

Water Quality Report

Comox Lake



comoxvalleyrd.ca

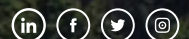


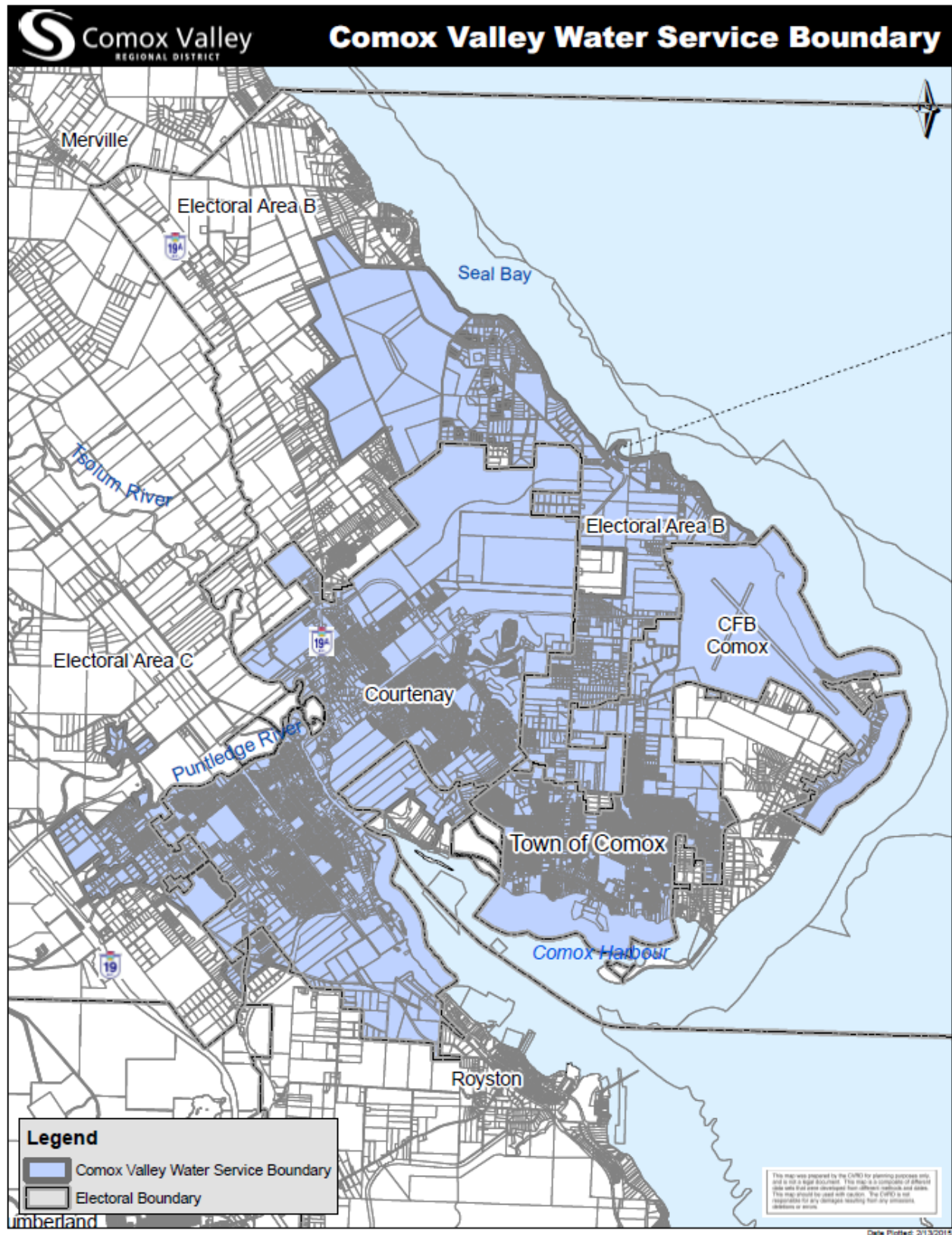
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“The CVRD’s role is to provide a reliable source of safe, high quality drinking water to homes and businesses. This includes acquiring and maintaining the water supply, treating it to ensure quality and delivering it - all at a reasonable cost”

-Mike Herschmiller, Manager of Water Services

Map of Service Area



Introduction

The Comox Valley Regional District (CVRD) strives to provide high quality drinking water to the Comox Valley Water Service Area, through responsible operation, monitoring, and management of the water system. The CVRD is regulated by Island Health as part of the Ministry of Health for its activities as a potable water supplier. Under the *Drinking Water Protection Act* (DWP Act), the CVRD is now required to report annually on the Comox Valley Water System. This report covers the period from January 1 to December 31, 2016 and includes information on water quality, consumption, maintenance and capital projects.

The CVRD owns and operates the Comox Valley Water System that provides domestic water to approximately 45,000 residents, including supplying bulk water to both the Town of Comox and the City of Courtenay. The system also provides water and system maintenance to five Water Local Service Areas (WLSA).

Water for the Comox Valley Water System is sourced from Comox Lake and collected from the Puntledge River via BC Hydro's penstock. Water travels through two pipes to the CVRD's chlorination station where it is metered, sampled and chlorinated before entering the distribution system. The system utilizes 33.6km of pipe, four pump stations and six reservoirs with ability to store a combined volume of 31ML.



Figure 1: East Courtenay Reservoirs

Operations

Goals

To provide high quality drinking water to all customers through efficient and effective disinfection and distribution operations.

Water Quality Summary

	2015	2016	Target
Source Water			
Chlorine Dosing Setpoint (mg/L)	1.81	1.87	<2.0
Trihalomethanes (mg/L)	0.032	0.020	<0.1
Distribution System			
Chlorine residual-distribution system (mg/L)	0.80	0.79	>0.2
Total Coliforms (positive samples)	0	0	0
E.Coli (positive samples)	0	0	0
Canadian Drinking Water Quality Guidelines			
Source Water Turbidity (average NTU)	0.52	0.56	<1.0
Source Water Temperature (°C)	16.0	15.6	15.0
Source Water pH Levels	7.28	7.17	6.5-8.5

The Ministry of Health regulates municipal drinking water quality through the DWP Act and the *Drinking Water Protection Regulation* (the Regulation). The DWP Act and Regulation are administered

by regional health authorities, and for the CVRD, the administering authority is Island Health. Both the DWP Act and Regulation set out certain requirements for drinking water operators and suppliers to ensure the provision of safe drinking water to their customers.

The CVRD manages the Comox Valley Water System which includes supplying bulk water to the City of Courtenay and the Town of Comox as well as providing and managing water for five WLSAs, which are the Arden WLSA, Greaves Crescent WLSA, Marsden/Camco WLSA, Comox Valley WLSA and England Road WLSA. The CVRD takes weekly water quality samples at the six reservoirs and within the distribution system, to ensure that water is meeting provincial objectives. Sampling for distribution by-products and an annual water chemistry report occurs annually. A summary of water quality and a description of sampling results can be found below.

