WHEREAS under the Local Government Act, a regional district may operate any service that the Board considers necessary or desirable for all or part of the regional district;

AND WHEREAS under the Local Government Act, subject to the Public Health Act, a regional district board may, by bylaw;

   a) regulate and prohibit for the purposes of maintaining, promoting or preserving public health or maintaining sanitary conditions; and

   b) undertake any other measures it considers necessary for those purposes;

AND WHEREAS the Regional District of Nanaimo owns, operates and maintains water supply and distribution systems which currently provide Water Service to the RDN Water Service Areas in accordance with Regional District of Nanaimo Water Use Regulation Bylaw No. 1654, 2012;

AND WHEREAS the Board wishes to protect public health by controlling Cross Connections in all Water Systems owned, operated and maintained by the Regional District of Nanaimo;

NOW THEREFORE the Board of the Regional District of Nanaimo in an open meeting assembled hereby enacts as follows:

1. **CITATION**

   This Bylaw may be cited as the "Regional District of Nanaimo Cross Connection Control Regulation Bylaw No. 1788, 2019".

2. **PURPOSE**

   The purpose of this Bylaw is to:

   a) protect the Potable Water supplied by the RDN against the possibility of contamination, by removing or isolating existing, or potential, Contaminant sources that may Backflow into the RDN Water Systems; and

   b) provide for the installation, inspection, and maintenance of Approved Backflow Preventers and other devices required by the Cross Connection Control Program, so as to systematically and effectively prevent the introduction of Contaminants into the RDN Water Systems.
3. **INTERPRETATION**

   a) Words or phrases defined in the *Interpretation Act*, the *Community Charter*, or the *Local Government Act*, R.S.B.C. 1996, Chapter 323 shall have the same meaning when used in this Bylaw, unless otherwise defined in this Bylaw.

   b) The headings contained in this Bylaw are for convenience only and are not to be construed as defining or in any way limiting the scope or the intent of the provisions of this Bylaw.

   c) Any enactment referred to herein is a reference to an enactment of the Province of British Columbia and regulations thereto, as amended, revised, consolidated or replaced from time to time, and any bylaw referred to herein (as may be cited by short title or otherwise) is a reference to a bylaw of the Board, as amended, revised, consolidated or replaced from time to time.

   d) If any provision of this Bylaw is held to be invalid by a court of competent jurisdiction, the provision may be severed from the Bylaw, and such invalidity shall not affect the validity of the remaining portions of this Bylaw.

4. **DEFINITIONS**

   In this Bylaw, unless the context requires otherwise:

   “**Actual Cost**” means the total amount invoiced to the RDN by a contractor or supplier for goods and services purchased and performed in performing work under this Bylaw.

   “**Alternate or Auxiliary Water Supply**” means any water supply available on the Premises, or to the Premises, other than an RDN Water System.

   “**Approved Backflow Preventer**” means an apparatus that is approved by the RDN or its authorized agent for installation in a water system so as to prevent Backflow of Contaminants into the RDN Water System, and includes approved Backflow Prevention Assemblies and approved Backflow Prevention Devices.

   “**Backflow**” means the flow of water or other liquids, gases or solids from any source in the reverse direction of the intended direction of flow and back into the Consumer's plumbing system or the RDN Water System.

   “**Backflow Assembly Tester**” means a person holding a valid certificate from the American Water Works Association, British Columbia section (BCWWA) for testing Backflow Prevention Assemblies.

   “**Backflow Assembly Test Report**” means a record, in the form provided or approved for use by the RDN Manager of Water Services, which contains all pertinent information and test data resulting from a Backflow assembly test conducted by a Backflow Assembly Tester in accordance with the provisions of this Bylaw.
“Backflow Preventer” means an apparatus that is installed in a water system so as to prevent Backflow of Contaminants into the RDN Water System, and includes Backflow Prevention Assemblies and Backflow Prevention Devices.

“Backflow Prevention Assembly” means a CSA Standard B64.10-approved apparatus that is installed in a Water System to stop the flow of water or other liquids, gases or solids from flowing in the reverse direction of the intended direction of flow and back into the Consumer’s plumbing system or the RDN Water System. A Backflow Prevention Assembly is equipped with an inlet and outlet shut-off valve and test cocks that allow it to be tested and repaired while in service.

“Backflow Prevention Device” means a non-testable apparatus that is installed in a water system to stop the flow of water or other liquids, gases or solids from flowing in the reverse direction. A Backflow Prevention Device is not equipped with an inlet and outlet shut-off valve or test cocks that would allow its functionality to be tested or determined.

“Board” means the Board of Directors of the Regional District of Nanaimo.

“Bylaw Enforcement Officer” means a person or persons appointed from time to time by the Board as a bylaw enforcement officer, or any other person appointed as such by the Board for the purposes of administering, enforcing or carrying out this Bylaw.

“Consumer” means any person who is the owner or occupier, or agent for the owner or occupier, of any Premises or equipment to whom water is supplied by the RDN.

“Consumer Supply Line” means the pipe that conveys water from an RDN Water System to the Consumer’s building or property being served.

