebook page continues to be visited regularly by Society members and citizens of both Port Hardy and Numata. Society events, photos and activities are uploaded and updated regularly. It has been a great way to let people know who we are, and what the Society does. Our local newspapers have shown great support for the Twinning Society through articles and interviews throughout the year.



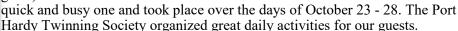
May 2018 - Private Visit

Robert and Leslie Driemel (PHTS Chair) made a pre-arranged private visit to Numata in May as part of a three week holiday in Japan. This was the first time Port Hardy residents have made a private trip to Numata. It was a good opportunity to meet informally with Mayor Kanehira and further cement friendships in the town. The hospitality shown to the visitors was excellent as always!

October 2018 - Delegation from Numata



This was the big event for 2018! There were 13 in the delegation: 9 students (13-14 years of age and all girls!) and 4 adults. The visit was a



Visit events included:

- A welcome by Mayor and Councillors at the Municipal Hall.
- Visits to Avalon Adventist Academy, Gwa'sala-'Nakwaxda'xw, Wagalus and Port Hardy Secondary schools.
- Hardy Buoys Tour & Pumpkin Carving.
- Fire Hall tour and a craft project.
- Pizza and bowling night with host families.
- RCMP tour complete with mug shots and jail time!
- Quatse Salmon Center & Grassroots Garden tour.
- Visiting the Library, Museum and of course shopping!







Twinning

There were new as well as repeat homestay families this visit who all made the delegation members very welcome in their homes and in our community. The girls were at first a little shy but quickly took to their 'new' families and there were tears at the good by dinner. Once again great memories and friendships have grown from the sister city

relationship between Port Hardy and Numata.

This year the Society was very fortunate to have the help of Cody Smedley, a fluent speaker of Japanese, who took time off from work to help with the visit. In 2013 Cody visited Numata with the Port Hardy delegation...and he has said it changed his life! He went on to university to study the Japanese language and from there spent a full year at university in Japan. He had an excellent rapport with both the adults and young students. Cody, we couldn't have done it without you!





The Society and our members thank all the homestay families for sharing their lives, the businesses and organizations we visited for their great hospitality. The Society also thanks the Mayor and Council, especially Councillors John Tidbury and Pat Corbett-Labatt for their hard work and support throughout the visit.









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Fiscal responsibility and financial sustainability are key goals of the District of Port Hardy's Finance Department. These goals are achievable with informed decision making and clear direction between staff and Council. Maintaining and improving service levels for the citizens of Port Hardy are a focus for Council and it is the responsibility of the finance department to find a balance of funding for these goals.

Capital projects including revitalization, infrastructure, and business attraction are projects that Council are directing staff to work towards so that financial sustainability for the District is achieved. The finance department reports to Council the fiscal viability and constraints with regards to Capital projects so that Council is able to make informed decisions when deciding which projects will benefit the citizens of Port Hardy.

Financial Activities of the Finance Department include:

Financial planning

• Annual five year financial plan, user rates and fees structure.

Financial reporting

• Audited financial statements, municipal tax rates, statement of financial information submitted to the Provincial Government.

Revenue collection

• Property tax collection, quarterly utility revenue, other revenue including user fees for services provided.

Payment of accounts

• Payments to hundreds of suppliers annually.

Other activities

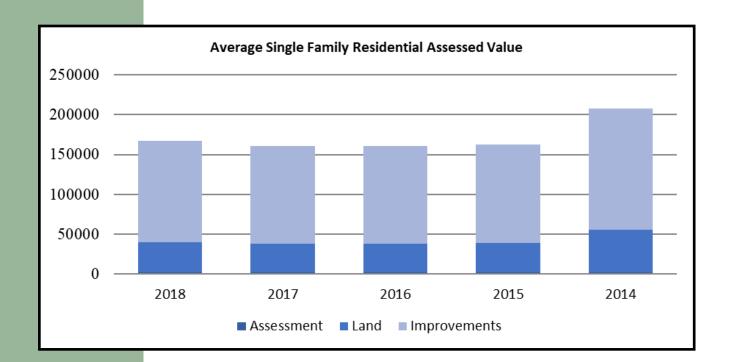
• Internal auditing controls, payroll functions, invoicing, debt financing, business licences and other activities required to manage the Districts financial matters.





Taxable Property Assessments

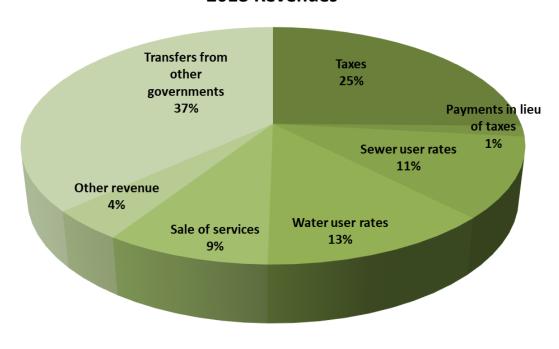
Taxable	Prop	er	ty Ass	se	ssme	nt	S		
(in \$1,000's)			2018		2017		2016	2015	2014
Residential		\$	254,253	\$	243,564	\$	242,790	\$ 246,311	\$ 261,596
Utilities			766		768		765	767	751
Light Industry			3,966		3,800		3,837	3,839	3,804
Business			64,866		62,182		58,160	58,776	58,419
Managed Forest			420		379		386	357	322
Recreation/Non Prof	it .		1,101		1,058		1,016	461	346
]	\$	325,372	\$	311,751	\$	306,954	\$ 310,511	\$ 325,237
% change from prior	r year		4.37%		1.56%		-1.15%	-4.53%	1.83%



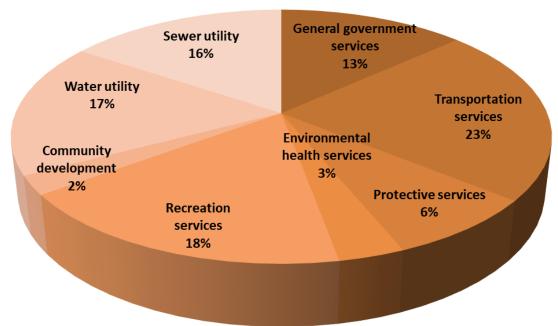


2018 Revenues & Expenses by %

2018 Revenues



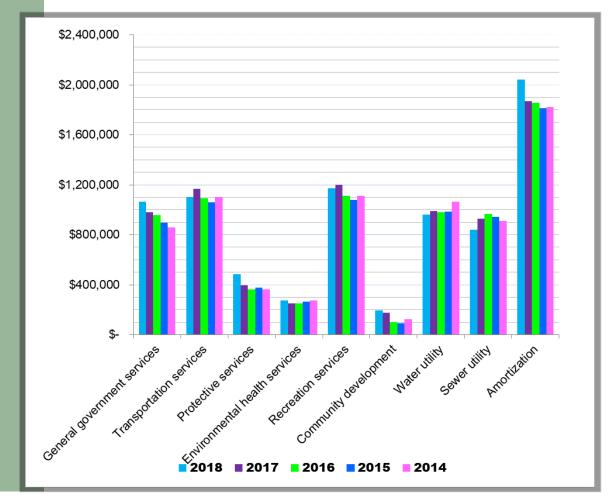
2018 Expenses





2018 Expenses by Function

		2018	2017	2016	2015	2014	
General government services	\$	1,065,287	\$ 982,760	\$ 958,740	\$ 897,331	\$ 856	,904
Transportation services		1,102,650	1,165,374	1,092,063	1,062,216	1,104	,213
Protective services		484,632	397,982	361,479	376,914	361	,526
Environmental health service	es	272,302	248,738	250,704	265,487	273	,210
Recreation services		1,172,965	1,198,794	1,110,075	1,079,890	1,110	,193
Community development		194,240	177,987	102,389	93,595	123	,013
Water utility		961,736	991,309	979,050	982,958	1,065	,927
Sewer utility		839,804	929,484	966,915	941,486	910	,759
Amortization		2,041,470	1,869,979	1,853,138	1,812,521	1,820	,611
	\$	8,135,086	\$ 7,962,407	\$ 7,674,553	\$ 7,512,398	\$ 7,626	,356





2018 Permissive Tax Exemptions

DISTRICT OF PORT HARDY	
Schedule of Property Tax Permissive Exemption	ons
For year ended December 31, 2018	
Organization	Total
Fort Rupert Curling Club	\$ 6,293
Grassroots Garden Society	809
North Island Crisis and Counseling Centre Society	4,410
Pentecostal Assemblies of Canada	4,033
Port Hardy Baptist Church	4,013
Port Hardy Chamber of Commerce	4,079
Port Hardy Congr Jehovah's Witnesses	1,304
Port Hardy Ecumenical Society	2,319
Port Hardy Heritage Society	4,818
Port Hardy Hospital Auxiliary	2,910
Rainbow Country Daycare Society	2,359
Royal Canadian Legion	2,370
Seventh Day Adventist Church	29,153
St. Bonaventure Catholic Church	1,586
Tri Port Motorsport Association	1,122
Vancouver Island Health Authority	122,159
PH Seniors Housing	610
	\$ 194,346

The 2018 Audited Financial Statements are located as Appendix III starting on page 49 of this document.



Appendix I

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Water Treatment Plant & Distribution System







WATER TREATMENT PLANT & DISTRIBUTION SYSTEM



2017 Annual Operations Performance Report Facility Numbers 529 & 155

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OVERVIEW

Port Hardy, with a population of 4,132 residents and over 5,000 connected to the infrastructure is located at the northern end of Vancouver Island. In May 2000 the water treatment plant was commissioned and established Port Hardy's reputation for having some of British Columbia's best water quality.

Port Hardy's source water is the Tsulquate River. The water from this river is tinted brown from tannins and other leachates. Port Hardy's Water Treatment Plant uses a Dissolved Air Flotation (DAF) system which is very effective in treating highly colored water. Treatment is achieved using ISOPAC 6 and Soda Ash to remove the color, particles, sediment and organics that are present. A filter aid, Hydrofloc 400 is added in trace amounts after the DAF treatment and prior to the filters to improve coagulation of fine particles. Filtration is done through a mixed media consisting silica sand and anthracite. Lime slurry, carbon dioxide and sodium hypochlorite are injected post filtration for alkalinity, pH adjustment and disinfection.

In 2018, the plant continued to produce a very high level of treatment providing excellent water quality to the District of Port Hardy.

PERMIT TO OPERATE

The Port Hardy water treatment plant is a Level III facility as deemed by the Environmental Operators Certification Program (EOCP), certification number 529. The distribution system is a Level III system with a certification number of 155.

CERTIFIED OPERATORS

The Operational Permit from Vancouver Island Health Authority Operational requires that a certified operator is employed to match the Water Treatment Plant Certification, a level III plant. The District currently employs a Level IV operator and two, Level III operators. The District also employs a Level III Water Distribution Operator.

Operator	Title	Certification
Joe Jewell	Utilities Supervisor	WT IV, WD III, WWT II, WWC I
Justin Reusch	Chief Operator	WT III, WD II, WWT II
Roland LeFort	Operator	WWT III, WT III
Cory Henschke	Operator	WWT I, WD II
Robert Cousins	Operator	WT I, WWT I

OPERATIONAL HIGHLIGHTS

WATER TREATMENT PLANT

Throughout 2018, there were times where due to heavy rains and high river colour events, that the water treatment process was upset. In these events, the plant is taken offline and no water is pumped to the reservoir. Water is only pumped to the reservoirs once the treatment plant's process quality is restored. This will result in lower than desired reservoir levels but quality will not be compromised.

Many capital projects were undertaken in 2018. The backup raw water pump was sent out for a rebuild this year. Upon it's return, it was put online and the main pump sent out for its rebuild. The main pump had been in service over 10 years.

New online turbidimeters were purchased to monitor raw and treated water quality. The existing turbidimeters are now obsolete and parts are becoming more difficult to find.

Spare components for the water plant's multiple Programmable Logic Controllers (PLCs) were purchased this year. The water plant incorporates 5 PLCs that monitor several hundred inputs in the process. If any portion of the PLC was to fail, the water plant process would stop, ceasing production of potable water. The original PLCs were installed in 2000 with one being replaced in 2016.

Additional highlights:

- ➤ No violations to permit in 2018
- > Quarterly samples for THMs and HAAs all returned within acceptable limits
- ➤ All bacteriological testing came back within expected parameters
- > Seasonal low river levels due to dry weather triggered a Stage 2 water use restriction as per Port Hardy Water Conservation Bylaw No. 06-2005.
- > A Stage 3 water use restriction was triggered when the water reservoir #1 was removed and while a replacement was being constructed
- > 130 ML less water was treated in 2018 compared to 2017; this is the lowest production since the water treatment plant was commissioned in 2000. This is due to the utilities crew continuing to make needed repairs and the implementation of the water conservation bylaw

WATER DISTRIBUTION SYSTEM

In 2018, the District of Port Hardy commenced on a major upgrade to the water distribution system in the Storey's Beach area. A new 2000 cubic meter (m³) reservoir was constructed on Fort Rupert Road and 3000 meters of distribution pipe was replaced. The replacement distribution pipe was also increased in size from 150mm and 250mm to 300mm and 350mm. Additional hydrants were also installed insuring a fire flow of 150 Litres/second where required. The Fort Rupert Reservoir site is equipped with backup power generation and chlorine disinfection booster pumps. The reservoir level is controlled by an altitude control valve which keeps the tank at a predetermined level within 1.5 meters. A rolling diaphragm pressure reducing valve is also installed on site to regulate the pressure in the event the reservoir is offline. The entire site can be monitored remotely from the water treatment.

A new Pressure Reducing Station (PRV) was installed at the corner of Beaver Harbour Road and Storey's Beach Road. This station reduces the mainline pressure from Storey's Beach Road to Chatham Avenue.

Also, as part of the project, Reservoir #1 at the water treatment plant was replaced. In March, the existing reservoir was taken offline. A new concrete base was poured, and new inlet and outlet valves installed. The new tank, is a 2700 cubic meter (m³) glass fused to steel (GFS) construction, has much lower maintenance requirements and a larger capacity. A new check valve system in the tank ensures better mixing of the water. The new tank was brought online in June.

The Holgrem Flats PRV station was rebuilt this summer. The original installation was in 1990 and was beginning to have some operational issues. Both valves, the pressure relief system and the electrical components were all rebuilt by the Utilities staff.

Tree and brush removal along the water mains was also a capital project this year. Keeping the watermains clear of large vegetation makes identifying and repairing leaks much easier reducing time that the community is without water. Local contractors were solicited for this work. Part of this work involved removing trees under the power line to the water treatment plant. As a result, there has been less power bumps at the water plant and less operator call outs.

Staff have also been working on the mapping project. A new set of water distribution maps are being worked on. Utilities staff have been verifying the details of maps and noting changes that are needed. The maps will then be returned and adjustments made.

Additional Highlights:

- ➤ Water meters were installed in more commercial properties in 2018
- > In January, the Port McNeill PRV station was found to be badly leaking. Repair parts were ordered and installed until the new water system was completed
- > The 2" water meter serving the Gwa'Sala-Nakwaxda'xw First Nation was found inoperable and a new meter was installed
- ➤ In February, brief water outages were caused twice when the contractor broke the water services to the Fort Rupert School and Fort Rupert Liftstation. Bacteriological samples were sent out with good results returned
- A new water service was installed to Fire Hall #2 at Storey's Beach in March
- ➤ All hydrants were serviced in 2018
- ➤ The fibre optic installation continued in 2018. Utilities operators continued to locate and mark our utilities. As a result, many of our service cards and maps were corrected or new cards were created. Any services that were found in need of repair were fixed
- > All Utilities operators received training on the Hydroexcavation truck this year and received the required Continuing Education Units (CEUs) credits for the course

CROSS CONNECTION CONTROL

A formal Cross Connection Control program, created by Maintenance Tracking Systems Inc (MTS) was presented to the District of Port Hardy in late 2010. Currently, backflow preventers are installed in all high risk areas of the treatment plants, liftstations with a washdown hose, public sani dumps and public gardens.

WATER WISE PROGRAM CONTINUATION

A total of 178 meters are being read including commercial users and multi-family dwellings. All new homes and constructions will have meter setters installed as part of this program. Continuing public education around proposed metering/rate changes and general information on water wise initiatives was conducted and will be ongoing until all users are metered. In 2016, new watering restrictions as per Port Hardy Water Conservation Bylaw No. 06-2005 were adopted. As part of the water system upgrade in 2018, water meter setters were installed on all single family dwellings on Beaver Harbour Road as new service lines were run to the property line

WATERSHED PROTECTION PLAN

The District of Port Hardy has taken steps to implement a watershed protection plan. The purpose of this is to create a plan that guides users in the best management and preservation of the Tsulquate River and Kains Lake watershed as a drinking water source for the District of Port Hardy. The plan will develop a public awareness, identify stakeholders, increase knowledge and public awareness of the watershed and develop procedures for an emergency response.

		——— Water	Treati	ment I	Plant /	Distr	ibutio	n Test	ing				
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Raw Water pH	27	24	26	26	27	30	27	27	25	27	26	26	318
Reservoir Water pH Daily Grab Sample or Continuous 7.0 - 10.5	31	28	31	30	31	30	31	31	30	31	30	31	365
Colour (Reservoir) AO: <= 15 TCU	27	24	26	26	27	25	27	27	25	27	26	26	313
Free Chlorine Residual (Reservoir) Daily Grab Sample or Continuous	31	28	31	30	31	30	31	31	30	31	30	31	365
Free Chlorine Residual Distribution Grab Sample	48	40	46	42	44	47	48	46	42	44	42	42	531
Turbidity (Distribution) Grab Samples	48	40	46	42	44	47	48	46	42	44	42	42	531
Turbidity (Filter) Grab Sample or Continuous <= 0.3 NTU in at least 95%; never > 1.0 NTU	31	28	31	30	31	30	31	31	30	31	30	31	365
Turbidity (Reservoir) Daily Grab Sample or Continuous 1 NTU Maximum in finished water	31	28	31	30	31	30	31	31	30	31	30	31	365
Escherichia Coli (E.coli) 11 per month Distribution, 1 Raw MAC: 0 CFU/100mL	12	14	17	12	12	40	14	12	12	12	12	12	181
Total Coliforms 11 per month Distribution, 1 Raw MAC: 0 CFU/100mL	12	14	17	12	12	40	14	12	12	12	12	12	181
Chemical and Physical Parameter Tests Once every 5 years Due 2019													0
Trihalomethanes & Haloacetic Acids (THMs & HAAs) Quarterly <0.100 mg/L annual average	1			1			1			1			4
Monthly Report 15 th of the following month	1	1	1	1	1	1	1	1	1	1	1	1	12
Annual Report Before January 31 st	1												1
Permit Violations	0	0	0	0	0	0	0	0	0	0	0	0	0
				Work	kplace	Metri	CS						
	January	February	March	April	May	June	July	August	September	October	November	December	Total
Safety Meetings	1	1	1	1	1	11	1	1	1	1	1	1	22
Worksite Inspections	1	1	1	1	1	1	1	1	1	1	1	1	12
Kain's Lake Dam Inspections	2	2	2	4	4	4	6	6	6	6	4	2	48
Water Service Locates	5	1	1	3	6	20	3	1	1	6	3	1	51
Water Service Repairs	5	3	2	0	3	0	6	0	1	1	0	0	21
Water Main Repairs	1.4	0	1	0	0	9	1	0	0	0	0	0	3 171
BC One Calls	14	11	16	6	17		8	8	40	21	16	5	
PRV Inspections ERP Exercises	7	0	0	0	0	0	7	0	7	0	7	0	29 0
Air Valve Inspections	2	2	2	0	0	0	5	0	0	12	18	0	41
Mainline Valve Locates/Inspections	0	3	1	0	1	6	14	24	0	12	0	0	50
Hydrant A - Services	0	0	0	0	0	0	0	0	0	0	0	0	0
Hydrant B - Services	0	0	0	0	0	0	82	60	66	0	0	0	208

RAW AND TREATED WATER PRODUCTION

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Raw Water Pumped in ML	124	119	125	118	131	128	142	151	123	130	112	111	1513
Treated Water Production in ML	120	117	122	112	128	124	138	147	119	122	109	108	1467
Rainfall in mm	129	157	91	85	9	106.7	19.6	16	169	173.6	264.8	396.2	1616
Backwashes	36	34	34	36	37	33	39	38	32	34	36	37	426

CHEMICAL USAGE

	January	February	March	April	May	June	July	August	September	October	November	December	Total
ISOPAC 6 Coagulant in kg	3355	2847	2859	2839	2276	3302	2811	1830	4105	5357	4892	4329	40802
Soda Ash in kg	1294	1158	1033	1339	817	1067	772	250	1203	1884	1952	2066	14835
Filter Aid (LT20) in kg	1.03	0.82	0.86	0.81	1.20	1.20	1.19	0.82	0.60	0.62	0.75	0.78	10.68
Salt for Chlorine Generator in kg	363	272	363	454	400	680	499	568	776	613	431	522	5942
Liquid Sodium Hypochlorite 12% in kg	20	0	0	0	4	0	0	0	0	0	0	0	24
Lime in kg	1935	1499	1614	1853	1834	1894	2043	2045	1854	2037	2004	2018	22629
Carbon Dioxide in kg	2248	1744	1708	2415	2471	2583	3049	2904	2587	2304	2776	1717	28507

FILTERED WATER QUALITY

Month	Filt	er 1	Filt	er 2	Filt	er 3	Filt	er 4
Month	Avg	Max	Avg	Max	Avg	Max	Avg	Max
January	0.04	0.29	0.05	0.29	0.12	0.29	0.04	0.29
February	0.07	0.29	0.07	0.29	0.08	0.29	0.06	0.29
March	0.04	0.29	0.04	0.29	0.04	0.29	0.04	0.29
April	0.04	0.29	0.04	0.29	0.04	0.29	0.03	0.29
May	0.03	0.29	0.03	0.29	0.03	0.29	0.02	0.29
June	0.03	0.29	0.04	0.29	0.03	0.29	0.03	0.29
July	0.03	0.17	0.04	0.29	0.03	0.24	0.02	0.22
August	0.04	0.29	0.03	0.29	0.04	0.29	0.01	0.29
September	0.03	0.29	0.04	0.29	0.03	0.25	0.03	0.19
October	0.04	0.29	0.04	0.29	0.04	0.29	0.03	0.29
November	0.03	0.29	0.04	0.29	0.03	0.29	0.02	0.29
December	0.03	0.29	0.04	0.29	0.03	0.30	0.02	0.29
Average	0.04	0.28	0.04	0.29	0.05	0.28	0.03	0.28
Minimum	0.03	0.17	0.03	0.29	0.03	0.24	0.01	0.19
Maximum	0.07	0.29	0.07	0.29	0.12	0.30	0.06	0.29

RESERVOIR EFFLUENT

Month	Flo (m ³ /1		Free Cl (mg	nlorine g/L)	р	Н	Turbidity (NTU)
Wionun	Avg	Max	Avg	Max	Avg	Max	Avg
January	128	234	1.0	1.0	7.5	7.5	0.04
February	142	313	1.0	1.1	7.5	7.6	0.02
March	138	216	1.0	1.1	7.5	7.6	0.03
April	138	216	1.1	1.2	7.5	7.6	0.05
May	151	236	1.1	1.1	7.3	7.3	0.01
June	147	198	1.0	1.1	7.4	7.4	0.10
July	160	207	1.0	1.0	7.4	7.5	0.03
August	186	370	1.0	1.0	7.4	7.5	0.06
September	152	254	1.0	1.1	7.3	7.4	0.07
October	142	183	1.0	1.1	7.3	7.4	0.10
November	133	207	0.9	1.0	7.4	7.5	0.14
December	133	331	1.0	1.0	7.4	7.5	0.10
Avg	146	247	1.0	1.1	7.4	7.5	0.06
Min	128	183	0.9	1.0	7.3	7.3	0.01
Max	186	370	1.1	1.2	7.5	7.6	0.14

Note: Data from the above tables are accumulated from online instrumentation and SCADA trending. Maximum values can be influenced by cleaning, calibrating and flushing of online instrumentation which at that time does not reflect the actual quality of the water.