Disinfection

The Comox Valley Water System utilizes surface water that is sourced from Comox Lake. All water supply systems using surface water are governed by Island Health and are required to adhere to provincial 4-3-2-1-0 surface water treatment objectives to ensure effective elimination of disease causing viruses, bacteria and parasites. The 4-3-2-1-0 objectives are as follows:

- 4-log (99.99 per cent) removal/inactivation of viruses
- 3-log (99.9 per cent) removal/inactivation of Giardia cysts and Cryptosporidium oocysts
- 2 treatment processes, usually filtration and disinfection
- 1 NTU turbidity (maximum) in finished water
- No detectable E.Coli, fecal coliforms and total coliforms in treated water

Currently the Comox Valley Water System utilizes chlorine to disinfect raw incoming surface water. Water from Comox Lake enters the chlorination station and is treated before being distributed throughout the system. The system currently does not filter incoming source water and is mandated by Island Health to construct a water filtration plant. A water filtration plant will remove suspended particles within the source water, ultimately eliminating boil water notices related to turbidity. This work was initiated in 2015 with commissioning of the water treatment plant scheduled for 2019.

By dosing the water with chlorine at the chlorination station a free chlorine residual is established throughout the distribution network to help prevent water from bacteriological regrowth and cross contamination during storage. The CVRD strives to achieve a free chlorine residual of 0.3-0.5mg/L at the end of the system. In 2016 the average residual throughout the whole system was 0.79mg/L and at the end of the system the residual was 0.54mg/L meeting Island Health's minimum requirement of 0.2mg/L. Figure 2 below shows the average free chlorine residual at each reservoir.

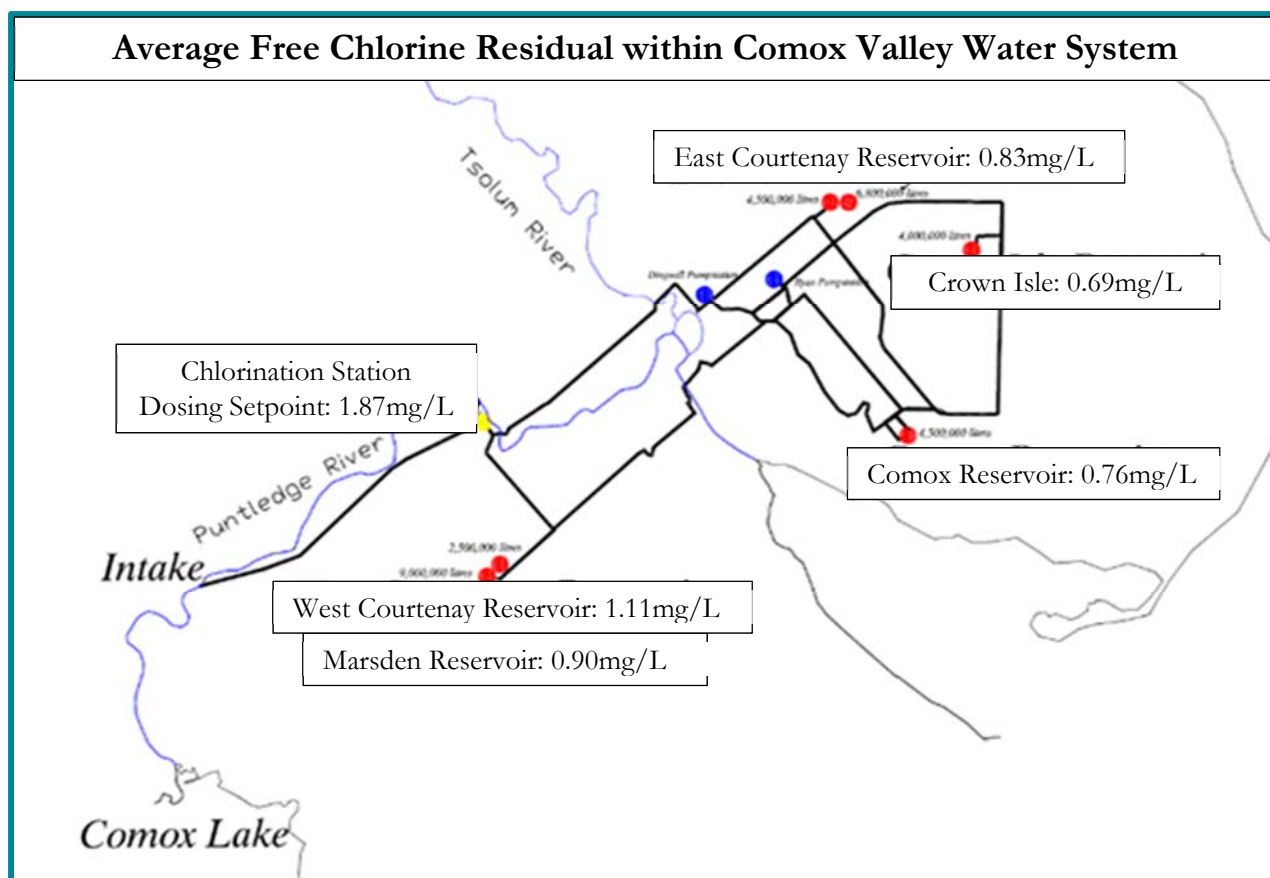


Figure 2: Average Free Chlorine Residual Within CVWS

The CVRD samples annually for disinfection by-products within the distribution system. Trihalomethanes (THM's) are the organic compounds that form as a by-product of chlorination, the CVRD samples for THM's at the West Courtenay reservoir. There are four types of THM's that contribute to total THM's. Chloroform is the most commonly regulated THM and is formed when natural organic matter reacts with chlorine and/or bromine in disinfected water. The guidelines require that total THM's for drinking water must be less than 0.1mg/L, Table No. 1 below shows the total THM's.

Table No. 1: Total THM Concentration at the West Courtenay Reservoir

Trihalomethanes	West Courtenay Reservoir
Chloroform	0.020
Bromodichloromethane	<0.001
Dibromochloromethane	<0.001
Bromoform	<0.001
Total Trihalomethanes (mg/L)	0.020

Bacteria

E.Coli and total coliform bacteria are microorganisms that if present in water samples indicate possible contamination with sewage or animal wastes. Chlorination helps to remove harmful pathogens within the water supply network. Table No. 2 illustrates that the CVRD's water disinfection system met the bacteriological standards for potable water.

Table No. 2: Bacteriological Standards and Sampling Results

Parameter	Standard	Result
E.Coli	No detectable E.Coli per 100mL	0 exceedances per 838 samples
Total Coliform Bacteria	At least 90% of samples have no detectable total coliform bacteria per 100 ml and no sample has more than 10 total coliform bacteria per 100 ml	0 exceedances per 838 samples

Canadian Drinking Water Guidelines

Health Canada develops the *Canadian Drinking Water Guidelines*. These are guidelines for limits on microbial, chemical, physical, radiological substances in drinking water. In the guidelines, health-based limits on a substance are assigned a maximum allowable concentration. The guidelines also assign aesthetic objectives to substances that do not cause risk to human health but influence consumer acceptance of the water based on factors such as taste, odour and colour. Table No. 3 shows the West Courtenay reservoir concentration averages compared to guideline concentrations. As per Island Health's requirements distribution water is sampled annually and in 2016 the system was below all guideline concentrations.

