INFRASTRUCTURE SERVICES COMMITTEE

Thursday, April 19, 2018 SCRD Boardroom, 1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER: 9:30 a.m.

AGENDA

1. Adoption of Agenda

PETITIONS AND DELEGATIONS

(Voting - All)

2. Dave Newman, Director of Infrastructure Services, Town of Gibsons Verbal Regarding Groundwater Investigation **REPORTS** 3. Chief Administrative Officer and General Manager, Infrastructure Services Annex A Phase 2 Test Drilling of the Groundwater Investigation pp 1 - 9(Voting – A, B, D, E, F, Sechelt) 4. Chief Administrative Officer Annex B Town of Gibsons Bulk Water Agreement – Terms of Reference pp 10 - 15(Voting – A, B, D, E, F, Sechelt) 5. General Manager, Infrastructure Services Annex C Raw Water Reservoir – Feasibility Study Outline pp 16 - 20(Voting – A, B, D, E, F, Sechelt) 6. GM, Corporate Services / Chief Financial Officer Annex D Universal Water Meter Installations Phase 3 Funding pp 21 - 24(Voting – A, B, D, E, F, Sechelt) 7. General Manager, Infrastructure Services Annex E Development of Water Sourcing Policy pp 25 - 28(Voting – A, B, D, E, F, Sechelt) 8. Water and Energy Projects Coordinator Annex F 2018 Drought Management Plan Implementation pp 29 - 33(Voting – A, B, D, E, F, Sechelt) 9. Manager, Solid Waste Services Annex G Recycle BC Revised Program Plan - Update

pp 34 - 60

 2018 Q1 – Quarterly Report – Infrastructure (Voting – All) Annex H pp 61 – 72

COMMUNICATIONS

NEW BUSINESS

IN CAMERA

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Remko Rosenboom – General Manager, Infrastructure Services

Janette Loveys, Chief Administrative Officer

SUBJECT: Phase 2 Test Drilling of the Groundwater Investigation

RECOMMENDATION

THAT the report titled Phase 2 Test Drilling of the Groundwater Investigation be received;

AND THAT the SCRD proceed with Phase 2 of the Groundwater Investigation and that staff bring forward future reports with the results and analysis;

AND THAT the SCRD exchange information with local governments, First Nations and other potentially affected parties on Phase 2 Test Drilling of the Groundwater Investigation;

AND THAT the SCRD collaborate on a framework with the Town of Gibsons and the Skwxwú7mesh Nation to establish a Groundwater Management Zone related to the Gibsons Aquifer and that staff bring forward a future report;

AND FURTHER THAT the SCRD establish a working group with infrastructure staff from local governments, *shishalh* Nation and Skwxwú7mesh Nation to share information and opportunities for cooperation.

BACKGROUND

The Board adopted the following recommendation at October 26, 2017 meeting:

300/17 Recommendation No. 1 Groundwater Investigation to Supplement Chapman Creek Water Supply

THAT the report titled Groundwater Investigation to Supplement Chapman Creek Water Supply be received;

AND THAT recommendations from the Groundwater Investigation to Supplement Chapman Creek Water Supply Report be brought forward to the 2018 Budget process;

AND FURTHER THAT the SCRD consult with the Town of Gibsons, District of Sechelt, and Sechelt Indian Government District regarding proposed aquifer exploration identified in the report, prior to concluding the 2018 Budget process.

Consultation with local governments was structured as the Regional Groundwater Task Force with Terms of Reference adopted at the December 14, 2017 Board meeting.

346/17 Regional Groundwater Task Force Draft Terms of Reference

THAT the report titled Regional Groundwater Task Force Draft Terms of Reference be received:

AND THAT the 1. Purpose be amended as follows:

a. Provide a forum for the staff at all four local governments on the Sunshine Coast to work towards – in the spirit of cooperation and collaboration – recommendations for the potential management of groundwater sources within the context of the region's water supply concerns.

AND THAT 2.1 c. be amended to "To identify all the local governments water strategies, concerns and potential solutions...";

AND FURTHER THAT the Regional Groundwater Task Force Terms of Reference be adopted as amended.