DISTRIBUTION WATER QUALITY AND BACTERIOLOGICAL RESULTS

1	Janu	ıary				Febr	uary				Ma	rch		
Dis	tribution	n Samp	ling		Dis	tributio	n Samp	ling		Dis	tributio	n Samp	ling	
Location	Date	Free Chlorine mg/L	Turbidity NTU	pН	Location	Date	Free Chlorine mg/L	Turbidity NTU	pН	Location	Date	Free Chlorine mg/L	Turbidity NTU	pН
Chatham Avenue	01-02-18 01-09-18 01-16-18	0.7 0.7 0.6	0.14 0.22 0.12	7.7 7.6 7.8		02-05-18 02-06-18 02-07-18	0.8 0.7 0.7	0.17 0.11 0.21	7.5 7.8 7.6		03-06-18 03-13-18 03-20-18	0.8 0.7 0.6	0.30 0.16 0.13	7.6 7.6 7.6
	01-23-18 01-30-18	0.8	0.14	7.8	Chatham Avenue	02-13-18 02-20-18	0.8 0.8	0.14 0.25	7.6 7.6	Chatham Avenue	03-27-18 03-28-18	0.8	0.11 0.12	7.6 7.7
	01-02-18	0.8	0.13	7.5		02-27-18 02-06-18	0.8	0.23 0.13	7.6 7.7		03-06-18	0.8	0.13	7.6
Peel Street Liftstation	01-09-18 01-16-18	0.8	0.34 0.12	7.4 7.5	Peel Street Liftstation	02-13-18 02-20-18	0.7	0.19 0.38	7.4 7.5	Peel Street Liftstation	03-13-18 03-20-18	0.7	0.14 0.25	7.4 7.6
	01-30-18 01-02-18	0.7	0.21 0.18	7.7		02-27-18 02-06-18	0.9	0.16 0.16	7.6 7.6		03-27-18 03-06-18	0.6	0.19	7.6 7.6
Airport Wastewater	01-09-18 01-16-18	0.6 0.6	0.23	7.5 8.2	Airport Wastewater	02-13-18 02-20-18	0.6 0.8	0.19 0.25	7.6 7.6	Airport Wastewater	03-13-18 03-20-18	0.2	0.19 0.17	7.6 7.6
Treatment Plant	01-23-18	0.6	0.22	7.7	Treatment Plant	02-27-18	0.2	0.54	7.7	Treatment Plant	03-27-18	0.7	0.17	7.7
	01-30-18 01-02-18	0.7	0.13 0.17	7.8		02-06-18	0.8	0.17	7.6		03-28-18 03-06-18	0.6	0.18 0.12	7.6 8.8
Public Works Yard	01-09-18 01-16-18	0.9	0.22	7.4 7.4	Public Works Yard	02-13-18 02-20-18	1.0 0.8	0.13	7.5 7.7	Public Works Yard	03-13-18 03-20-18	0.5	0.15 0.15	7.8 7.6
	01-23-18 01-30-18	0.6 0.6	0.28 0.13	7.9		02-27-18	0.3	0.19	8.1		03-27-18	0.9	0.15	7.7
	01-02-18	0.3	0.42	7.9		02-06-18	0.3	0.20	8.2		03-06-18	0.3	0.29	8.0
Eagleview School	01-09-18 01-16-18	0.3	0.27 0.16	8.0 7.9	Eagleview School	02-13-18 02-20-18	0.3	0.20	8.0 7.6	Eagleview School	03-13-18 3/20/2018*	0.3	0.41	7.9 7.7
	01-23-18 01-30-18	0.3	0.22	7.8		02-27-18	0.8	0.11	7.5		03-27-18	0.3	0.19	8.0
	01-02-18 01-09-18	0.8 0.7	0.23	7.5 7.5		02-06-18 02-13-18	0.7 0.7	0.15 0.18	7.5 7.5		03-06-18 03-13-18	0.8	0.29 0.14	7.6 7.5
Bear Cove Reservoir	01-16-18	0.7	0.14	7.5	Bear Cove Reservoir	02-20-18	0.8	0.28	7.5	Bear Cove Reservoir	03-20-18	0.8	0.15	7.6
	01-30-18	0.8 0.7	0.18 0.11	7.6		02-27-18	0.8	0.16	7.6			0.7	0.21	7.6
	01-02-18 01-09-18	0.6	0.10 0.14	7.5 7.5		02-06-18 02-13-18	0.7 0.7	0.19 0.14	7.5 7.4		03-06-18 03-13-18	0.7	0.21	7.6 7.5
Ferry Terminal	01-16-18 01-23-18	0.6 0.7	0.11 0.16	7.5 7.6	Ferry Terminal	02-20-18 02-27-18	0.9	0.19	7.4 7.5	Ferry Terminal	03-20-18 03-27-18	0.5 0.6	0.13 0.15	7.6 7.5
	01-30-18	0.6	0.15											
	01-02-18 01-09-18	0.8	0.25	7.5 7.4		02-06-18 02-13-18	0.7 1.0	0.17	7.6 7.4		03-06-18 03-13-18	1.0	0.31	7.7 7.5
Highway 19 PRV	01-16-18	0.9	0.15	7.4	Highway 19 PRV	02-20-18	1.0	0.14	7.6	Highway 19 PRV	03-20-18	0.8	0.15	7.6
	01-23-18 01-30-18	1.0 0.8	0.19 0.12	7.7		02-27-18	1.0	0.18	7.4		03-27-18	0.9	0.14	7.6
Average Minimur		0.7	0.19	7.6 7.4	Average Minimus	m	0.7	0.20	7.6 7.4	Average Minimus		0.6	0.19	7.7 7.4
Maximui		1.0	0.42	8.2	Maximu		1.0	0.54	8.2	Maximu	m	1.0	0.44	8.8
	Ap	ril				M	ay				Ju	ne		
Dis	tribution	oril n Sampi	ling		Dis	M tributio		ling		Dis	Ju		ling	
Dis		Free Chlorine	ling Turbidity (NTU)	pН	Dis		n Samp	ling Turbidity NTU	pH	Dis		Samp Free Chlorine	ling Turbidity NTU	pН
	Date 04-03-18	Free Chlorine (mg/L)	Turbidity (NTU)	7.5		Date 05-01-18	Free Chlorine mg/L 0.5	Turbidity NTU	8.0		Date 06-05-18	Free Chlorine mg/L 0.3	Turbidity NTU	7.5
	Date 04-03-18 04-05-18 04-10-18	Free Chlorine (mg/L) 0.9 0.8 0.7	Turbidity (NTU) 0.16 0.17 0.18	7.5 7.5 7.9		Date 05-01-18 05-08-18 05-15-18	Free Chlorine mg/L 0.5 0.7 0.4	Turbidity NTU 0.16 0.18 0.15	8.0 7.9 7.9		Date 06-05-18 06-12-18 06-19-18	Free Chlorine mg/L 0.3 0.3 0.5	Turbidity NTU 0.20 0.16 0.65	7.5 7.6 7.5
Location	Date 04-03-18 04-05-18 04-10-18 04-17-18	Free Chlorine (mg/L) 0.9 0.8 0.7	Turbidity (NTU) 0.16 0.17 0.18 0.16	7.5 7.5 7.9 7.9	Location	Date 05-01-18 05-08-18 05-15-18 05-22-18	Free Chlorine mg/L 0.5 0.7	Turbidity NTU 0.16 0.18 0.15 0.14	8.0 7.9	Location	Date 06-05-18 06-12-18	Free Chlorine mg/L 0.3 0.3	Turbidity NTU 0.20 0.16	7.5 7.6
Location Chatham Avenue	Date 04-03-18 04-05-18 04-10-18 04-17-18 04-24-18 04-03-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15	7.5 7.5 7.9 7.9 7.9 7.9	Location Chatham Avenue	Date 05-01-18 05-08-18 05-15-18 05-22-18 05-22-18 05-29-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.8	Turbidity NTU 0.16 0.18 0.15 0.14 0.20	8.0 7.9 7.9 8.1 8.3 7.5	Location Chatham Avenue	Date 06-05-18 06-12-18 06-19-18 06-26-18	Free Chlorine mg/L 0.3 0.5 0.1	Turbidity NTU 0.20 0.16 0.65 0.34	7.5 7.6 7.5 7.6 7.5
Location	Date 04-03-18 04-05-18 04-10-18 04-17-18 04-24-18 04-03-18 04-10-18 04-17-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.8 0.8 0.8	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7	Location	Date Date	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.8 0.9 0.9	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.14 0.17	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7	Location	Date 06-05-18 06-12-18 06-19-18 06-26-18 06-05-18 06-05-18 06-12-18 06-19-18	Free Chlorine mg/L 0.3 0.5 0.1 0.7 1.0 0.5	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78	7.5 7.6 7.5 7.6 7.5 7.6 7.5
Location Chatham Avenue Peel Street	Date 04-03-18 04-05-18 04-10-18 04-17-18 04-03-18 04-10-18 04-17-18 04-17-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.8 0.8 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5	Location Chatham Avenue Peel Street	Date Date	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.6	Location Chatham Avenue	Date 06-05-18 06-12-18 06-19-18 06-26-18 06-05-18 06-12-18 06-19-18 06-19-18	Free Chlorine mg/L 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5
Location Chatham Avenue Peel Street Liftstation	Date 04-03-18 04-05-18 04-05-18 04-10-18 04-17-18 04-17-18 04-10-18 04-10-18 04-10-18 04-03-18 04-03-18 04-03-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.7 0.8 0.9 0.9 0.8 0.7 0.8 0.6 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6	Location Chatham Avenue Peel Street Liftstation	Date 05-01-18 05-08-18 05-15-18 05-22-18 05-29-18 05-01-18 05-01-18 05-02-18 05-02-18 05-01-18 05-08-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.8 0.9 0.9 0.9 0.7 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.6 7.7	Location Chatham Avenue Peel Street Liftstation	Date 06-05-18 06-12-18 06-12-18 06-26-18 06-05-18 06-12-18 06-19-18 06-26-18 06-05-18 06-12-18	Free Chlorine mg/L 0.3 0.5 0.1 0.7 1.0 0.5 0.8	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.30 0.18	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.6
Location Chatham Avenue Peel Street	Date 04-03-18 04-05-18 04-10-18 04-17-18 04-24-18 04-10-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.9 0.9 0.8 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.45	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6	Location Chatham Avenue Peel Street	Date 05-01-18 05-08-18 05-08-18 05-15-18 05-29-18 05-01-18 05-01-18 05-02-18 05-01-18 05-22-18 05-01-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.7	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.22 0.27	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.6 7.7	Location Chatham Avenue	Date 06-05-18 06-12-18 06-19-18 06-26-18 06-05-18 06-19-18 06-19-18 06-26-18 06-05-18	Free Chlorine mg/L 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 04-03-18 04-05-18 04-10-18 04-10-18 04-10-18 04-24-18 04-10-18 04-17-18 04-24-18 04-03-18 04-17-18 04-10-18 04-17-18 04-10-18 04-10-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.8 0.8 0.9 0.9 0.8 0.0 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.12 0.45 0.45	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 05-01-18 05-08-18 05-08-18 05-15-18 05-22-18 05-01-18 05-01-18 05-01-18 05-01-18 05-08-18 05-01-18 05-08-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.22 0.27	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 06-05-18 06-12-18 06-12-18 06-19-18 06-26-18 06-19-18 06-26-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18	Free Chlorine mg/L 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.3	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.78 0.21 0.30 0.18 0.53	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 04-03-18 04-05-18 04-10-18 04-17-18 04-17-18 04-10-18 04-17-18 04-24-18 04-03-18 04-03-18 04-10-18 04-10-18 04-10-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45 0.20 0.74 0.41	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 05-01-18 05-08-18 05-15-18 05-15-18 05-22-18 05-01-18 05-15-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18 05-10-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.9 0.9 0.9 0.9 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.22 0.27 0.21 0.30	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant	Date 06-05-18 06-12-18 06-12-18 06-19-18 06-05-18 06-19-18 06-19-18 06-05-18 06-19-18 06-19-18 06-19-18	Free Chlorine mg/L 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.3 0.2 0.2	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.78 0.21 0.30 0.18 0.53 0.32	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 04-03-18 04-03-18 04-05-18 04-05-18 04-10-18 04-17-18 04-24-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18	Free (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.9 0.9 0.8 0.9 0.9 0.9 0.1 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45 0.45 0.20 0.74 0.41	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 05-01-18 05-08-18 05-13-18 05-13-18 05-29-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.17 0.15 0.21 0.22 0.27 0.21 0.30 0.41 0.16 0.14 0.16 0.14 0.12	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 06-05-18 06-12-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18 06-05-18 06-05-18 06-26-18	Free Chlorine mg/L 0.3 0.5 0.1 0.5 0.1 0.5 0.8 0.4 0.4 0.3 0.2 0.2 0.2	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.78 0.21 0.30 0.18 0.53 0.32 0.12	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 04-03-18 04-05-18 04-05-18 04-10-18 04-17-18 04-17-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18 04-24-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18 04-03-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.9 0.9 0.4 1.1 0.4 0.5	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45 0.20 0.74 0.41 0.11 0.11 0.11 0.11 0.11 0.11 0.1	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.6 7.7 8.7 9 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 05-01-18 05-08-18 05-08-18 05-15-18 05-22-18 05-22-18 05-29-18 05-01-18 05-01-18 05-02-18 05-22-18 05-29-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18 05-01-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.21 0.22 0.27 0.21 0.30 0.41 0.16 0.16	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 8.1 8.0 8.8	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant	Date 06-05-18 06-12-18 06-12-18 06-19-18 06-26-18 06-05-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-05-18 06-19-18 06-26-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18	Free Free Free Free Free Free Free Free	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.30 0.18 0.53 0.32 0.12 0.28 0.26 0.26	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2
Location Chatham Avenue Peel Street Liffstation Airport Wastewater Treatment Plant Public Works Yard	Date 04-03-18 04-03-18 04-05-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18 04-17-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18	N Samp) Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.9 0.9 0.3 0.4 0.1 1.1 0.4 0.5 0.2 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity (NTU) 0.16 0.17 0.18 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 7.7 8.3 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	05-01-18 05-08-18 05-08-18 05-08-18 05-15-18 05-22-18 05-01-18	Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.5 0.7 0.7 0.6 0.6 0.6 0.5 0.5 0.7 0.5 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.22 0.27 0.21 0.30 0.41 0.16 0.14 0.16 0.19 0.18 0.19	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 8.1 8.0 8.8 8.8 9.0 7.9 8.0	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant Public Works Yard	Date 06-05-18 06-12-18 06-12-18 06-12-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18 06-05-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-05-18 06-26-18 06-05-18 06-05-18 06-26-18	Free Chlorine mg/L 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.3 0.2 0.5 0.2 0.2 0.2 0.2 0.4 0.4 0.3 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.30 0.18 0.53 0.32 0.12 0.28 0.26 0.33 0.19 0.21	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 8.2 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 04-03-18 04-05-18 04-05-18 04-10-18 04-10-18 04-17-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.7 0.8 0.9 0.9 0.8 0.0 0.7 0.8 0.9 0.9 0.1 0.6 0.3 0.6 0.3 0.4 0.4 0.5 0.5 0.2	Turbidity (NTU) 0.16 0.17 0.18 0.18 0.16 0.11 0.15 0.15 0.12 0.45 0.40 0.41 0.41 0.11 0.31 0.31 0.31 0.31 0.31 0.31 0.3	7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 7.9 7.6 8.7 8.3 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date Date Date	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.6 0.8 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.21 0.20 0.21 0.30 0.41 0.16 0.15 0.11 0.16 0.16 0.16 0.16 0.16 0.16 0.16	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 8.1 8.8 8.8 8.8 9.0 7.9 8.0 8.0 8.4	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant	Date 06-05-18 06-12-18 06-12-18 06-12-18 06-26-18 06-12-18 06-12-18 06-12-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18	Free Chlorine mg/L 0.3 0.5 0.1 1.0 0.5 0.2 0.2 0.2 0.4 0.4 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.30 0.18 0.53 0.32 0.12 0.28 0.26 0.33	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8
Location Chatham Avenue Peel Street Liffstation Airport Wastewater Treatment Plant Public Works Yard	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-17-18 04-24-18 04-03-18 04-17-18 04-03-18 04-17-18 04-10-18 04-17-18 04-10-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18	Prec Chlorine (mg/L) 0.9 0.8 0.8 0.7 0.8 0.8 0.9 0.4 0.6 0.5 0.5 0.5 0.7 0.6 0.5 0.7 0.7 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.12 0.45 0.20 0.45 0.20 0.74 0.41 0.11 0.31 0.12 0.14 0.11 0.17 0.17 0.18	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 7.7 8.3 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date Date Display D	N Samp Free Chlorine mg/L 0.5 0.5 0.7 0.7 0.7 0.9 0.8 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.14 0.17 0.11 0.15 0.21 0.22 0.27 0.21 0.20 0.41 0.16 0.14 0.19 0.19 0.19 0.10 0.10 0.10 0.10 0.10	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 8.0 8.8 8.8 8.8 8.8 8.8 8.8 8.8	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant Public Works Yard	Tribution Date 06-05-18 06-12-18 06-12-18 06-26-18 06-05-18 06-19-18 06-05-18 06-19-18 06-19-18 06-26-18 06-19-18 06-26-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-05-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18	Samp Free Chlorine mg/L 0.3 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.4 0.3 0.2 0.2 0.2 0.2 0.2 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.2 0.2 0.2 0.3 0.2 0.2 0.3 0.2 0.3 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.20 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.30 0.18 0.53 0.32 0.12 0.28 0.26 0.30 0.19 0.21 0.19 0.21 0.16	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-17-18 04-24-18 04-03-18 04-17-18 04-24-18 04-03-18 04-17-18	Prescription Samp Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.7 0.8 0.8 0.9 0.3 0.6 0.3 0.6 0.3 0.6 0.5 0.7 0.8 0.8 0.9 0.9 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.15 0.15 0.15 0.15 0.16 0.17 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 8.7 8.3 8.9 7.7 8.3 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date Date Display D	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.14 0.17 0.11 0.15 0.21 0.22 0.27 0.21 0.20 0.41 0.16 0.18 0.16 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Waslewater Treatment Plant Public Works Yard	Tribution Date 06-05-18 06-12-18 06-12-18 06-12-18 06-05-18 06-12-18 06-05-18 06-05-18 06-05-18 06-19-18	Namp Free Chlorine mg/L 0.3 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.4 0.3 0.2 0.2 0.2 0.2 0.2 0.3 0.2 0.2 0.2 0.3 0.2 0.2 0.3 0.2 0.2 0.3 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.20 0.16 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.28 0.26 0.33 0.12 0.28 0.26 0.33 0.19 0.19 0.15 0.15 0.15 0.15 0.58 0.20 0.16	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 8.2 7.8 8.2 7.8 7.8 8.2 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 04-03-18 04-05-18 04-01-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18 04-17-18 04-03-18 04-17-18 04-03-18 04-17-18 04-03-18 04-17-18 04-03-18 04-10-18	Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.9 0.9 0.8 0.0 0.7 0.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Turbidity (NTU) 0.16 0.17 0.18 0.16 0.11 0.15 0.15 0.15 0.12 0.45 0.45 0.20 0.74 0.41 0.11 0.11 0.11 0.12 0.14 0.11 0.11 0.17 0.07 0.18	7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 7.9 7.6 8.7 8.3 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	05-01-18 05-08-18 05-08-18 05-08-18 05-13-18 05-22-18 05-01-18 05-15-18 05-29-18 05-01-18	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.6 0.6 0.7 0.7 0.6 0.7 0.7 0.7 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.18 0.15 0.14 0.20 0.17 0.17 0.15 0.21 0.27 0.27 0.21 0.30 0.41 0.14 0.15 0.16 0.18 0.16 0.18 0.19 0.18 0.16 0.13 0.16 0.15 0.13 0.16 0.15 0.13 0.16 0.14	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 8.1 8.0 8.8 8.8 9.0 8.0 8.0 8.1 7.6 8.1	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	106-05-18 06-05-18 06-19-18 06-19-18 06-26-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-26-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18	Pres Chlorine mg/L 0.3 0.5 0.1 0.1 0.5 0.8 0.4 0.4 0.3 0.2 0.2 0.5 0.2 0.2 0.4 0.4 0.3 0.2 0.5 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Turbidity NTU 0.20 0.16 0.16 0.65 0.34 0.15 0.51 0.78 0.21 0.18 0.53 0.32 0.12 0.26 0.33 0.10 0.15 0.21 0.15 0.58 0.21 0.15 0.58 0.28 0.28 0.28 0.28 0.28 0.28 0.29 0.21 0.13 0.16 0.15 0.15 0.15 0.15 0.15	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 8.2 7.8 8.2 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-24-18 04-03-18 04-17-18 04-24-18 04-03-18 04-17-18 04-24-18 04-03-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-03-18	Free Chlorine (mg/L) 0.9 0.9 0.7 0.8 0.7 0.8 0.8 0.9 0.9 0.9 0.0 0.8 0.9 0.9 0.0 0.8 0.9 0.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Turbidity (NTU) 0.16 0.17 0.18 0.19 0.19 0.19 0.15 0.15 0.12 0.14 0.11 0.11 0.11 0.11 0.11 0.11 0.11	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.7 7.6 7.7 7.6 8.7 9.9 7.9 7.6 8.7 9.9 9.7 9.9 9.7 9.9 9.9 9.9 9.9 9.9 9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date Date D5-01-18	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.16 0.15 0.14 0.10 0.19 0.11 0.11 0.15 0.12 0.22 0.20 0.21 0.21 0.21 0.21 0.21	8.0 7.9 7.9 7.9 8.1 8.3 8.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 06-05-18 06-12-18 06-12-18 06-05-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18	Description of the control of the co	Turbidity NTU 0.20 0.16 0.16 0.65 0.51 0.21 0.21 0.30 0.30 0.18 0.33 0.32 0.19 0.10 0.10 0.10 0.10 0.10 0.10 0.10	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18 04-24-18 04-03-18	Samp	Turbidity (NTU) 0.16 0.17 0.18 0.17 0.18 0.15 0.15 0.15 0.15 0.20 0.45 0.41 0.11 0.11 0.11 0.11 0.17 0.07 0.18 0.10 0.10 0.11 0.11 0.11 0.11 0.11	7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.7 7.5 8.7 7.9 7.6 8.7 8.9 7.9 7.9 7.9 7.9 7.9 7.6 8.7 8.7 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9 8.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date Date D	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.6 0.7 0.7 0.6 0.7 0.7 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.16 0.17 0.19 0.19 0.19 0.19 0.11 0.11 0.11 0.15 0.12 0.22 0.20 0.31 0.11 0.11 0.11 0.11 0.11 0.11 0.1	8.0 7.9 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 06-05-18 06-12-18 06-12-18 06-05-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18 06-19-18 06-26-18 06-19-18	Description of the control of the co	Turbidity NTU 0.20 0.16 0.16 0.55 0.21 0.21 0.22 0.26 0.25 0.25 0.26 0.21 0.15 0.20 0.19 0.10 0.15 0.20 0.19 0.10 0.15 0.20 0.19 0.10 0.15 0.20 0.19 0.10 0.15 0.20 0.19 0.10 0.15 0.20 0.19 0.13 0.16 0.20 0.19 0.13 0.16 0.20 0.19	7.5 7.6 7.5 7.5 7.6 7.5 7.6 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Tribution Date 04-03-18 04-03-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18 04-17-18 04-24-18 04-03-18 04-17-18 04-17-18 04-18	Samp	Turbidity (NTU) 0.16 0.17 0.18 0.19 0.19 0.19 0.19 0.19 0.45 0.20 0.74 0.41 0.11 0.17 0.17 0.17 0.17 0.17 0.17 0.1	7.5 7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 7.9 7.6 7.7 8.3 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date Date D	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.2 0.2 0.2 0.2 0.5 0.3 0.6 0.6 0.7 0.7 0.7 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.18 0.18 0.19 0.19 0.19 0.11 0.11 0.11 0.12 0.22 0.23 0.30 0.41 0.14 0.11 0.15 0.15 0.16 0.11 0.11 0.11 0.11 0.11 0.11 0.11	8.0 7.9 7.9 8.1 8.3 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Tribution Date 06-05-18 06-12-18 06-12-18 06-05-18 06-05-18 06-19-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-05-18 06-19-18	Description of the control of the co	Turbidity NTU 0.20 0.16 0.16 0.55 0.54 0.21 0.13 0.21 0.15 0.51 0.51 0.51 0.51 0.51 0.51 0.5	7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 04-03-18 04-03-18 04-01-18 04-17-18 04-17-18 04-03-18 04-17-18 04-03-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18	Samp Free Chlorine (mg/L) (mg	Turbidity (NTU) 0.16 0.17 0.18 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	7.5 7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.5 7.6 7.7 7.7 8.8 7.9 7.9 7.5 8.8 7.9 7.9 7.9 7.6 8.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7 9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 05-01-18 05-08-18 05-08-18 05-15-18 05-22-18 05-01-18 05-15-18 05-21-18	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.18 0.18 0.18 0.19 0.19 0.19 0.11 0.11 0.11 0.11 0.11	8.0 7.9 7.9 8.1 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Tributiol Date 06-05-18 06-12-18 06-12-18 06-12-18 06-19-18 06-12-18 06-19-18 06-12-18 06-19-18 06-12-18 06-19-18 06-12-18 06-12-18 06-19-18 06-26-18 06-19-18 06-26-18 06-19-18 06-26-18 06-19-18	Description of the control of the co	Turbidity NTU 0.20 0.16 0.16 0.65 0.51 0.51 0.51 0.51 0.51 0.52 0.21 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3	7.5 7.6 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 8.2 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-18 04-17-18 04-24-18 04-18	Samp Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.6 0.5 0.6 0.5 0.6 0.5 0.6 0.7 0.8 0.8 0.9 0.8 0.7 0.8 0.7 0.6 0.7 0.6 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.19 0.19 0.19 0.15 0.15 0.15 0.20 0.45 0.41 0.41 0.11 0.11 0.11 0.11 0.11 0.11	7.5 7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 8.7 8.9 7.9 7.9 8.9 7.7 8.2 8.9 7.9 7.9 8.0 7.9 8.0 7.9 8.0 7.9 8.0 7.9 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date Date D	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.6 0.6 0.7 0.7 0.6 0.8 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.18 0.18 0.19 0.19 0.10 0.11 0.10 0.11 0.11 0.11	8.0 7.9 8.1 7.9 8.1 8.3 8.3 8.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Tribution Date 06-05-18 06-12-18 06-12-18 06-05-18 06-05-18 06-19-18	Description of the control of the co	Turbidity NTU 0.20 0.20 0.16 0.55 0.21 0.21 0.22 0.28 0.26 0.21 0.15 0.28 0.20 0.21 0.10 0.16 0.55 0.22 0.26 0.27 0.20 0.20 0.21 0.20 0.20 0.20 0.20 0.20	7.5 7.6 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 7.8 7.8 7.8 7.8 7.6 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-17-18 04-24-18 04-03-18 04-17-18 04-24-18 04-03-18 04-17-18 04-17-18 04-17-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-10-18 04-17-18 04-17-18 04-10-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-17-18 04-10-18 04-17-18 04-10-18	Samp Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.7 0.8 0.8 0.9 0.3 0.6 0.3 0.6 0.3 0.6 0.7 0.8 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.9 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.5 7.5 7.5 7.9 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 8.7 8.7 8.7 8.9 7.9 7.9 7.5 7.6 7.5 7.6 7.6 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal	Date 05-01-18 05-09-18 05-15-18 05-22-18 05-20-18	N Samp Free Chlorine mg/L 0.5 0.7 0.7 0.7 0.6 0.8 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.6 0.3 0.6 0.6 0.7 0.2 0.2 0.2 0.2 0.2 0.5 0.3 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.16 0.16 0.15 0.15 0.10 0.14 0.14 0.17 0.11 0.15 0.21 0.22 0.27 0.21 0.21 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.1	8.0 7.9 8.1 8.3 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7	Location Chatham Avenue Peel Street Lifstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal Highway 19 PRV	Tribution Date 06-05-18 06-12-18 06-12-18 06-05-18 06-05-18 06-19-18 06-19-18 06-05-18 06-19-18 06-19-18 06-19-18 06-19-18 06-19-18 06-26-18 06-19-18 06-26-18	D Samp Free Chlorine mg/L 0.3 0.3 0.3 0.5 0.1 0.7 1.0 0.5 0.8 0.4 0.4 0.3 0.2 0.2 0.2 0.4 0.2 0.2 0.5 0.5 0.2 0.5 0.5 0.2 0.6 0.7 0.7 0.7 0.5 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.20 0.16 0.16 0.65 0.51 0.51 0.51 0.51 0.78 0.21 0.30 0.18 0.33 0.32 0.32 0.19 0.12 0.13 0.15 0.15 0.30 0.19 0.10 0.11 0.15 0.58 0.28 0.20 0.10 0.10 0.11 0.11 0.15 0.59 0.20 0.19 0.10 0.10 0.10 0.10 0.10 0.10 0.1	7.5 7.6 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 8.2 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal	Date 04-03-18 04-03-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-10-18 04-24-18 04-03-18	Samp Free Chlorine (mg/L) 0.9 0.8 0.7 0.8 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.9 0.8 0.6 0.5 0.6 0.5 0.6 0.5 0.6 0.7 0.8 0.8 0.9 0.8 0.7 0.8 0.7 0.6 0.7 0.6 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.9	Turbidity (NTU) 0.16 0.17 0.18 0.19 0.19 0.19 0.15 0.15 0.15 0.20 0.45 0.41 0.41 0.11 0.11 0.11 0.11 0.11 0.11	7.5 7.5 7.5 7.9 7.9 7.9 7.5 7.7 7.5 7.6 7.7 7.8 8.7 8.9 7.9 7.9 8.9 7.7 8.2 8.9 7.9 7.9 8.0 7.9 8.0 7.9 8.0 7.9 8.0 7.9 8.0 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal	05-01-18 05-08-18 05-01-18 05-08-18 05-21-18 05-01-18	N Samp Free Chlorine mg/L 0.5 0.7 0.4 0.6 0.8 0.9 0.9 0.9 0.7 0.6 0.6 0.6 0.8 0.7 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.5 0.5 0.5 0.5 0.5 0.5 0.6 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.18 0.18 0.19 0.19 0.19 0.14 0.14 0.11 0.11 0.11 0.11 0.12 0.22 0.27 0.27 0.20 0.30 0.41 0.14 0.14 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.15 0.16 0.17 0.17 0.17 0.17 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	8.0 7.9 8.1 8.3 8.3 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir Ferry Terminal	### Company of Company	Description of the control of the co	Turbidity NTU 0.20 0.20 0.16 0.55 0.21 0.21 0.22 0.28 0.26 0.21 0.15 0.28 0.20 0.21 0.10 0.16 0.55 0.22 0.26 0.27 0.20 0.20 0.21 0.20 0.20 0.20 0.20 0.20	7.5 7.6 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.6 7.5 7.8 8.2 7.8 7.8 7.8 7.8 7.8 7.6 7.7 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8