Table No. 3: Chemical and Physical Parameters at the West Courtenay Reservoir Compared to Guideline Concentrations

Parameter	West Courtenay Reservoir (mg/L)	Guideline Concentrations (mg/L)
Aluminum	0.0263	≤0.1
Arsenic	0.0001	≤0.01
Barium	0.0004	≤1.0
Boron	0.01	≤5.0
Cadmium	<0.00001	≤0.005
Chloride	2.07	250
Chromium	<0.000050	≤0.05
Copper	0.0165	1
Fluoride	0.029	≤1.5
Iron	0.031	≤0.30
Lead	0.000038	≤0.01
Manganese	0.002	≤0.05
Nitrate (as N)	0.080	10
Nitrite (as N)	<0.01	1
Selenium	<0.0002	≤0.05
Sodium	0.7	≤200
Sulfate (SO ₄)	1	≤500
Zinc	0.0018	≤5

Turbidity

The guidelines also require the turbidity of the water is below 1 NTU. Turbidity is the measure of fine suspended particles that are picked up by water as it passes through rivers and streams within a watershed. In 2016, multiple large storms with lasting periods of heavy rainfall caused an increase in turbidity within Comox Lake that resulted in four separate boil water notices, totaling 48 days. Figure 3 shows turbid water entering Comox Lake. The graph below shows the average source water turbidity entering the system.

**Figure 3: Turbid Water Entering Comox Lake**

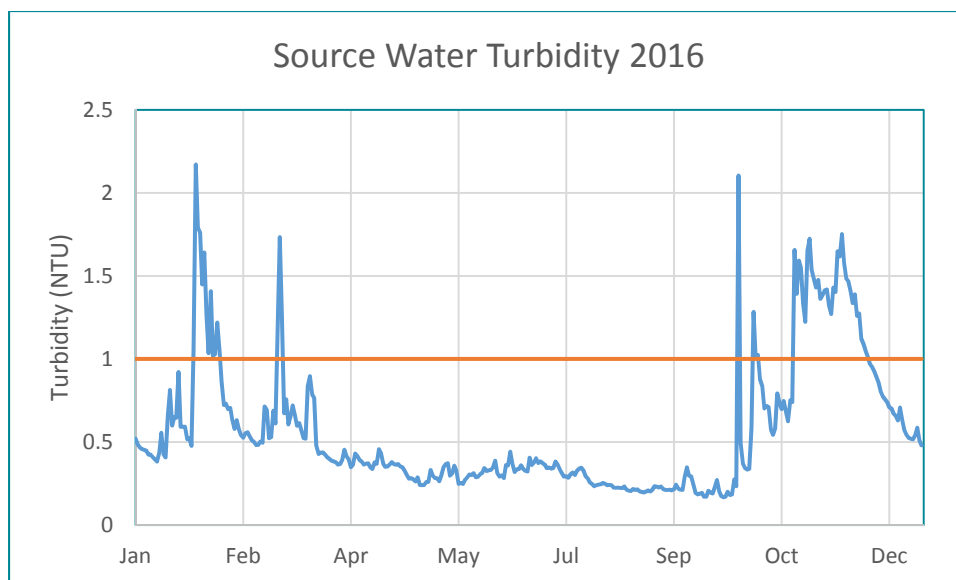


Figure 4: Average Daily Source Water Turbidity

Temperature

Temperature is described as an aesthetic objective (a parameter that may impair the taste, smell or colour of water) and a physical characteristic of water. Gradual variations in water temperature occur throughout the seasons, however significant changes in water temperature can upset chlorination and chemical water treatment processes. The guidelines recommend the temperature to be less than 15°C, the average source water temperature for the Comox Valley Water System was 15.6°C. Figure 5 below shows the incoming source water daily temperature from the BC Hydro penstock, it can be seen that the water temperature increases in the summer months and decreases in the winter months. As part of the water treatment plant project a new deep water intake will be constructed that will help ensure cooler water is drawn into the system throughout all seasons. Benefits of colder water include improved treatment and reduced microbiological growth.

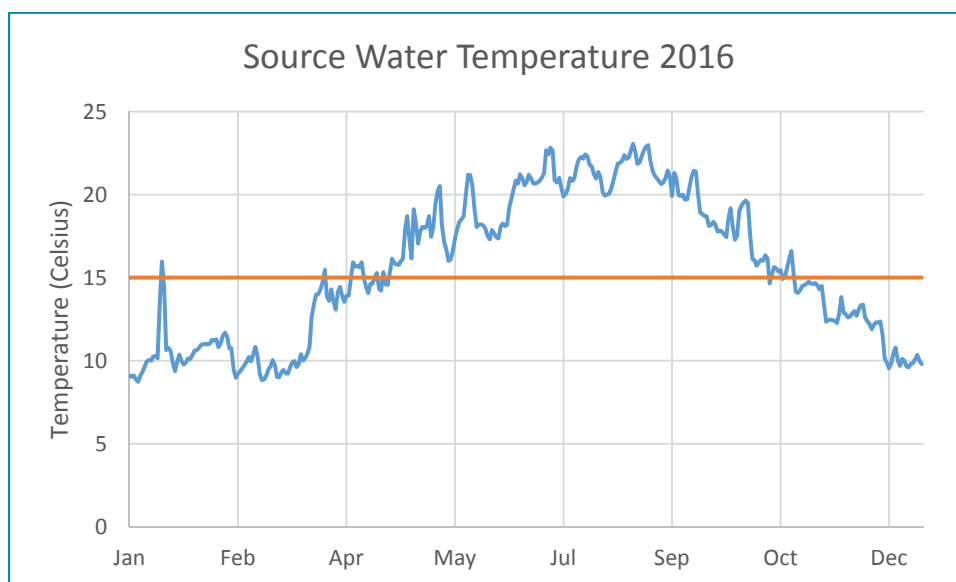


Figure 5: Source Water Temperature

pH

The pH of water is a measure of acidity. pH has minimal impact for water consumers however it is very important for many operational water quality parameters. The *Canadian Drinking Water Guidelines* recommend the pH ranging between 6.5-8.5. pH varies greatly depending on the water source and in 2016 the average pH of the source water was 7.17. The figure below shows the pH of the incoming source water.

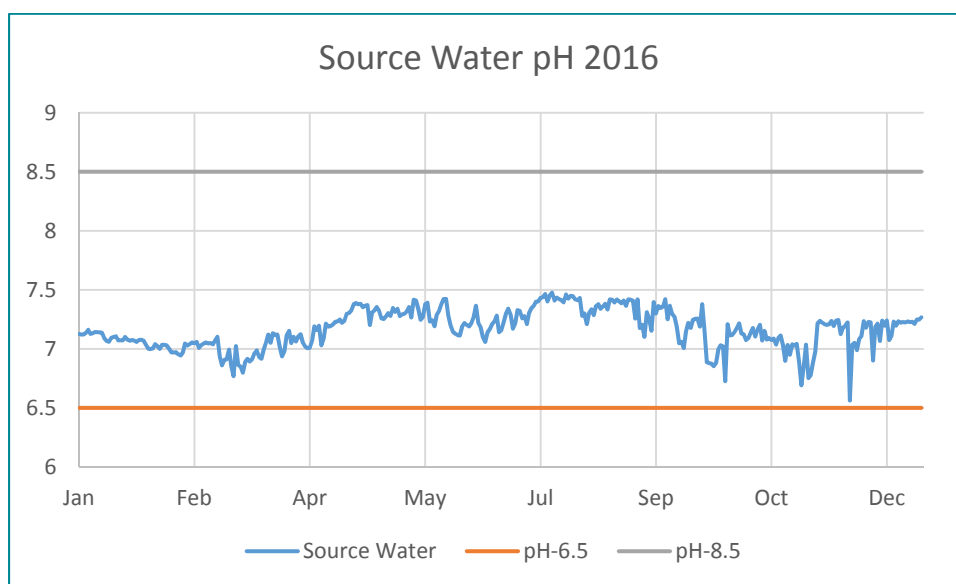


Figure 6: Source Water pH

Water Quality Concerns

The CVRD continues to monitor water quality on Comox Lake through a series of programs. In 2009, the CVRD entered into a partnership with the water and aquatic sciences program at the University of Victoria and the Natural Sciences and Engineering Research Council of Canada to study long term climate change impacts and a water quality monitoring project for Comox Lake. The CVRD also measures Comox Lake water quality through a deep water intake.

