



DATE: October 15, 2021

TO: Chair and Directors

Black Creek-Oyster Bay Services Committee

FROM: Russell Dyson

Chief Administrative Officer

Supported by Russell Dyson

FILE: 5600-01/BCOB

Chief Administrative Officer

R. Dyson

RE: Black Creek-Oyster Bay Water Local Service Area – Connection Suspension

Purpose

To suspend new or upsized connections in the Black Creek-Oyster Bay (BCOB) Water Local Service Area (WLSA) and complete further exploratory work to develop additional water supply sources to address water capacity constraints for the system.

Recommendations from the Deputy Chief Administrative Officer:

1. THAT no new or upsized connections be approved for any non-in-stream and non-entitled properties within the Comox Valley Regional District's Puntledge – Black Creek (Electoral Area C) portion of the Black Creek-Oyster Bay Water Local Service Area, as defined in the October 15, 2021 staff report;

AND FURTHER THAT Bylaw No. 5 being "Black Creek/Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008" be amended to include additional language to provide additional authority and flexibility to not approve new water connections as per the redline sections highlighted in blue and attached as Appendix A to the staff report dated October 15, 2021;

AND FINALLY THAT staff work with Strathcona Regional District staff to ensure that the connection suspension and bylaw conditions are implemented in a similar manner for all properties located within the Strathcona Regional District Electoral Area D portion of the Black Creek-Oyster Bay Water Local Service Area.

- 2. THAT the 2021-2025 financial plan for the Black Creek-Oyster Bay Water Local Service Area, Function 313, be amended to include an additional \$100,000 to be funded from reserves for further groundwater exploratory work, preliminary design, a Class C cost estimate and implementation schedule to be brought back to the Black Creek-Oyster Bay Services Committee for review in early 2022.
- 3. THAT Bylaw No. 5 being "Black Creek/Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008" be amended to include additional language surrounding use of wells for non-domestic purposes as per the redline sections highlighted in green and attached as Appendix A to the staff report dated October 15, 2021.

Executive Summary

The BCOB Water System treats and distributes water from two different water sources to properties north of the Oyster River in Electoral Area D of the Strathcona Regional District (SRD) and south of the Oyster River in Puntledge – Black Creek (Electoral Area C) of the Comox Valley Regional District (CVRD). The first water source is ground water from three wells in the Oyster River Nature

Park (ORNP), and the second is an infiltration gallery in the Oyster River. Historically, the river infiltration gallery has been the only source used in the summer, with the ground water wells reserved for the winter when the river water quality is compromised and community water consumption is lower. More recently, due to reduced performance of the infiltration gallery, the system has relied on a combination of infiltration gallery and groundwater wells to meet summertime demand.

Installation of the new third drinking water well was completed in March 2021. The project received 83 per cent grant funding from the Clean Water and Wastewater Fund (CWWF) and was completed on schedule and under budget. An extension to the grant funding to June 2022 to utilize remaining funds for optimization of the system was received following completion of the first phase of works.

Unfortunately, the ability for the system to supply the necessary water capacity to users continues to face a number of pressures, summarized below:

- Climate change projections and drought years Over the past several years the river infiltration gallery has proved unreliable, with 2014, 2015 and 2016 being particularly bad years. Conditions similar to those experienced in 2014-2016 are anticipated to be encountered more frequently in the near future based on climate change projections and an observed increase in weather extremes.
- Population growth and development potential The CVRD's Regional Growth Strategy (RGS) identifies Saratoga as one of three settlement nodes, with potential to accommodate medium density residential and commercial growth provided that servicing is available. This type of growth within the settlement node has the potential to significantly increase water demands especially in summer months when water capacity concerns are the highest and water demands are the greatest. Suspending connections will have the effect of slowing demand for growth opportunities until such time as water capacity is better understood and provided for.
- New production well yield Installation of the third production well was anticipated to relieve some of the capacity concerns for the system; however, the well has been operational since April 2021 and the yield is approximately 30 per cent less than anticipated.

As a result, CVRD staff recommend suspension of new or upsized connections until further water supply sources can be secured. To implement the suspension, the following steps are recommended:

- Suspend all new and upsized connections for all non-in-stream and non-entitled properties.
 New connections will only be granted to "in-stream" and "entitled" properties defined as follows:
 - For construction of principal dwellings on vacant land that have been paying frontage tax;
 - For property owners or developers that submitted development permit applications prior to October 2020, or building permit applications prior to November 16, 2021 (please note that incomplete applications will not be accepted);
 - O For projects of key strategic value to the Black Creek-Oyster Bay Water Local Service Area, such as partnership with a property owner for water system extension.
- Amendments to Bylaw No. 5 being "Black Creek/Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008" to allow the authority and flexibility to implement the connection suspension. Redline version of the bylaw is attached as Appendix A to the report; proposed changes related to the connection suspension are highlighted in blue.
- Budget amendment of \$100,000 for exploratory work and hydrogeological support to review and recommend location(s) for the development of additional groundwater wells far enough away from the Oyster River to avoid impacting flows in that important waterway.