The Board adopted the following resolution at its March 22, 2018 meeting:

107/18 THAT consideration of Infrastructure Services Committee Recommendation No. 1 of March 15, 2018 be postponed to the April 19, 2018 Infrastructure Services Committee meeting as follows:

<u>Recommendation No. 1</u> Regional Groundwater Task Force – Next Steps

THAT the report titled Regional Groundwater Task Force – Next Steps be received;

AND THAT the SCRD proceed with Phase 2 of the Groundwater Investigation Project and that staff bring forward a future report with the results:

AND THAT the SCRD exchange information with local governments and other potentially affected parties on Phase 2 Test Drilling with respect to monitoring results;

AND THAT the SCRD collaborate on a framework with the Town of Gibsons to establish a Groundwater Management Zone related to the Gibsons Aguifer and that staff bring forward a future report;

AND THAT the SCRD establish a working group with infrastructure staff from all four local governments to discuss upcoming projects and opportunities for collaboration;

AND FURTHER THAT the Mahan well drilling be delayed until such time as data is available from the other three well sites.

DISCUSSION

Legislative Framework

As per the Constitution of Canada, the legal right to administer ground and surface water use is vested in the Crown and regulated by the Province and, specifically in British Columbia, the *Water Sustainability Act.* The Ministry of Forest, Land, Natural Resource Operations and Rural Development (FLNRORD) is responsible for the administration of this legislation. Upon application by any land owner or local government FLNRORD can issue Water Licences to applicants who meet their requirements and whose applications do not adversely impact other Water Right holders, land owners, the environment and the rights and title of First Nations. Parties who feel that their interests are insufficiently considered by the FLNRORD Statutory Decision Maker can appeal the decision to the Environmental Appeal Board. Under the current legislation. Local governments are treated in a similar manner as any application from a resident or commercial operation.

All groundwater users who were using groundwater prior to February 29, 2016 on an ongoing basis are eligible to apply for an Existing Use Groundwater Licence for the volumes as used on or shortly before February 29, 2016. Local governments might be granted an Existing Use Groundwater Licence which could include predicted water demand for the population growth aligned to their respective OCP's but no later than 2026.

Any applications for use of groundwater not already occurring on February 29, 2016 will require a New Use Groundwater application and have to meet more stringent requirements and a more detailed technical review and consideration of adverse effects. It is relevant to note that FLNRORD can cancel or amend Water Licences if licensees are not using their allocated amounts, this to prevent applicants from staking water rights and in doing so, prevent other potential users from being granted the right to use water.

Policy Development

With the potential development of additional water sources to supply the Chapman System, there is a need to develop a Water Sourcing Policy (WSP). Such WSP would outline how the current and future water demand (until 2030) would be met using the available supply sources within the Chapman System. It would establish target volumes to be drawn from a particular source and criteria for when those sources would be used. The long-term water demand (after 2030) will be considered in to the Regional Growth Strategy Options report targeted for June 2018.

The Water Sourcing Policy would provide guidance and integrate to the operational focused Drought Management Plan.

One of the recommendations from the Groundwater Taskforce was establish a Groundwater Management Zone for the Gibson Aquifer. The purpose of any Groundwater Management Zone is to define an area and the permitted uses for any activities. Such a Plan would outline water quality, quality objectives and performance measures. The Plan would also outline the relevant

and applicable land use planning tools (e.g. OCP and Development Permit Areas) and potential other tools the SCRD commits to implement.

Regional Growth Strategy

The District of Sechelt sent correspondence to all four governments requesting the SCRD begin the process of initiating a Regional Growth Strategy. In December 2017, the SCRD has heard from shishálh Nation Chief and Council on the importance of a coordinated regional growth strategy for all our communities.

The issue of collaboration and cooperation on the development of a regional growth strategy remains important and relevant with the delivery of sustainable resources and infrastructure. There will be a need to review and integrate various master plans into community service levels for such services as water, solid waste/landfill management and transit. There is also an opportunity to revisit the Sustainable Land Use Principles report co-developed by planning staff from the local governments in the overall context of this initiative.

The development of a Groundwater Management Zone for the Gibson Aquifer is an opportunity and in order to be an effective planning tool, should be aligned within the context of the larger regional growth planning exercise.

The February 8, 2018 report identified a future report which will provide Committee with options and process for moving forward with the planning. Staff are working towards Q3 for this report and will ensure all of these various planning exercises are identified and incorporated into the report.