In 2016 the Comox Valley Water System experienced four boil water advisories, lasting a total of 48 days. All boil water advisories for 2016 were related to high turbidity events. Turbidity within Comox Lake is initially generated through high flows in the incoming rivers



Figure 8: CVRD Waterworks Operator Collecting Samples on Comox Lake

and creeks as a result of significant storms and heavy rains, the time it takes for the particles to settle out in the water can have little to do with the weather, either good or bad, that follows. Once the dirt, mud and clay have flowed into Comox Lake, they become individual suspended particles that result in turbid water, which can take a significant amount of time for those particles to settle and the turbidity to drop. These events plus recent water quality monitoring in the lake have led Island Health to make a final decision that both filtering and disinfection must be provided.

In 2016 a water treatment options study was completed by Opus Dayton and Knight Consultants and reviewed water intake options from Comox Lake, conveyance infrastructure and water treatment options. The study recommended a deep water intake on Comox Lake and construction of a water treatment facility that utilizes two forms of treatment, one being filtration.

Also completed in 2016 was the Watershed Protection Plan. Implementation of the Watershed Protection Plan began in 2016 and will be continued into 2017. The Watershed Protection Plan identifies areas of risk within the watershed and mitigation initiatives to help keep the watershed clean and our drinking water safe. Implementation of the plan includes forestry, recreation and land management, water quality monitoring, education and outreach and emergency planning. An improved source water quality sampling program was developed in 2016 and included installation of continuous turbidity monitors at major tributaries within the watershed.



Figure 9: CVRD Watershed Protection Plan Implementation

Planning

Goals

To ensure effective long-term planning and management programs are in place to meet the needs of all users groups while minimizing operation and infrastructure costs.

Consumption

The average daily water consumption for the system in 2016 was 22.6ML/day. Although the population is growing in the Comox Valley per capita water consumption is decreasing. To help reduce consumption the CVRD has multiple rebate programs in place encourage Comox Valley residents to be water efficient. Rebates include low flush toilets, smart control outdoor irrigation and BC Hydro appliance rebates. The CVRD closely monitors water demand and compliance to

restrictions throughout the year and has noticed that during summer months water demand increases approximately two fold from normal winter demand, as shown in Figure 10 below.

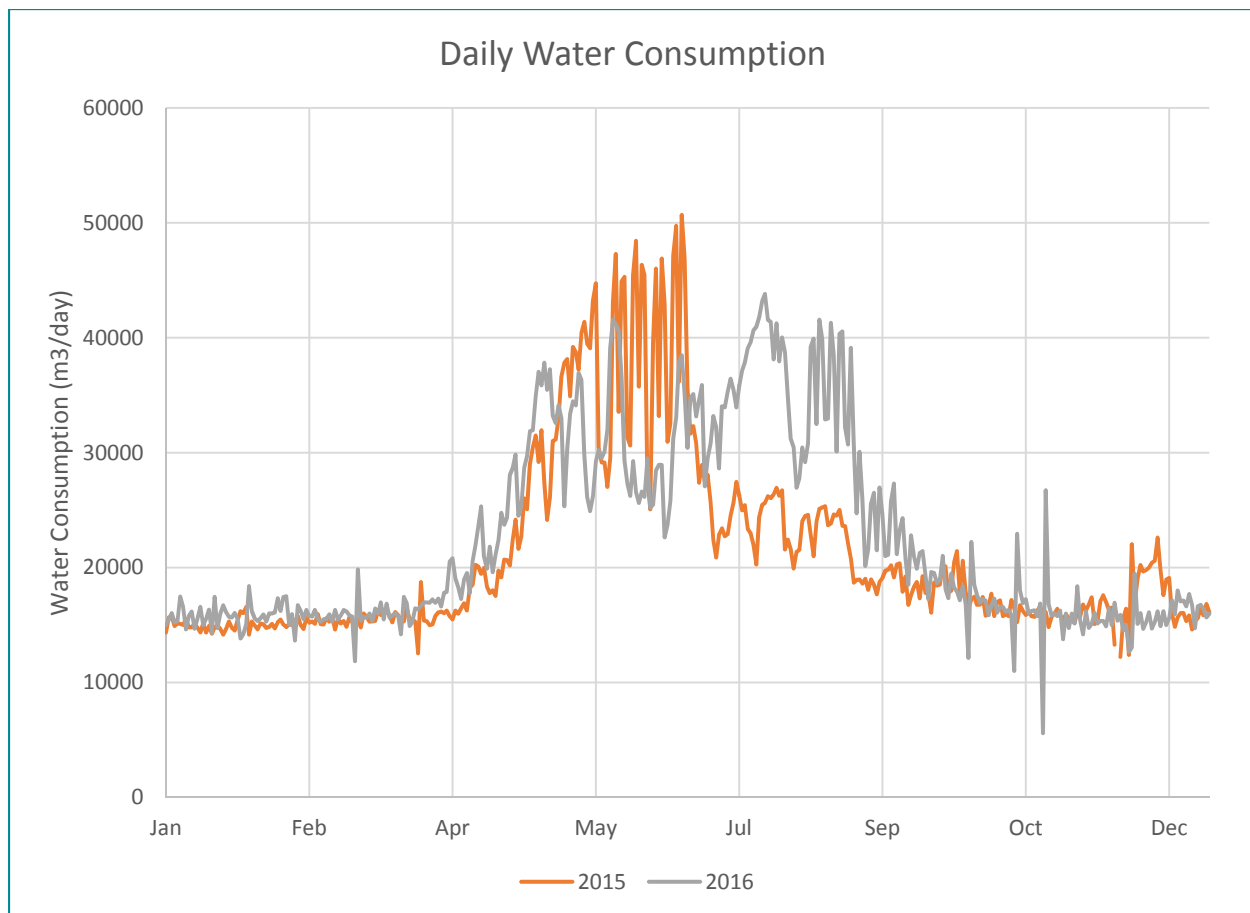


Figure 10: CVWS Daily Consumption in 2015 and 2016

During times of scarcity the CVRD implements watering restrictions, the CVRD has a four stage system in place for managing water consumption. Stage one is the least restrictive and is in effect all year unless noted otherwise, stages two, three and four are increasingly more restrictive and are implemented as the seriousness of the water shortage increases. In 2016, the CVRD revised the water conservation bylaw in order to reduce consumption during stage two watering restrictions in hopes to ultimately reduce the maximum daily demand (MDD) and adding a fourth stage of watering restrictions for extreme drought situations.

In 2016, the MDD was 43.8ML and occurred during stage one of watering restrictions on July 28, 2015. In comparison to 2015, the maximum day demand decreased from 50.8ML to 43.8ML. The MDD is one of the most critical design criteria used for sizing water system infrastructure. The higher the MDD, the larger and more expansive the infrastructure that is required.

