REGIONAL DISTRICT OF NANAIMO

Water Service Area Annual Report 2018

Westurne Heights Water Service Area

June 2019

REGIONAL DISTRICT OF NANAIMO
Water & Utility Services Department
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1.0 Introduction

The following annual report describes the Westurne Heights Water Service Area and summarizes the water quality and production data from 2018. This report also includes a summary of inquiries and complaints, completed and proposed maintenance activities, Operator Certification, the Emergency Response Plan, and the Cross Connection Control Program. This report is to be submitted to Island Health by the spring of 2019.

2.0 Westurne Heights Water Service Area

The Westurne Heights Water Utility is located 2.2 kilometers south of the intersection of Highway 4 and Chatsworth Road in Whiskey Creek. The utility was established in 1995 to service properties along Westurne Heights Road. Ownership of the water utility was transferred to the RDN in September 2016. The water system is comprised of one groundwater well, two underground cisterns, a pumphouse, and a short network of watermains. There are 17 residential connections in this water system. The water source is chlorinated and pumped into the system on demand via two pressure tanks. A backup generator is present on-site in the event of a power outage. A map of the Westurne Heights Water Service Area is provided in Appendix A for reference.

2.1 Groundwater Wells

One groundwater production well is present at the reservoir site at 1260 Westurne Heights Road, west of Coombs, B.C.

Well / Name	Well Depth	Wellhead Protection In Place	Treated/Untreated with Chlorine
#1	26.2 m	Yes	Treated

2.2 Reservoirs

Two below-ground cisterns are present at 1260 Westurne Heights Road, and have a combined water storage capacity of 13 m^3 (2,800 imperial gallons). Water supply is pumped into the system via a dual pressure tank arrangement.

Westurne Heights Well #1

2.3 Distribution System

The water distribution system is comprised of 0.21 km of 75mm diameter PVC watermains. Three below-ground flushouts are present at the end of each watermain. There are no fire hydrants located within the system.

Note: 'PVC' is poly-vinylchloride (plastic)

3.0 Water Sampling and Testing Program

Water sampling and testing is carried out weekly in the distribution system. Notably, the chlorine residual levels are tested weekly to ensure the absence of bacterial regrowth in the watermains. The following table includes a summary of all testing.

Timing	Location	Tests
Weekly	RDN (in-house) Laboratory	Total coliforms, E.Coli, Temperature, pH, Conductivity, Chlorine residual, Salinity, TDS, Monthly- Iron and Manganese
Weekly	BC Centre for Disease Control	Total coliforms, E.Coli
Annual Source Water Testing (every Fall)	Bureau Veritas (formerly Maxxam)	Complete potability testing of raw well water, including T-Ammonia
Annual System Water Testing (every Spring)	Bureau Veritas (formerly Maxxam)	Complete potability testing of distribution system, including T-Ammonia

4.0 Water Quality - Source Water and Distribution System

Up-to-date water quality reports and lab data are posted monthly on the RDN website at www.rdn.bc.ca in the Regional Services section, under "Water & Utility Services" then "WaterSmart Communities". Tables of water quality testing results for both the source water and distribution system are provided at the end of this report under Appendix B. Bacteriological results are posted on the Vancouver Island Health Authority (VIHA) website at: http://www.healthspace.ca/Clients/VIHA/VIHA_Website.nsf/Water-Samples-Frameset?OpenPage , then click on Qualicum Beach, then click Westurne Heights Water Service Area.

Westurne Heights Pumphouse and Buried Cisterns

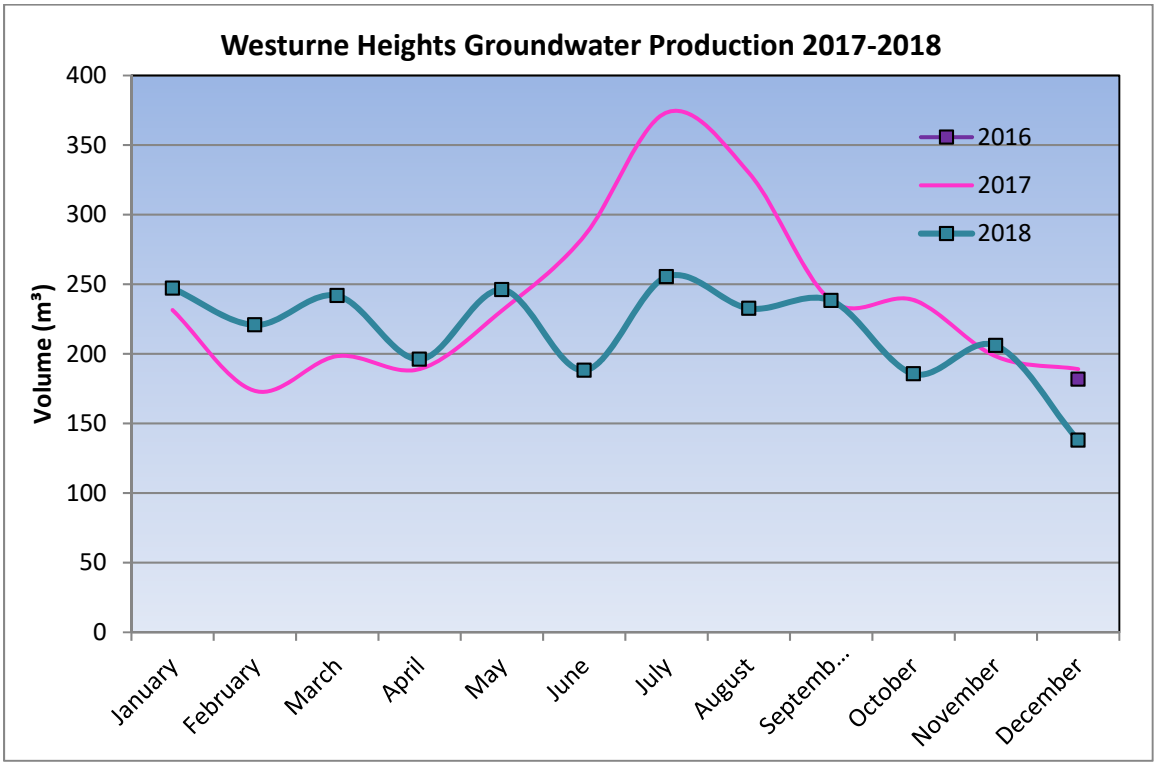
5.0 Water Quality Inquiries and Complaints