Stakeholder Engagement

Staff from the four local governments who participated in the Taskforce Groundwater Investigation experienced the opportunity to share information with respect to the infrastructure, operations and water initiatives. Staff found this beneficial and included in the recommendations was to establish a working group to continue this information sharing and to extend the invitation to Skwxwú7mesh Nation. The establishment of the working group would align well with the mission and values of the SCRD with respect to collaboration and transparency.

In this same spirit, staff from the Town of Gibsons and SCRD met again on April 4, 2018 to specifically gain further insight into the specific of the water supply infrastructure systems in Zone 3. Staff also discussed, at a high level, issues/topics to consider in the process of the Town of Gibsons taking back some responsibilities as it relates to Zone 3.

It was also discussed that the current water wells of the Town of Gibson have enough capacity to supply Zone 3 moving forward, but that the intention is to develop a new well to ensure adequate redundancy in their water supply, to reduce the dependency on water supply from the SCRD by increasing the withdrawal from the Gibson Aquifer and guarantee the water supply for buildout of the town until 2070.

Town of Gibsons' staff reiterated their willingness to collaborate with the SCRD on developing a comprehensive plan to address all water demands on the Sunshine Coast by all possible sources. They also reiterated their concerns about the SCRD exploring the feasibility of a

production well at Mahan Road to address its current water demand as that could impact their own plans to support their own long term (2050-2070) water demands.

Implementation Timelines For Additional Water Supply Sources

The following table present the current best estimates for the different phases of the development of the four CWRP-projects. For the Groundwater Investigation timeline, there are two scenarios included: one scenario which includes all 4 sites to be test drilled and one report which contains the results and analysis. The second scenario is where the testing of the four sites is done with 2 test phases and Mahan Road site is tested after the results of the other three sites are analysed and a decision is made to proceed with the Mahan Rd Site as well.

Table 1

Water Source	Feasibility confirmed	Authorizations received (incl. land ownership)	Commence Construction	Commissioning
Universal metering	-	-	2016	2019
Chapman Lake: supply expansion project	Confirmed	Spring 2019	Summer 2019	Late 2019
Groundwater Investigation – non- phased approach	Late 2018	2020-2022	2019-2020	2021-2022
Groundwater Investigation –phased approach	Late 2019	2021-2023	2010-2021	2022-2023
Raw Water Reservoir	2019	2022-2024	2025-2026	2026-2027

Attachment A provides more detailed information on the difference between the two timing options currently under consideration for the Phase 2 test drilling in context to the timeline for other water initiatives which are underway.

Technical Ranking Potential Production Well Sites

During Phase 1 of the Groundwater Investigation, a technical desktop assessment was done to determine potential areas for new production wells. The 12 selected areas were subsequently more precisely defined and ranked on multiple subjective criteria including Hydrological potential, infrastructure requirements and costs, water quality, stakeholder concerns, environmental impacts and regulatory requirements.

The total score and ranking of all potential sites for new production well is presented in the table below:

Table 2

Ranking	Considered sites	Score	Proposed for test drilling
1	Mahan Road*	108	X
2	Gray Creek	108	X
3	Soames Reservoir	108	X
4	District of Sechelt Operations Yard	81	X
5	Chapman WTP**	72	
6	Mahan Road	54	
7	Chaster Road Well	48	
8	Mahan Road	36	
9	Mahan Road	36	
10	Frank West	36	
11	Chapman Zone 1	36	
12	Reed Pump Station	12	

^{*} There were 4 different locations considered along Mahan Road, all with different characteristics.

Acknowledging the information already available on the Gibson Aquifer, the memo from our consultant hydrogeologist at Waterline Resources is included as Attachment B.

It concludes that the testing proposed under Phase 2 of the Groundwater Investigation is not possible with the Town of Gibsons monitoring well in that area. It also concludes that the proposed testing would fill an essential knowledge gap in the mapping of the Gibsons Aquifer essential for the development of a Groundwater Protection Zone for that area. It also clarifies that all the information to date is insufficient to determine the potential production capacity on this site.

Waterline Resources will attend the Committee meeting and be available to respond to questions related to their work.

Financial Implications

The implementation timelines for the additional water supply source projects listed in Table 1, will all have an impact to the Comprehensive Regional Water rates in the future. Rates set for 2018 only cover the current projects approved. A comprehensive financial report will be provided in Q4 in preparation for approval of the 2019 user rates and parcel taxes once more information is known on the estimated costs of the future projects.