“Contaminant” means any physical, chemical, biological or radiological substance or matter in water which may render the water non-potable, according to the Drinking Water Protection Act.

“Cross Connection” means any existing or potential physical connection whereby an RDN Water System is connected, directly or indirectly, with any Non-Potable or unapproved Private Water System, or any sewer, drain, conduit, well, pool, storage reservoir, pond, boiler, plumbing fixture, or any other device which contains or may contain contaminated water, liquid, gases, sewage, or other waste, of unknown or unsafe quality, capable of introducing Contaminants into the public water supply by Backflowing into the RDN Water System.

“Cross Connection Control Program” means the program developed and operated by the RDN to administer and regulate the selection, approval, installation, inspection, testing and maintenance of Backflow Prevention Devices.

“CSA or CAN/CSA” means the Canadian Standards Association.

“Disconnect” and “Disconnection” mean turning off or physically separating the Consumer Supply Line from the RDN Water System, and includes stopping the flow of water between the Consumer Supply Line and the RDN Water System by closing an RDN-owned valve, or by any other means approved by the RDN.
“Greywater” means untreated household wastewater that has not come in contact with toilet waste, and includes wastewater from bathtubs, showers, clothes washers and laundry tubs, but excludes wastewater from toilets, urinals, bidets, kitchen sinks, and dishwashers.

“Inspect” means an on-site review of the water use, facilities, meters, piping, equipment, operating conditions and maintenance records for the purpose of evaluating for conformity with the terms and conditions of this Bylaw.

“Manager of Water Services” means the person appointed to the position of Manager of Water Services of the RDN Regional and Community Utilities Department, and shall include any person designated by the Board to act on behalf of the Manager of Water Services.

“Non-Potable Water” means water that is not fit for human consumption as defined in the Drinking Water Protection Act.

“Potable Water” means water that is fit for human consumption as defined in the Drinking Water Protection Act.

“Premises” means any real property and all buildings and improvements thereon.

“Private Water System” means any Water System serving a premises with water originating from a source or system not owned or operated by the RDN.

“RDN” means the Regional District of Nanaimo.

“RDN Official” means a Bylaw Enforcement Officer, Building Inspector or any other person employed by the RDN for the purposes of administering, enforcing or carrying out the provisions in this Bylaw.

“RDN Water System” means any Water System owned, operated and maintained by the RDN or its authorized agent, and any and all parts thereof.

“Reconnect” and “Reconnection” mean to turn on, or physically connect the Consumer Supply Line to the RDN Water System, and includes allowing the flow of water by opening an RDN-owned valve, or by any other means approved by the RDN.

“Reclaimed Water” means wastewater or Non-Potable Water that has received at least secondary treatment and basic disinfection, and is available for reuse for a beneficial purpose.

“Service Connection” means any connection through means of a pipe, valve, and other appurtenances extending from an RDN Water System to the boundary of the property being served.

“Used Water” means any Potable Water which is no longer in the RDN Water System, including Potable Water that has moved downstream or past the Service Connection valve and/or the property line to the Premises.
“Water Service” means the supply of water to a Consumer by means of the RDN Water System.

“Water System” means a system of water supply pipes and appurtenances that conveys water to a Consumer.

5. APPLICATION

This Bylaw applies to all water supplied by the RDN to the RDN Water Service Areas, and to all Consumers receiving or using such water.

6. WATER SUPPLY AND PRESSURE

a) Water Service shall only be provided where, in the opinion of the Manager of Water Services, the RDN Water System has been effectively protected from any actual or potential Cross Connections existing at or within the Consumer’s private water system.

b) No person shall operate a valve in order to provide Water Service to the occupants of any newly renovated, constructed or reconstructed Premises until an RDN Official has first:

   i) inspected the Private Water System in such Premises for Cross Connections; and

   ii) confirmed that all required Backflow Preventers have been installed and tested, in accordance with this Bylaw.

7. CONNECTIONS, CROSS CONNECTIONS AND BACKFLOW PREVENTION

a) Except as specifically provided in this Bylaw, no person shall create a Cross Connection.

b) If an RDN Official or authorized agent determines that there exists a connection or Cross Connection prohibited by this Bylaw, that person may send written notice to the Consumer ordering the Consumer to correct the connection or Cross Connection at the expense of the Consumer within a specified time.

c) A Consumer to whom notice has been given under this section shall eliminate or control the connection or Cross Connection by installing an Approved Backflow Preventer that conforms to the CAN/CSA B64.10 standard or most current edition, for the selection and installation of Backflow Preventers, and that is approved by the RDN Manager of Water Services.

d) The failure to be sent a notice(s) or the failure to receive a notice(s) shall not excuse the mandatory duty of the Consumer or other responsible party to comply with this Bylaw and all other applicable bylaws.

e) Where the Consumer has not installed an Approved Backflow Preventer to the satisfaction of the Manager of Water Services within the time specified in the notice, or the Backflow Preventer fails to function as designed, the RDN may:
(i) Disconnect the Consumer’s Water Service with notice to the Consumer at the time of the disconnection; and