A few inquiries and complaints were received from the Westurne Heights water service area in 2018 and were typically related to temporary power outages in the area. The on-call water services staff respond to water system emergencies and alarms within minutes of receiving each call. A summary of the water system incidents in 2018 is given in the table below.

Activity in 2018	Date(s)	History/Notes
Boil Water Advisories	None	None
High Turbidity Events	None	None
Equipment Malfunction	None	None
Water Main Breaks	None	None
Pump Failures	Fall/Winter 2018	Temp power outages

6.0 Groundwater Production and Consumption

The monthly groundwater production in the Westurne Heights Water Service Area has been monitored in 2017 and 2018 but had not been monitored for a complete year previously. Groundwater production in 2018 is significantly lower than the previous year, particularly in the summer season, likely due to increased conservation efforts by residents.



In the Fall/Winter of 2018, the average usage per home in the Westurne Heights Water Service Area was 0.31 cubic metres per day (68.2 imperial gallons). In the summer, the average water usage was 0.34 cubic metres per day (74.8 imperial gallons). Based on these figures, the annual consumption per capita is estimated to be 193 L/day (based on 2.4 people per household). This consumption is *34% lower* than the average of all the other RDN water systems of 294 L/day/capita for 2018.

7.0 Maintenance Program

Weekly pump station inspections are carried out to reduce or eliminate the risk of contamination and system failure, and to ensure the consistent application of chlorine for treatment purposes. Watermains are flushed once a year in the spring.

The water storage cisterns are drained and cleaned as required. Twenty-four hour on-call coverage is in place to respond to water system emergencies and alarms.

Pressure tanks in the pump house

8.0 Operator Certification

The Regional District Water & Utility Services staff are comprised of one Manager, one Project Engineer, one Engineering Technologist, one Engineering Technician, one Chief Operator, and seven certified operators. The operators receive ongoing training and certification in:

- ✓ Water Treatment
- ✓ Water Distribution
- ✓ Wastewater Collection
- ✓ Cross Connection Control
- ✓ Asbestos Awareness
- ✓ Chlorine Handling
- ✓ WHMIS (Workplace Hazardous Material Information System)
- ✓ TDG (Transportation of Dangerous Goods)
- ✓ Confined Space Awareness
- ✓ Traffic Control
- ✓ Fall Protection
- ✓ First Aid

9.0 Water Service Area Projects

9.1 2018 Completed Studies & Projects

- Corresponded with residents regarding well level and water conservation;
- Completed irrigation checks for high-water users;
- Completed Water Conservation Evaluation Report;
- Advised residents regarding water leak repairs;
- Completed Cross Connection Control Bylaw in draft format;
- Completed regular flushing, reservoir cleaning projects;
- Enforced outdoor sprinkling regulations;
- Updated the online GIS Water Map update for aquifer and watershed info;
- Maintained a high level of water quality;
- Continued quality control through regular testing and monitoring of water system;
- Began a Water Systems SCADA Master Plan project;
- Initiated New Drinking Water and Watershed Protection Action Plan preparation;
- Began Water Systems Condition Assessment project.

9.2 2019 Proposed Projects & Upgrades

- Continue watermain flushing program;
- Adopt Cross Connection Control Bylaw;
- Implement a Water Systems SCADA Master Plan;
- Begin well protection plan;
- Begin DWWP Water Conservation Plan development;
- Implement new Drinking Water and Watershed Protection Action Plan;
- Continue to offer numerous water-saving incentives via rebates;
- Develop Cross Connection Control educational material.

Well site and fence

10.0 Emergency Response Plan

The Regional District Emergency Response Plan (ERP) contains procedures and contact information to efficiently respond to water system emergencies such as contamination of water supply, loss of supply, pump failure, and drought management. The ERP was reviewed and updated in 2018, and copies are available on our website, at each RDN office, in each pumphouse, and in each Water Services vehicle. A copy of the ERP is also attached to this report in Appendix C.

11.0 Cross Connection Control

In 2017, a more robust Cross Connection Control Plan was prepared that fully defines the CCC program, including standard operating procedures, plumbing code references, reporting procedures, survey schedules, backflow prevention standards, detailed installation schematics, blank test forms, testing reminders, and non-compliance letters. A minimum of two RDN Operators are certified in Backflow Assembly Testing at all times. The RDN Manager of Water Services is the designated Cross Connection Control Manager.