In addition, work is currently underway on completion of a water master plan for the water service, which will provide greater certainty about the number of connections that can reliably be supplied by existing source water infrastructure.

| Prepared by: | Concurrence: Concurrence: | |
|------------------------------|------------------------------------|----------------------|
| Z. Berkey | K. La Rose | M. Rutten |
| Zoe Berkey, EIT | Kris La Rose, P.Eng. | Marc Rutten, P.Eng. |
| Engineering Analyst | Senior Manager of Water/ | General Manager of |
| , | Wastewater Services | Engineering Services |
| Government Partners and S | takeholder Distribution (Upon Ager | nda Publication) |
| Strathcona Regional District | | ~ |

Background/Current Situation

The current water supply challenges faced within BCOB are complex and include a number of competing factors leading CVRD staff to recommend a connection suspension until further source water capacity can be added to the system. These factors are current water supply sources and infrastructure including the newly installed third well project, climate change uncertainties, increasing demands and population growth, and are discussed further below.

Update on Third Well Project

In March 2017, the CVRD received approximately \$540,000 from the CWWF, or 83 per cent of the total estimated cost of \$680,000, to install a new production well in the ORNP to complement the two pre-existing wells. The project was completed by the March 2021 funding deadline and was approximately \$170,000 under budget.

Through commissioning and operation of the new well over summer 2021, staff have confirmed that the production capacity is significantly less than expected. The new well can yield between 40 to 45 cubic meters an hour, approximately 30 per cent less than anticipated. A number of factors were used in developing the estimated yield:

- Considerations of well construction Existing wells are 12 inch casings and yield on average 80m³/hr. New well is completed with a 20 inch casing, which our hydrogeologist noted should have allowed for increased capacity.
- New well location The new well is further away from the existing wells, further limiting the zone of influence on the other wells.

Even with significant review of potential locations for the new well, the yield for a new well is only an estimate until the well is drilled. Unfortunately the aquifer in this location is yielding less water than anticipated based on the exploration work and less water than each of the existing wells produce. A number of verifications and inspections have been completed since installation to ensure all equipment is operating as intended and no modifications have been identified that can further increase capacity from current output.

Following project completion, the CVRD received an extension to the grant funding program until June 2022 to utilize remaining project funds to help optimize the ORNP system. A number of related projects were identified and will be completed that will help optimize blending of sources and operation of the new production well in combination with other wells or the river infiltration gallery. Some of these projects were already identified within the financial plan and will now be 83 per cent funded. These projects include:

- Upgrades to the river infiltration gallery, including an access hatch (previously included in 2021-2025 financial plan) and installation of an inline water meter;
- A new fiber connection between the river infiltration gallery and the treatment building; and
- The associated necessary electrical and control works (portion of this scope previously included in the 2021-2025 financial plan).

Separate from the additional language for the connection suspension, but also included within the bylaw amendment (highlighted in green within Appendix A) is language surrounding the requirements for continued use of a private well for non-domestic purposes following connection to the BCOB Water System. This proposed language is a grant funding requirement and follows the recommended language included within the Ministry of Community, Sport and Cultural Development's *Model Well Regulation Bylaw, March 2012*. In addition, updates to the application for connection are also being made in line with the model bylaw. Incorporation of the additional language provides further security and protection of groundwater for the service area and is a condition of the Clean Water and Wastewater grant funding reporting requirements for the new production well to receive final approval and payment.

Climate Change Uncertainties

Over the past several years the river infiltration gallery has proved unreliable, with 2014, 2015 and 2016 being particularly bad years, requiring blending of sources to keep up with system demands.

Climate change modelling for the area predicts that by 2055 the Oyster River watershed will receive 25 per cent more rain in the winter but 20 per cent less rain in the summer. Increase in precipitation in the winter will not necessarily lead to increase in groundwater recharge, depending on the intensity of the precipitation, meaning conditions similar to those experienced in 2014-2016 are anticipated to be encountered more frequently. The direct impact this may have on the long term production capacity of the groundwater wells is hard to quantify and is a major concern of CVRD staff.

Population Growth and Development Potential

The BCOB WLSA currently has 1015 connections; on the CVRD side of the water system there are 679 connections, accounting for 67 per cent of the total service area. The CVRD's RGS identifies Saratoga as one of three settlement nodes, with potential to accommodate medium density residential and commercial growth provided that servicing is available. This type of growth within the settlement node is anticipated to significantly increase water demands especially in summer months when water scarcity concerns are the highest and water demands are the greatest. Suspension of connections will slow potential growth until such time as adequate water capacity through the BCOB WLSA can be ascertained.

On paper, development potential within the CVRD's Electoral Area C portion of the WLSA is significant; there are currently 752 lots within the WLSA. 54 of the 752 lots could make application to the Ministry of Transportation and Infrastructure for subdivision under current zoning and create a maximum of 467 new lots. There are an additional 122 lots that are currently zoned CR-1 or RU-8 that have potential to subdivide with rezoning; this could create an additional 732 new lots if they rezoned to a zoning that allows for 0.4 hectare minimum lot size.

Further, any rural or residential property within the area is permitted to have a secondary dwelling or secondary suite, another factor that will add additional stresses to the system. A water master plan is underway that will develop growth scenarios based on the development potential and note specific infrastructure upgrades that will be needed to meet future demands. A need for the CVRD's

Electoral Areas Services Committee to contemplate amendments to the zoning in this area may arise as an outcome of the water master plan.

Over the past four years 26 new connections have been added to the system. There are roughly 325 connections that are considered in-stream, including the first phase of Saratoga Beach Estates and the Watutco water system. It should be noted that the two Watutco water system commercial connections are significant water users, and the equivalent number of residential connections associated with the two commercial properties is approximately 87, as these two connections consist of a mobile home park and a campsite/tourist accommodation. Should this policy be implemented, CVRD staff are aware of approximately 334 connections that would be delayed by the connection suspension, the majority of these connections being the remaining phases of the Saratoga Beach Estates development.