Maintenance

The waterworks staff consists of seven operators with varying ranges of certification. Each operator is registered with the environmental operator's certification program within BC and is required to remain in good standing by taking yearly continuing education courses.

The waterworks staff carries out regular and routine maintenance to all parts within the Comox Valley Water System, to ensure continued operation and supply of safe, clean water to all users. The chlorination facility, reservoirs and distribution system are regularly inspected and maintained.

Any inquiries within the system are investigated by the CVRDs waterworks operations staff and appropriate action is taken. Operator's time is primarily dedicated to operations and maintenance of transmission and treatment system, however Figure 11 shows the breakdowns of service requests by category.

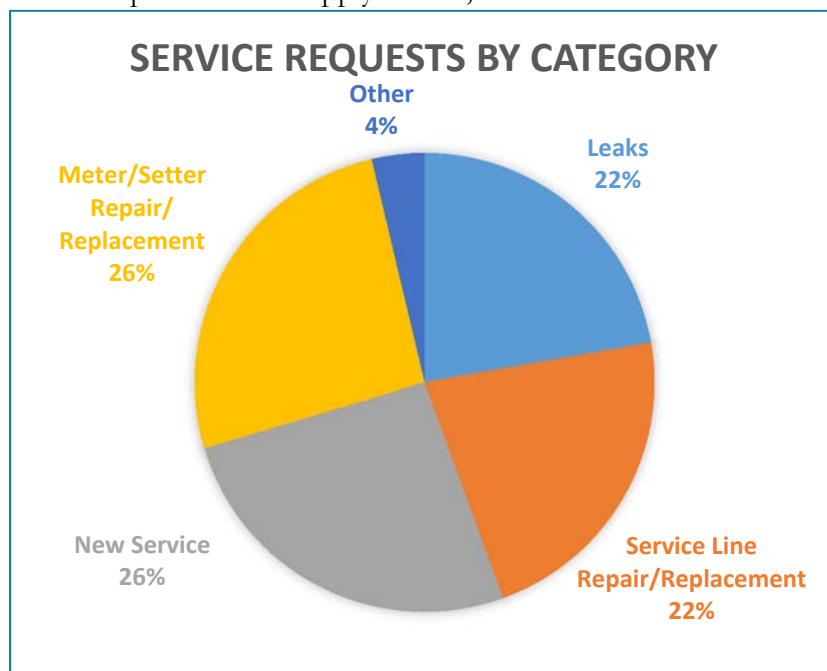


Figure 11: 2016 Service Requests by category

Financial

In 2016, the CVRD treated a total of 8.14 billion liters of water. Bulk water rates increased in 2016 from \$0.64/m³ to \$0.66/m³ to help finance rising operational costs, the repayment of debt on capital works, and the need to begin funding a long-term asset management strategy. However with the completion of the water treatment options study and the significant amount of capital infrastructure spending required in the coming years, additional water rate increases were approved for 2017, 2018 and 2019. As of January 1, 2017 water rates increased from \$0.66/m³ to \$0.71/m³. This increase is to begin increasing the contributions to the capital works reserve in order to reduce borrowing in the future for the water treatment options project.

In 2015, the CVRD awarded Opus Dayton and Knight Consultants to examine available water treatment technologies and conveyance options that will allow the CVRD to consistently meet Island Health's 4-3-2-1-0 surface water treatment objectives. The study was complete in 2016 and determined the components and associated costs necessary to meet the treatment requirements set out by Island Health. Table No.4 below details Opus's recommended treatment option.

Table No.4: Detailed Breakdown of Water Treatment Project

Project Component	Estimated Cost*
Deep water lake intake near the existing deep water sampling station sized for full system buildout to 2069	\$11.0M
Raw water pumping station located on the lake shore sized for easy expandability for full system buildout to 2069	\$10.7M
Conveyance of raw water from the pump station to a WTP located on or near Site A near the intersection of Bevan Road and Lake Trail Road	\$11.8M
Direct filtration and UV disinfection of the raw lake water and discharge to a clear well on the WTP site, located at the optimal elevation to maximize gravity distribution of water throughout the CVWS	\$47.1M
Conveyance of treated water down the BC Hydro penstock right of way to tie into the CVWS near the existing chlorination station	\$25.2M
Total Project Costs	\$106M

* Cost estimates developed to Class B or +/- 20% accuracy

The CVRD is required to construct and commission a water treatment facility that utilizes filtration by September 2019. The project is to be delivered as a design-build project and the next step for the CVRD is to procure an owners engineer for the project and begin the design-build selection team process. An RFP for the owners engineer services is to be issued in early 2017.

Implementation of the Watershed Protection Plan in 2016 will continue into 2017. Work that was completed in 2016 includes improving water quality monitoring within the watershed, installation of continuous turbidity monitors and the development of a robust raw water quality sampling plan.

Also completed in 2016 were the Courtenay booster pump station upgrades which included the installation of two new pumps. The new upgrade will provide increased capacity and accommodate growth within the area until approximately 2040 and will service the new hospital and fire training grounds.

All major altitude valve chambers were also upgraded in 2016, improving water control and regulating flows throughout the system. This work allows for more efficient and effective operations of the chlorination station by reducing spikes in flow within the distribution system.

2016 Accomplishments

- ✓ Completed and began implementation of the Watershed Protection Plan for Comox Lake
- ✓ Completed water treatment options study
- ✓ Determined procurement method for water treatment project
- ✓ Increased community outreach and education surrounding water education
- ✓ Updated water rates so revenue meets operations and infrastructure renewal expenditures
- ✓ Completed Courtenay booster station upgrades
- ✓ Updated the water conservation bylaw
- ✓ Improved raw water sampling program
- ✓ Upgraded all major altitude valve chambers

2017 Objectives

- Continue implementing the Watershed Protection Plan for Comox Lake
- Procure owner's engineer for water treatment project
- Award design-build contract of water treatment plant project
- Complete an asset management plan
- Update the water development cost charges bylaw
- Continue community outreach and education surrounding water education
- Complete Comox Lake climate change assessment