	Ju	ly				Aug	gust				Septe	mber		
Dis	tribution	n Samp	ling		Dis	tribution	n Samp	ling		Dis	tribution	n Samp	ling	
Location	Date	Free Chlorine mg/L	Turbidity NTU	рН	Location	Date	Free Chlorine mg/L	Turbidity NTU	pН	Location	Date	Free Chlorine mg/L	Turbidity NTU	pH
	07-03-18 07-10-18	0.4	0.35 0.62	7.5 7.6		08-07-18 08-14-18	0.3 0.2	0.14 0.18	7.8 7.9		09-04-18 09-11-18	0.2	0.13 0.14	7.8 8.3
Chatham Avenue	07-17-18 07-24-18 07-31-18	0.5 0.5 0.3	0.33 0.20 0.19	7.7 7.8 7.7	Chatham Avenue	08-21-18 08-28-18	0.3 0.6	0.17 0.15	7.7 7.8	Chatham Avenue	09-18-18 09-25-18	0.2	0.45 0.16	7.8 7.8
	07-03-18 07-10-18	0.6	0.25	7.4 7.5		08-07-18 08-14-18	0.7	0.38	7.4 7.2		09-04-18 09-11-18	0.8	0.13 0.17	7.6 7.4
Peel Street Liftstation	07-17-18 07-24-18	0.6 0.7	0.31 0.21	7.4 7.5	Peel Street Liftstation	08-21-18 08-28-18	0.7 0.7	0.21 0.15	7.5 7.8	Peel Street Liftstation	09-18-18 09-25-18	0.6 0.6	0.14 0.14	7.4 7.5
	07-31-18 07-03-18	0.5	0.20	7.4		08-07-18	0.4	0.39	7.6		09-04-18	0.5	0.13	7.6
Airport Wastewater Treatment Plant	07-10-18 07-17-18 07-24-18	0.3 0.2 0.6	0.39 0.30 0.29	7.6 7.5 7.5	Airport Wastewater Treatment Plant	08-14-18 08-21-18 08-28-18	0.3 0.3 0.6	0.19 0.25 0.24	7.7 7.8 7.7	Airport Wastewater Treatment Plant	09-11-18 09-19-18 09-25-18	0.2 0.3 0.4	0.17 0.14 0.13	7.5 7.4 7.4
	07-31-18 07-03-18	0.3	0.30	7.6		08-07-18	0.1	0.16	8.1		09-04-18	0.3	0.17	7.9
Public Works Yard	07-10-18 07-17-18	0.3	0.20	7.9 7.9	Public Works Yard	08-14-18 08-21-18	0.4	0.17	7.8 7.9	Public Works Yard	09-11-18 09-18-18	0.2	0.15 0.12	8.0 7.6
	07-24-18 07-31-18	0.2	0.14 0.14	8.5 7.9		08-28-18	0.2	0.13	8.0		09-25-18	0.7	0.13	7.4
	07-03-18 07-10-18	0.1	0.13 0.56	8.0 7.8		08-07-18 08-14-18	0.6 0.7	0.58 0.18	7.8 7.3		09-04-18 09-11-18	0.4	0.25 0.17	7.9 7.5
Eagleview School	07-17-18 07-24-18	0.5 0.6	0.81 0.20	7.8 7.7	Eagleview School	08-21-18 08-28-18	0.6 0.6	0.19 0.19	7.0 7.6	Eagleview School	09-18-18 09-25-18	0.2 0.3	0.12 0.13	7.9 7.8
	07-31-18 07-03-18	0.6	0.24	7.7 7.4		08-07-18	0.6	0.14	7.6		09-04-18	0.6	0.13	7.6
Bear Cove Reservoir	07-10-18 07-17-18	0.6	0.17 0.19	7.4 7.4	Bear Cove Reservoir	08-14-18 08-21-18	0.7 0.6	0.18 0.17	7.5 7.7	Bear Cove Reservoir	09-11-18 09-18-18	0.5 0.4	0.15 0.13	7.4 7.5
	07-24-18 07-31-18	0.6	0.14	7.6		08-28-18	0.6	0.17	7.6		09-25-18	0.4	0.14	7.4
	07-03-18 07-10-18	0.6	0.14	7.2		08-07-18 08-14-18	0.5	0.15	7.5		09-04-18 09-11-18	0.4	0.14	7.6
Ferry Terminal	07-17-18 07-24-18	0.2	0.16	7.3 7.5	Ferry Terminal	08-21-18 08-28-18	0.7 0.4	0.12 0.19	7.8 7.4	Ferry Terminal	09-18-18 09-25-18	0.3	0.20 0.11	7.6 7.4
	07-31-18 07-03-18	0.6	0.16	7.4		08-07-18	0.9	0.18	7.5		09-04-18	0.4	0.15	7.6
Highway 19 PRV	07-10-18 07-17-18	0.8	0.15 0.21	7.4 7.4	Highway 19 PRV	08-14-18 08-21-18	0.9	0.12 0.14	7.3 7.5	Highway 19 PRV	09-11-18 09-18-18	0.7 0.7	0.24 0.14	7.3 7.4
	07-24-18 07-31-18	0.9	0.21 0.25	7.5 7.4		08-28-18	0.9	0.10	7.5		09-25-18	0.6	0.14	7.4
Average Minimus		0.5 0.1	0.26 0.81	7.6 7.2	Average Minimus		0.6	0.20	7.6 7.0	Average Minimur		0.4	0.16 0.11	7.6 7.3
Maximu	m	0.9	0.81	8.5	Maximu	m	0.9	0.58	8.1	Maximur	n	0.8	0.45	8.3
	Octo	her				Nove	mbor							
		,,,,					mber				Dece	mber		
Dis	tribution	n Samp	ling		Dis	tributio	n Samp	ling		Dis	Dece:	n Samp	ling	
Dis	Date	Free Chlorine mg/L	Turbidity NTU	pН	Dis	Date	Free Chlorine mg/L	Turbidity NTU	pН	Dis	tribution Date	Free Chlorine mg/L	Turbidity NTU	pH
Location	Date 10-02-18 10-09-18	Free Chlorine mg/L 0.2 0.2	Turbidity NTU 0.14 0.15	7.4 7.5	Location	Date 11-06-18 11-13-18	Free Chlorine mg/L 0.2 0.3	Turbidity NTU 0.17 0.16	7.7	Location	Date 12-11-18 12-18-18	Free Chlorine mg/L 0.3 0.6	Turbidity NTU 0.15 0.31	7.6 7.9
	Date 10-02-18 10-09-18 10-16-18 10-22-18	Free Chlorine mg/L 0.2 0.2 0.4 0.2	Turbidity NTU 0.14 0.15 0.19 0.16	7.4 7.5 7.5 7.6		Date 11-06-18	Free Chlorine mg/L 0.2	Turbidity NTU	7.7		Date	Free Chlorine mg/L 0.3	Turbidity NTU 0.15	7.6
Location Chatham Avenue	Date 10-02-18 10-09-18 10-16-18 10-22-18 10-30-18 10-02-18	Free Chlorine mg/L 0.2 0.4 0.2 0.4 0.4	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14	7.4 7.5 7.5 7.6 7.8 7.3	Location Chatham Avenue	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4	Turbidity NTU 0.17 0.16 0.17 0.16	7.7 7.7 7.6 7.7	Location Chatham Avenue	Date 12-11-18 12-18-18 12-24-18 12-31-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6	Turbidity NTU 0.15 0.31 0.24 0.13	7.6 7.9 7.5 7.7
Location	Date 10-02-18 10-09-18 10-16-18 10-22-18 10-30-18 10-02-18 10-09-18 10-16-18	Free Chlorine mg/L 0.2 0.2 0.4 0.2 0.4 0.5 0.8	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3	Location	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-13-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.13 0.22	7.7 7.7 7.6 7.7 7.5 7.8 7.5	Location	Date 12-11-18 12-18-18 12-24-18 12-31-18 12-04-18 12-11-18 12-18-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37	7.6 7.9 7.5 7.7 7.5 7.4 7.9
Location Chatham Avenue Peel Street	Date 10-02-18 10-09-18 10-16-18 10-22-18 10-30-18 10-02-18 10-09-18	Free Chlorine mg/L 0.2 0.2 0.4 0.2 0.4 0.5	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15	7.4 7.5 7.5 7.6 7.8 7.3 7.4	Location Chatham Avenue Peel Street	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-13-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8	Turbidity NTU 0.17 0.16 0.17 0.16	7.7 7.7 7.6 7.7 7.5 7.8	Location Chatham Avenue	Date 12-11-18 12-18-18 12-24-18 12-31-18 12-04-18 12-11-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20	7.6 7.9 7.5 7.7 7.5 7.4
Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 10-02-18 10-09-18 10-16-18 10-22-18 10-30-18 10-02-18 10-09-18 10-16-18 10-22-18	Free Chlorine mg/L 0.2 0.2 0.4 0.4 0.5 0.8 0.7	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-13-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.13 0.22	7.7 7.7 7.6 7.7 7.5 7.8 7.5	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 12-11-18 12-18-18 12-18-18 12-24-18 12-31-18 12-04-18 12-11-18 12-18-18 12-18-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5
Location Chatham Avenue Peel Street Liftstation	Date 10-02-18 10-09-18 10-16-18 10-16-18 10-22-18 10-30-18 10-02-18 10-16-18 10-22-18 10-30-18 10-02-18 10-09-18 10-16-18 10-02-18 10-16-18 10-02-18 10-16-18 10-16-18	Free Chlorine mg/L 0.2 0.2 0.4 0.5 0.8 0.5 0.8 0.5 0.4	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.14 0.15 0.13 0.14 0.14 0.20 0.13 0.26	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.6 7.6 7.7 7.6	Location Chatham Avenue Peel Street Liftstation	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-27-18 11-06-18 11-13-18 11-06-18 11-13-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7 0.9	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.13 0.22 0.18 0.17 0.14	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.7 7.5 7.5 7.5 7.6	Location Chatham Avenue Peel Street Liftstation	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-24-18 12-11-18 12-11-18 12-12-18 12-12-18 12-12-18 12-12-18 12-12-18 12-12-18 12-11-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8 1.0 0.4 0.5	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.25	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 10-02-18 10-09-18 10-09-18 10-16-18 10-22-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-16-18 10-02-18 10-09-18 10-10-18 10-09-18 10-10-18	Free Chlorine mg/L 0.2 0.2 0.4 0.4 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.7 0.6 0.4 0.3 0.8 0.7 0.6 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.14 0.20 0.13 0.14 0.14 0.20 0.13 0.26 0.13 0.12	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.6 7.6 7.6 7.7 7.4 7.6 7.7 7.4 7.7 7.4 7.5 7.6 7.6 7.6 7.7 7.6 7.6 7.6 7.6 7.6 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-13-18 11-27-18 11-20-18 11-21-18 11-20-18 11-13-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18	Preceded to the state of the st	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.13 0.22 0.18 0.17 0.14 0.30 0.17	7.7 7.7 7.6 7.5 7.5 7.5 7.5 7.7 7.5 7.5 7.6 7.6 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-11-18 12-11-18 12-11-18 12-24-18 12-24-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18 12-11-18	Part No. 10 No.	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.25 0.38 0.24 0.16 0.15 0.15 0.15	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6 7.9 7.6 7.9
Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 10-02-18 10-09-18 10-09-18 10-16-18 10-22-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18 10-09-18	Free Chlorine mg/L 0.2 0.2 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.5 0.4 0.5 0.8 0.5 0.9 0.9 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.20 0.13 0.26 0.13 0.26 0.13 0.12 0.21 0.10 0.12 0.11 0.10 0.12 0.21 0.10 0.10	7.4 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.3 7.6 7.7 7.6 7.9 7.8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 11-06-18 11-13-18 11-23-18 11-27-18 11-06-18 11-13-18 11-27-18 11-06-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18 11-13-18	Presented Sample Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.4 0.5 0.5 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.8 0.8	0.17 0.16 0.17 0.16 0.13 0.13 0.22 0.18 0.17 0.14 0.30 0.17	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.7 7.5 7.5 7.6 7.6 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater	Date 12-11-18 12-18-18 12-24-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.9 0.7 0.8 0.7 0.9 0.7 0.8 0.8 0.7 0.9 0.7 0.8 0.8 0.8 0.7 0.9 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.12 0.27 0.13 0.18 0.25 0.38 0.24 0.16 0.15 0.15 0.16	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6 7.9 7.6 7.9 7.5 7.4 7.7 7.6 7.9 7.5 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 10-02-18 10-09-18 10-10-18 10-19-18	Free Chlorine mg/L 0.2 0.2 0.2 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.5 0.4 0.5 0.8 0.5 0.4 0.5 0.8 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.9 0.2 0.2 0.2 0.2 0.2 0.3	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.20 0.13 0.26 0.13 0.12 0.10 0.12 0.10 0.12 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.6 7.6 7.6 7.6 7.7 7.6 7.8 7.9 7.8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 11-06-18 11-13-18 11-27-18 11-27-18 11-01-18 11-13-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.7 0.9 0.8 0.7 0.9 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.2 0.2	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.13 0.22 0.18 0.17 0.14 0.30 0.17 0.14 0.15 0.18 0.28 0.28 0.21 0.21	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.5 7.5 7.5 7.6 7.6 7.7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-31-18 12-11-18 12-11-18 12-24-18 12-24-18 12-24-18 12-24-18 12-11-18 12-18-	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.8 1.0 0.5 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.9 0.7 0.8 0.7 0.9 0.7 0.9 0.7 0.8 0.8 0.7 0.9 0.7 0.8 0.8 0.9 0.3 0.8 0.9 0.3	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.28 0.24 0.16 0.15 0.16 0.15 0.16 0.14 0.13	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.7 7.6 7.8 7.7 7.6 7.8 7.7 7.8 7.8 7.7 7.8 7.8 7.8 7.8 7.8
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 10-02-18 10-09-18 10-16-18 10-22-18 10-30-18 10-09-18 10-09-18 10-16-18 10-22-18 10-09-18 10-09-18 10-09-18 10-16-18	Free Chlorine mg/L 0.2 0.2 0.2 0.4 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.4 0.3 0.5 0.5 0.4 0.3 0.5 0.5 0.4 0.3 0.5 0.5 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.14 0.14 0.14 0.13 0.10 0.13 0.10 0.13 0.12 0.10 0.13 0.12 0.10 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.6 7.6 7.7 7.4 7.6 7.7 7.4 7.8 7.9 7.8 7.8 7.8 7.9 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 11-06-18 11-13-18 11-120-18 11-20-18 11-27-18 11-06-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7 0.9 0.6 0.6 0.6 0.6 0.7 0.7 0.9 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.17 0.16 0.17 0.16 0.17 0.16 0.13 0.13 0.22 0.18 0.17 0.14 0.30 0.17 0.14 0.30 0.17 0.14 0.30 0.17 0.14 0.15 0.13 0.28	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.5 7.5 7.5 7.6 7.6 7.7 7.8 7.8 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-31-18 12-11-18 12-11-18 12-11-18 12-24-18 12-11-18 12-24-18 12-11-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8 1.0 0.5 0.7 0.8 0.7 0.8 0.7 0.9 0.8 0.7 0.9 0.7 0.8 0.7 0.9 0.7 0.9 0.7 0.9 0.7 0.8 0.8 0.9 0.7 0.8 0.8 0.9 0.7 0.8 0.8 0.9 0.7 0.8 0.8 0.9 0.7 0.8 0.8 0.9 0.9 0.7 0.8 0.8 0.9 0.9 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.25 0.38 0.24 0.16 0.15 0.16 0.14 0.13 0.24 0.24 0.24 0.20 0.23	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6 7.9 7.6 7.8 7.5 7.5 7.6 7.8 7.5 7.5 7.8 7.9 7.9 7.9 7.9 7.9 7.9 7.9 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 10-02-18 10-01-18 10-16-18 10-16-18 10-22-18 10-02-18 10-02-18 10-02-18 10-16-18 10-16-18 10-02-18 10-09-18 10-16-18 10-16-18 10-02-18 10-16-18 10-02-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18 10-16-18	Free Chlorine mg/L 0.2 0.2 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.5 0.4 0.3 0.9 0.2 0.2 0.2 0.3 0.3 0.9 0.2 0.2 0.2 0.3 0.3 0.9 0.2 0.2 0.2 0.3 0.3 0.9 0.9 0.2 0.2 0.3 0.3 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.14 0.15 0.15 0.19 0.16 0.13 0.15 0.19 0.12 0.13 0.14 0.20 0.13 0.26 0.13 0.26 0.13 0.12 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.6 7.6 7.7 7.9 7.9 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-27-18 11-20-18 11-27-18 11-20-18 11-27-18 11-20-18 11-27-18 11-20-18 11-27-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.9 0.8 0.6 0.6 0.6 0.6 0.7 0.7 0.9 0.8 0.6 0.6 0.6 0.7 0.7 0.9 0.8 0.6 0.6 0.6 0.7 0.7 0.8 0.6 0.6 0.7 0.7 0.8 0.6 0.6 0.7 0.7 0.8 0.6 0.6 0.7 0.7 0.8 0.6 0.6 0.7 0.7 0.8 0.6 0.6 0.7 0.7 0.8 0.8 0.8 0.8 0.8 0.8 0.7 0.7 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.17 0.16 0.17 0.16 0.17 0.16 0.13 0.13 0.12 0.18 0.17 0.14 0.30 0.17 0.14 0.15 0.13 0.28 0.21 0.21 0.21 0.21 0.23	7.7 7.7 7.6 7.7 7.5 7.5 7.5 7.5 7.5 7.6 7.6 7.6 7.6 7.7 7.8 7.8 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 12-11-18 12-18-18 12-24-18 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31 12-31-31	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.6 0.7 0.8 1.0 0.7 0.8 1.0 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.25 0.38 0.24 0.16 0.15 0.16 0.14 0.13 0.24 0.20 0.23 0.24 0.23 0.24 0.20 0.23	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6 7.9 7.6 7.8 7.5 7.5 7.6 7.8 7.5 7.5 7.5 7.4 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 10-02-18 10-09-18 10-16-18 10-16-18 10-22-18 10-30-18 10-02-18 10-09-18	Free Chlorine mg/L 0.2 0.2 0.4 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.5 0.4 0.3 0.8 0.5 0.4 0.3 0.9 0.2 0.2 0.2 0.3 0.4 0.4 0.3 0.9 0.2 0.2 0.2 0.5 0.3 0.3 0.4 0.4 0.3 0.8 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.20 0.13 0.14 0.20 0.13 0.16 0.10 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11 0.10 0.11	7.4 7.5 7.5 7.6 7.8 7.3 7.4 7.6 7.6 7.6 7.6 7.7 7.6 7.7 7.6 7.9 7.8 7.9 7.8 7.8 7.8 7.8 7.8 7.8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-27-18 11-20-18 11-27-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.9 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.17 0.16 0.16 0.17 0.16 0.17 0.16 0.17 0.18 0.13 0.22 0.18 0.17 0.14 0.30 0.17 0.14 0.15 0.13 0.28 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.7 7.5 7.5 7.7 7.6 7.6 7.6 7.7 7.8 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 12-11-18 12-18-18 12-18-18 12-24-18 12-31-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.8 1.0 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.7 0.8 0.7 0.7 0.8 0.8 0.7 0.7 0.8 0.8 0.7 0.7 0.8 0.8 0.7 0.7 0.8 0.8 0.9 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.27 0.13 0.18 0.28 0.38 0.29 0.16 0.15 0.16 0.11 0.13 0.24 0.10 0.13 0.24 0.20 0.23 0.39 0.17	7.6 7.9 7.5 7.7 7.5 7.4 7.9 7.5 7.4 7.7 7.6 7.9 7.6 7.9 7.6 7.9 7.6 7.9 7.5 7.6 7.9 7.5 7.4 7.9 7.5 7.7 7.6 7.9 7.5 7.7 7.6 7.9 7.5 7.6 7.7 7.6 7.7 7.6 7.6 7.6 7.6 7.6 7.6
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 10-02-18 10-09-18 10-16-18 10-16-18 10-10-18 10-10-18 10-10-18 10-10-18 10-10-18 10-10-18 10-18	Free Chlorine mg/L 0.2 0.4 0.2 0.4 0.5 0.8 0.7 0.6 0.8 0.7 0.6 0.8 0.7 0.6 0.3 0.8 0.5 0.4 0.3 0.9 0.2 0.2 0.4 0.4 0.3 0.8 0.7 0.6 0.7 0.6 0.7 0.7 0.6 0.8 0.7 0.6 0.8 0.7 0.7 0.6 0.8 0.7 0.7 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.19 0.16 0.13 0.14 0.19 0.13 0.14 0.20 0.13 0.26 0.13 0.22 0.21 0.21 0.10 0.12 0.19 0.12 0.19 0.12 0.19 0.12 0.19 0.12 0.19 0.12 0.19 0.12 0.19 0.19 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.11	7.4 7.5 7.5 7.5 7.6 7.8 7.3 7.4 7.3 7.4 7.6 7.6 7.6 7.7 7.6 7.9 7.4 7.8 8.0 7.9 7.8 8.0 7.7 8.0 7.7 8.0 7.7 8.0 7.0 8.0 7.0 8.0 7.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-00-18 11-13-18 11-20-18 11-27-18 11-20-18 11-27-18 11-20-18 11-21-18 11-20-18 11-21-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.6 0.6 0.6 0.7 0.9 0.8 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.17 0.16 0.17 0.16 0.17 0.16 0.13 0.13 0.12 0.18 0.17 0.14 0.15 0.13 0.28 0.21 0.21 0.21 0.21 0.22	7.7 7.7 7.6 7.7 7.5 7.8 7.5 7.5 7.7 7.5 7.6 7.6 7.6 7.7 7.8 7.9 7.9	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard	Date 12-11-18 12-18-18 12-24-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-38 12-31-	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8 1.0 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.9 0.7 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.22 0.20 0.37 0.27 0.27 0.23 0.38 0.25 0.38 0.24 0.16 0.15 0.16 0.15 0.16 0.13 0.24 0.10 0.13 0.24 0.10 0.13 0.24 0.10 0.13 0.24 0.10 0.25 0.38	7.6 7.9 7.5 7.7 7.5 7.7 7.5 7.7 7.7 7.7 7.7 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 10-02-18 10-09-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18	Free Chlorine mg/L 0.2 0.4 0.5 0.8 0.7 0.6 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.9 0.2 0.4 0.3 0.9 0.9 0.2 0.4 0.4 0.6 0.7 0.6 0.8 0.8 0.7 0.6 0.8 0.8 0.7 0.6 0.8 0.8 0.7 0.6 0.8 0.8 0.8 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.16 0.13 0.14 0.12 0.13 0.14 0.20 0.13 0.14 0.20 0.13 0.14 0.20 0.13 0.26 0.13 0.26 0.13 0.12 0.21 0.21 0.21 0.21 0.21 0.21 0.21	7.4 7.5 7.5 7.5 7.6 7.8 7.3 7.4 7.6 7.3 7.4 7.6 7.3 7.4 7.6 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8 7.8	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-06-18 11-31-18 11-27-18 11-06-18 11-13-18 11-21-18 11-13-18 11-21-18 11-13-18 11-21-18 11-13-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18 11-21-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.6 0.6 0.6 0.6 0.7 0.9 0.8 0.7 0.9 0.8 0.7 0.9 0.8 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6	Turbidity NTU 0.17 0.16 0.13 0.13 0.22 0.18 0.15 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	77 77 76 76 77 77 78 75 75 77 77 75 76 76 77 76 76 77 78 78 79 79 79 79	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 12-11-18 12-24-18 12-24-18 12-24-18 12-24-18 12-24-18 12-24-18 12-24-18 12-24-18 12-24-18 12-11-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.6 0.7 0.8 1.0 0.5 0.7 0.8 0.7 0.8 0.9 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.7 0.8 0.9 0.9 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.13 0.18 0.25 0.38 0.24 0.16 0.15 0.15 0.16 0.14 0.13 0.24 0.20 0.23 0.34 0.39 0.31 0.34 0.39 0.31 0.34 0.39 0.31 0.31 0.31 0.31 0.32 0.33 0.34 0.39 0.31 0.31 0.31 0.31 0.32 0.33	7.6 7.9 7.5 7.7 7.7 7.5 7.4 7.9 7.7 7.6 7.6 7.6 7.7 7.5 7.6 7.7 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 1002-18 1009-18 10-16-18 10-19-18 10-16-18 10-19-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18	Free Chlorine mg/L 0.2 0.2 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.9 0.5 0.4 0.3 0.9 0.2 0.2 0.2 0.4 0.5 0.8 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.7 0.6 0.7 0.7 0.7 0.7 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.20 0.13 0.14 0.20 0.13 0.14 0.20 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.10 0.12 0.11 0.11	7.4 7.5 7.5 7.5 7.6 7.8 7.3 7.4 7.6 7.3 7.4 7.6 7.6 7.8 8.0 7.9 7.8 8.0 7.9 8.1 7.8 8.1 7.6 7.6 7.8 8.0 7.6 7.8 8.0 7.6 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0 8.0	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-27-18 11-13-18 11-20-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.8 0.6 0.7 0.9 0.8 0.6 0.8 0.7 0.9 0.8 0.8 0.8 0.9 0.8 0.8 0.9 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.28 0.21 0.22 0.12 0.14 0.15 0.15 0.28 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	77 77 76 76 77 75 78 75 77 75 75 75 76 76 77 78 78 79 79 79 79	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-18 12-31-31	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.8 0.7 0.9 0.7 0.8 0.8 0.5 0.6 0.5 0.6 0.7 0.8 0.8 0.7 0.9 0.7 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.8 0.8 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5	Turbidity NTU 0.15 0.31 0.24 0.13 0.22 0.20 0.37 0.12 0.13 0.18 0.28 0.29 0.10 0.19 0.10 0.10 0.11 0.11 0.12 0.15 0.16 0.16 0.16 0.16 0.17 0.18 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.6 7.9 7.5 7.7 7.7 7.5 7.4 7.9 7.6 7.7 7.6 7.7 7.7 7.6 7.7 7.8 7.5 7.5 7.6 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 10-02-18 10-09-18 10-10-18 10-19-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-18 10-	Free Chlorine mg/L 0.2 0.4 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.8 0.5 0.4 0.3 0.9 0.2 0.2 0.2 0.4 0.5 0.4 0.3 0.9 0.9 0.2 0.2 0.5 0.3 0.3 0.4 0.6 0.7 0.6 0.6 0.7 0.6 0.7 0.6 0.8 0.8 0.7 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NIU 0.14 0.15 0.19 0.16 0.13 0.14 0.15 0.19 0.12 0.13 0.14 0.14 0.10 0.13 0.14 0.10 0.11 0.11 0.12 0.10 0.12 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.4 7.5 7.5 7.5 7.6 7.8 7.3 7.4 7.6 7.3 7.4 7.6 7.3 7.4 7.6 7.3 7.4 7.6 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.7 7.8 8.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7.0 7	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 11-06-18 11-13-18 11-20-18 11-20-18 11-20-18 11-20-18 11-13-18 11-20-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.8 0.6 0.6 0.7 0.9 0.8 0.8 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.17 0.16 0.18 0.18 0.13 0.13 0.22 0.11 0.14 0.15 0.17 0.15 0.17 0.14 0.15 0.17 0.14 0.15 0.17 0.14 0.15 0.17 0.14 0.15 0.17 0.17 0.14 0.15 0.18 0.18 0.18 0.18 0.18 0.18 0.18 0.18	77 77 76 76 77 77 75 78 75 75 75 75 76 76 76 77 78 78 79 79 79 76 76 76 77 77 78	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-31-18 12-31-18 12-31-18 12-24-18 12-24-18 12-11-18 12-24-18 12-11-18 12-24-18 12-11-18 12-34-18 12-11-18 12-34-18 12-11-18	Free Chlorine mg/L 0.3 0.6 0.5 0.6 0.7 0.8 0.7 0.8 0.7 0.9 0.7 0.8 0.8 0.7 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.9 0.7 0.7 0.9 0.9 0.7 0.8 0.8 0.8 0.9 0.9 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	Turbidity NTU 0.15 0.31 0.24 0.13 0.12 0.20 0.37 0.13 0.25 0.38 0.25 0.38 0.26 0.16 0.14 0.13 0.24 0.16 0.14 0.13 0.24 0.20 0.23 0.34 0.16 0.17 0.18 0.17 0.18 0.17 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.6 7.9 7.5 7.7 7.7 7.5 7.4 7.9 7.5 7.6 7.7 7.8 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.7 7.7
Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 1002-18 1009-18 10-16-18 10-22-18 10-30-18 10-02-18	Free Chlorine mg/L 0.2 0.2 0.4 0.4 0.5 0.8 0.7 0.6 0.4 0.3 0.9 0.2 0.2 0.2 0.4 0.4 0.5 0.8 0.5 0.4 0.3 0.8 0.5 0.4 0.5 0.5 0.3 0.9 0.2 0.2 0.5 0.3 0.3 0.2 0.2 0.5 0.3 0.3 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.6 0.7 0.5 0.3 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4	Turbidity NTU 0.14 0.15 0.19 0.16 0.13 0.14 0.19 0.16 0.13 0.14 0.19 0.13 0.14 0.20 0.13 0.14 0.20 0.13 0.12 0.21 0.10 0.12 0.19 0.12 0.19 0.12 0.19 0.12 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19	7.4 7.5 7.5 7.5 7.6 7.8 7.3 7.4 7.6 7.3 7.6 7.6 7.3 7.6 7.4 7.6 7.8 8.0 7.7 7.8 8.0 7.7 7.8 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6 7.6	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 11-06-18 11-13-18 11-20-18 11-27-18 11-27-18 11-13-18 11-20-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18 11-27-18	Free Chlorine mg/L 0.2 0.3 0.4 0.4 0.6 0.8 0.7 0.9 0.6 0.6 0.6 0.7 0.9 0.8 0.6 0.7 0.9 0.8 0.6 0.8 0.7 0.9 0.8 0.8 0.8 0.9 0.8 0.8 0.9 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8	Turbidity NTU 0.17 0.16 0.17 0.16 0.13 0.28 0.21 0.22 0.12 0.14 0.15 0.15 0.28 0.21 0.21 0.21 0.21 0.21 0.21 0.21 0.21	77 77 76 76 77 75 78 75 77 75 75 75 76 76 77 78 78 79 79 79 79	Location Chatham Avenue Peel Street Liftstation Airport Wastewater Treatment Plant Public Works Yard Eagleview School Bear Cove Reservoir	Date 12-11-18 12-18-18 12-24-18 12-24-18 12-31-31 12-31-31 12-31-31	Free Chlorine mg/L 0.3 0.6 0.6 0.7 0.6 0.7 0.8 1.0 0.7 0.8 0.9 0.7 0.8 0.8 0.5 0.7 0.8 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.8 0.8 0.8 0.9 0.7 0.7 0.8 0.8 0.8 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9 0.9	Turbidity NTU 0.15 0.31 0.24 0.13 0.24 0.13 0.22 0.20 0.37 0.27 0.13 0.18 0.25 0.38 0.26 0.16 0.15 0.16 0.15 0.16 0.11 0.13 0.24 0.10 0.13 0.24 0.16 0.15 0.16 0.15 0.16 0.17 0.17 0.18	7.6 7.9 7.5 7.7 7.7 7.7 7.5 7.4 7.9 7.5 7.6 7.9 7.6 7.7 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.7 7.7