^{**} Subsequent review concluded that a production well on this site might impact the flows downstream in the Chapman Creek watershed which is counterproductive to the intent of the project.

STRATEGIC PLAN AND RELATED POLICIES

The Groundwater Investigation Project is intended to supplement the existing water supply and ensure that the SCRD can continue to meet its mission of providing quality services to our community through effective and responsive government.

The establishment of a working group to share information and identify opportunities for cooperation on the use of groundwater resources would further allow for an effective and sustainable use of all available water supply sources.

The SCRD Board Strategic Priorities of Embed Environmental Leadership, Enhance collaboration with the *shíshálh* and Skwxwú7mesh Nations and Ensure Fiscal Sustainability are all aligned with this initiative and recommendations contained in this report.

CONCLUSION

The objective of the Groundwater Investigation is to determine the feasibility of the development of additional production wells with to reduce the reliance on the Chapman system.

Based on a technical assessment of all potential sites within the Chapman system, Phase 1 of the Groundwater Investigation concluded that there are four sites with a high feasibility for the development of production well.

Staff recommend that any decision on the development of new production wells be made in the context of a Water Sourcing Policy. The proposed policy would outline how the current and future water demand (until 2030) would be met using the available water supply sources.

A phased approach to the test drilling on the four proposed sites could result in one year delay (until 2020) of the actual development of a production well.

Staff support the recommendation from the Taskforce Groundwater to collaborate with the Town of Gibsons on the development of a Groundwater Management Zone for the Gibsons Aquifer in the context of development of a regional growth strategy.

Staff recommend the establishment of a working group groundwater with technical staff from local governments, shíshálh Nation and Skwxwú7mesh Nation to enhance information sharing opportunities and protection of the groundwater resources in our region.

Attachments

Attachment A - Proposed Test Drilling Timeline Attachment B – Memo from Waterline Resources

Reviewed by:				
Manager		Finance		
GM		Legislative		
CAO	X – J. Loveys	Other		

Proposed Test Drilling Timeline for 4 Sites in context to the other water initiatives which are underway.

Staff will keep Committee informed throughout all the stages and significant milestones.

Activity	4 Sites	3 Sites + Mahan Rd
·	Test Drilling	Test Drilling
Post to BC Bid	April 27, 2018	April 27, 2018
RFP Closes	June 1, 2018	June 1, 2018
Report to ISC with tender results	June 21, 2018	June 21, 2018
Board Direction on tender	June 28, 2018	June 28, 2018
Contract Executed	July 6, 2018	July 6, 2018
Data collection and analyses	July-September 2018	July-September 2018
Report to Board outlining results - well development	December 2018	December 2018
Report to Board outlining results - water reservoir	December 2018	December 2018
Report to Board on Water Sourcing Policy	February 2019	
Budget approval for development of additional water sources	March 2019	
Additional data collection and analyses - Mahan Rd		January-March 2019
Report to Board outlining results - Mahan Rd		April 2019
Report to Board on Water Sourcing Policy		June 2019
Budget approval for development of additional water sources		March 2020
Initiate production wells	Summer 2019	Summer 2020

Attachment B



2301 McCullough Road, Unit D Nanaimo, British Columbia Canada V9S 4M9 Tel: 250.585.0800 www.waterlineresources.com

Technical Memorandum

Prepared For:	Sunshine Coast Regional District	Date:	April 6, 2018
Prepared By:	Darren David, VP Operations	File No.:	2746-18-001
Subject:	SCRD Groundwater Supply Investiga Exploration Site Concerns	tion – Resp	oonse to Mahan Road

Following the SCRD Groundwater Task Force Meetings relating to the proposed groundwater exploration drilling program, several concerns were raised by the Town of Gibsons and SCRD Board members. The enclosed memo provides Waterline Resources Inc.'s response to these concerns.

Waterline understands that SCRD Board members raised the question of what more could be learned from test drilling at the Mahan Rd site. It was suggested that considerable information is already available to assess the potential of this site and that possibly no further test drilling would be required. The board requested a response outlining what added-value test drilling would provide.