Appendix A

Date	RAW WATER				DISTRIBUTION SYSTEM																																	
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	Chlorine Residual (mg/L)													Total Coliform										E.Coli										
					74 Salsbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salsbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salsbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	
01-Jan-16	14,996	7.13	9.11	0.52																																		
02-Jan-16	15,478	7.12	9.03	0.49																																		
03-Jan-16	16,032	7.12	9.11	0.47																																		
04-Jan-16	15,224	7.14	8.87	0.46	0.89	0.96	0.51	0.39	0.65	0.81	0.83	0.69	0.6	0.94	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
05-Jan-16	15,351	7.16	8.73	0.45																																		
06-Jan-16	17,482	7.13	9.11	0.45																																		
07-Jan-16	16,576	7.13	9.32	0.42																																		
08-Jan-16	14,623	7.14	9.64	0.42																																		
09-Jan-16	15,771	7.14	9.96	0.41																																		
10-Jan-16	16,171	7.14	10.05	0.40																																		
11-Jan-16	14,672	7.14	10.01	0.38	0.9	0.92	0.54	0.44	0.76	0.83	0.94	0.65	0.69	0.9	1.07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12-Jan-16	15,555	7.09	10.25	0.43																																		
13-Jan-16	16,569	7.07	10.29	0.56																																		
14-Jan-16	14,989	7.06	10.15	0.43																																		
15-Jan-16	15,547	7.09	13.47	0.41																																		
16-Jan-16	16,331	7.10	15.97	0.66																																		
17-Jan-16	14,305	7.11	14.41	0.81																																		
18-Jan-16	17,446	7.07	10.65	0.60	0.69	0.72	0.51	0.48	0.83	0.69	0.84	0.7	0.78	0.86	0.98	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
19-Jan-16	14,739	7.07	10.77	0.65																																		
20-Jan-16	15,995	7.07	10.56	0.65																																		
21-Jan-16	16,715	7.10	9.86	0.92																																		
22-Jan-16	16,122	7.08	9.38	0.59																																		
23-Jan-16	15,710	7.07	9.95	0.59																																		
24-Jan-16	15,650	7.07	10.36	0.59																																		
25-Jan-16	16,042	7.07	9.98	0.52	0.88	0.83	0.37	0.34	0.89	0.69	0.7	0.77	0.68	0.88	1.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
26-Jan-16	15,533	7.06	9.78	0.52																																		
27-Jan-16	13,832	7.08	9.89	0.48																																		
28-Jan-16	14,234	7.08	10.14	1.06																																		
29-Jan-16	15,020	7.07	10.11	2.17																																		
30-Jan-16	18,378	7.03	10.34	1.79																																		
31-Jan-16	16,192	7.00	10.61	1.76																																		
01-Feb-16	15,574	7.00	10.63	1.45	0.77	0.78	0.59	0.61	0.69	0.71	0.81	0.65	0.7	0.91	0.84	<1	<1	<1	<1	<1	<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
02-Feb-16	15,345	7.00	10.78	1.64																		<1	<1	<1	<1	<1						<1	<1	<1	<1	<1	<1	
03-Feb-16	15,585	7.04	10.96	1.26																		<1	<1	<1	<1	<1						<1	<1	<1	<1	<1	<1	
04-Feb-16	15,917	7.02	10.99	1.04																		<1	<1	<1	<1	<1						<1	<1	<1	<1	<1	<1	
05-Feb-16	15,309	7.00	11.02	1.41																		<1	<1	<1	<1	<1						<1	<1	<1	<1	<1	<1	
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10-Feb-16	16,217	6.97	11.29	0.87																																		
11-Feb-16	17,434	6.97	10.83	0.72																																		
12-Feb-16	17,507	6.97	11.05	0.73																																		
13-Feb-16	15,025	6.95	11.50	0.70																																		
14-Feb-16	15,950	6.94	11.69	0.71																																		
15-Feb-16	13,649	6.97	11.47	0.63	0.81	0.91	0.48	0.58	0.84	0.83	0.88	0.62	0.73	0.89	1.07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1								

Date	RAW WATER				DISTRIBUTION SYSTEM																																					
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28-Apr-16	23,727	7.33	14.60	0.36																																						
29-Apr-16	24,370	7.38	14.57	0.38																																						
30-Apr-16	28,079	7.39	15.35	0.37																																						
01-May-16	28,661	7.38	16.14	0.36																																						
02-May-16	29,833	7.38	15.88	0.37	0.79	0.88	0.44	0.31	0.97	0.61	0.73	0.78	0.84	0.88	0.95	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1							
03-May-16	24,505	7.35	15.80	0.35																																						
04-May-16	25,325	7.37	15.77	0.35																																						
05-May-16	28,669	7.37	15.98	0.33																																						
06-May-16	29,711	7.20	16.15	0.30																																						
07-May-16	31,857	7.31	17.98	0.28																																						
08-May-16	31,955	7.32	18.71	0.28																																						
09-May-16	34,912	7.35	17.24	0.28	0.78	0.87	0.6	0.76	0.96	0.76	0.83	0.77	0.85	0.98	1.18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1						
10-May-16	37,027	7.32	16.17	0.26																																						
11-May-16	35,850	7.26	19.12	0.29																																						
12-May-16	37,821	7.25	18.30	0.24																																						
13-May-16	35,469	7.28	17.05	0.24																																						
14-May-16	37,248	7.30	17.81	0.24																																						
15-May-16	33,214	7.28	18.06	0.26																																						
16-May-16	32,587	7.35	18.00	0.26	0.84	0.89			0.95	0.84				0.92	1.09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1						
17-May-16	34,128	7.31	18.10	0.33																																						
18-May-16	32,950	7.34	18.70	0.30																																						
19-May-16	25,332	7.28	17.47	0.28																																						
20-May-16	30,240	7.29	18.03	0.28																																						
21-May-16	33,382	7.30	19.46	0.26																																						
22-May-16	34,467	7.32	20.23	0.30																																						
23-May-16	34,122	7.35	20.51	0.35																																						
24-May-16	36,929	7.27	18.19	0.37	0.78	0.85	0.68	0.67	1	0.82	0.82	0.83	0.81	0.51	1.06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1						
25-May-16	36,283	7.42	17.13	0.37																																						
26-May-16	29,838	7.41	16.72	0.30																																						
27-May-16	26,131	7.34	16.01	0.31																																						
28-May-16	24,908	7.25	16.10	0.36																																						
29-May-16	26,219	7.27	16.62	0.33																																						
30-May-16	29,231	7.38	17.39	0.25												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1							
31-May-16	30,235	7.39	17.93	0.25																																						
01-Jun-16	29,518	7.23	18.37	0.25																																						
02-Jun-16	30,078	7.24	18.51	0.27																																						
03-Jun-16	32,025	7.19	18.72	0.29																																						
04-Jun-16	39,105	7.29	19.97	0.30																																						
05-Jun-16	41,574	7.32	21.20	0.30																																						
06-Jun-16	41,192	7.38	21.18	0.31	0.89	1	0.71	0.61	0.95	0.78	0.85	0.81	0.86	1.03	1.24	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1						
07-Jun-16	40,536	7.42	20.55	0.29																																						
08-Jun-16	36,560	7.42	19.05	0.29																																						
09-Jun-16	29,339	7.28	18.05	0.31																																						
10-Jun-16	27,275	7.20	18.20	0.31																																						
11-Jun-16	26,232	7.15	18.21	0.34																																						
12-Jun-16	29,261	7.13	18.14	0.33																																						
13-Jun-16	26,550	7.12	17.96	0.33	0.65	0.84	0.52	0.6	0.7	0.73	0.72	0.66	0.77	0.87	1.04	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1							
14-Jun-16	25,615	7.11	17.51	0.33																																						
15-Jun-16	26,611	7.19	17.32	0.35																																						

[illegible]