Supple S		January								Febru	ıary			
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Colorable Colo														
142-14-15 142-14-15 142-														
Trightony NY FRY 10														
Abbility Node York 69 622 74	01-02-18	Highway 19 PRV	0.8	0.25	7.5	L1	L1	02-13-18	Highway 19 PRV	1.0	0.19		L1	L1
	01-16-18	Pioneer Inn	0.8	0.13	7.4	L1	L1	02-20-18	Pioneer Inn	0.8	0.15	7.5	L1	L1
	01-09-18	Public Works Yard	0.9	0.22	7.4	L1	L1	02-06-18	Public Works Yard	0.8	0.17	7.6	L1	L1
	01-09-18	Glen Lyon Restaurant	0.5	0.22	7.4	L1	L1	02-06-18	Glen Lyon Restaurant	0.7	0.14	7.6	L1	L1
	01.00.18	Airport Inn	0.7	0.18	7.4	T.1	I 1	02-20-18		0.7	0.11	7.4	I 1	I 1
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0.36-18 Airport Wenhrome 0.5 0.18 7.8 1.1 1.1 0.440-18 Airport Wenhrome 0.3 0.20 7.7 1.1 1.1 0.340-18 Rear Cove Reservoir 0.8 0.14 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.6 1.1 1.1 0.440-18 Rear Cove Reservoir 0.8 0.22 7.5 1.1 1.1		Sample	Free Chlorine	Turbidity					Sample	Free Chlorine	Turbidity			
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0.36-18 Chalbam Ave. 0.8 0.30 0.74 0.11 1.1 0.440-18 Bear Cove Reservoir 0.8 0.14 7.5 1.1 1.1 0.440-18 Bear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 1.1 0.440-18 Bear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 1.1 0.430-18 Bear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 1.1 0.430-18 Bear Cove Reservoir 0.8 0.17 7.7 1.1 1.1 1.1 0.430-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Reservoir 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.5 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1 0.447-18 Bear Cove Research 0.8 0.15 7.6 1.1 1.1		_				-			•					
03-03-18 Bear Cove Reservoir 0.8														
03-03-18 Highway 19 PRV 0.8 0.15 7.5 1.1 1.1 04-10-18 Highway 19 PRV 0.9 0.53 7.7 1.1 1.1 1.1 03-03-18 Princer Inn 0.6 0.12 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 03-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.5 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.15 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1 04-03-18 Public Works Yard 0.8 0.17 7.6 1.1 1.1	03-03-18	Bear Cove Reservoir	0.8	0.14		Ĭ1	11	04-10-18	Bear Cove Reservoir	0.8	0.17	77	Ĭ.1	1.1
0.03-0.18 Peloner Inn 0.6 0.12 7.6 1.1 1.1 0.41-7.18 Peloner Inn 0.8 0.15 7.5 1.1 1.1 0.3-0.18 Peloner Inn 0.8 0.22 7.6 1.1 1.1 0.3-0.18 Peloner Inn 0.7 0.14 7.6 1.1 1.1 0.41-7.18 Peloner Inn 0.6 0.16 7.6 1.1 1.1 0.41-7.18 Peloner Inn 0.6 0.16 7.6 1.1 1.1 0.41-7.18 Peloner Inn 0.6 0.15 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.8 0.15 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.7 0.15 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.7 0.15 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.8 0.15 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.7 0.5 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.7 0.5 7.7 1.1 1.1 0.41-7.18 Peloner Inn 0.7 0.5 7.7 1.1 1.1 0														
0.06-18 Public Works Yard 0.3 0.12 8.8 1.1 1.1 0.40-3-18 Public Works Yard 1.1 0.11 7.5 1.1 1.1 0.30-30-36 Clen Lyon Restaurant 0.7 0.13 7.5 1.1 1.1 1.1 0.40-3-18 Clen Lyon Restaurant 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.22 7.6 1.1 1.1 1.1 0.40-3-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.8 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.8 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.9 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.15 7.7 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.12 7.6 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.17 7.8 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.12 7.7 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.12 7.7 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.12 7.5 1.1 1.1 0.41-7-18 Public Works Yard 0.8 0.1		0 /												
03-05-18 Gien Lyon Restaurant 0.7 0.13 7.5 1.1 1.1 04-03-18 Gien Lyon Restaurant 0.8 0.22 7.6 1.1 1.1 1.1 03-03-27-18 Airport Inn 0.7 0.14 7.4 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.5 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.7 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.7 7.7 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.7 7.7 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.16 7.7 7.7 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.12 7.6 1.1 1.1 1.1 04-17-18 Airport Inn 0.6 0.10 0.7 0.5														
0.3-27-18														
0.3-03-18 Peel St Lifstation 0.7 0.14 7.4 1.1 1.1 0.4-17-18 Peel St Lifstation 0.8 0.15 7.7 1.1 1.1 1.1 0.3-27-18 B.C. Ferry 0.6 0.15 7.5 1.1 1.1 1.1 0.4-17-18 B.C. Ferry 0.6 0.12 7.6 1.1		-												
Sample Date		_												
Sample Date						-								
Date Location Lo	03-27-18	B.C. Ferry	0.6	0.15	7.5	El	LI	04-17-18	B.C. Ferry	0.6	0.12	7.6	L1	Li
Date Location Lo	Sample	Sample	Free Chlorine	Turbidity		Total Coliform	E.Coli	Sample	Sample	Free Chlorine	Turbidity		Total Coliform	E.Coli
May Sample Sample Date Location CFU/100ml	Date	Location	(mg/L)			CFU/100ml	CFU/100ml	Date	Location	(mg/L)	(NTU)		CFU/100ml	CFU/100ml
Sample Location Free Chlorine (mg/L) NTU) pH Total Coliform CFU/100ml CF	03-03-18			0.40	6.7			04-10-18			0.97	6.8		
Sample Date			Ma	ny						Jur	ne			
Date Location (mg/L) (NTU) PH CFU/100ml CFU/100ml Date Location (mg/L) (NTU) PH CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) PH CFU/100ml CFU/		Bacte	eriologic	al Sam	pling				Bacte	eriologic	al Sam	npling		
05-15-18			(mg/L)		рН							рН		CFU/100ml
OS-15-18 Chatham Ave. O.4 O.15 7.9 L.1 L.1 O6-05-18 Chatham Ave. O.3 O.20 7.5 L.1 L.1 OS-08-18 Bear Cove Reservoir O.7 O.14 7.7 L.1 L.1 O6-12-18 Bear Cove O.7 O.58 7.6 L.1 L.1 O6-12-18 Bear Cove O.7 O.58 7.6 L.1 L.1 O6-12-18 Highway 19 PRV O.7 O.17 7.5 L.1 L.1 O6-12-18 Pioneer Inn O.6 O.20 7.7 L.1 L.1 O6-05-18 Pioneer Inn O.7 O.12 7.5 L.1 L.1 U.1 O6-05-18 Pioneer Inn O.7 O.12 7.5 L.1 L.1 U.1 O6-05-18 Pioneer Inn O.7 O.20 7.8 L.1 L.1 U.1 O6-05-18 Pioneer Inn O.7 O.22 7.6 L.1 L.1 U.1 O6-05-18 Airport Inn O.8 O.12 7.6 L.1 L.1 O6-05-18 Airport Inn O.8 O.12 7.6 L.1 L.1 O6-05-18 Airport Inn O.8 O.12 7.6 L.1 L.1 O6-12-18 Peel St Lifstation O.9 O.17 7.7 L.1 L.1 O6-12-18 Peel St Lifstation O.0 O.18 7.5 L.1 L.1 O6-12-18 Peel St Lifstation O.0 O.15 7.6 L.1 L.1 O6-12-18 Peel St Lifstation O.0 O.15 7.6 L.1 L.1 U.1 O6-12-18 Peel St Lifstation O.0 O.15 7.6 L.1 L.1 U.1 O6-12-18 Peel St Lifstation O.0 O.15 7.6 L.1 L.1 U.1 U									_					
D5-08-18 Bear Cove Reservoir O.7 O.14 7.7 I.1 I.1 O6-12-18 Bear Cove O.7 O.58 7.6 I.1 I.1 O5-15-18 Highway 19 PRV O.9 O.18 7.8 I.1 I.1 O6-19-18 Highway 19 PRV O.7 O.17 7.5 I.1 I.1 O6-19-18 Highway 19 PRV O.7 O.17 7.5 I.1 I.1 O6-19-18 Pioneer Inn O.7 O.12 7.5 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.8 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1 I.1 I.1 I.1 I.1 I.1 I.1 O6-19-18 Pioneer Inn O.5 O.58 7.6 I.1		•				-								
05-15-18														
D5-15-18 Pioneer Inn D6 D20 7.7 L1 L1 D6-05-18 Pioneer Inn D7 D.12 7.5 L1 L1 D5-15-18 Public Works Yard D.2 D.14 8.8 L1 L1 D6-12-18 Public Works Yard D.5 D.28 7.8 L1 L1 D5-08-18 Glen Lyon Restaurant D7 D.5 D.7 L1 L1 D6-012-18 Glen Lyon Restaurant D6-05-18 Airport Inn D7 D7 D7 D7 D7 D7 D7														
05-15-18 Public Works Yard 0.2 0.14 8.8 L1 L1 06-12-18 Public Works Yard 0.5 0.28 7.8 L1 L1 05-08-18 Glen Lyon Restaurant 0.7 0.15 7.7 L1 L1 06-12-18 Glen Lyon Restaurant 1.0 0.52 7.6 L1 L1 1.1 05-08-18 Airport Inn 0.8 0.12 7.6 L1 L1 06-05-18 Airport Inn 0.6 0.18 7.5 L1 L1 1.1 05-15-18 Peel St Lifstation 0.9 0.17 7.7 L1 L1 L1 06-12-18 Peel St Lifstation 1.0 0.51 7.6 L1 L1 L1 05-15-18 B.C. Ferry 0.5 0.17 7.4 L1 L1 L1 06-19-18 B.C. Ferry 0.3 0.21 7.2 L1 L1 L1 U1 U1 U1 U1 U1		0 /				-				-				
05-08-18 Glen Lyon Restaurant 0.7 0.15 7.7 L1 L1 06-12-18 Glen Lyon Restaurant 1.0 0.52 7.6 L1 L1 05-08-18 Airport Inn 0.8 0.12 7.6 L1 L1 06-05-18 Airport Inn 0.6 0.18 7.5 L1 L1 1.1 05-15-18 Peel St Lifstation 0.9 0.17 7.7 L1 L1 06-12-18 Peel St Lifstation 1.0 0.51 7.6 L1 L1 L1 06-12-18 Peel St Lifstation 0.51 7.6 L1 L1 L1 06-12-18 Peel St Lifstation 0.0 0.51 7.6 L1 L1 L1 1.1 06-12-18 Peel St Lifstation 0.0 0.51 7.6 L1 L1 L1 L1 1.1 U1 U1 U1 U2 U3 U3 U3 U3 U4 U4 U4 U5 U5 U5 U5 U5														
05-08-18														
05-15-18 Peel St Lifstation 0.9 0.17 7.7 1.1 1.1 06-12-18 Peel St Lifstation 1.0 0.51 7.6 1.1 1.1 05-15-18 B.C. Ferry 0.5 0.17 7.4 1.1 1.1 06-19-18 B.C. Ferry 0.3 0.21 7.2 1.1 1.		*				-				-				
D5-15-18 B.C. Ferry D5 D17 T4 L1 L1 D6-19-18 B.C. Ferry D3 D21 T2 L1 L1 L1 D5-15-18 B.C. Ferry D3 D21 T2 L1 L1 L1 D6-19-18 B.C. Ferry D3 D3 D3 D3 D3 D3 D3 D														
Sample Date Location Free Chlorine Turbidity (mg/L) NTU) pH Total Coliform E.Coli CFU/100ml CFU/														
Date Location (mg/L) (NTU) PH CFU/100ml CFU/100ml Date Location (mg/L) (NTU) PH CFU/100ml CFU/100ml 05.15.18 Tsulquate River 0.35 7.0		Í												
05.15.18 Tsulquate River 0.39 7.2 06.19.18 Tsulquate River 0.35 7.0					рН							pН		
	05-15-18	Tsulquate River (Untreated)		0.39	7.2			06-19-18	Tsulquate River (Untreated)		0.35	7.0		