In 2019, a stand-alone Cross Connection Control Bylaw will be adopted that contains definitions, authorizations, applications, liability, rules, regulations, testing requirements, and reporting requirements. The bylaw will address retrofits, prohibitions, special circumstances, reclaimed water use, alternate water sources, failure to comply, inspections, testing, offences, penalties and more. A webpage will be established on the Water Services website that will educate RDN customers about cross connections and list the relevant links to current standards and resources.

12.0 Cyber Security

The RDN uses a multi-level approach to cyber-security. Corporate network security is employed via a universal threat management gateway that implements various methods of data security, which includes daily definition updates to block known cyber threats. In addition, all RDN PC's are protected with anti-virus software. RDN water systems are connected to the corporate network via IP-Sec VPN's for remote management by information technology and equipment operators. Future infrastructure upgrades will see our water systems located on segregated networks to limit the vulnerability from cybersecurity threats.

13.0 Closing

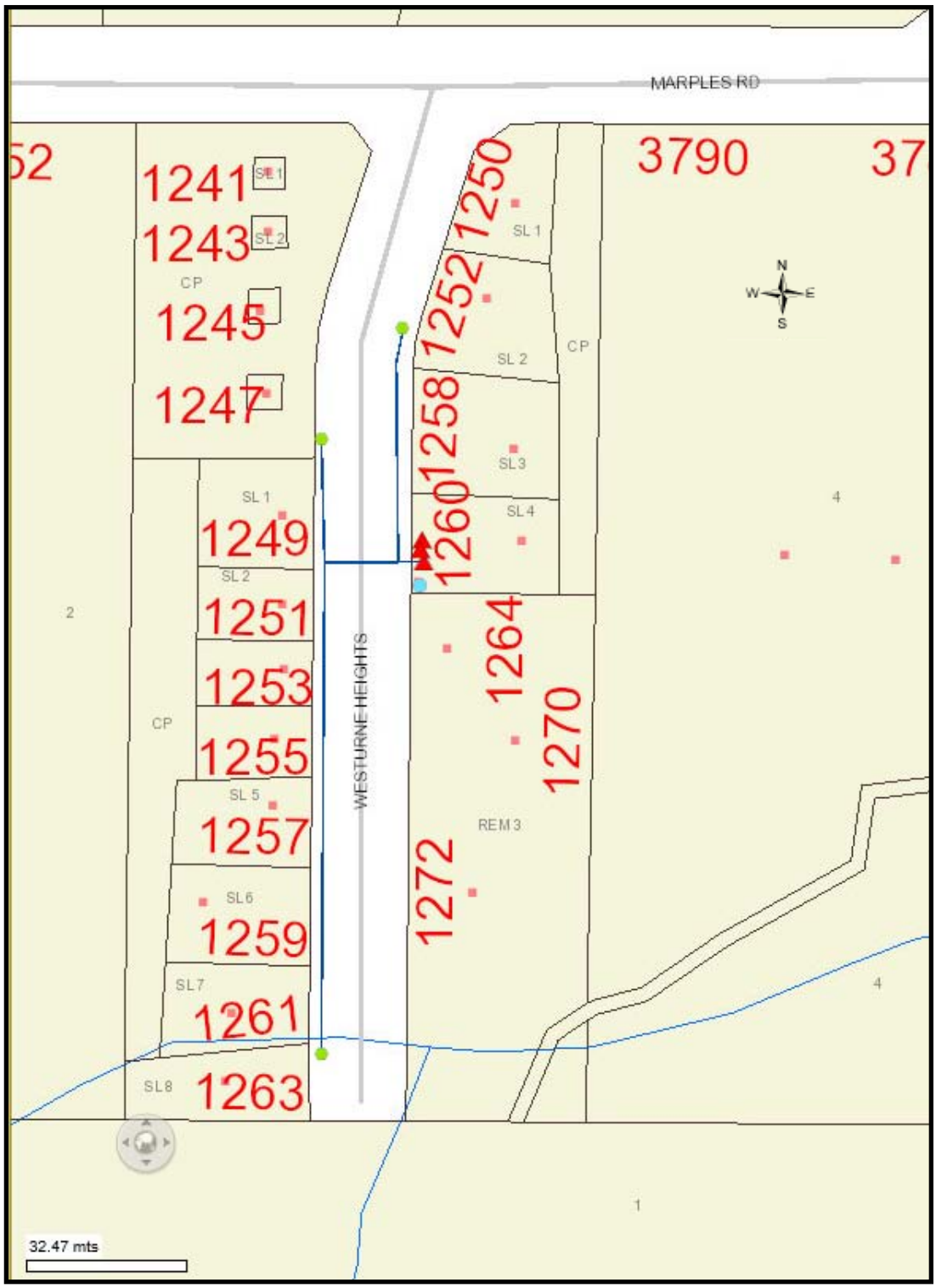
An annual report for the year 2019 will be prepared and submitted to Island Health in the Spring of 2020. Annual reports are also available on our website at: https://www.rdn.bc.ca/westurne-heights.