Date	RAW WATER				DISTRIBUTION SYSTEM																																					
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	Chlorine Residual (mg/L)												Total Coliform												E.Coli													
					74 Salisbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir					
22-Oct-16	15,893	7.20	14.65	0.58																																						
23-Oct-16	10,996	7.07	15.16	0.54																																						
24-Oct-16	22,931	7.15	15.64	0.58	0.57	0.73	0.31	0.36	0.55	0.74	0.46	0.5	0.65	0.77	0.77	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
25-Oct-16	17,985	7.08	15.57	0.79																																						
26-Oct-16	16,911	7.09	15.37	0.74																																						
27-Oct-16	17,242	7.07	15.46	0.70																																						
28-Oct-16	16,000	7.09	14.92	0.75																																						
29-Oct-16	16,220	7.04	15.04	0.68																																						
30-Oct-16	16,277	7.09	15.60	0.63																																						
31-Oct-16	15,760	7.11	16.13	0.75	0.69	0.81	0.35	0.78	0.64	0.76		0.58	0.81	0.86	1.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
01-Nov-16	16,868	7.03	16.61	0.74																																						
02-Nov-16	5,582	6.90	15.24	1.66																																						
03-Nov-16	26,720	7.03	14.16	1.39																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
04-Nov-16	16,791	6.95	14.09	1.59																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
05-Nov-16	15,837	7.04	14.23	1.55																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
06-Nov-16	16,026	7.03	14.50	1.33																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
07-Nov-16	15,782	7.04	14.55	1.22	0.75	0.91	0.36	0.5	0.72	0.8	0.6	0.5	0.79	0.96	1.07	<1	<1	<1	<1	<1	<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
08-Nov-16	16,248	6.88	14.65	1.66																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
09-Nov-16	13,763	6.69	14.76	1.72																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
10-Nov-16	15,990	6.86	14.65	1.54																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
11-Nov-16	14,737	7.03	14.63	1.48																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
12-Nov-16	15,981	6.75	14.67	1.43																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
13-Nov-16	15,135	6.78	14.53	1.48																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
14-Nov-16	18,371	6.88	14.30	1.36			0.4	0.55	0.81		0.88	0.64	0.71			<1	<1	<1	<1	<1	<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
15-Nov-16	15,372	6.98	14.50	1.39																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
16-Nov-16	14,186	7.22	13.43	1.41																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
17-Nov-16	16,182	7.24	12.35	1.42																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
18-Nov-16	14,747	7.22	12.44	1.32																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
19-Nov-16	15,094	7.21	12.48	1.27																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
20-Nov-16	16,061	7.20	12.44	1.43																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
21-Nov-16	15,143	7.21	12.40	1.40	0.72	0.83	0.36	0.49	0.79	0.84	0.66	0.54	0.73	0.93	1.07	<1	<1	<1	<1	<1	<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
22-Nov-16	15,343	7.24	12.28	1.65																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
23-Nov-16	15,351	7.19	12.79	1.62																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
24-Nov-16	14,892	7.24	13.83	1.75																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
25-Nov-16	16,448	7.24	12.90	1.58																																						
26-Nov-16	14,998	7.12	12.80	1.48																		<1/<1	<1/<1	<1/<1	<1/<1	<1/<1								<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	
27-Nov-16	16,929	7.18	12.61	1.47																		<1	<1	<1	<1	<1								<1	<1	<1	<1	<1	<1	<1	<1	
28-Nov-16	15,369	7.20	12.66	1.41	0.99	0.56	0.56	0.68	0.84	1.05	0.72	0.72	0.91	1.09	1.24	<1	<1	<1	<1	<1	<1	<1/<1	<1/<1	<1/<1	<1/<1	<1/<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
29-Nov-16																																										

Date	RAW WATER				DISTRIBUTION SYSTEM																																	
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	Chlorine Residual (mg/L)														Total Coliform												E.Coli							
					74 Salisbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	
20-Dec-16	17,059	7.20	10.03	0.63																																		
21-Dec-16	17,131	7.23	9.70	0.71																																		
22-Dec-16	16,625	7.22	10.11	0.63																																		
23-Dec-16	17,686	7.23	10.00	0.57																																		
24-Dec-16	16,734	7.22	9.68	0.54																																		
25-Dec-16	14,724	7.23	9.61	0.53																																		
26-Dec-16	16,634	7.23	9.81	0.52																																		
27-Dec-16	16,749	7.23	9.86	0.52																																		
28-Dec-16	16,410	7.21	10.09	0.54												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
29-Dec-16	15,667	7.25	10.35	0.59																																		
30-Dec-16	15,976	7.25	10.00	0.51																																		
31-Dec-16	16,528	7.27	9.80	0.48																																		

*<1/<1 denotes two samples taken on the day

*<1/<1 denotes two samples taken on the day

Appendix A

Date	RAW WATER				DISTRIBUTION SYSTEM																																	
					Chlorine Residual (mg/L)														Total Coliform										E.Coli									
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	74 Salsbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salsbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salsbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W.Courtenay Reservoir	
01-Jan-16	14,996	7.13	9.11	0.52																																		
02-Jan-16	15,478	7.12	9.03	0.49																																		
03-Jan-16	16,032	7.12	9.11	0.47																																		
04-Jan-16	15,224	7.14	8.87	0.46	0.89	0.96	0.51	0.39	0.65	0.81	0.83	0.69	0.6	0.94	1.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
05-Jan-16	15,351	7.16	8.73	0.45																																		
06-Jan-16	17,482	7.13	9.11	0.45																																		
07-Jan-16	16,576	7.13	9.32	0.42																																		
08-Jan-16	14,623	7.14	9.64	0.42																																		
09-Jan-16	15,771	7.14	9.96	0.41																																		
10-Jan-16	16,171	7.14	10.05	0.40																																		
11-Jan-16	14,672	7.14	10.01	0.38	0.9	0.92	0.54	0.44	0.76	0.83	0.94	0.65	0.69	0.9	1.07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
12-Jan-16	15,555	7.09	10.25	0.43																																		
13-Jan-16	16,569	7.07	10.29	0.56																																		
14-Jan-16	14,989	7.06	10.15	0.43																																		
15-Jan-16	15,547	7.09	13.47	0.41																																		
16-Jan-16	16,331	7.10	15.97	0.66																																		
17-Jan-16	14,305	7.11	14.41	0.81																																		
18-Jan-16	17,446	7.07	10.65	0.60	0.69	0.72	0.51	0.48	0.83	0.69	0.84	0.7	0.78	0.86	0.98	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
19-Jan-16	14,739	7.07	10.77	0.65																																		
20-Jan-16	15,995	7.07	10.56	0.65																																		
21-Jan-16	16,715	7.10	9.86	0.92																																		
22-Jan-16	16,122	7.08	9.38	0.59																																		
23-Jan-16	15,710	7.07	9.95	0.59																																		
24-Jan-16	15,650	7.07	10.36	0.59																																		
25-Jan-16	16,042	7.07	9.98	0.52	0.88	0.83	0.37	0.34	0.89	0.69	0.7	0.77	0.68	0.88	1.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
26-Jan-16	15,533	7.06	9.78	0.52																																		
27-Jan-16	13,832	7.08	9.89	0.48																																		
28-Jan-16	14,234	7.08	10.14	1.06																																		
29-Jan-16	15,020	7.07	10.11	2.17																																		
30-Jan-16	18,378	7.03	10.34	1.79																																		
31-Jan-16	16,192	7.00	10.61	1.76																																		
01-Feb-16	15,574	7.00	10.63	1.45	0.77	0.78	0.59	0.61	0.69	0.71	0.81	0.65	0.7	0.91	0.84	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
02-Feb-16	15,345	7.00	10.78	1.64																																		
03-Feb-16	15,585	7.04	10.96	1.26																																		
04-Feb-16	15,917	7.02	10.99	1.04																																		
05-Feb-16	15,309	7.00	11.02	1.41																																		
06-Feb-16	16,004	7.03	10.99	1.02																																		
07-Feb-16	16,007	7.03	11.03	1.03																																		
08-Feb-16	16,097	7.03	11.26	1.22																																		
09-Feb-16	17,320	7.00	11.22	1.05	0.85	0.91	0.55	0.47	1.25	0.8	0.7	0.73	2.2	1	1.09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
10-Feb-16	16,217	6.97	11.29	0.87																																		
11-Feb-16	17,434	6.97	10.83	0.72																																		
12-Feb-16	17,507	6.97	11.05	0.73																																		
13-Feb-16	15,025	6.95	11.50	0.70																																		
14-Feb-16	15,950	6.94	11.69	0.71																																		
15-Feb-16	13,649	6.97	11.47	0.63	0.81	0.91	0.48	0.58	0.84	0.83	0.88	0.62	0.73	0.89	1.07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
16-Feb-16	16,721	7.05	10.74	0.58																																		
17-Feb-16	16,217	7.03	10.76	0.63																																		
18-Feb-16	15,510	7.04	9.47	0.58																																		
19-Feb-16	16,303	7.05	8.98	0.54																																		
20-Feb-16	15,762	7.05	9.23	0.53																																		
21-Feb-16	15,733	7.06	9.35	0.55																																		
22-Feb-16	16,308	7.01	9.54	0.56	0.96	0.61	0.33	0.31	0.77	0.69	0.73	0.63	0.89	0.91	1.09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
23-Feb-16	15,565	7.03	9.75	0.54																																		
24-Feb-16	15,270	7.05	9.94	0.51																																		
25-Feb-16	15,500	7.05	10.23	0.50																																		
26-Feb-16	15,509	7.05	9.97	0.48																																		

