



**REPORT TO CAPITAL REGIONAL DISTRICT BOARD  
MEETING OF WEDNESDAY, MAY 13, 2020**

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**SUBJECT**     **Proposed Amendment to Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 2312 (as amended by Bylaws No. 3028 and 3319)**

**ISSUE SUMMARY**

As a result of the Core Area Wastewater Treatment Project, bylaw amendments are required to update the bylaw to reflect new conveyance and treatment capacities and cost apportionment methods.

**BACKGROUND**

At its July 17, 2019 meeting, the Core Area Liquid Waste Management Committee (Committee) received a staff report (Report attached as Appendix A) which provided an overview and rationale for the proposed amendments to Bylaw No. 2312. In summary, as a result of the implementation of the Core Area Wastewater Treatment Program, it is necessary to update the Bylaw to reflect the system infrastructure changes, conveyance and treatment capacity allocations, and operating and capital cost apportionment methodologies.

The Core Area Liquid Waste Management Committee recommended to the Capital Regional District (CRD) Board:

That staff be directed to prepare a new draft bylaw to replace Bylaw No. 2312, to set out operating and capital cost apportionment, conveyance and treatment capacity allocations, method for acquiring additional capacity, and dispute resolution processes for the new Core Area Wastewater System and bring back to the Committee for review, and direct staff to work with municipal and First Nations staff on design capacity allocation needs and report back to the Committee.

The second part of the staff recommendation was to direct staff to prepare a terms of reference for the establishment of a Core Area Liquid Waste Management Service Development Cost Charge Program and bring back to Committee for review.

The CRD Board subsequently approved the Committee's recommendations.

**Municipal and First Nations Engagement**

Between September 2019 and March 2020, Capital Regional District (CRD) staff met with each participant's senior staff (Administration, Finance, Engineering and Operations) to present the following:

- proposed capacity and cost apportionment methodologies;
- 2020-2045 conveyance and treatment capital plan;

- proposed concept for the Development Cost Charge (DCC) Program for upgrades beyond 2045; and
- estimated operating and capital requisitions by participant.

To assist the participants in reaffirming treatment capacity allocations, the CRD provided the existing and future populations by participant (for sewered service area) and catchment area (*Sanitary Model Update and Flow Study*, Kerr Wood Leidal, June 2019) and the design per capita flows used to arrive at the treatment plant total Average Dry Weather Flow capacity of 108 megalitres per day (MLD). This information is summarized in the technical memo attached as Appendix B, *CRD Bylaw 2312 Update – CRD Core Area Flow Allocation Methodology Summary*, Kerr Wood Leidal, February 2020. In addition, to assist the participants in estimating requisition adjustments based on the operating and capital cost apportionment methodologies, fillable spreadsheets were provided to enable the participants to model various financial scenarios.

After meeting with each of the municipal participants, a summary of the feedback and ‘what we heard’ was presented at a joint staff meeting in December. The following summarizes the key points:

1. The participants have a general understanding and are supportive of the ‘one-system’ approach, on the basis that:
  - The entire conveyance and treatment system will fall under one regulatory scheme/set of requirements for treatment effluent quality and conveyance wet-weather overflow management.
  - CRD is moving to ‘one-system’ for conveyance operations and maintenance management, rather than the current separate trunk system approach, to effectively and efficiently manage system as a whole. There will be a single conveyance and treatment operating budget and standardized operations and maintenance routines/procedures across entire system.
  - Prioritization of capital projects will occur across the entire conveyance system.
  - This approach is consistent with other existing operating and governance models including CRD Regional/Sub-Regional water/wastewater utility services.
  - Bringing together Eastern and Western conveyance systems is equitable based on flows and infrastructure value (See Appendix B that summarizes the system infrastructure and value).
2. Cost Apportionment & Financials:
  - There is participant support for annual operating cost apportionment (conveyance and treatment) based on total annual flow into system by participant. This follows the cost apportionment method currently in place for trunk operating costs and provides incentive to all participants to keep inflow and infiltration (I&I) low or achieve further reductions.
  - There is support for conveyance and treatment capital (and debt servicing) cost apportionment based on treatment capacity allocations at McLoughlin Point Wastewater Treatment Plant (WWTP) for each participant, calculated based on 70% Average Dry Weather Flow (ADWF)/30% Average Annual Flow (AAF). This follows the cost apportionment method already in place for Core Area Wastewater Treatment Project (CAWTP) requisitions. Once CAWTP works are complete, the long-term capital plan will

address infrastructure renewal and capacity upgrades. A new loan authorization will be required to allow financing this work. Note, the Bylaw will continue to carry reference to the annual debt and capital cost apportionment method for 'legacy' capital projects constructed after December 31, 2002 (excluding the CAWTP) until the debt associated with those projects is retired.