Semple Color Col			Jul	y							Aug	ust			
Secretar Secretar		Bacte	eriologic	al Sam	pling					Bacte	eriologic	al Sam	pling		
		Sample	Free Chlorine	Turbidity									рН		
0.24348 Canbana Ace															
Decided Recording Control Cont														1	
10-19-19-19 10-19-19-19-19-19-19-19-19-19-19-19-19-19-															
Property Property															
Graph Resultant Graph Resultant Graph Graph Resultant Graph Resultant Graph Graph Resultant Graph Resultant															
Chi-State March State Chi-State Ch		Public Works Yard	0.4	0.21	7.9	L1	L1	08-28-	18		0.2	0.13			L1
07-07-18 Pred Statishaston 0.8 0.23 7.4 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 7.2 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 7.2 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 7.2 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 7.2 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 7.2 1.1 1.1 1.1 0.5-14-15 Pred Statishaston 0.7 0.18 Pr	07-10-18	Glen Lyon Restaurant	0.7	0.16	7.4	L1	L1	08-14-	-18	Glen Lyon Restaurant	0.6	0.17	7.4	L1	L1
07-07-18 Prec Statissation 0.6 0.25 7.4 1.1 1.1 1.1 1.2 1.	07-10-18	Airport Inn	0.8	0.61	7.5	L1	L1	08-14-	-18	Airport Inn	0.7	0.16	7.3	L1	L1
Sample Location Pre-Chlorine Turbidity pH Total Collisions E.Col CHU/19064 CHU/19064		_													
Dais	07-17-18	B.C. Ferry	0.2	0.16	7.3	L1	L1	08-28-	18	B.C. Ferry	0.4	0.19	7.4	L1	L1
Dais															
September Sept					рН								pН		
Sample Sample Date Dat	07-17-18			0.23	7.3			08-28-	-18			0.27	7.2		
Sample Sample Date Dat			Septe:	mber							Octo	ber			
Sample Date Date Prec Chlorine Free		Bacte	-		pling					Bacte			pling		
		Sample	Free Chlorine	Turbidity						Sample	Free Chlorine	Turbidity			
09-11-13					7.8		·						7.4		
1002-18 Chatham Ave. 0.4 0.14 7.6 1.1 1.1 1.1 1.0 1.															
99-94-18 Highway 19 PRV 0.4	-														
99-11-18 Picheer Inn 0.7 0.17 7.3 L1 L1 1.099-18 Professer Inn 0.9 0.12 7.3 c1 c1 0.099-18 Poble Works Yard 0.2 0.15 8.0 L1 L1 1.099-18 Public Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.9 0.12 7.4 c1 c1 c1 0.099-18 Poble Works Yard 0.05 0.13 7.3 L1 L1 L1 1.01-18 Poble Works Yard 0.05 0.04 7.4 L1 L1 1.01-18 Poble Works Yard 0.06 0.042 7.3 c4 c4 c1 0.099-18 Poble Works Yard 0.06 0.044 7.4 L1 L1 1.01-18 Poble Works Yard 0.06 0.042 7.3 c4 c4 c4 c4 c4 c4 c4 c	09-11-18	Bear Cove Reservoir	0.5	0.15	7.4	L1	L1	10-09-	18	Bear Cove Reservoir	0.4	0.12	7.6	<1	<1
09-13-18 Public Works Yard 0.2 0.15 8.0 L1 L1 1.069-18 Public Works Yard 0.9 0.12 7.4 <1 <1 <1 <1 <1 <1 <1 <										. ,					
09-18-18 Glen Lyon Restaurant 0.5 0.33 7.3 1.1 1.1 1.1 1.016-18 Glen Lyon Restaurant 0.5 0.38 7.4 <1 <1 <1 <1 <1 <1 <1 <														1	
O-18-18															
	09-18-18	Glen Lyon Restaurant		0.13			L1	10-16-	-18	Glen Lyon Restaurant	0.5				<1
Sample Date Location December															
Sample Date Location Free Chlorine Turbidity (mg/L) NTU) PH Total Coliform CFU/100ml CFU/100ml															
Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100m	09-04-18	B.C. Perry	0.4	0.14	7.0	LI	LI	10-02-	-10	B.C. Perry	0.5	0.19	7.4	<u> </u>	\1
November Sample Sample Location Free Chlorine (mg/L) (ms/L) pH Total Coliform E.Coli CFU/100ml CFU/1					рН								рН		
Sample Date Ceclorine Free Chlorine Turbidity (mg/L) PH Total Coliform CFU/100ml CFU	09-18-18			0.47	6.9			10-16-	-18			0.34	6.9		
Sample Date Ceclorine Free Chlorine Turbidity (mg/L) PH Total Coliform CFU/100ml CFU															
Sample Date Sample Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100ml CFU/100ml Date Location Free Chlorine Turbidity PH Total Coliform CFU/100ml CFU/100m			Nove	mber							Decer	nber			
Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/100ml CFU/100ml CFU/100ml Date Location (mg/L) (NTU) P1 CFU/100ml CFU/		Bacte	1		pling	1			Bacteriological Sampling						
11-06-18 Hospital 0.5 0.13 7.6 <1 <1 12-04-18 Hospital 0.6 0.24 7.7 <1 <1 11-06-18 Airport Washroom 0.4 0.23 7.6 <1 <1 12-04-18 Airport Washroom 0.5 0.62 7.7 <1 <1 <1 <1 <1 <1 <1 <	n :	v 2	((Y)		рН			n î		v 2-			pН		OFF 1 (1 0 0 1
11-06-18	11-06-18	Hospital			7.6			12-04-	-18	Hospital			7.7		
11-13-18 Bear Cove Reservoir 0.4 0.14 7.6 <1 <1 12-11-18 Bear Cove Reservoir 0.6 0.14 7.5 <1 <1 11-13-18 Highway 19 PRV 0.9 0.14 7.4 <1 <1 <1 <1 <1 <1 <1 <															
11-13-18 Highway 19 PRV 0.8 0.17 7.5 <1 <1 12-11-18 Highway 19 PRV 0.9 0.14 7.4 <1 <1 11-06-18 Pioneer Inn 0.6 0.16 7.4 <1 <1 12-04-18 Pioneer Inn 0.7 0.17 7.7 <1 <1 <1 <1 <1 <1 <1 <															
11-06-18 Pioneer Inn 0.6 0.16 7.4 <1 <1 12-04-18 Pioneer Inn 0.7 0.17 7.7 <1 <1 <1 <1 <1 <1 <1 <															
11-13-18 Public Works Yard 0.6 0.15 7.6 <1 <1 12-12-18 Public Works Yard 0.7 0.15 7.5 <1 <1 11-20-18 Glen Lyon Restaurant 0.7 0.19 7.5 <1 <1 12-12-18 Glen Lyon Restaurant 0.8 0.17 7.8 <1 <1 <1 11-13-18 Airport Inn 0.6 0.14 7.5 <1 <1 12-12-18 Airport Inn 0.5 0.20 7.5 <1 <1 11-20-18 Ped St Lifstation 0.7 0.22 7.5 <1 <1 12-20-18 Ped St Lifstation 0.7 0.12 7.5 <1 <1 <1 12-20-18 B.C. Ferry 0.7 0.16 7.4 <1 <1 12-12-18 B.C. Ferry 0.7 0.23 7.6 <1 <1 <1 <1 <1 <1 <1 <															
11-20-18 Glen Lyon Restaurant 0.7 0.19 7.5 <1 <1 12-12-18 Glen Lyon Restaurant 0.8 0.17 7.8 <1 <1 <1 11-13-18 Airport Inn 0.6 0.14 7.5 <1 <1 12-12-18 Airport Inn 0.5 0.20 7.5 <1 <1 <1 11-20-18 Peel St Liftstation 0.7 0.22 7.5 <1 <1 12-04-18 Peel St Liftstation 0.7 0.12 7.5 <1 <1 <1 12-04-18 Peel St Liftstation 0.7 0.12 7.5 <1 <1 <1 12-04-18 Peel St Liftstation 0.7 0.12 7.5 <1 <1 <1 <1 <1 <1 <1 <															
11-13-18															
11-20-18 Peel St Liftstation 0.7 0.22 7.5 <1 <1 12-04-18 Peel St Liftstation 0.7 0.12 7.5 <1 <1 11-20-18 B.C. Ferry 0.7 0.16 7.4 <1 <1 12-12-18 B.C. Ferry 0.7 0.23 7.6 <1 <1 <1 <1 <1 <1 <1 <		-								*					
11-20-18 B.C. Ferry 0.7 0.16 7.4 <1 <1 12-12-18 B.C. Ferry 0.7 0.23 7.6 <1 <1															
Sample Sample Free Chlorine (mg/L) Turbidity pH Total Coliform E.Coli Date Location (mg/L) (NTU) pH Total Coliform CFU/100ml CFU/100ml CFU/100ml CFU/100ml															
Date Location (mg/L) (NTU) pH CFU/100ml CFU/100ml Date Location (mg/L) (NTU) pH CFU/100ml CFU/100ml		,								,					
11.20.18 Tsulquate River 0.11 68 Tsulquate River 1.05 (/					рН								pН		
11-20-18 (Untreated) 0.41 6.8 12-12-18 (Untreated) 1.05 6.6	11-20-18			0.41	6.8			12-12-	18			1.05	6.6		

TRIHALOMETHANE AND HALOACETIC ACID QUARTERLY RESULTS

Exova #104, 19575-55 A Ave. Surrey, British Columbia V38 8P8, Canada

Page 1 of 2 Exova |

Analytical Report

Bill To: District of Port Hardy Box 68

Port Hardy, BC, Canada V0N 2P0 Attn: Accounts Payable
Sampled By: Justin Reusch
Company: District of Port Hardy

Project ID: Project Name: Project Location: LSD: P.O.: Proj. Acct. code:

WP Quarterly

Lot ID: 1248505 Control Number:

Date Received: Jan 11, 2018 Date Reported: Jan 19, 2018 Report Number: 2256494

Reference Number Sample Date Jan 10, 2018 Sample Time 11:30 Sample Location Sample Description

1248505-1

1248505-2 Jan 10, 2018

DPH / WTP DPH / Chatham Ave. Reservoir / 7.0°C / 7.0°C

		Matrix	Water	Water		
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen	- Water					
Chloroform		mg/L	0.025	0.037		0.001
Bromodichloromethane		mg/L	<0.001	0.001		0.001
Dibromochloromethane		mg/L	<0.001	< 0.001		0.001
Bromoform		mg/L	<0.001	< 0.001		0.001
Total Trihalomethanes		mg/L	0.025	0.038		0.001
Trihalomethanes - Surro	gate Recovery					
Dibromofluoromethane	EPA Surrogate	%	105	106		50-140
Toluene-d8	EPA Surrogate	%	102	103		50-140
Bromofluorobenzene	EPA Surrogate	%	96	94		50-140
Haloacetic Acids - Water						
Monochloroacetic Acid		µg/L	<2.0	<2.0		2.0
Monobromoacetic Acid		µg/L	<2.0	<2.0		2.0
Dichloroacetic Acid		µg/L	11.0	13.0		2.0
Bromochloroacetic Acid		µg/L	<2.0	<2.0		2.0
Dibromoacetic Acid		µg/L	<2.0	<2.0		2.0
Trichloroacetic Acid		µg/L	21.3	20.0		2.0
Total Haloacetic Acids (HAA6)		µg/L	32.3	33.0		2.0

Vice President

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Analytical Report

Bill To: District of Port Hardy

Box 68 Port Hardy, BC, Canada VON 2P0

Attn: Accounts Payable Sampled By:

Company: District of Port Hardy

Project ID: WTP Project Name:

Project Location:

LSD: P.O.: 2886

Proj. Acct. code:

Lot ID: 1263477

Control Number: Date Received: Apr 6, 2018 Date Reported: Apr 17, 2018

Report Number: 2276116

Reference Number Sample Date Sample Time Sample Location Sample Description

1263477-1 Apr 05, 2018 NA

1263477-2 Apr 05, 2018 NA

DPH / WTP DPH / Chatham Ave. Reservoir / 6.9°C / 6.9°C

		Matrix	Water	Water		
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen	- Water					
Chloroform		mg/L	0.027	0.041		0.001
Bromodichloromethane		mg/L	0.001	0.002		0.001
Dibromochloromethane		mg/L	<0.001	< 0.001		0.001
Bromoform		mg/L	<0.001	< 0.001		0.001
Total Trihalomethanes		mg/L	0.028	0.043		0.001
Trihalomethanes - Surro	gate Recovery					
Dibromofluoromethane	EPA Surrogate	%	119	117		50-140
Toluene-d8	EPA Surrogate	%	97	95		50-140
Bromofluorobenzene	EPA Surrogate	%	101	95		50-140
Haloacetic Acids - Water						
Monochloroacetic Acid		µg/L	<2.0	<2.0		2.0
Monobromoacetic Acid		µg/L	<2.0	<2.0		2.0
Dichloroacetic Acid		μg/L	8.0	17.0		2.0
Bromochloroacetic Acid		μg/L	<2.0	<2.0		2.0
Dibromoacetic Acid		µg/L	<2.0	<2.0		2.0
Trichloroacetic Acid		µg/L	17.0	34.0		2.0
Total Haloacetic Acids (HAA6)		μg/L	25.0	51.0		2.0

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Analytical Report

Lot ID: 1285168 Bill To: District of Port Hardy Project ID:

Box 68 Project Name: Control Number:

Port Hardy, BC, Canada Project Location: Date Received: Jul 17, 2018 VON 2PO LSD: Date Reported: Jul 25, 2018 Attn: Accounts Payable P.O.: Report Number: 2305813

Sampled By: R> Lefort Proj. Acct. code:

Company: District of Port Hardy

Reference Number 1285168-1 1285168-2 Jul 16, 2018 Jul 16, 2018 Sample Date Sample Time 09:50 10:30

Sample Location

Sample Description DPH / Reservoir / DPH / Chatham Ave. 5.8°C / 5.8°C

		Matrix	Water	Water		
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen	- Water					
Chloroform		mg/L	0.039	0.053		0.001
Bromodichloromethane		mg/L	0.003	0.003		0.001
Dibromochloromethane		mg/L	<0.001	< 0.001		0.001
Bromoform		mg/L	<0.001	< 0.001		0.001
Total Trihalomethanes		mg/L	0.042	0.056		0.001
Trihalomethanes - Surrog	gate Recovery					
Dibromofluoromethane	EPA Surrogate	%	113	118		50-140
Toluene-d8	EPA Surrogate	%	96	92		50-140
Bromofluorobenzene	EPA Surrogate	%	101	101		50-140
Haloacetic Acids - Water						
Monochloroacetic Acid		μg/L	<2.0	<2.0		2.0
Monobromoacetic Acid		µg/L	<2.0	<2.0		2.0
Dichloroacetic Acid		μg/L	16.0	20.2		2.0
Bromochloroacetic Acid		μg/L	<2.0	<2.0		2.0
Dibromoacetic Acid		µg/L	<2.0	<2.0		2.0
Trichloroacetic Acid		µg/L	12.5	20.8		2.0
Total Haloacetic Acids (HAA6)		μg/L	28.5	41.0		2.0

Approved by: Mathier Simmean

Mathieu Simoneau Operations Manager

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Analytical Report

Bill To: District of Port Hardy Project ID: Lot ID: 1303153

Box 68 Project Name: Control Number:

| Port Hardy, BC, Canada | Project Location: | Date Received: Oct 4, 2018 | V0N 2P0 | LSD: | Date Reported: Oct 16, 2018 | Attn: Accounts Payable | P.O.: 3354 | Report Number: 2330261

Sampled By: Proj. Acct. code: Company: District of Port Hardy

 Reference Number
 1303153-1
 1303153-2
 1303153-3

 Sample Date
 Oct 03, 2018
 Oct 03, 2018
 Oct 03, 2018

 Sample Time
 NA
 NA
 NA

 Sample Location
 NA
 NA
 NA

Sample Description DPH / Reservoir / DPH / Reservoir DPH / Chatham /

			8°C	Dup. / 8°C	8°C	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen	- Water					
Chloroform		mg/L	0.026	0.024	0.051	0.001
Bromodichloromethane		mg/L	0.001	< 0.001	0.002	0.001
Dibromochloromethane		mg/L	<0.001	< 0.001	< 0.001	0.001
Bromoform		mg/L	< 0.001	< 0.001	< 0.001	0.001
Total Trihalomethanes		mg/L	0.027	0.024	0.053	0.001
Trihalomethanes - Surro	gate Recovery					
Dibromofluoromethane	EPA Surrogate	%	94	99	100	50-140
Toluene-d8	EPA Surrogate	%	92	87	93	50-140
Bromofluorobenzene	EPA Surrogate	%	112	103	89	50-140
Haloacetic Acids - Water						
Monochloroacetic Acid		μg/L	<2.0	<2.0	<2.0	2.0
Monobromoacetic Acid		μg/L	<2.0	<2.0	<2.0	2.0
Dichloroacetic Acid		μg/L	17.9	17.8	20.6	2.0
Bromochloroacetic Acid		μg/L	<2.0	<2.0	<2.0	2.0
Dibromoacetic Acid		μg/L	<2.0	<2.0	<2.0	2.0
Trichloroacetic Acid		μg/L	21.5	21.4	43.1	2.0
Total Haloacetic Acids (HAA6)		µg/L	39.4	39.2	63.7	2.0

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Analytical Report

Lot ID: 1303153 Bill To: District of Port Hardy Project ID:

Project Name: Box 68 Control Number:

Port Hardy, BC, Canada Project Location: Date Received: Oct 4, 2018 V0N 2P0 LSD: Date Reported: Oct 16, 2018 Attn: Accounts Payable P.O.: 3354 Report Number: 2330261

Proj. Acct. code: Sampled By: Company: District of Port Hardy

> Reference Number 1303153-4 Oct 03, 2018 Sample Date

Sample Time Sample Location

Sample Description DPH / Chatham

Dup.. / 8°C 107.

NA

		Matrix	Water			
Analyte		Units	Results	Results	Results	Nominal Detection Limit
Trihalomethanes Screen	- Water					
Chloroform		mg/L	0.057			0.001
Bromodichloromethane		mg/L	0.002			0.001
Dibromochloromethane		mg/L	<0.001			0.001
Bromoform		mg/L	<0.001			0.001
Total Trihalomethanes		mg/L	0.059			0.001
Trihalomethanes - Surro	gate Recovery					
Dibromofluoromethane	EPA Surrogate	%	110			50-140
Toluene-d8	EPA Surrogate	%	93			50-140
Bromofluorobenzene	EPA Surrogate	%	90			50-140
Haloacetic Acids - Water						
Monochloroacetic Acid		μg/L	<2.0			2.0
Monobromoacetic Acid		μg/L	<2.0			2.0
Dichloroacetic Acid		μg/L	20.9			2.0
Bromochloroacetic Acid		μg/L	<2.0			2.0
Dibromoacetic Acid		μg/L	<2.0			2.0
Trichloroacetic Acid		μg/L	45.5			2.0
Total Haloacetic Acids (HAA6)		μg/L	66.4			2.0

Approved by:

Matthew Norman, BSc, PChem

Operations Chemist

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ADDITIONAL SAMPLING RESULTS

External Lab Results after Line Break on Beaver Harbour Road



Success Through Science®

Success Through Science®

DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID				SX6203	SX6204	
Sampling Date				2018/02/05	2018/02/05	
Sampling Date				09:20	09:40	
COC Number				G124325	G124325	
		UNITS	MAC	FORT RUPERT SCHOOL	CHATHAM AVE	QC Batch
Microbiological F	Param.					
Total Coliforms (QT)	MPN/100mL	0	0	0	8905104
E. coli (QT)		MPN/100mL	0	0	0	8905104
No Fill	No Exceed	ance				
Grey	Exceeds 1	criteria policy/	level/			
Black	Exceeds bo	oth criteria/lev	els			



Maxxam Job #: 8809746 Report Date: 2018/02/09 DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

				KING WAT		
Maxxam ID				SX9692	SX9693	
Sampling Date				2018/02/07	2018/02/07	
Sampling Date				11:15	11:00	
COC Number			G124875		G124875	
		UNITS	UNITS MAC F.R. SCHOOL CHATHAI		СНАТНАМ	QC Batch
Microbiologica	l Param.					
Total Coliforms	s (QT)	MPN/100mL	MPN/100mL 0		0	8907370
E. coli (QT)		MPN/100mL	0	0	0	8907370
No Fill	No Exceedan	ice				
Grey Exceeds 1 criteria policy/level						
Black Exceeds both criteria/levels						



Maxxam Job #: B823298 Report Date: 2018/04/02 Success Through Sciences

DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

Maxxam ID				TE5982	TE5983	TE5984	TE5985	TE5986	
Sampling Date				2018/03/29	2018/03/29	2018/03/29	2018/03/29	2018/03/29	
Sompany Date				12:00	12:00	12:00	12:00	12:00	
COC Number				135873	135873	135873	135873	135873	
	UNITS	MAC	СНАТНАМ	PEEL ST	AWWTP	KT K	PIONEER	QC Batch	
Microbiological Para	m.								
Total Coliforms		CFU/100mL	0	0	0	0	0	0	8949448
E. coli		CFU/100mL	0	0	0	0	0	0	8949448
No Fill No Exceedance									
Grey Exceeds 1 criteria po				evel					
Black Exceeds both crite			ia/leve	ls					

RESERVOIR #1 EXTERNAL LABORATORY WATER QUALITY RESULTS



Report Date: 2018/06/08

DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID				TO7062	
Sampling Da	te			2018/06/05	
Semping Se				11:30	
COC Number	r			G135941	
		UNITS	MAC	RESERVOIR #1	QC Batch
Microbiologi	cal Param.				
Total Colifor	ns (QT)	MPN/100mL	0	0	9017171
E. coli (QT)		MPN/100mL	0	0	9017171
No Fill	No Exceedance	2			
Grey	Exceeds 1 crite	ria policy/leve	d		
Black		riteria/levels			

Success Through Science®



Maxxam Job #: B845195 Report Date: 2018/06/14

DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (DRINKING WATER)

Maxxam ID				TP2756	
Sampling Da	ite			2018/06/07 11:50	
COC Numbe	r			135942	
		UNITS	MAC	RESERVOIR 1	QC Batch
Microbiolog	ical Param.				
Total Colifor	ms	CFU/100mL	0	0	9020660
E. coli		CFU/100mL	0	0	9020660
No Fill	No Exceedance				
Grey	Exceeds 1 crite	ria policy/leve	el		
Black	Exceeds both o	riteria/levels			

Note: Tests sent out on June 6^{th} were too long in transit, arrived over temperature and could not be tested.



Maxxam Job #: B846401 Report Date: 2018/06/15 Success Through Science®

STANTEC CONSULTING LTD Client Project #: 111720046

Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

				MICROBIOLOGY (\	WATER)			
Maxxam ID				TP9938	TP9939	TP9940		
Sampling Date				2018/06/11 14:30	2018/06/11 14:22	2018/06/11 14:20		
COC Number			\vdash	WI16i897	WI16i897	WI16i897	\vdash	
		UNITS	MAC	3500 BYNG RD	3000 BYNG RD FLUSH OUT L- TAP	3500 HYDRANT F.R. / BYNG - TAP	QC Batch	
Microbiological Para	m.							
Total Coliforms (QT)		MPN/100mL	. 0	0	0	0	9024174	
E. coli (QT)		MPN/100mL	. 0	0	0	0	9024174	
No Fill	No Exceedance							
Grey	Exce	eds 1 criteria p	olicy/l	evel				
Black	Exceeds both criteria/levels							
Maxxam ID				TP9941	TP9942	TP9948		
Sampling Date				2018/06/11 14:25	2018/06/11 14:13	2018/06/11 14:10		
COC Number				WI16i897	WI16i897	WI16898		
		UNITS	MAC	FORT RUPERT SOURCE - TAP	3000 F.R. RES. FLUSH OUT - TAP	3500 F.R. RES FLUSH OUT - TAP	QC Batch	
Microbiological Para	m.		•	•				
Total Coliforms (QT)		MPN/100mL	. 0	0	0	0	9024174	
E. coli (QT)		MPN/100mL	. 0	0	0	0	9024174	
No Fill	No E	xceedance						
Grey	Exce	eds 1 criteria p	olicy/l	evel				
Black	Exceeds both criteria/levels							
Maxxam ID		Т	П	TP9949	TP9950	TP9951	Т	
Sampling Date	ľ			2018/06/11	2018/06/11	2018/06/11		
sampling Date			_	18:35	18:27	18:26		
OC Number			\rightarrow	WI16898	WI16898	WI16898		
		UNITS	MAC	BEAVER H. BYNG FLUSH OUT - TAP	BEAVER H. PEEL - TAP	BEAVER H. TSAKIS - TAP	QC Batch	
Microbiological Param								
Total Coliforms (QT)		MPN/100mL	0	0	0	0	9024174	
E. coli (QT) MPI		MPN/100mL	0	0	0	0	9024174	
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							



Maxxam Job #: B846401 Report Date: 2018/06/15 STANTEC CONSULTING LTD Client Project #: 111720046

Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID				TP9952	TP9953	TP9954		
Sampling Date				2018/06/11 18:21	2018/06/11 18:41	2018/06/11 18:40		
COC Number				WI16898	WI16910	WI16910		
		UNITS	MAC	BEAVER H. N. LIHIT FLUSH OUT - TAP	BEAVER H SE LIMIT - TAP	BEAVER H. SOURCE - TAP	QC Batch	
Microbiological Param.								
Total Coliforms (QT)		MPN/100mL	0	0	0	0	9024174	
E. coli (QT) MPN		MPN/100mL	0	0	0	0	9024174	
No Fill Grey Black	No Exceedance Exceeds 1 criteria policy/level							
DIACK	Exceeds both criteria/levels							



Maxxam Job #: B846409 Report Date: 2018/06/15 STANTEC CONSULTING LTD Client Project #: 111720046

Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID				TP9970	TP9971	TP9972		
Sampling Date				2018/06/12	2018/06/12	2018/06/12		
coc Number			\vdash	13:11	13:01	12:57		
COC Number				WI16899	WI16899	WI16899		
		UNITS	MAC	3500 BYNG RD FLUSH OUT - TAP	3000 BYNG RD FLUSH OUT - TAP	3500 HYDRANT F.R. / BYNG - TAP	QC Batch	
Microbiological Paran	n.			1203110011111	130311001 1111	, , , , , , , , , , , , , , , , , , , ,		
Total Coliforms (QT)		MPN/100mL	0	0	0	0	9024174	
E. coli (QT)		MPN/100mL	0	0	0	0	9024174	
No Fill No Exceedance								
Grev	Exce	Exceeds 1 criteria policy/level						
Black	1	eds both criteri	_					
DIOCK			.,					
Maxxam ID				TP9973	TP9974	TP9980		
Campling Date				2018/06/12	2018/06/12	2018/06/12		
Sampling Date				12:48	12:50	13:35		
COC Number				WI16899	WI16899	WI16900		
		UNITS	MAC	3000 F.R. RES	3500 F.R. RES	BEAVER H. BYNG	QC Batch	
		05		FLUSH OUT - TAP	FLUSH OUT - TAP	FLUSH OUT - TAP	QC Date	
Microbiological Paran	n.							
Total Coliforms (QT)		MPN/100mL	0	0	0	0	9024174	
E. coli (QT)		MPN/100mL	0	0	0	0	9024174	
No Fill	No E	xceedance						
Grey	Exceeds 1 criteria policy/level							
Black								
			ay reve					
		- Cas both criteri	ay ic ve					
Maxxam ID			ayieve	TP9981	TP9982	TP9983		
	-	eus sour enter	ay reve	TP9981 2018/06/12	2018/06/12	2018/06/12		
Maxxam ID Sampling Date	-		ayieve	TP9981				
	-		ayieve	TP9981 2018/06/12	2018/06/12	2018/06/12		
ampling Date	-			TP9981 2018/06/12 13:42	2018/06/12 13:46	2018/06/12 13:52 W116900 BEAVER H. N.		
ampling Date	-		MAC	TP9981 2018/06/12 13:42 WI16900	2018/06/12 13:46 WI16900	2018/06/12 13:52 WI16900 BEAVER H. N. LIMIT FLUSH OUT	QC Batci	
ampling Date	-			TP9981 2018/06/12 13:42 WI16900 BEAVER H. PEEL -	2018/06/12 13:46 WI16900 BEAVER H. TSAKIS -	2018/06/12 13:52 W116900 BEAVER H. N.	QC Batc	
ampling Date OC Number Vicrobiological Param.		UNITS	мас	TP9981 2018/06/12 13:42 WI16900 BEAVER H. PEEL- TAP	2018/06/12 13:46 WI16900 BEAVER H. TSAKIS - TAP	2018/06/12 13:52 WI16900 BEAVER H. N. LIMIT FLUSH OUT - TAP		
coc Number Microbiological Param. otal Coliforms (QT)		UNITS I	мас	TP9981 2018/06/12 13:42 WI16900 BEAVER H. PEEL - TAP	2018/06/12 13:46 WI16900 BEAVER H. TSAKIS - TAP	2018/06/12 13:52 W16900 BEAVER H. N. LIMIT FLUSH OUT - TAP	9024174	
ampling Date OC Number Vicrobiological Param.		UNITS	мас	TP9981 2018/06/12 13:42 WI16900 BEAVER H. PEEL- TAP	2018/06/12 13:46 WI16900 BEAVER H. TSAKIS - TAP	2018/06/12 13:52 WI16900 BEAVER H. N. LIMIT FLUSH OUT - TAP	QC Batcl	

Exceeds both criteria/levels



Maxxam Job #: B846409 Report Date: 2018/06/15

STANTEC CONSULTING LTD

Client Project #: 111720046
Site Location: PORT HARDY WATERMAIN REPLACEMENT

MICROBIOLOGY (WATER)

Maxxam ID				TP9984			
Sampling Date			2018/06/12 13:18				
COC Number	C Number			WI16900			
		UNITS	MAC	BEAVER H. SE. LIMIT - TAP	QC Batch		
Microbiological Param.							
Total Coliforms	(QT)	MPN/100mL	0	0	9024174		
E. coli (QT)		MPN/100mL	0	0	9024174		
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						



Maxxam Job #: B850383 Report Date: 2018/06/25 Success Through Science®

Success Through Science®

DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (WATER)

Maxxam ID				TS1658	TS1659			
Sampling Dat				2018/06/22	2018/06/22			
Sampling Date				09:55	10:10			
COC Number				G135951	G135951			
		UNITS	MAC	API	BUDGET	QC Batch		
Microbiological Param.								
Total Coliforn	ns (QT)	MPN/100mL	0	0	0	9037335		
E. coli (QT)		MPN/100mL	0	0	0	9037335		
No Fill	No Exceedan	No Exceedance						
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							

Beaver Harbour Road and Storey's Beach Road New Watermain Connection - June $24^{\text{\tiny TH}}$



Maxxam Job #: B851245 Report Date: 2018/06/27 DISTRICT OF PORT HARDY Your P.O. #: 1936

MICROBIOLOGY (WATER)

iniciae de la constant de la constan								
Maxxam ID				TS6133	TS6134			
Sampling Date				2018/06/25	2018/06/25			
Sampling Date				09:40	10:00			
COC Number				G135962	G135962			
		UNITS	MAC	BEACH SANI DUMP	CHATHAM AVE.	QC Batch		
Microbiological	Param.							
Total Coliforms (QT)	MPN/100mL	0	0	0	9041801		
E. coli (QT)		MPN/100mL	0	0	0	9041801		
No Fill	No Exceed	ance						
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							

Appendix II

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Wastewater Treatment Plants & Collection System









Tsulquate Wastewater System Operations Annual Report 2018

Operational Certificate Number ME-00385

District of Port Hardy Tsulquate Wastewater Operations Report Annual Report 2018

PLANT SUMMARY

The Tsulquate Wastewater Treatment Plant (TWWTP), originally built in 1972, services the majority of the population of Port Hardy, and has historically operated under permit PE-385. The discharge from this facility is sent into Hardy Bay. There are eight lift stations located in the TWWTP collection system. The plant underwent a major upgrade in 2007 which included the addition of two sequential batch reactors, a new headworks and ultraviolet disinfection (UV). The permit was also updated into a more stringent Operational Certificate (ME-00385).

The collection system is comprised of seven liftstations feeding into the Tsulquate plant. Of these seven liftstations, two currently have emergency standby generators in the event of a power outage. A tow behind generator is used when needed.

PLANT AND OPERATOR CLASSIFICATION

The Tsulquate Wastewater Treatment plant is a Class III. Operators have met the level of certification of the plants.