Waterline Response:

Some risks still exists that this site may not be suitable for the SCRD to develop a useable production well. The following summarizes key points that need to be considered which support the recommended drilling and testing at this location:

- The Mahan Road site is located near the western extent of the mapped Gibsons Aquifer. The geological data in that area is sparse and it is possible that the aquifer thins or is not as productive/permeable to the north and west of the Town of Gibsons well field. The exploration drilling and testing program will help to further define and map the aquifer in that area and determine if any restrictive (natural) barriers exist that would otherwise reduce well yield and possible groundwater extraction volumes.
- Although theoretical calculations suggests that impact to the existing users should be insignificant, under the Water Sustainability Act, the SCRD must prove through testing that a proposed SCRD Well(s) would not adversely affect existing users such as the Town of Gibsons. Furthermore, as part of the Groundwater Task Force meetings held in January and February 2018, the Town of Gibsons indicated a desire to protect some future amount of groundwater from the Gibsons Aquifer to accommodate expected population growth as described in the Town of Gibsons OCP. Although no definitive water demand/volume was identified for protection/conservation during the meetings, the discussion included possible protection of groundwater to supply projected community growth ranging from 5 years (based on Waterline's discussion with MFLNRO) to over 100 years (Town of Gibsons preference). In order to address this issue, actual long-term capacity values for any new SCRD production wells being contemplated are needed which could only be achieved through exploration drilling and testing.



SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Janette Loveys, Chief Administrative Officer

SUBJECT: Town of Gibsons Bulk Water Agreement - Terms of Reference

RECOMMENDATION(S)

THAT the report titled Town of Gibsons Bulk Water Agreement - Terms of Reference be received;

AND THAT the Terms of Reference for the Bulk Water Review Committee be sent to the Town of Gibsons for their comments.

BACKGROUND

The bulk sale of water to the Town of Gibsons was established by an agreement originally executed in 1992.

The current Bulk Water Agreement between the Sunshine Coast Regional District and the Town of Gibsons was signed on June 3, 2013. The Agreement is due for review in June of 2018.

This report and attached draft Terms of Reference is provided to Committee for their review and comments.

DISCUSSION

Analysis

As referenced at the March 1, 2018 Special Infrastructure Services Committee, there is an acknowledgement by both parties that the current Bulk Water Agreement is due for a review.

Staff have prepared the attached draft Terms of Reference for a Committee to undertake the review. The current agreement states that a review is to occur every five years but does not include an established review process.

Intergovernmental

Staff recommend that the draft Terms of Reference be forwarded to the Town of Gibsons for their comments and approval. Also attached to the report is correspondence from staff at the Town of Gibsons indicating their interest in participating in the review.

Timeline for next steps or estimated completion date

The current Agreement is due for review by June 2018. Staff recommend that the terms of the current Agreement remain in effect until a new Agreement is adopted by both parties.

STRATEGIC PLAN AND RELATED POLICIES

Establishing Terms of Reference and a clear process for the review and update to the Bulk Water Agreement is aligned with the following Board's Strategic Priorities.

- Enhances Board Structure and Process
- Ensure Fiscal Sustainability

In addition, this review process is supported by SCRD values of collaboration, respect and equality and transparency.

CONCLUSION

The current Bulk Water Agreement between the Sunshine Coast Regional District and the Town of Gibsons was signed on June 3, 2013. The Agreement is due for review in June of 2018.

This report and attached draft Terms of Reference is provided to Committee for their review and comments.

Staff recommend that the draft Terms of Reference be sent to the Town of Gibsons for their comments.

Reviewed b	y:		
Manager		Finance	
GM		Legislative	X-A.Legault
CAO		Other	

ATTACHMENT

Appendix A - Draft Terms of Reference

Appendix B - Correspondence from Town of Gibsons Administration.

DRAFT TERMS OF REFERENCE

TOWN OF GIBSONS BULK WATER AGREEMENT REVIEW COMMITTEE

1. Purpose

1.1 The purpose of the Town of Gibsons Bulk Water Agreement Review Committee is to review and make recommendations with respect to a revised Bulk Water Agreement with the Town of Gibsons as contemplated by Section 31 of the Bulk Water Supply Agreement.

2. Duties

- 2.1 The Town of Gibsons Bulk Water Agreement Review Committee will:
 - a. Recommend revisions to the Bulk Water Agreement to the Town of Gibsons and SCRD.
 - b. Review the existing Agreement format and verbiage to ensure it meets the current needs of each party.
 - c. Share information with respect to Zone 3 and relative capital planning work as described by the March 12, 2018 Town of Gibsons presentation.
 - d. Review financials impacts and/changes including but not limited to development cost charges, reserve funding and infrastructure capital costs.
 - e. Review and recommend a rate structure based on the flow requirements.
 - f. Ensure the revised Bulk Water Agreement is aligned with the Water Sustainability Act.
- 2.2 The Town of Gibsons Bulk Water Agreement Review Committee will be dissolved upon the adoption of the revised Bulk Water Agreement by each party.

