

DRINKING WATER SYSTEM ANNUAL REPORT

Reporting Period: January 1st to December 31st, 2021 (year)

Water System Haywire Bay Regional Park

Water System Owner qathet Regional District

Primary Contact Name (Operator or Manager) Regan Keil, Parks and Properties Supervisor

Phone Number (Operator or Manager) 604-485-2260 ext 408

E-mail (Operator or Manager) rkeil@qathet.ca

DESCRIBE YOUR WATER SUPPLY SYSTEM

What is the Source(s) of Raw Water?

Deep Well Shallow Well Surface Water Other

If other, specify details:

Does the Drinking Water System have Primary Disinfection? Yes No

Chlorination Ultraviolet Light Ozone Other

If other, specify details:

Does the Drinking Water System have Secondary Disinfection? Yes No

Chlorination Other

If other, specify details:

Does the Drinking Water System have Filtration? Yes No

Check all boxes that apply

Cartridge Filter(s) Carbon Filter Sand Filtration Reverse Osmosis Other

If other, specify details:

PUBLIC REPORTING

Emergency Response & Contingency Plan (ERCP)

Is your ERCP up to Date? Yes No

How do you Inform the System Users of the ERCP?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

Drinking Water System Annual Report

How do you Inform the System Users of the Annual Report?

Hand Delivered Bulletin Board Newspaper Utility Bill Insert Website

Other (specify details)

COMPLIANCE WITH OPERATING PERMIT

List the conditions of your Operating Permit (Contact the DWO for a copy if needed):

Samples submitted on a regular basis beginning 2 weeks prior, and throughout the operating season.

Ensure Emergency Response Plan is reviewed at least annually and updated as required.

Ensure certified operator is available at all times.

Are you in compliance with your Operating Permit? Yes No

BACTERIOLOGICAL TESTING AND DRINKING WATER PROTECTION REGULATION WATER QUALITY STANDARDS

How many bacteriological samples were collected during this reporting period? 26

What is the minimum required sampling frequency for this system? (#samples/month) "regular basis"

Additional sampling details:

Was the minimum required sampling frequency achieved? Yes No

Comments:

Bacteriological summary attached to this report? Yes No

If no, how do the users of the system view the results?

WATER QUALITY STANDARDS FOR POTABLE WATER

Parameter:	Standard:	Did this system meet standard?	
Escherichia coli (for all samples)	No detectable <i>Escherichia coli</i> per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if only 1 sample collected in a 30 day period)	No detectable total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Total Coliform Bacteria (if more than 1 sample collected in a 30 day period)	No more than 10% of samples contain total coliform bacteria, and No sample has more than 10 total coliform bacteria per 100ml	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If the system did not meet any of above Drinking Water Protection Regulation standards, record the results in the table below; attach additional sheets if necessary.

Date	TC/100ml	E.coli/100ml	Reason	Corrective Action

CHEMICAL SAMPLING COMPLETED DURING THIS REPORTING PERIOD

Was any chemical sampling conducted during reporting period? Yes No

<p>If no, when were the last chemical samples conducted for this system? (date) 07/01/2015 <input type="checkbox"/> Don't Know <input type="checkbox"/> Never</p>	<p>If yes, did all water samples meet the Guidelines for Canadian Drinking Water Quality? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
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If any water samples did not meet the Guidelines for Canadian Drinking Water Quality, record the results in the table below; attach additional sheets if necessary.

Parameter	Result	Corrective Action / Treatment / Comments

ADDITIONAL TESTING

Does the system have analyzers for continuous monitoring? Yes No

If yes, check all boxes that apply:

Chlorine Turbidity Other (details)

Are the results available on request?

If any additional testing or sampling was conducted, record results in the table below; attach additional sheets if necessary.

Additional Testing & Reason for Sampling	Corrective Action Taken

WATER QUALITY COMPLAINTS

Were there any water quality complaints in this reporting period? (e.g. taste, odour, colour etc.) Yes No

If yes, complete the table below; attach additional sheets if necessary.

Date	Water Quality Complaint	Corrective Action / Treatment

OPERATIONAL PROBLEMS

Were there any operational problems during this reporting period? (e.g. insufficient water supply, malfunction of disinfection equipment, line breaks, elevated turbidity etc.). Yes No

If yes, complete the table below; attach additional sheets if necessary.

Incident Date	Type of Operational Problem	Corrective Action Taken

MAJOR UPGRADES/REPAIRS & EXPENSES

Were there any major upgrades/repairs or any major costs incurred during this reporting period? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Major Upgrades/Expenses	Details
Improvements required by DWO	
Additions/changes to system	
Purchase or install new equipment	
Equipment repair or replacement	
Annual maintenance of system	
Specialist report	
Other	

FUTURE IMPROVEMENTS

Are there any plans for future improvements? Yes No

If yes, complete the table below; attach additional sheets if necessary.