Operator	Title	Certification
Joe Jewell	Utilities Supervisor	WT IV, WWT II, WD III, WWC I
Justin Reusch	Chief Operator	WT III, WD II, WWT II
Roland LeFort	Operator	WWT III, WT III
Cory Henschke	Operator	WWT I, WD II
Robert Cousins	Operator	WWT I, WT I

OPERATIONS SUMMARY AND HIGHLIGHTS

- The Tsulquate wastewater plant continued to produce effluent within the parameters of the permit
- The annual average daily flow was 2119 m³/day
- The majority of the UV disinfection bulbs were replaced in November and December this year as part of scheduled O&M
- Exterior building electrical plugs were replaced this fall after several had failed at the Tsulquate Plant
- The annual receiving waters monitoring testing was performed in August. Effluent quality was within normal parameters
- An LC50 test was also performed on the effluent with a 100% survival rate
- A Sewer Manhold Survey was conducted by our Utilities group to determine the condition of each manhole and to prioritize where structural maintenance and flushing is needed. In all, over 200 manholes inspections were completed
- A sewage forcemain break was found and repaired on the Hardy Bay. Divers were hired to make repairs
- Three of the sewage liftstations are scheduled to receive permanent standby emergency power generators. Control kiosks that encompass the new transfer switch gear will also be installed. Completion of the project will be early 2019
- Sewer flusher truck training was provided for all operators in November. Operators were able to receive Continuing Education Units (CEUs) for this training
- A sewer flushing program is ongoing with focus on areas with high grease deposits as identified by our Sewer Manhole Survey
- An electrical engineer has been solicited to troubleshoot and prepare a plan to replace some failing electrical equipment at the wastewater treatment plant. This work is planned to be done as a capital project in 2019
- Many power outages have occurred in the fall of 2018. The Tsulquate wastewater treatment plant has an emergency generator capable of running the entire system. Quality of the effluent is not compromised

District of Port Hardy Tsulquate Wastewater Operations Report Annual Report 2018

LAB DATA

	Te	ulanate Waster	water Plant Comp	liance Test	inσ		
	15		2018 Q4 WQ DAT		ilig		
3.6 d	pН	Total Suspended Solids (TSS) mg/L	Carbonaceous Biochemical Oxygen	Fecal Coliforms	Flow	low (m ³)	
Month	Weekly 6.0 - 9.0	Weekly <=45 mg∕l	Demand (CBOD ₅) mg/L Weekly <= 45 mg/l	CFU/100 mL Geomean AVG	Annual Average 2870 m ³	Maximum 11,200 m ³ /da	
	7.9	8	<5				
Tonuomi	7.7	7	<5				
January	8.0	9	<5				
	7.9	9	<5				
	8.0	10	<5	118	2282	4541	
February	7.7	4	<5				
	7.8	8	<5				
	6.6	4	4				
	6.8	4	4	46	2139	3506	
	7.2	6	<5				
March	7.8	7	<5				
	7.7	<4	<5				
	7.6	5	<5	41	1862	4007	
	6.9	<4	<5				
April	7.9	6	<5				
	6.8	4	<5	40	1072	2465	
	7.7	6	<5	12	1972	2467	
	6.8 7.8	12 3	<5 <5				
May	7.8	7	<5				
	7.6		<5				
	7.7	3	<5	9	1586	2101	
	7.7	6	<5	9	1386	2101	
	7.6	6	5				
June	7.8	5	<5				
	7.4	5	<5	44	1746	2066	
	7.4	5	<5	44	1740	2000	
	7.7	4	<5				
July	7.6	4	<5				
,,	7.1	<5	8				
	7.4	<2	<5	13	1979	2277	
	7.3	3	<5	10	1777	22,7	
	7.4	9	<5				
August	7.4	6	7				
	7.4	3	<2	9	1920	2443	
	7.5	5	<2				
	7.2	5	<2				
September	7.2	5	<2				
	7.7	7	<2	70	2162	3274	
	7.5	10	<2				
	7.5	12	2				
October	7.6	7	<5				
	7.2	4	<5				
	7.9	13	<5	54	2187	4428	
	6.7	8	<6				
Morropalace	7.6	11	<5				
November	7.4	6	<5				
	7.9	15	8	66	2665	5061	
	8.3	19	12				
Docombon	7.8	16	11				
December	7.8	16	<5				
	7.5	6	<5	20	2922	6634	
			Annual Avera	ge Daily Flow	2118.5	m ³	

* Note: The average daily rate of discharge based on annual average shall be less than 2,870		
**Note: The maximum authrorixed rate of discharge is 11,200 m3/day		





Airport Wastewater Operations Report Annual Report 2018

Operational Certificate Number ME-105299

District of Port Hardy Airport Wastewater Operations Report Annual Report 2018

PLANT SUMMARY

The Airport Wastewater Treatment Plant (AWWTP), built in 1975, is located adjacent to the Transport Canada Airport facility and operates under permit ME-105299. Its effluent is discharged into the Queen Charlotte Strait. There are three lift stations located in the AWWTP collection system; Fort Rupert School, Fort Rupert Village and Peel Street.

PLANT AND OPERATOR CLASSIFICATION

The Tsulquate Wastewater Treatment plant is a Class III. Operators have met the level of certification of the plants.

Operator	Title	Certification
Joe Jewell	Utilities Supervisor	WT IV, WWT II, WD III, WWC I
Justin Reusch	Chief Operator	WT III, WD II, WWT II
Roland LeFort	Operator	WWT III, WTI II
Cory Henschke	Operator	WWT I, WD II
Robert Cousins	Operator	WWT I , WT I

OPERATIONS SUMMARY AND HIGHLIGHTS

- The Airport wastewater plant continued to produce effluent within the parameters of the permit
- The annual average flow was 552 m³/day with a maximum flow of 960 m³ recorded in January during a storm
 event
- The headworks screening unit has been problematic requiring a complete teardown and repair due to rocks entering the sanitary system. The screen has been functioning well in the last part of the year
- The air header was repaired in many spots this year
- A new emergency generator transfer switch has been installed as part of the 2018 capital project program. The commissioning is now complete
- Receiving waters monitoring and an dive of the outfall pipe were conducted in August as per our the requirements of the Operating Certificate. The receiving waters testing results were found to be within expected parameters
- An LC50 test was also performed in August on the effluent with a 100% survival rate
- The dive found that there was a small leak in the outfall pipe. The District was not made aware of the issue for 10 weeks after the fact. The issue was reported through the Non-Compliance e-mail address to the Ministry of Environment and repairs are being scheduled for 2019

District of Port Hardy Airport Wastewater Operations Report Annual Report 2018

LAB DATA

	District of Port Hardy Airport Wastewater Plant Compliance Testing													
	105299 - 2018 AnnRpt WQ DATA													
Month	Flo	w (m³)	рН 6.0 - 9.0		Total Suspended Solids (TSS) mg/L <= 45 mg/l		Demand (CROD.) mg/l			oliforms		ococcus 100 mL		otal mia mg/l
	Average	Maximum 1254 m³/day	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate	First	Duplicate
January	744	960	6.6	6.6	29	20	12.0	5.0					3.80	3.80
February	722	848	6.6	6.7	18	17	9.0	5.0	21000	26000	11000	10000		
March	726	911	6.8	6.6	30	18	9.0	4.3						
April	612	772	7.1	7.1	17	21	<5	6	12000	8900	2300	2900	0.07	0.12
May	552	655	6.7	6.7	15	12	<6	<6						
June	544	688	6.8	6.7	26	20	6	14	45000	27000	1800	2900		
July	395	568	7.4	7.4	7	7	<5	<5						
August	373	432	6.8	6.7	14	14	<5	<5	20000	16000	1200	1100	<0.0005	<0.0005
September	439	578	7.2	7.2	16	15	3.8	3.4						
October	515	799	6.9	7.0	28	28	7.8	6.5	4400	3100	280	220		
November	612	926	6.7	6.7	15	20	7	6					<0.005	<0.005
December	650	890	7.3	7.0	30	29	6	6	3800	4700	1100	1200		

Appendix III

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Audited Financial Statements





Consolidated Financial Statements

December 31, 2018



District of Port Hardy December 31, 2018

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Consolidated Statement of Changes in Net Financial Assets	3
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The accompanying consolidated financial statements are the responsibility of management. To ensure their integrity, objectivity and reliability, the statements have been prepared in accordance with the recommendations of the Public Sector Accounting Board, which are generally accepted accounting principles for British Columbia municipalities and are outlined in Note 1 to the Consolidated Statements. Some amounts on these statements are based on management's best estimates and careful judgment.

Management maintains a system of internal accounting controls to provide reasonable assurance that assets are safeguarded and that transactions are authorized, recorded and reported properly.

Council is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control and exercises this responsibility through the Council. The Council reviews external Audited Financial Statements annually.

The external auditors, MNP LLP, are appointed by Council to conduct an independent examination in accordance with Canadian auditing standards, and express their opinion on the consolidated financial statements. The external auditors have full and free access to financial records and management of the District of Port Hardy.

Lynda/Sowerby, BCor

Director of Finance

Independent Auditor's Report

To the Mayor and Council of the District of Port Hardy:

Opinion

We have audited the consolidated financial statements of the District of Port Hardy (the "District"), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statements of operations and accumulated surplus, changes in net financial assets and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the District as at December 31, 2018, and the results of its consolidated operations and its consolidated cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the District in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the District's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the District or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the District's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error,
 design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to
 provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one
 resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal
 control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.



- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the District's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the District to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and
 whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair
 presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the District to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Nanaimo, British Columbia

April 23, 2019

MNP LLP
Chartered Professional Accountants



District of Port Hardy
Consolidated Statement of Financial Position As At December 31, 2018

	2018	2017
Financial Assets		
Cash and cash equivalents (Note 2)	\$ 5,132,160	\$ 7,394,802
Accounts receivable (Note 3)	2,445,940	1,686,249
Investment in Government business enterprises (Note 15)	81,497	48,340
Tax sale properties	108,882	9,590
Land held for resale	506	506
	7,778,985	9,139,487
Financial Liabilities		
Accounts payable and other liabilities (Note 4)	970,139	1,503,045
Deposits	35,500	39,100
Deferred revenue (Note 5)	514,572	882,217
Capital borrowing (Note 17)	1,295,833	1,164,175
	2,816,044	3,588,537
Net Financial Assets	4,962,941	5,550,950
Tangible capital assets (Note 7)	43,144,918	39,149,007
Inventory	168,945	152,644
Prepaids	56,626	32,202
	43,370,489	39,333,853
Accumulated Surplus (Schedule 3)	\$ 48,333,430	\$ 44,884,803

Commitments and contingencies (Note 13)

Approved by:

Lynda Sowerby, BComm Director of Finance

Dennis Dugas Mayor

District of Port HardyConsolidated Statement of Operations and Accumulated Surplus For the Year Ended December 31, 2018

		2018	2018 Budget (Note 9)	2017
Revenue				
Taxes	\$	2,928,702	\$ 2,909,562	\$ 2,756,671
Payments in lieu of taxes		169,921	179,128	175,980
Sale of services		3,755,366	3,650,491	3,573,337
Other revenue		444,859	291,928	838,983
Income from investment in Government business enterprises (Note 15)		33,157	-	734,261
Government transfers		4,251,708	13,428,425	1,827,596
	1	1,583,713	20,459,534	9,906,828
Expenses				
General government services		1,081,539	1,149,359	1,008,437
Transportation services		1,837,367	2,030,344	1,853,171
Protective services		643,869	624,572	518,033
Environmental health services		272,302	284,359	248,738
Recreation and culture		1,442,673	1,477,986	1,461,725
Community development		194,240	202,376	177,987
Water		1,393,514	1,521,480	1,355,641
Sewer		1,269,582	1,377,900	1,338,675
		8,135,086	8,668,376	7,962,407
Annual surplus		3,448,627	11,791,158	1,944,421
Accumulated surplus, beginning of year	4	4,884,803	44,884,803	42,940,382
Accumulated surplus, end of year	\$ 4	8,333,430	\$ 56,675,961	\$ 44,884,803

Consolidated Statement of Changes in Net Financial Assets As At December 31, 2018

		2018 Budget	
	2018	(Note 9)	2017
Annual surplus	\$ 3,448,627	\$11,791,158	\$ 1,944,421
Acquisition of tangible capital assets	(6,037,381)	(19,709,700)	(3,350,174)
Amortization	2,041,470	1,870,000	1,869,979
Gain on disposal of tangible capital assets	-	-	(332,748)
Proceeds on sale of tangible capital assets	_	-	468,218
	(3,995,911)	(17,839,700)	(1,344,725)
Use (Acquisition) of supplies inventory	(16,301)	-	8,388
Use (Acquisition) of prepaid expense	(24,424)	-	20,645
	(40,725)	-	29,033
Change in net financial assets	(588,009)	(6,048,542)	628,729
Net financial assets, beginning of year	5,550,950	5,550,950	4,922,221
Net financial assets (debt), end of year	\$ 4,962,941	\$ (497,592)	\$ 5,550,950

District of Port HardyConsolidated Statement of Changes in Net Financial Assets As At December 31, 2018

	2018	2017
Cash Provided By (Used In)		
Operating Activities		
Annual surplus	\$ 3,448,627	\$ 1,944,421
Increase (Decrease) in Non Financial Assets		
Amortization	2,041,470	1,869,979
Gain on disposal of assets	-	(332,748)
Change in inventory	(16,301)	8.388
Change in prepaids	(24,424)	20,645
	5,449,372	3,510,685
(Increase) Decrease in Financial Assets and Liabilities		
Change in accounts receivable	(769,691)	(8,790)
Change in investment in Government business enterprises	(33,157)	39,045
Change in tax sale properties	(99,292)	9,320
Change in accounts payable	(532,906)	833,895
Change in tax sale deposits	(3,600)	(3,521)
Change in performance deposits and bonds	-	17,450
Change in deferred revenue	(367,645)	627,526
Actuarial adjustment on debt		(70,516)
Cash provided by operating transactions	3,643,081	1,950,348
Capital Activities		
Acquisition of tangible capital assets	(6,037,381)	(3,350,174)
Proceeds on sale of tangible capital assets	-	468,218
	(6,037,381)	(2,881,956)
Financing Activities		
Capital borrowing repaid	(128,271)	(340,669)
Debenture debt repaid	-	(166,582)
Capital borrowing draws	259,929	
	131,658	865,156
Net increase (decrease) in cash and cash equivalents	(2,262,642)	2,938,294
Cash and cash equivalents at beginning of period	7,394,802	4,456,508
Cash and cash equivalents at end of period	\$ 5,132,160	\$ 7,394,802

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

The District of Port Hardy was incorporated in 1966 under the provisions of the British Columbia Municipal Act. Its principal activities are the provision of local government services to the residents of the Municipality. These services include general government administration, bylaw enforcement, planning and land use, building inspection, fire protection, parks and recreation, water distribution and sewer collection, wastewater disposal, garbage and recycling services and road and street maintenance.

1. Significant Accounting Policies:

a) Basis of Presentation

The District of Port Hardy follows accounting principles accepted for British Columbia municipalities and applies these principles consistently. The consolidated financial statements have been prepared in accordance with Canadian public sector accounting standards as prescribed by the Public Sector Accounting Board (PSAB) of CPA Canada. The consolidated financial statements reflect the combined results and activities of the reporting entity which is comprised of the General, Water and Sewer, Operating, Capital and Reserve funds. Inter-fund transactions have been eliminated on consolidation.

b) Revenue Recognition

Sources of revenue are recorded on the accrual basis and include revenue in the period in which the transaction or events occurred. Taxation revenues are recognized at the time of issuing the property tax notices for the fiscal year. Sale of services and user fee revenues are recognized when the service or product is rendered by the District. Development contributions are recorded as contributed tangible capital assets at their fair value on the date of contribution. Amounts received from non-government sources in advance of services being rendered are recorded as deferred revenue until the obligations that led to the collection of funds has been discharged. The District recognizes a government transfer as revenue when the transfer is authorized and all eligibility criteria, if any, have been met. A government transfer with stipulations giving rise to an obligation that meets the definition of a liability is recognized as a liability. In such circumstances, the District recognizes revenue as the liability is settled. Transfers of non-depreciable assets are recognized in revenue when received or receivable. Other revenue is recorded when performance of services is complete, amounts are measurable, and collectibility is reasonably assured. Income from investment in Government business enterprises is recorded using the modified equity method, based on the District's portion of annual earnings from the government business enterprises for the year (see Note 15).

c) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits and short-term highly liquid investments with original maturities of three months or less that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.

d) Inventory

Inventory is valued at the lower of cost and net realizable value. Cost is determined by the weighted average method. Inventory for resale is recorded at lower of cost or net realizable value as a financial asset. Inventory of supplies is recorded at the lower of cost or net realizable value as a non-financial asset.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

1. Significant Accounting Policies (continued from previous page)

e) Leases

Leases, which transfer substantially all of the benefits and risks incidental to ownership of property are accounted for as leased tangible capital assets. All other leases are accounted for as operating leases and related payments are charged to expenses as incurred.

f) Financial Instruments

The District's financial instruments consist of cash and cash equivalents, accounts receivable, accounts payable and other liabilities, deposits, and capital borrowing. It is management's opinion that the District is not exposed to significant interest, currency or credit risk arising from these financial instruments, except as described in Note 3.

g) Accrued Employee Benefits

Accrued employee benefits include an allowance for sick leave, vacation and severance benefits. These benefits are based on obligations as determined by collective agreements and contractual arrangements. Allowances for sick leave and vacation entitlement are recorded in the year in which they are earned. Severance benefits are recorded in the year in which they are earned. For union employees, 1 week is earned for each year of employment, to a maximum of 10 or 12 weeks depending on the union. Non-union employees earn severance in accordance with individual contracts or the BC labour standards. The severance banks are then multiplied by 10% for senior management and 2% for all other employees to estimate the potential for the District paying out severance.

h) Use of Estimates

The preparation of consolidated financial statements in conformity with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the period. Significant areas requiring estimates include the determination of collectability of accounts receivable, accrued payroll liabilities, tangible capital assets and provisions for contingencies. Accounts receivable are stated after evaluation of their collectability. Amortization is based on the estimated useful lives of tangible capital assets. Accrued employee benefits liabilities are estimated based on the anticipated wage rate increases, time value of money and expected average length of employment of District staff. These estimates and assumptions are reviewed periodically and, as adjustments become necessary, they are reported in earnings in the periods in which they become known. Liabilities for contaminated sites are estimated based on the best information available regarding potential contaminated sites that the District of Port Hardy is responsible for. Actual results may differ from estimates.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

1. Significant Accounting Policies (continued from previous page)

i) Tangible Capital Assets

Tangible capital assets are recorded at cost, net of disposals, write-downs and amortization. Tangible capital asset expenses exceeding the thresholds per major category are capitalized. The average useful life is applied straight line to calculate amortization. Amortization is taken at one-half of the calculated amount in the year of acquisition and/or disposal.

	Average Useful Life
Land	Indefinite
Land Improvements	10 - 40 years
Buildings	20 - 80 years
Equipment	3 - 25 years
Engineering Structures	·
Roads	10 - 60 years
Water	8 - 100 years
Sewer	8 - 100 years

Carrying costs directly attributable to the acquisition, construction or development activity are capitalized to the point in time the asset is substantially complete and ready for use. Contributed tangible capital assets are recorded at their fair value on the date of contribution. Assets under construction are not amortized until the asset is in use.

j) Liability for Contaminated Sites

A liability for remediation of a contaminated site is recognized at the best estimate of the amount required to remediate the contaminated site when contamination exceeding an environmental standard exists, the District of Port Hardy is either directly responsible or accepts responsibility, it is expected that future economic benefits will be given up, and a reasonable estimate of the amount is determinable. The best estimate of the liability includes all costs directly attributable to remediation activities and is reduced by expected net recoveries based on information available as at December 31, 2018.

At each financial reporting date the District of Port Hardy reviews the carrying amount of the liability. Any revisions required to the amount previously recognized is accounted for in the period revisions are made. The District of Port Hardy continues to recognize the liability until it is settled or otherwise extinguished. Disbursements made to settle the liability are deducted from the reported liability when they are made. As at December 31, 2018 the District has not recorded any liability for contaminated sites as no such sites have been identified.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

1. Significant Accounting Policies (continued from previous page)

k) Adoption of New Accounting Standards

PS 2200 Related Party Disclosures

Effective January 1, 2018, the District adopted the recommendations relating to PS 2200 Related Party Disclosures, as set out in the CPA Canada public sector accounting standards. Pursuant to the recommendations, the change was applied prospectively, and prior periods have not been restated.

This new section defines a related party and establishes disclosures required for related party transactions. Disclosure of Information about related party transactions and the relationships underlying them is required when they have occurred at a value different from that which would have been arrived at if the parties were unrelated, and they have, or could have, a material financial effect on the financial statements.

There was no material impact on the consolidated financial statements of adopting the new Section.

PS 3420 Inter-entity Transactions

Effective January 1, 2018, the District adopted the recommendations relating to PS *3420 Inter-entity Transactions*, as set out in the CPA Canada public sector accounting standards. Pursuant to the recommendations, the change was applied prospectively, and prior periods have not been restated.

The new Section establishes standards on how to account for and report transactions between public sector entities that comprise a government's reporting entity from both a provider and recipient perspective. The main features of the new Section are:

- Under a policy of cost allocation, revenues and expenses are recognized on a gross basis.
- Transactions are measured at the carrying amount, except in specific circumstances.
- A recipient may choose to recognize unallocated costs for the provision of goods and services and measure them at the carrying amount, fair value or other amount dictated by policy, accountability structure or budget practice.
- The transfer of an asset or liability for nominal or no consideration is measured by the provider at the carrying amount and by the recipient at the carrying amount or fair value.
- Inter-entity transactions are considered in conjunction with PS 2200 Related Party Disclosures.

There was no material impact on the consolidated financial statements of adopting the new Section.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

1. Significant Accounting Policies (continued from previous page)

k) Adoption of New Accounting Standards

PS 3210 Assets

Effective January 1, 2018, the District adopted the recommendations relating to PS 3210 *Assets*, as set out in the CPA Canada Public Sector Accounting Handbook. Pursuant to the recommendations, the change was applied prospectively, and prior periods have not been restated.

The new Section provides guidance for applying the definition of assets set out in PS 1000 Financial Statement Concepts. The main features of this standard are as follows:

- Assets are defined as economic resources controlled by a government as a result of past transactions
 or events and from which future economic benefits are expected to be obtained.
- Economic resources can arise from such events as agreements, contracts, other government's legislation, the government's own legislation, and voluntary contributions.
- The public is often the beneficiary of goods and services provided by a public sector entity. Such assets benefit public sector entities as they assist in achieving the entities primary objective of providing public goods and services.
- A public sector entity's ability to regulate an economic resource does not, in and of itself, constitute
 control of an asset, if the interest extends only to the regulatory use of the economic resource and does
 not include the ability to control access to future economic benefits.
- A public sector entity acting as a trustee on behalf of beneficiaries specified in an agreement or statute
 is merely administering the assets and does not control the assets, as future economic benefits flow to
 the beneficiaries.
- An economic resource may meet the definition of an asset, but would not be recognized if there is no
 appropriate basis for measurement and a reasonable estimate cannot be made, or if another Handbook
 Section prohibits its recognition. Information about assets not recognized should be disclosed in the
 notes.