APPENDIX A

MAP OF WESTURNE HEIGHTS

WATER SERVICE AREA

WESTURNE HEIGHTS WATER SERVICE AREA



APPENDIX B

WATER QUALITY TESTING RESULTS

WESTURNE HEIGHTS WATER SERVICE AREA

Facility Location:
1260 Westurne Heights Road
Qualicum Beach

Facility Information:

Facility Type: 15-300 (DWC)

Facility Sampling History:

Location	Date	Total Coliform	E. Coli
1252 WESTURNE HEIGHTS ROAD	18-Dec-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	10-Dec-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	10-Dec-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	3-Dec-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	3-Dec-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	19-Nov-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	19-Nov-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	7-Nov-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	7-Nov-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	15-Oct-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	15-Oct-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	1-Oct-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	1-Oct-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	17-Sep-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	17-Sep-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	5-Sep-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	5-Sep-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	20-Aug-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	20-Aug-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	7-Aug-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	7-Aug-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	16-Jul-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	16-Jul-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	9-Jul-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	9-Jul-2018	L1	L1

Location	Date	Total Coliform	E. Coli
1252 WESTURNE HEIGHTS ROAD	3-Jul-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	3-Jul-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	25-Jun-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	25-Jun-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	18-Jun-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	18-Jun-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	11-Jun-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	11-Jun-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	5-Jun-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	5-Jun-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	22-May-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	22-May-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	14-May-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	14-May-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	7-May-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	7-May-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	1-May-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	1-May-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	24-Apr-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	24-Apr-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	16-Apr-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	16-Apr-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	9-Apr-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	9-Apr-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	4-Apr-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	4-Apr-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	27-Mar-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	27-Mar-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	20-Mar-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	20-Mar-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	12-Mar-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	12-Mar-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	5-Mar-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	5-Mar-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	27-Feb-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	27-Feb-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	20-Feb-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	20-Feb-2018	L1	L1

Location	Date	Total Coliform	E. Coli
1252 WESTURNE HEIGHTS ROAD	14-Feb-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	14-Feb-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	5-Feb-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	5-Feb-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	22-Jan-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	22-Jan-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	15-Jan-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	15-Jan-2018	L1	L1
1263 WESTURNE HEIGHTS ROAD	8-Jan-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	8-Jan-2018	L1	L1
1252 WESTURNE HEIGHTS ROAD	2-Jan-2018	L1	L1
WESTURNE HEIGHTS WELLHEAD	2-Jan-2018	L1	L1

Interpreting Sample Reports

At Island Health, the results of drinking water sampling are reported using the following coding system:

L1 Less than 1 (no detectable bacteria) - Meaning: No bacteria present
OG Overgrown - Meaning: Too many background bacteria to give an accurate count
EST Estimated Count
A Sample not tested; Too long in transit
C Sample leaked/broken in transit
D Sample not tested; No collection date given
T Sample submitted unsatisfactory. Exceeded 30 hours holding time, please resample.
NS No sample received with requisition

REGIONAL DISTRICT OF NANAIMO

Westurne Heights Distribution Water Analysis
1252 Westurne Heights

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value
MAC=Maximum Acceptable Concentration
AO= Asthetic Objective.

water SMART zero waste

Red font indicates non-compliance with Canadian Drinking Water Guidelines

	Units	CDWG		May 8 2017	May 7 2018				
Miscellaneous Inorganics									
Fluoride	mg/L	1.5	MAC	0.03	0.031				
Alkalinity (total as $CaCO_3$)	mg/L			42.7	39.9				
Anions									
Dissolved Sulphate	mg/L	500	AO	1.91	2.7				
Dissolved Chloride	mg/L	250	AO	2.6	2.8				
Nitrite	mg/L	1	MAC	<0.0050	<0.0050				
Miscellaneous									
Apparent Colour	Colour Unit			10	5				
Nutrients									
Total Ammonia	mg/L			0.095	0.35				
Physical Properties									
Conductivity	µS/cm			93.3	93				
pH	pH	7.0:10.5	AO	7.8	7.74				
TDS	mg/L	500	AO	62	56				
Turbidity	NTU			0.13	0.18				
Microbiological Parameters									
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0				
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0				
Calculated Parameters									
Total Hardness ($CaCO_3$)	mg/L			45.1	38.9				
Nitrate	mg/L	10	MAC	0.113	0.116				
Elements									
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.000002				
Total Metals									
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003				
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005				
Total Arsenic	mg/L	0.01	MAC	<0.0001	<0.0001				
Total Barium	mg/L	1	MAC	0.0015	0.0012				
Total Beryllium	mg/L			<0.0001	<0.0001				
Total Bismuth	mg/L			<0.001	<0.001				
Total Boron	mg/L	5	MAC	<0.050	<0.050				
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001				
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001				
Total Cobalt	mg/L			<0.0002	<0.0002				
Total Copper	mg/L	1	AO	0.00863	0.00424				
Total Iron	mg/L	0.3	AO	0.0867	0.0879				
Total Lead	mg/L	0.01	MAC	0.00134	<0.0002				
Total Manganese	mg/L	0.05	AO	0.0035	0.0028				
Total Molybdenum	mg/L			<0.001	<0.001				
Total Nickel	mg/L			<0.001	<0.001				
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001				
Total Silicon	mg/L			9.03	7.62				
Total Silver	mg/L			<0.00002	<0.00002				
Total Strontium	mg/L			0.0267	0.0262				
Total Thallium	mg/L			<0.00001	<0.00001				
Total Tin	mg/L			<0.005	<0.005				
Total Titanium	mg/L			<0.005	<0.005				
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001				
Total Vanadium	mg/L			<0.005	<0.005				
Total Zinc	mg/L	5	AO	0.0185	0.0152				
Total Zirconium	mg/L			<0.0001	<0.0001				
Total Calcium	mg/L			12.4	10.9				
Total Magnesium	mg/L			3.42	2.87				
Total Potassium	mg/L			0.22	0.171				
Total Sodium	mg/L	200	AO	3.91	3.49				
Total Sulphur	mg/L			<3.0	<3.0				