Future Upgrades or Improvements	Estimated Date of Completion

Click here to enter a date.
DATE COMPLETED: April 22, 2022

COMPLETED BY: Regan Keil

HAYWIRE BAY WATER TESTS

DATE COLLECTED YEAR DATE	TAP #1			TAP #5			TAP #10			TAP #12			HOUSE TAP			WELLHEAD SOURCE RAW WATER			POWELL LAKE RAW WATER		
	TC*	FC**	CMT	TC*	FC**	CMT	TC*	FC**	CMT	TC*	FC**	CMT	TC*	FC**	CMT	TC*	FC**	CMT	TC*	FC**	CMT
2021																					
20-Apr				L1	L1		L1	L1					L1	L1							
27-Apr	L1	L1		L1	L1		L1	L1					L1	L1							
12-May	L1	L1		L1	L1		L1	L1					L1	L1							
26-May	L1	L1		L1	L1		L1	L1					L1	L1							
9-Jun	L1	L1		L1	L1		L1	L1					L1	L1							
23-Jun	L1	L1		L1	L1		L1	L1													
7-Jul	L1	L1		L1	L1		L1	L1					L1	L1							
21-Jul	L1	L1		L1	L1		L1	L1		L1	L1		L1	L1							
4-Aug	L1	L1		L1	L1		L1	L1		L1	L1		L1	L1							
25-Aug	L1	L1		L1	L1		L1	L1		L1	L1		L1	L1							
8-Sep	L1	L1		L1	L1		L1	L1		L1	L1		L1	L1							

EST: EST result indicates high colony density on membrane preventing accurate coliform counting.

BWA: Boil Water Advisory

OG: Overgrown - confluent bacterial growth on membrane preventing accurate coliform determination

~ More than 200 background colonies noted on total coliform membrane filter per 100 ml. Indicates system requires flushing

Indicates high colony density on membrane preventing accurate coliform counting

* Total Coliform per 100 mL

** E. Coli per 100 mL

CMT Comment

L Less than

Small Water System Emergency Response Plan

Name of Water System: HAYWIRE BAY PARK - #11035

Date Prepared: March 10, 2022 **Prepared By:** Caroline Visser

Emergency Contact Information

Contact Name(s)	Phone #	Cell #	Fax # or other #'s	Email
Operator If certified operator give EOC #: Regan Keil - #9197	604-487-1380	604-223-7856		rkeil@gathet.ca
Owner's Name and Address: qathet Regional District 202 – 4675 Marine Ave. Powell River, BC V8A 2L2	604-487-1380	604-483-8201		operations@gathet.ca
Electrician: Foxtrot Electrical Solutions	604-414-3929			
Plumber: Target Plumbing	604-483-5192	604-414-8450		
Equipment Supplier(s): Pete's Plumbing Fred Surridge	604-485-9761 250-954-0368			
Other: Morgan Huxter, Caretaker	604-483-1097			rkeil@gathet.ca
Public Health Contact Information				
Drinking Water Officer: Michael Nguyen, DWO	604-485-3324	604-414-5545	778-317-8567	Michael.nguyen@vch.ca
Back-up Health Contact Darren Molder, SEHO	604-885-8711	604-989-1357	604-885-5200	Darren.molder@vch.ca
Back-up Health Contact Len Clarkson, DWO, Drinking Water Specialist	604-815-6841	604-892-7528	604-892-5447	Len.Clarkson@vch.ca
Medical Health Officer: Dr. Geoff McKee, MHO	604-983-6701	604-842-2357	604-983-6715	geoff.mckee@vch.ca
Back-up Health Contact Mark Ritson, DWO, Manager Health Protection	604-983-6751	604-219-7359	604-988-6516	Mark.ritson@vch.ca

Location of Water Source(s)

Directions to Site: Drill well located 20' on the right hand side of the road leading to the caretakers cabin at Haywire Bay.

Attach photo's (Optional)

GPS settings: 49.904 N 124.52 W

IN CASE OF EMERGENCY: *Enter name of the person responsible for tasks.*

If the water in the water system becomes contaminated or you receive an unsatisfactory water result, or in the event of an interruption in the treatment process:

1. Shut off water supply, if appropriate.
2. **Regan** Keil will notify DWO or back-up health contact.
3. Contact other appropriate person(s) from the list of emergency numbers.
4. **Morgan Huxter** will notify any affected water users. Please keep a phone and address list of users and warning signs handy. May need to phone or hand-deliver the notice (and water disinfection procedures) to the users.
5. **Morgan Huxter** will post warning signs.
6. **Regan Keil** will coordinate repair.
7. Organize alternate source of safe drinking water (if available).

Start-up Procedure

1. Identify and correct source of contamination.
2. Entire system should be flushed and disinfected. Follow attached guideline.
3. Submit water sample(s) to appropriate approved Lab for testing. For bacteriological contamination three negative successive samples are usually required. Contact your DWO to confirm the number of samples necessary.
4. Contact DWO for approval to resume use of water supply.

Posting the Emergency Response Plan

The ERP must be posted in a conspicuous location that is easily accessible to the operator and management of the water supply.

Location of ERP: Hanging on the wall of the chlorine building with a copy at the qathet Regional District Maintenance Facility.

Additional Information

1. **Include a schematic drawing of the water supply system; from the source to the tap. Include all sources, storage, reservoirs, treatment and distribution system.**
2. **Include public notices which may be required in the event of a "boil advisory" or "do not consume" notice. Templates are attached.**

DO NOT USE WATER NOTICE

**HAYWIRE BAY PARK
WATER SYSTEM
IS ADVISING ALL USERS
THAT THE DOMESTIC
WATER SUPPLY IS NOT
SAFE FOR DRINKING OR
DOMESTIC USE.**

****DUE TO THE NATURE OF THE
CONTAMINATION, BOILING MAY NOT
ACHIEVE SAFE DRINKING WATER**



BOIL WATER ADVISORY

Haywire Bay Park Water System is advising all users to boil their water before using it for drinking, cooking, washing food, or brushing teeth, due to a potential problem with the water system.

The water can be made safe by boiling it for one minute at a rolling boil. Boiled water should be stored in a clean container in the refrigerator.

Alternatively, bottled water can be used.

You will be notified when service is returned to normal and the water is again safe to drink. Thank you for your co-operation in this matter.