There was no material impact on the consolidated financial statements of adopting the new Section.

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Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

1. Significant Accounting Policies (continued from previous page)

k) Adoption of New Accounting Standards (continued from previous page)

PS 3320 Contingent Assets

Effective January 1, 2018, the District adopted the recommendations relating to PS 3320 *Contingent Assets*, as set out in the CPA Canada Public Sector Accounting Handbook. Pursuant to the recommendations, the change was applied prospectively, and prior periods have not been restated.

The new Section establishes disclosure standards on contingent assets. The main features of this standard are as follows:

- Contingent assets are possible assets arising from existing conditions or situations involving
 uncertainty. That uncertainty will ultimately be resolved when one or more future events not wholly
 within the public sector entity's control occurs or fails to occur. Resolution of the uncertainty will confirm
 the existence or non-existence of an asset.
- Passing legislation that has retroactive application after the financial statement date cannot create an existing condition or situation at the financial statement date.
- Elected or public sector officials announcing public sector intentions after the financial statement date cannot create an existing condition or situation at the financial statement date.
- Disclosures should include existence, nature, and extent of contingent assets, as well as the reason for any non-disclosure of extent, and the basis for any estimates of extent made.
- When a reasonable estimate can be made, disclosure should include a best estimate and a range of
 possible amounts (or a narrower range of more likely amounts), unless such a disclosure would have
 an adverse impact on the outcome.

There was no material impact on the consolidated financial statements of adopting the new Section.

PS 3380 Contractual Rights

Effective January 1, 2018, the District adopted the recommendations relating to PS 3380 *Contractual Rights*, as set out in the CPA Canada Public Sector Accounting Handbook. Pursuant to the recommendations, the change was applied prospectively, and prior periods have not been restated.

The new Section establishes disclosure standards on contractual rights, and does not include contractual rights to exchange assets where revenue does not arise. The main features of this Standard are as follows:

- Contractual rights are rights to economic resources arising from contracts or agreements that will result in both an asset and revenue in the future.
- Until a transaction or event occurs under a contract or agreement, an entity only has a contractual right to an economic resource. Once the entity has received an an asset, it no longer has a contractual right.
- Contractual rights are distinct from contingent assets as there is no uncertainty related to the existence
 of the contractual right.
- Disclosures should include descriptions about nature, extent and timing.

There was no material impact on the consolidated financial statements of adopting the new Section.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

2. Cash and Cash Equivalents

	2018	2017
Cash Investments	\$ 389,791 4,742,369	\$ 331,545 7,063,257
	\$ 5,132,160	\$ 7,394,802

The above investments balance includes Municipal Finance Authority money market account and high interest savings account \$4,742,369 (2017 - \$7,063,257), carried at cost, which is also equal to market value.

3. Accounts Receivable

2018		2017
\$ 973,969	\$	661,731
354,124		387,898
 1,489,583		997,702
2,817,676		2,047,331
 (361,736)		(361,082)
\$ 2,445,940	\$	1,686,249
<u> </u>	\$ 973,969 354,124 1,489,583 2,817,676	\$ 973,969 \$ 354,124

Wharf receivables total \$282,676 (2017 - \$276,642). Of this amount \$248,532 (2017 - \$250,651) is 90 days overdue and has been recorded in allowance for doubtful accounts above. A total of \$93,677 (2017 - \$53,187) in taxes receivable has been recorded as doubtful and the remainder of doubtful accounts represents general accounts receivable.

4. Accounts Payable and Other Liabilities

2018	2017
\$ 101,248	\$ 48,909
298,700	291,492
 570,191	1,162,644
\$ 970,139	\$ 1,503,045
\$ 	570,191

5. Deferred Revenue

		2018		2017
Prepaid taxes	\$	73,259	\$	46,374
Prepaid fees and charges		54,740		52,637
Other deferred revenue		386,573		783,206
	\$	514,572	\$	882,217
	<u>\$</u>	514,572	<u>\$</u>	88

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

6. Federal Gas Tax Funds

Gas tax transfers are recorded as revenues when received. Unspent funds are included in Operating Funds Surplus (see Schedule 3).

			2018	2017
Openir	ng balance of unspent funds	\$	470,794 \$	422,392
Add:	Amount received during the year		232,222	223,926
	Interest earned		11,298	4,598
Less:	Amount spent on eligible projects		(29,978)	(180,122)
Closin	ng balance of unspent funds	<u>\$</u>	684,336 \$	470,794

7. Tangible Capital Assets (Schedule 2)

	2018	2017
Land and Improvements	\$ 4,633,329	\$ 4,690,526
Buildings	4,384,549	3,945,626
Furniture and Equipment	4,246	5,789
Vehicles and Machinery	2,224,324	2,270,821
Computer Hardware and Software	34,949	46,634
Engineering Structures		
Roads	11,800,771	12,079,554
Water	10,661,743	6,597,185
Sewer	9,401,007	9,512,872
	\$ 43,144,918	\$ 39,149,007

Tangible capital assets include land under the District's roads, which is disclosed at a nominal amount. Art and historic treasures are displayed at various District facilities and consist of painting, historical photographs, sculptures, carvings and other cultural artifacts. These items have not been included in tangible capital assets due to the inability of estimating future benefits associated with such property.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

8. Pension Liability

The District and its employees contribute to the Municipal Pension Plan, (a jointly trusteed pension plan). The board of trustees, representing plan members and employers, is responsible for administering the plan, including investment of assets and administration of benefits. The plan is a multi-employer defined benefit pension plan. Basic pension benefits provided are based on a formula. As at December 31, 2017 the plan has about 197,000 active members and approximately 95,000 retired members. Active members include approximately 39,000 contributors from the Local Governments.

Every three years an actuarial valuation is performed to assess the financial position of the plan and adequacy of plan funding. The actuary determines an appropriate combined employer and member contribution rate to fund the plan. The actuary's calculated contribution rate is based on the entry-age normal cost method, which produces the long-term rate of member and employer contributions sufficient to provide benefits for average future entrants to the plan. This rate may be adjusted for the amortization of any actuarial funding surplus and will be adjusted for the amortization of any unfunded actuarial liability.

The most recent valuation for the Municipal Pension Plan as at December 31, 2015 indicated a \$2.224 billion funding surplus for basic pension benefits on a going concern basis. As a result of the 2015 basic account actuarial valuation surplus and pursuant to the joint trustee agreement, \$1.927 billion was transferred to the rate stabilization account and \$297 million of the surplus ensured the required contribution rates remained unchanged.

The District of Port Hardy paid \$184,316 (2017 - \$178,047) for employer contributions while employees contributed \$163,518 (2017 - \$162,819) to the plan in fiscal 2018.

The next valuation will be as at December 31, 2018, with results available in 2019.

Employers participating in the plan record their pension expense as the amount of employer contributions made during the fiscal year (defined contribution pension plan accounting). This is because the plan records accrued liabilities and accrued assets for the plan in aggregate, resulting in no consistent and reliable basis for allocating the obligation, assets and cost to individual employers participating in the plan.

9. Budget Figures

The budget amounts presented throughout these financial statements are based on the Five Year Financial Plan bylaw adopted by Council on February 14, 2018 adjusted for budget amounts for amortization and tangible capital assets.

Annual surplus, as adopted February 14, 2018 Add:	<u>\$ -</u>
Acquisition of tangible capital assets	19,709,700
Debt principal repayments	202,500
Less:	
Debt incurred	(4,539,000)
Interfund transfers	(3,582,042)
Annual surplus restated	\$ 11,791,158

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

10. Collections for Other Governments

The District is required to collect taxes on behalf of, and transfer these amounts to, the governments and/or its agencies noted below. These sums are not included in the schedules to these statements.

	2018	2017
School Taxes	\$ 1,306,933	\$ 1,311,241
Regional District of Mount Waddington	405,469	386,834
Mount Waddington Regional Hospital District	142,788	138,990
BC Assessment Authority	20,596	21,287
Municipal Finance Authority	90	86
Police Tax	186,198	176,659
Vancouver Island Regional Library	 156,216	148,500
	\$ 2,218,290	\$ 2,183,597

0040

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11. Trust Funds

The District operates the cemetery and maintains a cemetery perpetual care fund in accordance with the Cremation, Interment and Funeral Services Act. The trust fund assets and liabilities are not included in the consolidated financial statements. At December 31, 2018, the balance of funds held in trust was \$39,747 (2017 - \$38,420).

The District operates the Fisherman's Wharf for the Department of Fisheries and Oceans and acts as project manager for the capital items constructed. The assets and liabilities of the operations are not included in the consolidated financial statements.

12. Employee Benefit Obligations

Full-time permanent employees receive their full sick bank up to 60 days upon retirement or one third upon termination. There are no additional liabilities accrued for these amounts as they are included in the sick leave and vacation liability accounts. Specified officers of the District are entitled to severance benefits. This liability is recorded as the severance benefits are negotiated. The reported liability reflects the likelihood that employees will become eligible for this benefit.

Vacation liability at December 31, 2018 is \$28,070 (2017 - \$31,266).

Sick leave liability at December 31, 2018 is \$136,536 (2017 - \$119,823).

Severance liability at December 31, 2018 is \$36,981 (2017 - \$47,087).

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

13. Commitments and Contingencies

a) Municipal Insurance Association of British Columbia

The District is a subscribed member of the Municipal Insurance Association of British Columbia as provided by section 3.02 of the Insurance Act of the Province of British Columbia (the Exchange"). The main purpose of the Exchange is to pool the risks of liability so as to lessen the impact upon any subscriber. Under the Reciprocal Insurance Exchange Agreement, the District is assessed a premium and a specific deductible for claims is based on population. The obligation of the District with respect to the Exchange and/or contract and obligation entered into by the Exchange on behalf of its subscribers in connection with the Exchange are in every case several, not joint and several. The District irrevocably and unconditionally undertakes and agrees to indemnify and save harmless the other subscribers against liability losses and costs which the other subscriber may suffer.

b) Funding Agreement

The District has entered into a funding agreement with the Union of British Columbia Municipalities under the terms and conditions of the Strategic Priorities Fund. The purpose of the agreement is to award the District up to \$6 million in funding for the construction of the Port Hardy Multiplex - Swimming Pool Replacement. The funds are contingent on the project being completed by December 31, 2020 or the agreement may be terminated, and any costs incurred will be deemed ineligible for the grant funding.

As of December 31, 2018, the District has incurred \$608,386 in expenses for the design and tender of the multiplex project.

The project is currently on hold as the bids received exceeded the project budget. If the District is successful in receiving additional grant funding, the project will proceed in late 2019.

c) Regional District of Mount Waddington

The District is responsible, as a member of the Regional District of Mount Waddington, for its portion of any operating deficits or long-term debt related function in which it participates.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

14. Segmented Information

For management reporting purposes the District's operations and activities are organized and reported by Fund. Funds were created for the purpose of recording specific activities to attain certain objectives in accordance with special regulation, restriction or limitations. District services are provided by departments and their activities are reported in the funds. Certain departments that have been separately disclosed in the segmented information on Schedule 1, along with the services they provide, are as follows:

Protection

Protection is comprised of the Volunteer Fire Department, the Emergency Preparedness coordinator, building inspection and bylaw enforcement.

Community Development

The Community Development department provides economic development services. These services consist of downtown revitalization, grant proposals and new business and development.

Recreation and Culture

The Recreation and Culture department provides recreation and leisure services such as fitness and aquatic programs, the library and the museum.

Environmental Health

This service is for the collection and disposal of solid waste and recycling program.

Transportation

The Transportation department delivers the municipal services related to maintenance of the roads, sidewalks, parks, open space, street lighting and storm drains.

General Government

Provides services related to corporate and legislative administration, governance, financial management, human resources and information technology.

Water

The water department is responsible for the water treatment plant and distribution system.

Sewer

The waste water department is responsible for the treatment and collection system for waste water.

For each reported segment, revenues and expenses represent amounts that are directly attributable to the segment and amounts that are allocated on a reasonable basis. The General Revenue Fund reports on municipal services that are funded by taxation. The taxes are apportioned to the fund services based on the net surplus.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

15. Investment in Government Business Enterprises

The investment in the North Island Community Forest Limited Partnership (NICFLP) is reported as a government business partnership and North Island Community Forest Ltd. (NICF LTD) as a government business enterprise. These businesses are accounted for using the modified equity method. Under this method, the government businesses' accounting principles are not adjusted to conform with those of the District and inter-corporate transactions are not eliminated. District of Port Hardy owns a one third share.

As a government business partnership, the NICFLP is required to report under International Financial Reporting Standards (IFRS). In the prior and current year, the NICFLP financial statements were prepared under Canadian Accounting Standards for Private Enterprises (ASPE). Any difference between ASPE and IFRS would likely be insignificant.

	2018	2017
Summary of investment in Government Businesses		
NICFLP	\$ 68,890 _{\$}	36,065
NICF LTD.	 12,607	12,275
	 81,497	48,340
Summary of results of operations		
NICFLP	32,826	726,918
NICF LTD.	 331	7,343
	\$ 33,157 \$	734,261

The condensed supplementary financial information of the NICFLP is as follows:

	2018	2017
Financial Position Current and other assets Current and other liabilities	\$ 286,576 42,088	283,110 138,095
Partners' Capital Results of operations	 244,488	145,015
Revenues	151,215	2,254,124
Expenses	 51,742	51,342
Net surplus	\$ 99,473	2,202,782

During the year the District received a dividend from the NICFLP of \$NIL (2017 - \$726,918).

16. Comparative Figures

Certain comparative figures have been reclassified to conform with the current year's presentation.

Notes to the Consolidated Financial Statements For the Year Ended December 31, 2018

17. Capital Borrowing

		Balance, Beginning of Year	Additions	re	Principal epayments	Balance, end of year
2017 Fire Ladder Truck	\$	1,060,029	\$ -	\$	76,024	\$ 984,005
2018 Dodge Dump Truck		104,146	-		20,006	84,140
2019 International Hook Truck		-	233,153		29,304	203,849
2018 Nissan Rogue	_	-	26,776		2,937	23,839
	\$	1,164,175	\$ 259,929	\$	128,271	\$ 1,295,833

Short term financing is secured through the Municipal Finance Authority for capital initiatives approved under loan authorizations. Interest is calculated daily on a variable rate basis at a 0.5% spread on top of the CDOR (Canadian Dealer Offered Rate) rate. In 2018 the rate varied between 1.34 % and 1.94%. At December 31, 2018 the rate was 1.94%. Equipment is financed over a five year period with the exception of the Fire Department Ladder truck purchased in 2017 which is amortized over a twelve year period with a five year term. The residual amount that will need to be re-financed in 2022 is estimated to be \$698,006.

The following represents the principal repayments over the next five years.

quipment Financing
\$ 145,517
149,488
153,312
156,644
 124,069
\$ 729,030

18. Subsequent events

Subsequent to December 31, 2018, the District has entered into a contract for the purchase and installation of a refrigeration chiller upgrade at the Don Cruikshank Memorial Arena. The total cost of the contract is \$295,750 and will be completed in 2019.

Consolidated Schedule of Segmented Disclosure

For the Year Ended December 31, 2018

Schedule 1 (Note 14)

	General government services			ansportat	ion s	services		Protectiv	rvices	Environm ser	enta vice:			Recreation and culture			
	2018	2017	2018			2017		2018		2017		2018		2017		2018	2017
Revenues																	
Taxes	\$ 2,928,702 \$	2,756,671 \$		-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	-
Payments in lieu of taxes	169,921	175,980		-		-		-		-		-		-		-	-
Sale of services	-	-	399,335			332,070		149,993		42,358		282,432		268,116		198,266	217,611
Income from investment in Government business enterprises	-	-		-		-		-		-		_		-		-	-
Government transfers	541,231	529,376	76 232,222			223,926		13,234 -			-		-		3,500	3,000	
Actuarial recognized	-	-	-			-					-		-		-	-	
Gain on disposal of assets	-	-				332,748		-		-		-		-		-	-
Other revenue	 219,908	167,701		10,200		20,423		67,850)	88,274	4	2,212	2	2,209	9	37,590	37,035
	3,859,762	3,629,728		641,757		909,167	•	231,077	7	130,632	2	284,644	ļ	270,325	5	239,356	257,646
Expenses																	
Salaries and benefits	817,794	786,996		464,737		478,558		143,144	ļ	134,480	0	18,554	ļ.	13,646	3	712,983	699,436
Goods and services	193,815	153,696		373,506		458,950		219,117	7	172,14	5	39,970)	31,240)	342,886	350,476
Contracted services	27,818	30,284		264,407		227,866		122,371		91,35	7	213,778	3	203,852	2	117,096	148,882
Interest Expense	25,860	11,784	-			-		-		-		-		-		-	-
Amortization	 16,252	25,677		734,717		687,797		159,237	7	120,05	1	-		-		269,708	262,931
	1,081,539	1,008,437	1	1,837,367		1,853,171		643,869)	518,033	3	272,302	2	248,738	3	1,442,673	1,461,725
Net Surplus (Deficit)	\$ 2,778,223 \$	2,621,291 \$	(1	,195,610)	\$	(944,004)	\$	(412,792) \$	(387,401) \$	12,342	2 \$	21,587	7 \$	(1,203,317) \$	(1,204,079)

Consolidated Schedule of Segmented Disclosure

For the Year Ended December 31, 2018

Schedule 1 (Note 14)

												С	onsolidated	C	onsolidated	
	Community development				Wa	ter			Sewe	r	Ī	Actual	Budget	Actual	Budget	
		2018		2017		2018		2017		2018	2017		2018	2018	2017	2017
Revenues																
Taxes	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	2,928,702 \$	2,909,562 \$	2,756,671 \$	2,754,846
Payments in lieu of taxes		-		-		-		-		-	-		169,921	179,128	175,980	171,519
Sale of services	-		-		1,461,523		1,502,160		1,263,817	1,211,0	22	3,755,366	3,650,491	3,573,337	3,557,265	
Income from investment in Government business enterprises		33,15	7	734,261		-		_		-	_		33,157	-	734,261	-
Government transfers	183,167		198,123		3,278,354		873,171				4,251,708		13,428,425	1,827,596	12,987,000	
Actuarial recognized		-		-		-		-		-	70,5	16	-	-	70,516	-
Gain on disposal of assets		-		-		-		-		-	-		-	-	332,748	-
Other revenue		37,10	5	37,213		43,392		36,872	2	26,602	45,99	92	444,859	291,928	435,719	299,501
		253,42	9	969,597		4,783,269	2	2,412,203	3	1,290,419	1,327,5	30	11,583,713	20,459,534	9,906,828	19,770,131
Expenses																
Salaries and benefits		-		-		377,350		410,006	;	277,473	283,20	67	2,812,035	3,046,964	2,806,389	2,928,748
Goods and services		28,57	9	31,938		501,108		527,523	3	386,894	394,64	49	2,085,875	2,431,671	2,120,617	2,415,466
Contracted services		165,66	1	146,049		83,278		53,780)	171,934	163,08	89	1,166,343	1,240,740	1,065,159	1,141,048
Interest expense	nse		-		-		-		3,503	88,4	79	29,363	79,001	100,263	169,309	
Amortization			-		431,778		364,332	2	429,778	409,19	91	2,041,470	1,870,000	1,869,979	1,800,000	
		194,24	.0	177,987		1,393,514		1,355,641		1,269,582	1,338,6	75	8,135,086	8,668,376	7,962,407	8,454,571
Net Surplus (Deficit)	\$	59,18	9 \$	791,610	\$	3,389,755	\$	1,056,562	2 \$	20,837 \$	(11,14	5) \$	3,448,627 \$	11,791,158 \$	1,944,421 \$	11,315,560

Consolidated Statement of Tangible Capital Assets For the Year Ended December 31, 2018

Schedule 2

				Costs				Accumulated A	mortization					
			A	Add					Add	Less				
	Ope	ening Balance	Additions	Construction progress	In Dispos	als (Closing Balance	Opening Balance	Amortization	Accumulated Amortization on Disposals	Closi	ing Balance	2018	2017
Land and Land Improvements	\$	6,799,332 \$	62,322	\$ -	\$ -	\$	6,861,654	\$ 2,108,806	119,519	-	\$	2,228,325 \$	4,633,329 \$	4,690,526
Buildings		10,682,641	56,073	608,38	6 -		11,347,100	6,737,015	225,536	-		6,962,551	4,384,549	3,945,626
Furniture and Equipment		405,068	-	-	-		405,068	399,279	1,543	-		400,822	4,246	5,789
Vehicles and Machinery Computer Hardware and		5,063,918	215,490	-	(234,4	178)	5,044,930	2,793,097	261,987	(234,478))	2,820,606	2,224,324	2,270,821
Software Engineering Structures		223,418	-	-	-		223,418	176,784	11,685	-		188,469	34,949	46,634
Roads		25,365,259	280,860	-	-		25,646,119	13,285,705	559,643	-	1	13,845,348	11,800,771	12,079,554
Water		14,424,189	4,496,336	-	-		18,920,525	7,827,004	431,778	-		8,258,782	10,661,743	6,597,185
Sewer		16,679,649	317,914	-	(11,5	500)	16,986,063	7,166,777	429,779	(11,500))	7,585,056	9,401,007	9,512,872
	\$	79,643,474 \$	5,428,995	\$ 608,3	86 \$(245,9	978) \$	85,434,877	\$ 40,494,467	2,041,470	\$ (245,978)) \$ _	42,289,959 \$	43,144,918 \$	39,149,007

Consolidated Statement of Accumulated Surplus For the Year Ended December 31, 2018

Schedule 3

	2018	2017
Surplus		
Invested in tangible capital assets	\$ 41,849,085	\$ 37,984,832
Operating funds	5,963,263	5,962,697
	47,812,348	43,947,529
Reserves		
Buildings	48,675	59,666
Computers	4,965	4,872
Equipment replacement	135,115	146,664
General capital works	97,587	302,348
Park development	40,288	39,534
Recreation facilities	99,636	122,490
Water Brown Ford	426,266	675,574
Water Reserve Fund Water capital works Sewer Reserve Fund	94,816	135,554
Sewer capital works		126,146
	521,082	937,274
Accumulated Surplus, end of year	\$ 48,333,430	\$ 44,884,803