REGIONAL DISTRICT OF NANAIMO

Westurne Heights Well # 1 Water Analysis
1260 Westurne Heights Road

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value
MAC=Maximum Acceptable Concentration
AO= Asthetic Objective.

water SMART zero waste

Red font indicates non-compliance with Canadian Drinking Water Guidelines

	Units	CDWG		Sept. 8 2014	October 12 2016	September 18 2017	October 25 2018		
Miscellaneous Inorganics									
Fluoride	mg/L	1.5	MAC	<0.05	0.026	0.031	0.026		
Alkalinity (total as $CaCO_3$)	mg/L			46	44.5	47.5	45.1		
Anions									
Dissolved Sulphate	mg/L	500	AO	1.6	1.7	1.8	2.3		
Dissolved Chloride	mg/L	250	AO	1.4	1.8	2.3	1.6		
Nitrite	mg/L	1	MAC	<0.05	<0.0050	<0.0050	<0.0050		
Miscellaneous									
Apparent Colour	Colour Unit			<5	5	5	5		
Nutrients									
Total Ammonia	mg/L			<0.02	0.1	<0.020	0.02		
Physical Properties									
Conductivity	µS/cm			90.7	97.6	98.5	95.4		
pH	pH	7.0:10.5	OG	7.2	7.79	7.79	7.78		
TDS	mg/L	500	AO	76	78	82	60		
Turbidity	NTU			<0.5	0.55	0.15	0.34		
Microbiological Parameters									
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0		
Total Coliforms	MPN/100mL	<1	MAC	<1.0	4.2	<1.0	<1.0		
Calculated Parameters									
Total Hardness ($CaCO_3$)	mg/L			42	41.5	42.6	43.3		
Nitrate	mg/L	10	MAC	0.10	0.118	0.115	0.117		
Elements									
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	0.0000083		
Total Metals									
Total Aluminum	mg/L	0.1	OG	<0.025	<0.003	<0.003	<0.003		
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005		
Total Arsenic	mg/L	0.01	MAC	0.00041	<0.0001	<0.0001	0.00011		
Total Barium	mg/L	1	MAC	0.00315	0.0015	0.0014	0.0014		
Total Beryllium	mg/L			<0.00025	<0.0001	<0.0001	<0.0001		
Total Bismuth	mg/L			<0.0005	<0.001	<0.001	<0.001		
Total Boron	mg/L	5	MAC	<0.010	<0.050	<0.050	<0.050		
Total Cadmium	mg/L	0.005	MAC	0.00015	<0.00001	<0.00001	<0.00001		
Total Chromium	mg/L	0.05	MAC	<0.0025	<0.001	<0.001	<0.001		
Total Cobalt	mg/L			<0.0005	<0.0005	<0.0002	<0.0002		
Total Copper	mg/L	1	AO	0.0085	0.0028	0.00469	0.00418		
Total Iron	mg/L	0.3	AO	0.058	0.123	0.0845	0.142		
Total Lead	mg/L	0.01	MAC	0.0035	<0.0002	<0.0002	0.00032		
Total Manganese	mg/L	0.05	AO	<0.0050	0.0075	0.0028	0.003		
Total Molybdenum	mg/L			0.00028	<0.001	<0.001	<0.001		
Total Nickel	mg/L			0.0101	<0.001	<0.001	<0.001		
Total Selenium	mg/L	0.05	MAC	<0.0005	<0.0001	<0.0001	<0.0001		
Total Silicon	mg/L			7.5	6.63	7.55	7.17		
Total Silver	mg/L			<0.00025	<0.00002	<0.00002	<0.00002		
Total Strontium	mg/L			0.028	0.0286	0.0281	0.0281		
Total Thallium	mg/L			<0.00005	<0.00005	<0.00001	<0.00001		
Total Tin	mg/L			0.0006	<0.005	<0.005	<0.005		
Total Titanium	mg/L			<0.0025	<0.005	<0.005	<0.005		
Total Uranium	mg/L	0.02	MAC	<0.00005	<0.0001	<0.0001	<0.0001		
Total Vanadium	mg/L			0.0023	<0.005	<0.005	<0.005		
Total Zinc	mg/L	5	AO	0.121	<0.005	0.0058	<0.005		
Total Zirconium	mg/L				<0.0005	<0.0001	<0.0001		
Total Calcium	mg/L			11.7	11.1	11.7	12		
Total Magnesium	mg/L			3.16	3.34	3.25	3.27		
Total Potassium	mg/L			<0.5	0.189	0.192	0.179		
Total Sodium	mg/L	200	AO	2.7	3.18	3.57	2.8		
Total Sulphur	mg/L				<3.0	<3.0	<3.0		