- Theoretical financial modeling with operating and capital spreadsheets was reviewed with each participant to estimate effect of cost apportionments. There were no significant cost increases/decreases anticipated when comparing existing versus proposed methods. The operating cost drivers included growth related domestic flow, I&I, and treatment operating costs. The capital cost driver is primarily the treatment capacity that each participant purchased.
- Existing capital reserve funds held for each participant will be utilized for 2020 conveyance capital funding then remaining funds will be reimbursed to each participant. New capital reserve fund will be 'pooled' in the future - major capital reserve fund contributions will be deferred until current long-term debt servicing costs begin to decrease but minor equipment replacement reserves will need to be established immediately.

### 3. Development Cost Charge (DCC) Program:

- In concept, given that the current CAWTP scope will provide growth related capacity to around 2045, after 2045 the McLoughlin WWTP will be upgraded to provide 124 MLD ADWF treatment capacity, which is projected to provide capacity to around 2060. It is also planned to upgrade the Residual Treatment Facility (RTF) to provide additional capacity for similar time horizons. Then a second WWTP and outfall and RTF will be designed and constructed. All upgrades/new infrastructure necessary to provide growth related capacity beyond 2045 would be funded by DCCs.
- There was general support for a system wide DCC but the CRD may also need to consider specified area DCCs.
- In developing the DCC Program, the CRD will explore phased-in DCCs, DCC credits, where infrastructure suits, and 'rebalancing' treatment capacity allocations over time to maximize plant capacity before triggering new infrastructure, which would result in a financial benefit for all of the participants.

Note that the DCC Program will be set out in a separate and subsequent bylaw.

There was also discussion with the participants regarding bylaw language that would address the process to buy or sell capacity and surcharges or penalties for capacity exceedances. With regards to the process to buy or sell capacity, it was agreed that the preference would be to have the participant make a request to the CRD to buy or sell capacity, then the CRD would negotiate with the other participants based on availability of unused capacity and other factors. The CRD would calculate the cost (to buy) or worth (to sell) of the request. The participant acquiring capacity would compensate the seller based on total capital, debt servicing (principal and interest), reserve transfers, and any other associated expenses paid to date by the seller. This approach seeks a standard process that allows the buyer to acquire additional capacity and makes certain that the seller is compensated for the transaction. This should provide a means to maximize the full capacity of the plant while making sure that each participant pays for their fair share of the capacity that they need, while discouraging participants from unnecessarily 'holding on to' capacity.

With regards to the surcharges or penalties for capacity exceedances, the Bylaw sets out surcharges that will be levied against a participant that discharges flow into the system that exceeds the allocated ADWF capacity of the participant. This approach remains consistent with the surcharge methodology first presented to the Committee in 2012. The surcharge is sufficiently significant in order to discourage permanent use of additional capacity without acquiring that capacity from another participant through the CRD, and to guard against overall flow exceedances that could result in discharges in contravention of the CRD Operating Permit.

Based on the engagement feedback, CRD staff have prepared Bylaw No. 4304 (Attached as Appendix D).

### Next Steps

CRD staff are recommending seeking approval and adoption of the amending Bylaw. In accordance with the *Local Government Act*, the consent of a minimum of two-thirds of the municipal participants and approval of the Inspector of Municipalities is required before the Bylaw can be adopted by the CRD Board.

The amending Bylaw will be referred to the participants as part of the consent process after it receives three readings by the CRD Board. The deadline for the response to the referral and consent process will be June 30, 2020, at which time the CRD will require a Council resolution consenting to, or opposing, the adoption of the Bylaw. After participant consent is received, staff would undertake the following steps:

- August 31 (estimated, subject to Ministry timing) : Inspector of Municipalities Bylaw approval received;
- September 9: CRD Board adoption of Bylaw;
- October 14: CRD Board consideration of Core Area Reserve Fund Bylaw and Loan Authorization Bylaw for long term capital plan;
- October 28: 2021 Provisional Core Area Operating and Capital budget review;
- November: Loan Authorization Bylaw participating area approval process.