3. Membership

- 3.1 The Town of Gibsons Bulk Water Agreement Review Committee is comprised of the following members:
 - a. Chair of SCRD Infrastructure Services Committee (ex-officio) One SCRD Elected Official who is a participant in the Regional Water Service One Town of Gibsons Elected Official Chief Administrative Officers from Town of Gibsons and SCRD Chief Financial Officers from Town of Gibsons and SCRD Director of Infrastructure Services, Town of Gibsons General Manager, Infrastructure Services SCRD

- b. Members will be considered to be appointed upon adoption of the Terms of Reference by the Town of Gibsons and SCRD.
- 3.2 The SCRD Infrastructure Services Committee Chair will serve as Chair (ex-officio) of the Bulk Water Agreement Renewal Committee.

4. Operations

- 4.1 A majority of the voting members of the committee, as listed in section 3 will constitute a quorum (or other number as may be appropriate).
- 4.2 At their first meeting, the Town of Gibsons Bulk Water Agreement Review Committee will set their meeting schedule and overall timeline to recommend a revised Bulk Water Agreement. The Committee will be responsible to set meeting locations and times.
- 4.3 All Committee meetings must be open to the public except where the committee resolves to close a portion of it pursuant to Section 90 of the *Community Charter*.
- 4.4 The authority of the Committee is limited as follows:
 - a. The Town of Gibsons Bulk Water Agreement Review Committee does not have the authority to bind the SCRD in any way, nor engage or otherwise contact third parties, consultants, organizations or authorities in a manner which may appear to be officially representing the SCRD.
 - b. The Town of Gibsons Bulk Water Agreement Review Committee may communicate with external organizations and agencies to collect information and make inquiries.
 - c. Where the Town of Gibsons Bulk Water Agreement Review Committee wishes to express opinions or make recommendations to external organizations and agencies, it must first obtain authorization from the SCRD Board.
- 4.5 Committee members are encouraged to:
 - a. attend and participate in meetings of the Committee
 - b. share experiences and ideas while maintaining an open mind to others' perspectives
 - c. report back to the appropriate Standing Committee
 - d. be able to dedicate approximately 6 hours per month to the work of the Committee
- 4.6 In carrying out its mandate, the Committee will work towards conducting operations in a way that:
 - a. improves the economic, environmental and social well-being for present and future generations:
 - b. encourages and fosters community involvement;
 - c. enhances the friendly, caring character of the community;
 - d. maintains an open, accountable and effective operation;
 - e. is consistent with the goals and objectives of the SCRD's strategic plan; and

- f. recognizes advisory committees are one of many channels that the Regional Board may utilize to obtain opinions and advice when making decisions.
- 4.8 The SCRD will provide a recording secretary whose duties will include:
 - a. preparing meeting agendas and distributing them to the Committee members in advance of the meeting
 - b. preparing minutes of all meetings using SCRD standard practices
 - c. forwarding the approved minutes to the Infrastructure Services Committee and the Town of Gibsons for further consideration and approval.
- 4.9 Unless otherwise provided for, meetings shall be conducted in accordance with the rules of procedure set out in the Board Procedure Bylaw.
- 4.10 Committee members are subject to the Conflict of Interest legislation outlined in Section 100 109 of the *Community Charter*. The terms "Council" and "Committee" shall be interchangeable for the purpose of interpretation of these sections.
- 4.11 Committee members must respect and maintain the confidentiality of the issues brought before them.

5. Reference Documents

- 5.1 SCRD Procedure Bylaw No. 474
- 5.2 Community Charter, Section 100 109 Conflict of Interest
- 5.3 Community Charter, Section 90 Open/Closed Meetings

Approval Date:		Resolution No.	
Amendment Date:		Resolution No.	
Amendment Date:	4	Resolution No.	