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
3-Dec-18	Well Head	0	0	0	0	9	7.25	0.47	49.8	0.05	105.6	0.13	0.080
3-Dec-18	1252 Westurne Heights	0	0	0	0	7	7.24	0.52	50.3	0.05	106.6	0.14	0.000
10-Dec-18	1263 Westurne Heights	0	0	0	0	5	7.29	0.48	48.8	0.05	103.6		
10-Dec-18	Well Head	0	0	0	0	9	7.35	0.44	49.4	0.05	104.8		
17-Dec-18	1252 Westurne Heights	0	0	0	0	6	7.20	0.56	49.4	0.05	104.7		
	Average	0	0	0	0	7.2	7.3	0.49	49.5	0.05	105.1	0.14	0.040
	Maximum	0	0	0	0	9	7.35	0.56	50.3	0.05	106.6	0.14	0.08
	Minimum	0	0	0	0	5	7.2	0.44	48.8	0.05	103.6	0.13	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
7-Nov-18	1263 Westurne Heights	0	0	0	0	11	7.12	0.54	51.3	0.05	108.8	0.12	0.006
7-Nov-18	Well Head	0	0	0	0	9	7.20	0.50	50.9	0.05	107.8		
14-Nov-18	1252 Westurne Heights			0	0	8	7.62	0.54	50.0	0.05	106.8		
19-Nov-18	Well Head	0	0	0	0	9	7.33	0.49	50.5	0.05	106.9		
19-Nov-18	1252 Westurne Heights	0	0	0	0	8	7.36	0.51	50.5	0.05	106.8		
27-Nov-18	1263 Westurne Heights			0	0	8	7.32	0.51	50.2	0.05	106.3		
	Average	0	0	0	0	8.8	7.3	0.52	50.6	0.05	107.2	0.12	0.006
	Maximum	0	0	0	0	11	7.62	0.54	51.3	0.05	108.8	0.12	0.006
	Minimum	0	0	0	0	8	7.12	0.49	50.0	0.05	106.3	0.12	0.006

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
1-Oct-18	1263 Westurne Heights	0	0	0	0	12	7.37	0.33	51.4	0.05	108.9	0.09	0.016
1-Oct-18	Well head	0	0	0	0	9	7.32	0.40	51.3	0.05	108.7	0.11	0.000
9-Oct-18	1252 Westurne Heights			0	0	13	7.38	0.43	51.3	0.05	108.2		
15-Oct-18	Well head	0	0	0	0	8	7.24	0.62	51.0	0.05	108.0		
15-Oct-18	1252 Westurne Heights	0	0	0	0	11	7.21	0.62	51.2	0.05	108.4		
23-Oct-18	1263 Westurne Heights			0	0	9	7.59	0.60	51.3	0.05	108.6		
30-Oct-18	Well head			0	0	9	7.33	0.59	51.4	0.05	109.0		
	Average	0	0	0	0	10.1	7.3	0.51	51.3	0.05	108.5	0.10	0.008
	Maximum	0	0	0	0	13	7.59	0.62	51.4	0.05	109	0.11	0.016
	Minimum	0	0	0	0	8	7.21	0.33	51	0.05	108	0.09	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
5-Sep-18	1263 Westurne Heights	0	0	0	0	17	7.30	0.34	50.8	0.05	107.8	0.11	0.009
5-Sep-18	Well head	0	0	0	0	11	7.32	0.43	50.8	0.05	107.9	0.10	0.028
10-Sep-18	Well head			0	0	9	7.30	0.47	50.4	0.05	106.9		
17-Sep-18	Well head	0	0	0	0	9	7.39	0.50	50.3	0.05	106.3		
17-Sep-18	1252 Westurne Heights	0	0	0	0	15	7.35	0.51	50.9	0.05	107.9		
24-Sep-18	Well head			0	0	9	7.35	0.50	50.8	0.05	107.6		
	Average	0	0	0	0	11.7	7.3	0.46	50.7	0.05	107.4	0.11	0.019
	Maximum	0	0	0	0	17	7.39	0.51	50.9	0.05	107.9	0.11	0.028
	Minimum	0	0	0	0	9	7.30	0.34	50.3	0.05	106.3	0.10	0.009

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
7-Aug-18	Well Head	0	0	0	0	9	7.12	0.42	49.4	0.05	104.9	0.08	0.022
7-Aug-18	1263 Westurne Heights	0	0	0	0	22	7.10	0.45	49.8	0.05	105.6	0.09	0.004
13-Aug-18	Well Head			0	0	9	7.23	0.50	48.4	0.05	102.7		
20-Aug-18	Well Head	0	0	0	0	9	7.52	0.60	49.8	0.05	105.9		
20-Aug-18	1252 Westurne Heights	0	0	0	0	18	7.46	0.59	50.4	0.05	106.7		
29-Aug-18	Well Head			0	0	9	7.32	0.52	50.1	0.05	106.3		
	Average	0	0	0	0	12.7	7.3	0.51	49.7	0.05	105.4	0.09	0.013
	Maximum	0	0	0	0	22	7.52	0.6	50.4	0.05	106.7	0.09	0.022
	Minimum	0	0	0	0	9	7.1	0.42	48.4	0.05	102.7	0.08	0.004