Along with the additional potential residential development described above, there is the potential for additional commercial and tourist commercial development demand, further highlighting the need for significant additional groundwater capacity.

Recommendation for Connection Suspension for BCOB WLSA

To ensure adequate supply of water to existing users (e.g. including "in-stream" and "entitled" properties), CVRD staff are recommending a number of action items listed below and further described within the report below:

- 1. Suspend new and upsized connections for all non-in-stream and non-entitled properties.
- 2. BCOB WLSA water rates bylaw amendments to allow authority and flexibility to implement the connection suspension.
- 3. Groundwater exploratory work to review locations for development of additional groundwater wells.

Connection Suspension

The CVRD's top priority is to ensure there is adequate water supply to properties that are already connected to the water system and are water users. When requests for new water connections are received, the Senior Manager of Water/Wastewater Services will consider the following priorities in determining if a new connection shall be granted.

- Entitled: Any vacant property or property that does not have a principal dwelling or principle commercial/tourist commercial building, that is already within the service area and has been paying the associated frontage tax is entitled to a single service connection.
- In-Stream: Developments that submitted their planning applications prior to October 2020; single unit developments that submitted their building permit applications prior to November 16, 2021.
- Strategic value to the BCOB Water System: Any property/watermain extension that is determined by the CVRD to improve water quality or quantity for the system.

All other applications will be rejected or deferred until such time that the water system source capacity has been increased. Secondary dwellings, carriage houses or suites on properties with an existing connection will only be approved if they don't require a second connection.

Bylaw Amendments

Attached as Appendix A to the report is a redline draft, incorporating proposed changes to the fees and charges bylaw, to provide further authority and flexibility to implement connection suspensions. Language is similar to bylaws from other jurisdictions where the number of connections available to the system were limited.

Exploratory Work to Identify Additional Groundwater Well Locations

With the yield of the new production well-being less than anticipated, further investigations and hydrogeological work are required to identify potential locations for additional groundwater wells. Work will include completing a desktop assessment reviewing the aquifer to determine locations where exploratory drilling should occur, followed by completion a number of test holes to gather the information necessary to recommend locations and yields of future wells, and a final report summarizing the exploratory work. Staff will then work with engineering consultants to develop cost estimates for development of additional ground water wells, and assess opportunities for grant funding to assist with funding. Once all study work has been completed staff will report back to the committee with a recommended path forward. Total cost for the exploratory and study work is estimated at \$100,000 proposed to be funded from reserves.

Policy Analysis

The CVRD's RGS identifies Saratoga as one of three settlement nodes. The settlement nodes were identified based on existing residential densities and/or based on the ability to accommodate additional growth coincidental with adequate servicing. Growth within the Saratoga settlement node must be limited via a connection suspension at this time given the potential of residential and non-residential growth to significantly increase water demands, especially in summer months when water capacity concerns are the highest and water demands are the greatest. Further investigation into additional sources to ensure sufficient capacity for all users is required. No changes to the settlement node designation under the RGS or Rural Comox Valley Official Community Plan are proposed as growth potential is only one factor in the designation of a settlement node.

Options

The committee has the following options.

- 1. Suspend new or upsized connections to the BCOB WLSA and complete further exploratory work for additional groundwater well sites.
- 2. Do not apply a connection suspension to BCOB WLSA and complete further exploratory work for additional groundwater well sites.

The CVRD's top priority is to ensure there is adequate water supply to properties that are already connected to the water system. The water scarcity challenge for this service is complex with many competing factors needing to be taken into consideration. As such only option 1 above is recommended.

Financial Factors

The cost for the additional groundwater exploration and study work is estimated at \$100,000 and will require an amendment to the 2021-2025 financial plan to complete.

The additional works covered under the extension to the CWWF are estimated at \$90,000 and will be 83 per cent funded by grant funding. A number of these items were already included within the 2021-2025 financial plan and are now eligible to be partially funded by grants.

Legal Factors

Amendments to the existing fees and charges bylaw provides the authority and flexibility to implement connection suspensions. Language is similar to bylaws from other jurisdictions where the number of connections available to the system were limited. Suspending connections and development within the area could limit development potential of properties and may result in some pushback from developers and land owners.

Regional Growth Strategy Implications

As noted elsewhere, Saratoga is identified as a settlement node in the RGS. Due to water capacity concerns for the settlement node, a connection suspension for the area is necessary to ensure the appropriate water supply infrastructure is available for the system for existing users. Public health and safety and climate change impacts are driving factors in recommending the suspension of new connections and are similarly key goals of the RGS. The suspension will ensure water supply can be maintained now and in the future. Further study work will also look to develop new well sites to provide additional water security for the system.

Intergovernmental Factors

The BCOB WLSA straddles CVRD Electoral Area C and SRD Electoral Area D. CVRD staff will work with SRD staff to ensure the connection suspension is applied consistently on either side of the Oyster River.

Interdepartmental Involvement

Engineering Services and Planning and Development Services are working together collaboratively on development and implementation of the connection suspension for the BCOB Water System.

Citizen/Public Relations

Should the committee approve the recommendations within this report, a press release will be issued and a letter will be sent to all potentially impacted parties. The full communications plan is attached as Appendix B.