Date	RAW WATER				DISTRIBUTION SYSTEM																																	
					Chlorine Residual (mg/L)												Total Coliform												E.Coli									
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	74 Salisbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	
29-Feb-16	16,311	7.07	10.29	0.50																																		
01-Mar-16	15,491	7.10	9.23	0.71																																		
02-Mar-16	15,832	6.93	8.85	0.69	0.92	1	0.66	0.68	0.91	0.87	0.73	0.77	0.67	1.02	1.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
03-Mar-16	16,314	6.86	8.87	0.52																																		
04-Mar-16	16,186	6.91	9.08	0.53																																		
05-Mar-16	15,851	6.91	9.47	0.69																																		
06-Mar-16	15,735	6.99	9.67	0.61																																		
07-Mar-16	11,849	6.85	10.03	1.16	0.84	1.01	0.34	0.31	0.97	0.81	0.83	0.69	0.61	1.03	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
08-Mar-16	19,828	6.77	9.72	1.73																		<1	<1	<1	<1	<1				<1	<1	<1	<1	<1	<1	<1	<1	
09-Mar-16	15,381	7.02	9.02	1.26							0.76	0.82	1.01	1.09	1.54								<1	<1	<1	<1	<1						<1	<1	<1	<1	<1	
10-Mar-16	15,696	6.86	9.01	0.67							0.84	0.82	1.01	1.15	1.49																							
11-Mar-16	15,628	6.85	9.30	0.76																		<1	<1	<1	<1	<1												
12-Mar-16	15,998	6.80	9.44	0.61																																		
13-Mar-16	15,357	6.89	9.24	0.66																																		
14-Mar-16	16,438	6.91	9.23	0.72	0.88	0.96	0.51	0.44	0.91	0.69	0.89	0.79	0.92	0.9	1.08	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
15-Mar-16	15,981	6.89	9.62	0.66																																		
16-Mar-16	16,967	6.91	9.89	0.60																																		
17-Mar-16	15,487	6.96	9.97	0.61																																		
18-Mar-16	16,847	6.99	9.63	0.57																																		
19-Mar-16	15,646	6.93	9.80	0.52																																		
20-Mar-16	15,815	6.92	10.39	0.52																																		
21-Mar-16	16,051	6.99	10.01	0.84	0.82	0.93	0.41	0.33	0.98	0.77	0.83	0.77	0.83	1.03	0.98	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
22-Mar-16	15,837	7.05	10.17	0.90																																		
23-Mar-16	14,193	7.12	10.43	0.79																																		
24-Mar-16	17,452	7.05	10.87	0.76																																		
25-Mar-16	16,911	7.13	12.65	0.48																																		
26-Mar-16	14,912	7.12	13.41	0.43																																		
27-Mar-16	15,297	7.12	13.98	0.44																																		
28-Mar-16	16,444	7.02	14.01	0.44																																		
29-Mar-16	16,374	6.94	14.30	0.43	0.81	0.71	0.52	0.41	0.85	0.86	0.7	0.76	0.77	0.95	1.15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
30-Mar-16	16,669	6.98	14.74	0.41																																		
31-Mar-16	16,966	7.11	15.47	0.40																																		
01-Apr-16	16,960	7.15	13.86	0.39																																		
02-Apr-16	16,931	7.05	13.61	0.38																																		
03-Apr-16	17,225	7.10	14.29	0.38																																		
04-Apr-16	16,937	7.06	13.59	0.36	1	0.82	0.58	0.69	0.73	1.02	0.65	0.64	0.85	1.02	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
05-Apr-16	17,299	7.10	13.09	0.37																																		
06-Apr-16	16,613	7.12	14.12	0.39																																		
07-Apr-16	17,802	7.05	14.45	0.45																																		
08-Apr-16	17,891	7.02	13.93	0.41																																		
09-Apr-16	20,495	7.01	13.55	0.40																																		
10-Apr-16	20,799	7.01	13.91	0.35																																		
11-Apr-16	19,052	7.07	13.94	0.36	0.74	0.88	0.54	0.59	0.88	0.73	0.86	0.61	0.85	0.99	1.14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
12-Apr-16	18,286	7.19	14.87	0.43																																		
13-Apr-16	17,272	7.16	15.93	0.42																																		
14-Apr-16	18,972	7.20	15.66	0.39																												</						

[illegible]

Date	RAW WATER				DISTRIBUTION SYSTEM																																	
	Consumption (m3)	pH	Temperature (°C)	Turbidity (NTU)	Chlorine Residual (mg/L)														Total Coliform												E.Coli							
					74 Salisbury	Arden Stn	1750 Astra	2490 Waveland	4871 Greaves Crescent	3441 Cumberland	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	1750 Astra	2490 Waveland	3441 Cumberland	4871 Greaves Crescent	74 Salisbury	Arden Stn	Comox Reservoir	Crown Isle Reservoir	E. Courtenay Reservoir	Marsden Reservoir	W. Courtenay Reservoir	
20-Dec-16	17,059	7.20	10.03	0.63																																		
21-Dec-16	17,131	7.23	9.70	0.71																																		
22-Dec-16	16,625	7.22	10.11	0.63																																		
23-Dec-16	17,686	7.23	10.00	0.57																																		
24-Dec-16	16,734	7.22	9.68	0.54																																		
25-Dec-16	14,724	7.23	9.61	0.53																																		
26-Dec-16	16,634	7.23	9.81	0.52																																		
27-Dec-16	16,749	7.23	9.86	0.52																																		
28-Dec-16	16,410	7.21	10.09	0.54												<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
29-Dec-16	15,667	7.25	10.35	0.59																																		
30-Dec-16	15,976	7.25	10.00	0.51																																		
31-Dec-16	16,528	7.27	9.80	0.48																																		

*<1/<1 denotes two samples taken on the day

*<1/<1 denotes two samples taken on the day