(ii) install an Approved Backflow Preventer on or near the Premises and invoice the Consumer for the Actual Cost to have an Approved Backflow Preventer installed on or near the Premises.

f) In the event a Consumer’s Water Service is Disconnected pursuant Section 7(e) of this Bylaw, the Consumer may apply to have the Water Service reinstated on the condition that the Consumer pays outstanding fees and charges, including all RDN costs associated with the Disconnection and Reconnection, and is otherwise in compliance with this Bylaw.

g) Where there is any indication that an Approved Backflow Preventer is malfunctioning, including, without limitation, due to damage caused by freezing, hot water, fire, neglect or mistreatment, the Consumer shall immediately notify the RDN, and cease using the Cross Connection until the Approved Backflow Preventer is replaced or repaired and re-tested in accordance with this Bylaw.

h) All Approved Backflow Preventers installed by the RDN or its authorized agent on or near the Premises under Section 7(e) of this Bylaw remain the property of the RDN.

i) No person shall impede, remove, bypass, stop-up, render inoperable, or replace an Approved Backflow Preventer without prior written consent from the RDN Manager of Water Services.

8. INSPECTION

a) A Bylaw Enforcement Officer has the authority to enter at all reasonable times on any property that is subject to this Bylaw to ascertain whether the requirements of this Bylaw are being met or observed.

b) The RDN and its authorized agent may:

   (i) Impose minimum standards that must be met and satisfied relating to the type of Backflow Preventer and the installation and maintenance of the same as specified in the RDN Cross Connection Control Program; and

   (ii) Inspect the type of Backflow Preventer, the installation and state of maintenance and repair of the same.

9. TESTING OF BACKFLOW PREVENTION ASSEMBLIES

a) Every Consumer must ensure that all Approved Backflow Prevention Assemblies serving their Premises are inspected and tested by a certified Backflow Assembly Tester, upon installation, after repair and at least once in every twelve (12) month period following installation or more often if written notice is given to the Consumer.
b) Every Consumer must ensure that within thirty (30) days of installation, repair, inspection, test, replacement or relocation of an Approved Backflow Prevention Assembly, a completed Backflow Assembly Test Report is provided to the RDN Manager of Water Services.

c) In addition to any other requirement in this Bylaw, an RDN Official may at any time require a Consumer to have a Backflow Prevention Assembly tested at the Consumers’ expense, provide Backflow Assembly Test Reports to the RDN, and undertake whatever other measures are required to prevent the contamination of the RDN Water System.

10. FAILURE TO COMPLY WITH TESTING OR REPORTING REQUIREMENTS

a) If a Consumer fails to comply with any testing or reporting requirements contained in this Bylaw: the RDN or its authorized agent may undertake the Backflow Preventer testing and reporting on behalf of the Consumer in order to ensure compliance with this Bylaw and the RDN Cross Connection Control Program and may invoice the Actual Cost of the testing to the Consumer.

11. PRIVATE WATER SYSTEM (ALTERNATE/AUXILIARY WATER SUPPLY)

No person shall cause a connection to be installed or a connection to be maintained whereby water from a Private Water System or Alternate or Auxiliary Water Supply can enter the RDN Water System unless:

a) the Consumer has received the prior written approval of the RDN;

b) an Approved Backflow Preventer has been installed in accordance with the RDN Cross Connection Control Program; and

c) the Consumer has entered into an agreement on terms and conditions acceptable to the RDN, for the installation, operation and maintenance of the connection.

12. RECLAIMED WATER, GREYWATER, and other NON-POTABLE WATER SYSTEMS

a) No person shall install, or permit or allow to be installed any direct connection between Reclaimed Water, Greywater, or other Non-Potable water system and an RDN Water System.

13. INVOICED COSTS

a) All invoices issued to a Consumer under this Bylaw must be paid within 30 days of issue.

b) If any part of an invoice remains unpaid on December 31st of the year it was issued, the amount unpaid is deemed to be taxes in arrears and the Regional District's financial officer shall seek collection in accordance with section 399(2)(b) of the Local Government Act.
14. OFFENCE AND PENALTY

a) A Consumer who violates any provision of this Bylaw, or who suffers or permits any act or thing to be done in contravention or in violation of any provision of this Bylaw, or who neglects to do or refrains from doing anything required to be done by any provision of this Bylaw, is guilty of an offence under this Bylaw.

b) A Consumer who commits an offence under this Bylaw is liable on summary conviction to a penalty of not less than $100.00 and not more than $2,000.00, plus the costs of prosecution if ordered by the court.

c) Each day that an offence under this Bylaw continues shall be deemed a separate and distinct offence.

d) Any penalty imposed pursuant to this Bylaw shall be in addition to, and not in substitution for, any other penalty or remedy imposed pursuant to any other applicable statute, law or legislation.

15. Effective Date

a) This Bylaw shall come into full force and effect upon adoption.

Introduced and read three times this day of , 2019.

Adopted this day of , 2019.

____________________________________     ______________________ _______________
CHAIR    CORPORATE OFFICER