Attachments: Appendix A – Redline Draft of Bylaw No. 5 being "Black Creek / Oyster Bay Water

Service Regulation, Fees and Charges Bylaw, 2008"

Appendix B - Communications Plan - BCOB Water System Connection Suspension



Black Creek – Oyster Bay Water Rates Bylaw

The following is a consolidated copy of the Black Creek – Oyster Bay water rates bylaw and includes the following bylaws:

| Bylaw No. | Bylaw Name | Adopted | Purpose |
|--------------|--|---|---|
| 5 | Black Creek – Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008 | March 25, 2008 | To fix and regulate the fees and charges, terms and conditions under which water may be supplied and used in the Black Creek / Oyster Bay water service area |
| 40 | Black Creek – Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 1 | February 24, 2009 (effective April 1, 2009) | To pay back borrowed funds that allowed for capital improvements to the service including the development of new groundwater wells and the construction of a water treatment plant building |
| 72 | Black Creek – Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 2 | October 27, 2009 | To clarify regulations for strata developments |
| 79 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 3 | November 24, 2009 | To reflect current job titles |
| 211 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 4 | March 27, 2012 | To increase fees and charges by 20% |
| 381 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 5 | June 30, 2015 | To increase fees and charges effective July 1, 2015 |

| 424 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 6 | March 22, 2016 | To increase fees and charges effective July 1, 2016 |
|-----|--|-------------------|--|
| 455 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 7 | January 24, 2017 | To increase fees and charges effective April 1, 2017 |
| 544 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 8 | July 24, 2018 | To reflect the costs for the installation of water meters and provide a limit of liability in relation to leak related charges |
| 595 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 9 | December 17, 2019 | To reflect a five per cent rate increase for all commercial and residential minimum charge and tiered rates effective April 1, 2020 |
| 682 | Black Creek - Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008, Amendment No. 10 | | To include language around use of existing wells for non-domestic purposes following connection to the system and additional language for clarity around connection approvals. |

This bylaw may not be complete due to pending updates or revisions and therefore is provided for reference purposes only. THIS BYLAW SHOULD NOT BE USED FOR ANY LEGAL PURPOSES. Please contact the corporate legislative officer at the Comox Valley Regional District to view the complete bylaw when required.

COMOX VALLEY REGIONAL DISTRICT

BYLAW NO. 5

A bylaw to fix and regulate the fees and charges, terms and conditions under which water may be supplied and used in the Black Creek / Oyster Bay water service area

WHEREAS under section 796.2 of the *Local Government Act* a regional district may regulate in relation to a service;

AND WHEREAS under section 363.2 of the *Local Government Act* a regional district may impose a fee or charge payable in respect of all or part of a service of the regional district;

AND WHEREAS the Black Creek / Oyster Bay water service was established by the adoption of Bylaw No. 1557 being "Black Creek / Oyster Bay Water Local Service Area Conversion and Establishment Bylaw, 1993" on the 30th day of January 1994;

NOW THEREFORE the board of the Comox Valley Regional District in open meeting assembled enacts as follows:

Definitions

1. In this bylaw, *unless* the context otherwise requires, the following definitions shall apply:

"APPLICANT" means an owner, or agent making application for a water connection to provide a supply of water from the system.

"BOARD" means the board of directors of the Comox Valley Regional District.

"COMMERCIAL" means those properties zoned commercial/industrial in the Comox Valley zoning bylaw.

"CONSUMER" means a person to whom water is supplied under this bylaw.

"DISCONNECTION" means the complete removal of a water connection from the water main.

"DOMESTIC PURPOSE" means the use of water for human consumption, food preparation, sanitation or other household purposes.

"DWELLING UNIT" means a self-contained residential unit consisting of one or more habitable rooms designed, occupied or intended for occupancy as a separate household of only one person or family with a separate entrance and sleeping, sanitary and cooking facilities, with not more than one kitchen room.

"MANAGER OF WATER SERVICES" means the manager of water services of the regional district and includes any person appointed or designated by him to act on his behalf.

"MULTI FAMILY" means a building, or series of buildings, containing two or more separate dwelling units used or intended for residential use on a single property, excluding a secondary suite.

"NON-DOMESTIC PURPOSE" means the use of water for a purpose that is not defined as a domestic purpose.

"PARCEL OF LAND" means any lot, block or other area in which land is held or into which it is subdivided but does not include a highway.

"PREMISES" includes land, buildings and structures.

"PRIVATE SYSTEM" means the onsite pipes and other apparatus on a parcel, connected to the system at the property line and used to convey water from the system to the plumbing fixtures in the buildings and structures on that parcel.

"REGIONAL DISTRICT" means the Comox Valley Regional District and those persons duly authorized to represent the regional district in respect to this bylaw.

"RESIDENTIAL" means a single family residential dwelling zoned residential OR rural/resource in the Comox Valley zoning bylaw, which may include a secondary suite.

"SECONDARY SUITE" means a dwelling unit of less than 90 m2 or 40% of the habitable floor space of the main dwelling unit, whichever is less, which is located within a single family residential building, which is self-contained and accessory to the principal use being made of the lot upon which the secondary suite is located, with a separate entrance and exit.

"SERVICE AREA" means the Black Creek / Oyster Bay water service area.

"SINGLE FAMILY RESIDENTIAL DWELLING" means a detached free-standing building or mobile home containing one dwelling unit used or intended for residential use.

"STRATA" means lots that are specifically shown on a strata plan and subdivided under a section of the Strata Property Act and amendments thereto.

"SYSTEM" means the distribution system of the service operated by the regional district.