### ALTERNATIVES

#### *Alternative 1*

1. That Bylaw No. 4304, “Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 1, 1995, Amendment Bylaw No. 3, 2020” be introduced and read a first time, second and third time.
2. That staff be directed to refer Bylaw No. 4304 to the participant councils for consent requesting that the participants provide a written response by no later than June 30, 2020.
3. That staff be directed to submit the Bylaw No. 4304 to the Inspector of Municipalities for approval upon receiving two-thirds consent of the participants.

#### *Alternative 2*

That staff be directed to come back to the CRD Board with more information.

## **IMPLICATIONS**

### **Financial Implications**

As previously noted, Bylaw No. 2312 requires updating in order to formalize and regulate the new capacity and cost allocation figures and methodologies that have been in place since 2012/2013. As discussed with the participants this fall, in summary, the comprehensive financial implications associated with the development, construction and operation of the Core Area Wastewater Treatment Project, as well as the on-going capital, and operation and maintenance costs were set out in the July 17, 2019 staff report to the Committee, *Wastewater Treatment Project Capital and Operating Budget*. Staff will continue to refine estimates and forecasts through project completion.

### **Intergovernmental Implications**

While the Songhees and Esquimalt First Nations are connected to the wastewater system, the Bylaw does not apply to these First Nations as they are not participants in the service. The CRD previously held service agreements with Songhees and Esquimalt Nations enabling them to access Core Area Liquid Waste Management services and the Board provided for their inclusion on the Core Area Liquid Waste Management Committee. The service agreements set out the service provisions and conditions however they have now expired. The Core Area Wastewater Treatment Project Board (Project Board) also enabled inclusion and accommodations of these First Nations interests by way of an Impact Benefit Agreement. The agreements are being updated to reflect the Bylaw provisions as close as possible and address the future servicing capacity needs for these actively developing communities. It is anticipated that the amendments to the Bylaw and adoption of a 'one system' approach will assist in advancing a financial model that will enable full recognition and service provision for these First Nations.

### **Environmental and Social Implications**

There is currently no funding available or authorized to undertake the long-term capital plan that will address infrastructure renewal and capacity upgrades across the conveyance system. As previously reported to the Committee, for over ten years, while the treatment and conveyance options were being considered and the project scope was being determined, the on-going capital work plan has been largely deferred. Several renewal projects must now be completed to avoid failures, such as a collapsed pipe or pump station breakdown, which could result in environmental and property impacts and cause service interruptions. The capital cost apportionment methodology set out in the amended Bylaw would apply to these capital expenditures going forward. Once the Bylaw is adopted, staff will present a new loan authorization bylaw to enable financing this work.

## **CONCLUSION**

As the Core Area Wastewater System improvements near completion and become operationalized in January 2021, it is necessary to update Bylaw No. 2312 to reflect the system changes, the proposed conveyance and treatment capacity allocations and operating and capital cost sharing methodologies. It is proposed to have the bylaw amendment process commence now in order to have the bylaw adopted before year-end and in effect for the 2021 budget.

**RECOMMENDATION**

1. That Bylaw No. 4304, “Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 1, 1995, Amendment Bylaw No. 3, 2020” be introduced and read a first time, second and third time.
2. That staff be directed to refer Bylaw No. 4304 to the participant councils for consent requesting that the participants provide a written response by no later than June 30, 2020.
3. That staff be directed to submit the Bylaw No. 4304 to the Inspector of Municipalities for approval upon receiving two-thirds consent of the participants.

Submitted by:	Ted Robbins, B.Sc., C. Tech, General Manager, Integrated Water Services
Concurrence:	Nelson Chan, M.B.A., C.P.A., C.M.A., Chief Financial Officer
Concurrence:	Kristen Morley, J.D., General Manager, Corporate Services & Corporate Officer
Concurrence:	Robert Lapham, M.C.I.P., R.P.P., Chief Administrative Officer

**ATTACHMENTS**

- Appendix A: Report to Core Area Liquid Waste Management Committee, *Proposed Amendments to Bylaw No. 2312 – Capacity Allocations and Cost Apportionment*, July 17, 2019
- Appendix B: *CRD Bylaw 2312 Update – CRD Core Area Flow Allocation Methodology Summary*, Kerr Wood Leidal, February 2020
- Appendix C: Bylaw No. 2312 redlined with amendments
- Appendix D: Bylaw No. 4304, “Liquid Waste Management Core Area and Western Communities Service Establishment Bylaw No. 1, 1995, Amendment Bylaw No. 3, 2020”