

# REGIONAL DISTRICT OF NANAIMO

## Water Service Area Annual Report 2017



### Rollo McClay Community Park Water System



June 2018

**REGIONAL DISTRICT OF NANAIMO**

*Water & Utility Services Department*

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Appendix A - Map of Rollo McClay Community Park Water System

Appendix B - Water Quality Testing Results

Appendix C - Emergency Response Plan

## 1. Introduction

The following annual report describes the Rollo McClay Community Park Water System and summarizes the water quality, the completed and proposed maintenance activities, Operator Certification, the Emergency Response Plan, and the Cross Connection Control Program for the year 2017. This report is to be submitted to Island Health by the spring of 2018.

## 2. Rollo McClay Community Park Water System

The Rollo McClay Community Park was created in 1990 as part of a residential subdivision (Plan No. VIP51655). The park was operated and maintained by Gabriola Island residents until the Regional District acquired the park later in the 1990's. The park comprises an area of 7.8 hectares (19 acres) on the north side of Gabriola Island, and is accessed from McClay Way. There is one drilled well located within the park, and the water supply was used for sinks and washrooms in the ball field concession building. Currently, the drinking water is being trucked-in, and stored in one cistern on site. A map of the Rollo McClay Community Park Water System is provided in Appendix A for reference.

### 2.1 Groundwater Wells

The Rollo McClay Community Park well is located inside a concrete manhole ring, approximately 50 meters to the southeast of the concession building. The well is 48.7 meters deep. The well is not currently in use, and its future is scheduled to be discussed in 2018.

### 2.2 Reservoirs

One polyethylene cistern is located inside the concession stand building. The cistern has a capacity of 5.5 m<sup>3</sup> (1,200 imperial gallons).



Rollo McClay  
Concession  
Building



Rollo McClay  
Water  
Cistern

**2.3 Distribution System**

There is no water distribution system in Rollo McClay Park. The cistern located inside the concession building supplies potable water to the kitchen and bathrooms. There are no fire hydrants in this water system.

**3. Water Sampling and Testing Program**

Water sampling and testing is carried out monthly in the concession building. The following table includes a summary of all testing:

Timing	Location	Tests
Monthly: May-Oct (Closed: Nov-Apr)	BC Centre for Disease Control	Total coliforms, E.Coli
Annually (April)	Maxxam Labs	Complete potability testing of treated water (trucked-in, source is from San Pareil)

**4. Water Quality - Distribution System**

Drinking water is trucked-in to the Rollo McClay Park from an RDN-owned water system near Parksville, using an RDN-owned truck and tank. The delivery of potable water was determined to be less costly than using the well and water treatment system on-site. Trucking in water has been ongoing since 2015.

The trucked-in water has a chlorine residual upon arrival at Rollo McClay Park, and chlorine residuals are tested regularly by the park operator to ensure no bacterial regrowth occurs in the cistern. The water stored in the cistern does not have a high turnover rate, so the park operator adds liquid chlorine manually, as required.

Tap water test results 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?](http://www.healthspace.ca/Clients/VIHA/VIHA_Website.nsf/Water-Samples-Frameset?) , then click on [Gabriola Island](#), then click [Rollo McClay Community Park Water](#).

**5. Water Quality Inquiries and Complaints**

No complaints were received from the Rollo McClay Community Park Water System users. RDN staff have a good line of communication with the park users and are notified if water is required during the normal shut-down period.



**Rollo McClay Wellhead Cover in 2012**



A summary of the water system incidents in 2017 is given in the table below.

Activity in 2017	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	None	None

**6. Groundwater Production and Consumption**

The volume of groundwater pumped from the Rollo McClay Community Park well is not monitored, nor is the water consumption metered at the concession stand. However, the volume of water trucked-in with the RDN tank is estimated to be 8 cubic meters per month (x 6 months/year).

**7. Maintenance Program**

Chlorine residuals are taken and recorded 2-3 times weekly by the local water system operator on Gabriola Island while the concession building is open (summer months only). The operator contacts RDN staff weekly to coordinate water hauling.

The water storage cistern is drained for the winter season, and cleaned/disinfected every Spring before being filled. Twenty-four hour on-call coverage is in place to respond to water system emergencies.

**8. Operator Certification**

The Regional District Water & Utility Services staff are comprised of one Manager, one Project Engineer, one Engineering Technologist, one Chief Operator, and seven certified Level 2 Water Distribution System Operators. The Park Operator has the Small Water Systems Operator certification. 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. Water System Projects

### 9.1 2017 Completed Studies & Projects

- Utilized hauled water as a drinking water source;
- Cleaned the water storage cistern;
- Completed a Cross Connection Control Bylaw in draft format;
- Added 15 new volunteer observation wells to the RDN monitoring network;
- Completed the online GIS Water Map update for aquifer and watershed info;
- Issued a Public newsletter on State of Our Aquifers;
- Maintained a high level of water quality;
- Continued quality control through regular testing and monitoring of water system; and
- Completed additional educational programs.

### 9.2 2018 Proposed Projects & Upgrades

- Consider closing the well permanently;
- Consider installing an additional storage cistern;
- Review and update the Emergency Response Plan;
- Complete the Cross Connection Control Bylaw; and
- Review and update the Drinking Water and Watershed Protection Action Plan.



Rollo McClay Wellhead  
(2012)

## 10. 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 2017, 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. 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. Two RDN Operators achieved their Backflow Assembly Tester re-certification in 2017. The RDN Chief Operator is the designated Cross Connection Control Manager.

In 2018, 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. Sections of the existing RDN Water Supply Bylaw No. 1654 will be repealed so they do not conflict with the new Cross Connection Control Bylaw. A webpage will be established on the Water & Utility Services website that will educate RDN customers about cross connections and list the relevant links to current standards and resources.

## 12. Closing

An annual report for the year 2018 will be prepared and submitted to Island Health in the Spring of 2019. The Rollo McClay Community Park Water System Annual Report is also available on our website at <https://www.rdn.bc.ca/rollo-mcclay-community-park>.



Park  
Entrance

**APPENDIX A**

**MAP OF ROLLO McCLAY COMMUNITY**

**PARK WATER SYSTEM**



MAP OF ROLLO McCLAY COMMUNITY PARK WATER SYSTEM



# ROLLO McCLAY COMMUNITY PARK WATER



**Facility Location:**

1100 McClay Way  
Gabriola Island

**Facility Information:**

Facility Type: DWQ

**Facility Sampling History:**

<u>Location</u>	<u>Date</u>	<u>Total Coliform</u>	<u>E. Coli</u>
Kitchen, Gabriola	7-Dec-2017	L1	L1
Kitchen, Gabriola	9-Nov-2017	L1	L1
Kitchen, Gabriola	12-Oct-2017	L1	L1
Kitchen, Gabriola	13-Sep-2017	L1	L1
Kitchen, Gabriola	30-Aug-2017	L1	L1
Kitchen, Gabriola	6-Jul-2017	L1	L1
Kitchen, Gabriola	7-Jun-2017	L1	L1
Rollo McClay Community Park Water - AUDIT, 1100 McClay Way	7-Jun-2017	L1	L1
Kitchen, Gabriola	3-May-2017	L1	L1
Rollo McClay Community Park Water - AUDIT, 1100 McClay Way	3-May-2017	L1	L1
Rollo McClay Community Park Water - AUDIT, 1100 McClay Way	20-Apr-2017	L1	L1

**Interpreting Sample Reports**

In VIHA, 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