"TURN ON/TURN OFF" means the operation of the curb stop valve(s) by the regional district at the water service connection

"WATER MAIN" means the water distribution pipeline in a highway or regional district statutory right of way or easement and forming part of the system.

"WATER SERVICE CONNECTION" means a pipe and all necessary valves, connections and other appurtenances necessary to and actually used to connect a water main to a shut off valve at or near a property line.

"WELL" means a well that is used for supplying water for domestic purposes prior to the connection of the parcel to the system on which the well is located.

"WELL CLOSURE REPORT" means a report that complies with Schedule 3 of the Groundwater Regulation or a successor enactment of similar intent.

Applications to connect

- 2. (1) Applications for a water service connection in the service area shall include:
 - (a) Completion of the application form as supplied by the regional district; and
 - (b) The proper fee as specified in Schedule A of this bylaw.
 - (2) The Manager of Water Services may refuse to supply water to a property if, in the opinion of the Manager of Water Services:
 - (a) The regional district does not have the capacity to supply water for that property or the level of proposed use;
 - (b) Doing so would adversely affect existing consumers; or

- (c) The water system would not effectively be protected from any potential or actual cross-connections existing at, or within, a water service on the property to be connected.
- (3) If such application for connection is not approved, the Manager of Water Services will so notify the applicant and the regional district will refund the charges or fees paid by the Applicant.

Connection

- 3. (1) Each property located within the service area is required to be connected to the water system, unless an application for connection is denied by the Manager of Water Services as per section 2(3).
 - (1)(2) Minimum standards must comply with the British Columbia Plumbing Code pertaining to:
 - (a) The connection with or the attachment to the waterworks of the regional district of any water mains, pipes or service; and
 - (b) The repair or alteration of any such water connection with the waterworks of the regional district.
 - (2)(3) The regional district may refuse a service connection where the plumbing within any premises to be served by the water service connection does not meet the British Columbia Plumbing Code.
 - (3)(4) Approval of a water service connection is valid only in respect of the premises described in the application and the owner or occupier must not make any further or future connection of any other building or parcel without making a new application.
 - (4)(5) Where possible a water service connection will be located where requested by the applicant; however, if the applicant's requested location will result in additional costs, or is not practicable due to unsuitable ground conditions or the existence of installed service improvements or underground utilities, the Manager of Water Services may designate the location of the water service connection.
 - (6) If the applicant wishes to be connected to the system and to use a well for non-domestic purposes, the owner must complete an Application for Permission to Use a Well for Non-Domestic Purposes as supplied by the regional district.
 - (a) Promptly after connection, the applicant must ensure that the well is disconnected from the private system on the parcel on which the well is located, in a manner that prevents water or other substances from the well entering the system, at the owner's expense.
 - (b) An owner who is permitted under this section to use a well for non-domestic purposes after connection to the system must:
 - . Operate and maintain the well in good order;
 - ii. Ensure the well is closed immediately when required by the regional district to do so if it is not operated or maintained in good order;
 - iii. Not reconnect the well to the owner's private water distribution system as long as the owner's parcel is connected; and

iv. Not use the well for domestic purposes.

Applications to disconnect

4. Applications for a water service disconnection from the water main shall be accompanied by the proper fee as specified in Schedule A of this bylaw.

Disconnection

- 5. (1) If a person wishes to be disconnected from the system an application to disconnect must be made in writing and delivered to the regional district by the owner/agent of the premises.
 - (2) The regional district may, with notice, disconnect the water service to any premises for any of the following reasons:
 - (a) Failure by the consumer to obey any direction of the board under section 10 of this bylaw;
 - (b) Non-payment of fees and charges outlined as in Schedule A of this bylaw, after the fees and charges are overdue for a period of thirty (30) days or more;
 - (c) Failure to repair or replace defective pipes, fittings, valves, or tanks which are leaking or are otherwise not in good state of repair and which are or may become a cause of waste of water;
 - (d) Use of a pump, booster or other device in a manner outlined in section 12.
 - (3) The regional district shall not be liable for damages by reason of discontinuing water service for the reasons outlined in subsection (2b).

Installation and size of meters

- 6. (1) The regional district may direct that the supply of water to any premises in the water service area be metered and the meter fees and charges specified in Schedule A of this bylaw shall apply and be payable as soon as the meter is installed.
 - (2) The regional district:
 - (a) Shall determine the size of meter and the installation standards required; and
 - (b) May supply the meter to the owner or his agent for installation.
 - (3) The regional district may install meters, on a supply line if requested to do so in writing by the owner of the premises, and the total installation cost shall be borne by the applicant and thereupon the applicant shall pay, in lieu of the flat rate set forth in section 1 of Schedule A hereof, the rate for meters according to the fees and charges contained in section 2 of Schedule A of this bylaw.
 - (4) Where the service is to a single building, the meter may be located in the building as close as possible to the entrance point of the water service into the building and before any take off points. If the water service is to a distribution system not solely for fire protection purposes, the meter shall be located upstream of any distribution point and as close as possible to the property line.
 - (5) If no building or structure exists at the location where the meter is to be installed, the property owner shall be responsible for constructing and maintaining the meter vault in accordance with the standards issued by the regional district.

(6) All commercial, industrial, strata property, multiple family, and institutional consumers shall install a meter complete with bypass and isolation valves in a location easily accessible to the regional district for inspection and reading of the meter. Detailed plans must be submitted to the regional district general manager of property services for approval prior to the meter installation. Such plans shall conform to the standards of the regional district. An exemption may include fire protection water mains. Strata developments serviced by multiple meters prior to the adoption of this bylaw will not be required to change to a single meter.