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
3-Jul-18	Well Head	0	0	0	0	9	7.12	0.57	47.9	0.05	101.3	0.08	0.000
3-Jul-18	1252 Westurne Heights	0	0	0	0	15	7.15	0.63	49.6	0.05	105.0	0.11	0.000
9-Jul-18	1263 Westurne Heights	0	0	0	0	17	7.13	0.56	48.9	0.05	103.7		
9-Jul-18	Well Head	0	0	0	0	9	7.15	0.62	46.8	0.05	103.5		
16-Jul-18	Well Head	0	0	0	0	9	7.23	0.63	49.1	0.05	103.9		
16-Jul-18	1252 Westurne Heights	0	0	0	0	17	7.19	0.56	49.5	0.05	104.8		
24-Jul-18	1263 Westurne Heights			0	0	19	7.02	0.45	49.7	0.05	105.2		
30-Jul-18	Well Head			0	0	9	7.07	0.45	49.9	0.05	105.7		
30-Jul-18	1252 Westurne Heights			0	0	20	7.06	0.46	49.8	0.05	105.5		
	Average	0	0	0	0	13.8	7.1	0.55	49.0	0.05	104.3	0.10	0.000
	Maximum	0	0	0	0	20	7.23	0.63	49.9	0.05	105.7	0.11	0.000
	Minimum	0	0	0	0	9	7.02	0.45	46.8	0.05	101.3	0.08	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
5-Jun-18	Well head	0	0	0	0	9	6.98	0.56	47.2	0.05	100.1		
5-Jun-18	1252 Westurne Heights	0	0	0	0	15	6.96	0.55	47.2	0.05	100.2		
11-Jun-18	1263 Westurne Heights	0	0	0	0	14	7.15	0.59	47.2	0.05	100.3	0.09	0.002
11-Jun-18	Well head	0	0	0	0	9	7.13	0.60	47.0	0.05	99.5	0.11	0.001
18-Jun-18	Well Head	0	0	0	0	12	7.01	0.56	48.7	0.05	103.1		
18-Jun-18	1252 Westurne Heights	0	0	0	0	17	6.90	0.45	48.2	0.05	102.1		
25-Jun-18	1263 Westurne Heights	0	0	0	0	16	7.23	0.61	48.8	0.05	103.5		
25-Jun-18	Well head	0	0	0	0	9	7.12	0.62	48.0	0.05	101.8		
	Average	0	0	0	0	12.6	7.1	0.57	47.8	0.05	101.3	0.10	0.002
	Maximum	0	0	0	0	17	7.23	0.62	48.8	0.05	103.5	0.11	0.002
	Minimum	0	0	0	0	9	6.9	0.45	47.0	0.05	99.5	0.09	0.001

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L Aesthetic Objective for Manganese is ≤0.05mg/L

*Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
1-May-18	1263 Westurne Heights	0	0	0	0	11	7.08	0.52	46.4	0.05	98.4		
1-May-18	Well head	0	0	0	0	9	7.07	0.55	45.9	0.05	97.2		
7-May-18	Well head	0	0	0	0	9	7.12	0.58	47.2	0.05	100.1	0.07	0.015
7-May-18	1252 Westurne Heights	0	0	0	0	13	7.12	0.57	76.0	0.08	159.7	0.05	0.009
14-May-18	1263 Westurne Heights	0	0	0	0	15	7.07	0.68	46.6	0.05	98.9		
14-May-18	Well head	0	0	0	0	9	7.05	0.67	52.5	0.05	108.2		
22-May-18	Well head	0	0	0	0	9	7.01	0.56	46.7	0.05	99.1		
22-May-18	1252 Westurne Heights	0	0	0	0	15	7.04	0.61	47.8	0.05	101.4		
29-May-18	1263 Westurne Heights			0	0	16	7.03	0.50	46.8	0.05	99.4		
29-May-18	Well head			0	0	9	7.01	0.54	47.0	0.05	99.4		
	Average	0	0	0	0	11.5	7.1	0.58	50.29	0.05	106.2	0.06	0.012
	Maximum	0	0	0	0	16	7.12	0.68	76	0.08	159.7	0.07	0.015
	Minimum	0	0	0	0	9	7.01	0.5	45.9	0.05	97.2	0.05	0.009

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L **Aesthetic Objective for Manganese is ≤0.05mg/L**

***Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)**

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
4-Apr-18	1263 Westurne Heights	0	0	0	0	6	6.72	0.50	46.8	0.05	99.3	0.11	0.002
4-Apr-18	Well head	0	0	0	0	7	6.79	0.53	61.6	0.05	129.9	0.11	0.010
9-Apr-18	Well head	0	0	0	0	8	6.73	0.48	46.1	0.05	97.0		
9-Apr-18	1252 Westurne Heights	0	0	0	0	8	6.76	0.50	46.0	0.05	96.1		
16-Apr-18	1263 Westurne Heights	0	0	0	0	8	6.71	0.46	46.1	0.05	97.4		
16-Apr-18	Well head	0	0	0	0	8	6.71	0.47	45.7	0.04	97.4		
24-Apr-18	Well head	0	0	0	0	8	7.08	0.58	46.0	0.05	97.6		
24-Apr-18	1252 Westurne Heights	0	0	0	0	8	7.08	0.56	46.3	0.05	98.3		
	Average	0	0	0	0	7.6	6.8	0.51	48.1	0.05	101.6	0.11	0.006
	Maximum	0	0	0	0	8	7.08	0.58	61.6	0.05	129.9	0.11	0.010
	Minimum	0	0	0	0	6	6.71	0.46	45.7	0.04	96.1	0.11	0.002