Access to meters

- 7. (1) The owner/agent or occupier of a premise(s) must permit the regional district access to the water meter for the purpose of reading and maintenance of the meter and inspecting the water pipes, fixtures, and fittings used in connection with such water supply, during the hours of 8:30 a.m. to 4:30 p.m., Monday to Friday, inclusive.
 - (2) No person shall obstruct at any time or in any manner the access to the meter.
 - (3) If access is not provided, fees and charges may be determined as per Schedule A of this bylaw. Further, a letter will accompany the billing indicating a date by which access must be provided.

Maintenance of meters

- 8. (1) The owner/agent or occupier of the premises to whom water is supplied shall;
 - (a) Keep the service pipes, stop cocks, fixtures and fittings on their premises in good order and repair, and protect them from frost at their own risk and expense; and
 - (b) Turn off the stop cock when the premise is vacated.
 - (2) No person to whose premises water is supplied shall make, or permit to be made, any additional connection to his/her service of either temporary or permanent nature, for the purpose of supplying water to another building, or house trailer on his/her or any other property without written permission of the regional district.
 - (3) No person shall interconnect any portion of works on private property which are supplied by the regional district with an external source of water, such as a well, except with written permission of the regional district. Wherever works on private property which are supplied by the regional district are connected to a body of contaminated water, such as a swimming pool, in such a way that, if a reverse flow were to be induced, a health hazard could result, the owner of the private property shall install and maintain a back-flow preventer on every such potentially dangerous cross-connection to the approval of the regional district.
 - (4) No change or addition to the number or type of fixtures on a premises, for the purpose of expanding a commercial or industrial enterprise, shall be made until notice thereof has been given in writing to the regional district and written permission therefore obtained. Any extra charge or higher toll payable due to the change or addition must be paid before the change or addition is commenced.
 - (5) No device designed to introduce another substance into the water in the connection between the building and the water supply main will be installed without written permission of the regional district who shall ensure that the device is so designed and installed that such substance cannot be introduced into the system.

Fees and charges

- 9. (1) The fees and charges specified in Schedule A of this bylaw are hereby imposed and levied for water services supplied by the regional district.
 - (2) All fees and charges shall be billed at least once per annum. Where a strata property has a metered service, the regional district will issue a single bill to the Strata Council which is responsible for collecting payment from the owners and submitting such payment to the regional district. Under section 363.2 of the *Local Government Act*, fees and charges that remain unpaid after December 31 in any year shall be deemed to be taxes in arrears and shall be forwarded to the surveyor of taxes to be added as taxes payable on the property. In the case of a strata property this transfer will be to the owners of the strata property development based on the total unit entitlement for the strata corporation multiplied by unit entitle for the strata unit.
 - (3) Water service disconnected under this bylaw shall not be reconnected unless the following has been paid to the regional district:
 - (a) The fees and charges that are overdue; and
 - (b) The turn on fee as described in Schedule A.

Fee rebates

- 10. (1) Where an owner or owner's agent provides evidence that:
 - (a) Fees charged to that person under Schedule A have been unduly high because of a water leak; and
 - (b) The leak has been repaired
 - a rebate calculated in accordance with subsection (2) may be made to the owner.
 - (2) A rebate under subsection (1) shall be calculated on half of the dollar amount of:
 - (a) The last billing period calculated immediately before repair of the leak; and
 - (b) The first billing period calculated immediately after repair of the leak.
 - (3) The power to review the evidence provided under subsection (1) and to calculate the rebate under (2) may be exercised by the Manager of Water Services or his designate.
 - (4) The maximum leak related charge as described in subsection (2) shall be limited to \$1,000 per owner per application.
 - (5) The rebate payable under subsection (1) may be made to an owner for a leak that occurred on or after July 1, 2000.
 - (6) The rebate payable under subsection (1) is limited to once every two year per owner.

Restriction of water use

11. If at any time the regional district considers it to be in the public interest, it may direct that the use of water by any or all of the consumers be reduced or discontinued until the regional district considers it advisable to permit full use of water. Where practical, notice of water use restrictions may be hand delivered to the consumer or be published in a newspaper circulating in the service area at least seven (7) days prior to the commencement of the restriction.

System extensions

- 12. (1) Any owner of land located within the service area, other than an extension to serve lots created by a subdivision of land, who wishes an extension to the system to serve the land, must make a written application to the regional district in the form as supplied by the regional district.
 - (2) The Manager of Water Services may refuse any watermain extensions outside the service area if, in the opinion of the Manager of Water Services:
 - (a) The regional district does not have the capacity to supply water for that property or the level of proposed use;
 - (b) Doing so would adversely affect existing consumers; or
 - (c) The water system would not effectively be protected from any potential or actual cross-connections existing at, or within, a water service on the property to be connected.
 - (2)(3) Where the Manager of Water Services or designate considers that the minimum water pressure at the property line would be at least 275 kilopascals (40 pounds per square inch) and an extension to the system can be made to serve the land for which an application has been made under subsection (1) without affecting the supply of potable water to any other land in the service area, then the Manager of Water Services may approve the extension.
 - (3)(4) An owner of land who wishes to proceed with an approved system extension:
 - (a) Must pay to the regional district all amounts reasonably estimated to represent the reasonable cost of design and construction of the extension to the system, and modifications to the system to allow the extension; or
 - (b) Must cause a qualified contractor to construct the extension and modifications referred to in subsection (3)(4)(a) to the system, entirely at the cost of the owner.
 - (4)(5) Where the extension to the system is constructed by the owner under subsection (3)(4)(b), then the extension must be:
 - (a) Designed by a professional engineer, registered in the province of British Columbia;
 - (b) Constructed in accordance with the plans and specifications of the regional district; public health authority, or its consulting engineer, or plans and specifications approved by the regional district or its consulting engineer;
 - (c) Constructed in accordance with all requirements, standards, and policies of the regional district;
 - (d) Inspected by the regional district or its consulting engineer prior to backfilling;
 - (e) Approved and accepted by the regional district or its consulting engineer; and
 - (f) Transferred to the regional district together with all necessary rights of way.
 - (5)(6) Construction of an extension to the system does not relieve an owner from payment of a service connection fee for each parcel of land to be served by the extensions to the system.

- (6)(7) The extension of the system shall extend from the most convenient existing water main of the system having sufficient surplus capacity, to the center of the last lot serviced.
- (7)(8) If the regional district at its cost constructs the extension, the owner must pay the costs of construction within thirty (30) days of issuance of an invoice.
- (8)(9) The board hereby imposes as a charge on an owner of land requesting the extension the cost referred to in subsection $\frac{(3)(4)}{(a)}$.
- (9)(10) This section shall not be interpreted as imposing an obligation on the regional district to approve any extension.

Illegal connection and use

- 13. (1) No person shall connect or allow to remain connected to the system any premises without first obtaining the required permits in accordance with the section 3 of this bylaw.
 - (2) No person shall use or allow to be used water supplied by the system except in accordance with the provisions of this bylaw.
 - (3) No person shall use or allow to be used water supplied by the system contrary to all provisions of this bylaw.
 - (4) No person shall use a water pump, booster, or other device, for the purpose of, or having the effect of, increasing water pressure in service lines to a higher pressure unless current pressure does not meet minimum standards, or as required for fire protection.
 - (5) No person shall:
 - (a) Undertake work that is connected with the system on or under any street or land within the service area; or
 - (b) In any way, interfere or tamper with any water meter, sealed bypass valve, pipe, fixture, fitting or appliance of or connection with the waterworks whether on his own premises or elsewhere within the service area.

Penalty

14. Every person who contravenes any of the provisions of this bylaw or permits any act or things to be done in contravention of a provision of this bylaw commits an offense and is be liable on summary conviction to a penalty not exceeding the sum of two thousand dollars (\$2,000.00).

Indemnity

- 15. Nothing in this bylaw shall be interpreted as imposing any duty on the regional district to provide a continuous supply of water to any person or premises and it is a condition of supply of water that the regional district is not liable for any injury, damage, or loss, including economic loss, to any person or property:
 - (a) Arising or occurring from the use of water from the system;
 - (b) Resulting from a failure of water supply to any consumer;
 - (c) Resulting from any impurity, lack of pressure, increased supply pressure, or other condition affecting water supplied by the system.

Severability

16. If any provision of this bylaw is found invalid by any court of competent jurisdiction, the provision may be severed from the bylaw without affecting the validity of the remaining portion of the bylaw.

Repeal

17. Bylaw No. 2033 being "Black Creek/Oyster Bay Water Regulation, Fees and Charges Bylaw, 1998" and all amendments thereto are hereby repealed.

Citation and effective date

18. This Bylaw No. 5 may be cited as "Black Creek / Oyster Bay Water Service Regulation, Fees and Charges Bylaw, 2008" and shall take effect on the 1st day of April 2008.

Schedule A

Fees and charges

1. (a) All metered accounts are subject to a monthly minimum charge. The charge for the quantity of water used each month shall be calculated at the following rates:

| Charge | Water volume | Rate (effective April 1, 2017) | Rate (effective April 1, 2020) |
|---------------------|----------------------------|--------------------------------|--------------------------------|
| Residential minimum | Up to 15 m3 | \$22.88 flat fee per month | \$24.02 flat fee per month |
| Residential tier 1 | Over 15 m3 and up to 45 m3 | \$1.37 per m3 | \$1.44 per m3 |
| Residential tier 2 | Over 45 m3 | \$2.06 per m3 | \$2.16 per m3 |
| Commercial minimum | Up to 15 m3 | \$35.64 flat fee per month | \$37.42 flat fee per month |
| Commercial tier 1 | Over 15 m3 | \$1.78 per m3 | \$1.87 per m3 |

(b) Where a meter is found not to register, or access is not available as per section 6 of this bylaw, then charges shall be computed on the basis of the amount of water used during the time the meter was working or form any other information or source which can be obtained, and such amount so composed shall be paid by the owner/agent.

Extra charges - failure to provide access

2. Each call after the first of each month if access has not been provided is charged at \$25.00 per call. The actual cost to gain access to the meter that is incurred by the regional district will be charged to the owner / occupier of the premises.

Connection and disconnection charges

- 3. (1) The following charges apply to service connections:
 - (a) 19 mm connection \$2000.00;
 - (b) 25 mm connection \$2500.00;
 - (c) Greater than 25mm At cost (minimum \$1000.00)
 - (2) The following charges apply to service disconnections:
 - (a) 19 mm, 25 mm and greater disconnection \$1000.00.