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L Aesthetic Objective for Manganese is ≤0.05mg/L

*Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
5-Mar-18	1263 Westurne Heights	0	0	0	0	4	6.85	0.40	44.4	0.04	94.3	0.08	0.017
5-Mar-18	Well head	0	0	0	0	8	6.90	0.50	45.3	0.04	96.1	0.10	0.000
12-Mar-18	Well head	0	0	0	0	8	6.81	0.51	45.3	0.04	95.7		
12-Mar-18	1252 Westurne Heights	0	0	0	0	5	6.88	0.48	45.4	0.04	96.5		
20-Mar-18	1263 Westurne Heights	0	0	0	0	6	6.88	0.43	45.5	0.04	96.3		
20-Mar-18	Well head	0	0	0	0	8	6.95	0.45	45.5	0.04	96.6		
27-Mar-18	Well head	0	0	0	0	7.5	6.98	0.47	45.5	0.04	97.0		
27-Mar-18	1252 Westurne Heights	0	0	0	0	7	6.97	0.54	45.4	0.04	96.3		
	Average	0	0	0	0	6.7	6.9	0.47	45.3	0.04	96.1	0.09	0.009
	Maximum	0	0	0	0	8	6.98	0.54	45.5	0.04	97.0	0.10	0.017
	Minimum	0	0	0	0	4	6.81	0.40	44.4	0.04	94.3	0.08	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L Aesthetic Objective for Manganese is ≤0.05mg/L

*Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
5-Feb-18	1263 Westurne Heights	0	0	0	0	7	6.95	0.56	46.3	0.05	98.4	0.04	0.001
5-Feb-18	Well head	0	0	0	0	8	6.95	0.57	47.1	0.05	99.2	0.02	0.000
14-Feb-18	Well head	0	0	0	0		6.95	0.61	46.4	0.05	96.3		
14-Feb-18	1252 Westurne Heights	0	0	0	0		6.95	0.57	46.1	0.05	97.9		
20-Feb-18	1263 Westurne Heights	0	0	0	0	5	6.75	0.58	46.0	0.05	97.0		
20-Feb-18	Well head	0	0	0	0	8	6.78	0.56	46.0	0.05	97.3		
27-Feb-18	Well head	0	0	0	0	8	6.85	0.45	45.0	0.04	95.6		
27-Feb-18	1252 Westurne Heights	0	0	0	0	4	6.78	0.44	44.8	0.04	94.9		
	Average	0	0	0	0	6.7	6.9	0.54	46.0	0.05	97.1	0.03	0.001
	Maximum	0	0	0	0	8	6.95	0.61	47.1	0.05	99.2	0.04	0.001
	Minimum	0	0	0	0	4	6.75	0.44	44.8	0.04	94.9	0.02	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L Aesthetic Objective for Manganese is ≤0.05mg/L

*Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.

Regional District of Nanaimo - Water Services Department

Westurne Heights Water Analysis - 2018 Monthly Report

		Health Department		In-House									
Date	Sample Location (Address)	E. coli *	Total Coliform *	E.coli *	Total Coliform *	Temp. (°C)	pH	Free Chlorine Residual (mg/L)	Total Dissolved Solids (mg/L)	Salinity (%)	Conductivity (µS/cm)	Total Iron (mg/L)	Manganese (mg/L)
2-Jan-18	Well Head	0	0	0	0		6.90	0.59	48.6	0.05	102.8	0.11	0.022
2-Jan-18	1252 Westurne Heights	0	0	0	0		6.94	0.57	46.8	0.05	99.1	0.11	0.000
8-Jan-18	1263 Westurne Heights	0	0	0	0	8	7.02	0.56	46.7	0.05	99.2		
8-Jan-18	Well Head	0	0	0	0	8	7.10	0.57	46.9	0.05	99.6		
15-Jan-18	Well Head	0	0	0	0	8	6.85	0.58	46.5	0.05	98.2		
15-Jan-18	1252 Westurne Heights	0	0	0	0	4	6.90	0.58	46.1	0.05	97.9		
22-Jan-18	1263 Westurne Heights	0	0	0	0	7	6.85	0.61	46.7	0.05	99.0		
22-Jan-18	Well Head	0	0	0	0	8	6.72	0.60	46.9	0.05	99.3		
29-Jan-18	Well Head			0	0	7	6.83	0.53	46.6	0.05	98.9		
29-Jan-18	1252 Westurne Heights			0	0	6	7.02	0.51	47.1	0.05	99.9		
	Average	0	0	0	0	7	6.9	0.57	46.9	0.05	99.4	0.11	0.011
	Maximum	0	0	0	0	8	7.10	0.61	48.6	0.05	102.8	0.11	0.022
	Minimum	0	0	0	0	4	6.72	0.51	46.1	0.05	97.9	0.11	0.000

Red font indicates non-compliance with Canadian Drinking Water Guidelines

Aesthetic Objective for Iron is ≤0.3 mg/L Aesthetic Objective for Manganese is ≤0.05mg/L

*Coliforms are measured in colony forming units (CFU) per 100 millilitres of water (CFU/100mL)

Yellow Column Coliform tests are completed by Health Department

Blue column tests are completed by RDN

Comments:

Iron and manganese are found naturally in drinking water. Levels found in these samples are not a health concern.