Turn on / turn off charges

- 4. The following charges apply to turning on OR turning off water supply at the service connection and do not preclude payment of the minimum charge in Schedule A
 - (a) Turn on \$25.00;
 - (b) Turn off \$25.00.



| Project Name: Black Creek Oyster Bay Water System Connection Suspension | File: |
|---|-------|
|---|-------|

Purpose

 To inform impacted and potentially impacted parties about the decision to suspend new connections to the water service until an adequate supply of water is confirmed.

Target audience(s):

External

- Developers and property owners that have applied for a development permit and have likely already invested money and resources into the project
- Developers and property owners who are in the pre-application consultation phase for a
 development permit and may have already invested money and resources into the project
- Homeowners considering the option of building a second dwelling unit on their property
- Those with an active building permit and owners of vacant properties that are currently paying frontage tax are **exempt from the suspension**
- Realtors and prospective home buyers
- Media and general public

Internal

- Directors for Electoral Area C and D
- Planning and Engineering department staff

| Communication Tools | Target Audience |
|---|--|
| Press release | Media and general public |
| Website updates | All audiences |
| Letter – potentially impacted parties | BCOB area homeowners |
| | Comox Valley developers |
| | Vacant property owners paying parcel tax |
| Letter – impacted parties | Developers and property owners who have applied for a |
| | development permit or are in the pre-application phase |
| Outreach through Chamber of Commerce | Realtors and prospective home buyers |
| Outreach through Building Links publication | Developers and realtors |
| Briefing Note | Directors for Electoral Area C and D |
| | Planning and Engineering department staff |



Project background:

- A third production well was installed in early 2021 to increase capacity for the Black Creek-Oyster Bay (BCOB) Water System. This water system treats and distributes water to properties north of the Oyster River in Electoral Area D of the SRD and south of the Oyster River in Puntledge – Black Creek (Electoral Area C) of the Comox Valley Regional District (CVRD).
- Unfortunately, the third well has not performed as well as expected and staff will be recommending
 the BCOB Services Committee continue a suspension on new connections to the water service until
 an adequate supply of water is confirmed.
- To confirm this water supply, staff will recommend the committee approve funding to explore, install and test a new production well by summer 2022.
- A staff report was presented to the BCOB Services Committee on September 20, 2021 and deferred
 to the October 18, 2021 meeting. The suspension of new connections will require a bylaw
 amendment, proposed revisions to which must be adopted by the CVRD Board.
- The BCOB system also includes the Saratoga settlement node, which is identified by the Regional Growth Strategy as having potential to accommodate growth. However, that growth is contingent on a long term supply of water for the area.
- If approved, exploration of the well would be complete in 2021 and a report would come back to BCOB Services Committee in early 2022. The new well could be installed and tested by summer 2022.

Spokespeople:

For media inquiries

Kris La Rose, Senior Manager of Water/Wastewater Services

For public inquires

- Kris La Rose, Senior Manager of Water/Wastewater Services
- Alana Mullaly, GM of Planning and Development Services
- Ton Trieu, Manager of Planning Services



Guiding principles:

- Communications staff are included in all project team meetings and in key project-related discussions.
- Project to have budget sufficient to cover communications strategies.
- All materials and communication will follow the CVRD style guide.

Communication Objectives: 3-5 objectives

- Inform impacted and potentially impacted audiences about the connection suspension and the rationale for it.
- Ensure CVRD staff are consistent in delivering messages to impacted audiences, including current and prospective homeowners, developers and property owners.
- Increase understanding among developers and realtors about the challenges associated with developing properties on the BCOB Water System.

Timeline:

• Summer 2021: Planning

- The Planning and Development Services branch will work together with the Engineering Services branch to develop an inventory and categories of applicants/properties requiring new water connections.
- o Develop communications plan and public facing materials.

• October 2021: Approvals and Inform Community

- o Staff report to BCOB Services Committee (October 18, 2021)
- o Following committee approval of bylaw amendments:
 - Issue press release
 - Direct outreach to Chamber and Building links
 - Mailout to impacted and potentially impacted parties



- Fall 2021-Summer 2022: Engineering
 - o Exploration, installation and testing of well
 - Report back to BCOB Services Committee
 - o Fall 2022: Report back to the community. Close the loop with all audiences and provide status of connection suspension (TBD)

| Tool/Task | Description | Budget | Date |
|--|--|-----------|----------|
| Staff Report | Draft report/approvals | \$0 | Oct 2021 |
| Press release and briefing note | Draft materials/approvals/distribution | \$0 | Oct 2021 |
| Letter to potentially impacted parties | Draft/approvals/mailout | \$1/house | Oct 2021 |
| Letter to impacted parties | Draft/approvals/mailout | \$1/house | Oct 2021 |
| Website | Update content – BCOB page | \$0 | Oct 2021 |
| Outreach | Chamber of Commerce and Building Links | \$0 | Oct 2021 |

Budget

 Budget impacts are associated with the mailout only. Following outreach with Chamber and Building Links it may be determined additional advertising is needed.

Evaluation

- Measurements ensuring success of the communications objectives include:
 - Media coverage contains intended key messages
 - o Public materials are shared among potentially impacted audiences
 - Website is utilized by those seeking more information
 - o Impacted audiences are informed directly and reach out to Planning and Engineering staff.
- Departments will log their interactions and keep communications staff apprised of whether additional communications effort are necessary.



Approval History

| Created by: | Christianne Wile, Manager of External Relations Aug 4, 2021 |
|-------------|--|
| Amended: | October 14, 2021 |