Attachment B



TOWN OF GIBSONS

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F F

APR 1 1 2018

CHIEF ADMINISTRATIVE OFFICER

April 6, 2018

Sunshine Coast Regional District 1975 Field Road Sechelt BC V0N 3A1

Attention: General Manager, Infrastructure Services

Dear Remko Rosenboom,

Reference: Bulk Water Supply Agreement

As per Article 31 of the 2013 Bulk Water Supply Agreement, this letter is to formally notify you of the Town's intention to proceed with a review of the above referred agreement.

The Town's Director of Infrastructure Services, Mr. Dave Newman, copied on this letter, will be our representative at the upcoming review. He can be reached by email at dnewman@gibsons.ca or by phone at 604-886-2274.

Yours truly,

Émanuel Machado

Chief Administrative Officer

Cc: Council, Town of Gibsons

Dave Newman, Director of Infrastructure Services, Town of Gibsons

Board, Sunshine Coast Regional District

Janette Loveys, Chief Administrative Officer, Sunshine Coast Regional District

TOWN OF GIBSONS

"Nature is our most valuable asset"

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: RAW WATER RESERVOIR - FEASIBILITY STUDY OUTLINE

RECOMMENDATION(S)

THAT the report titled Raw Water Reservoir – Feasibility Study Outline be received for information.

BACKGROUND

The Engineered Lake (raw water reservoir) is a long term recommendations identified in the Comprehensive Regional Water Plan (CRWP) in order to address the Regional Water System's supply capacity deficit. The CRWP the water reservoir project will target a reservoir with a storage volume of 0.43 Mm³ to 0.76Mm³. Since the approval of the CRWP in 2013, growth projections, environmental flow requirements, and extended periods of less precipitation have indicated that a storage volume in excess of 0.76 Mm³ might be required.

The 2018 budget proposal Regional Water Storage Capacity recommended a feasibility study that will include site identification, regulatory framework, preliminary engineering and estimated Class D costs. Staff commit to bring back more information on the investigation prior to tendering the required professional services.

This report described the project outline of the Feasibility and Development Study portion of the Raw Water Reservoir project (Attachment A).

The following resolution was adopted at the March 22, 2018 Board meeting:

104/18 Recommendation No. 7 Regional Water Service [370] – 2018 R2

Budget Proposals

THAT the report titled 2018 R2 Budget Proposal for [370] Regional Water Service be received:

AND THAT the following budget proposal be incorporated into the 2018 Budget, as amended:

 Budget Proposal 3 – Regional Water Storage Capacity, \$200,000 funded from Development Cost Charges (DCC's).

DISCUSSION

The Raw Water Reservoir Feasibility Study is a complex and multi-phased project which will be conducted with guidance of professional services and input from staff. The Feasibility Study is outlined in detail in the attached Project Outline (Attachment A) for Committee information.

The Feasibility Study, which comprises the first two phases of the project, will include the identification and review of all potential sites and selection of several preferred sites for further assessment. Other deliverables will include Class 'D' cost estimates for construction and operation, regulatory requirements, development timelines, and a summary report presenting the results of the first two phases. The target date for the Feasibility Study summary report is in Q4 of 2018.

Recommendations will also be brought forward for the Board's consideration outlining next steps and budgetary requirements for the Development Study phases 3 and 4 as outlined in the Project Outline. These recommendations will be included in a report targeted for Q1 of 2019 to align with the 2019 budget process.

STRATEGIC PLAN AND RELATED POLICIES

The SCRD Strategic Plan's Mission is to provide leadership and quality services to our community through effective and responsive government. This report outlines key projects that will help ensure the SCRD continues to provide the services of water purveyor. Interwoven in the projects outlined in this report are the SCRD Strategic Priorities of Ensuring Fiscal Sustainability, Embedding Environmental Leadership, Supporting Sustainable Economic Development, Enhancing Collaboration with the *shíshálh* and Skwxwú7mesh Nations, and Facilitating Community Development.

This report is built upon the Comprehensive Regional Water Plan's elements to meet the community's water needs now and in the future.

CONCLUSION

The development of a Raw Water Reservoir is recommended in the Comprehensive Regional Water Plan to address the Regional Water System's storage capacity deficit. The siting and design of this reservoir will require a complex, multi-phased project. An outline of the Project Outline for the Feasibility Study is attached for information.

This report is built upon the Comprehensive Regional Water Plan's elements to meet the community's water needs now and in the future.

Attachment - Project Outline for Raw Water Reservoir Feasibility and Development Study

Reviewed I	oy:		
Manager		CFO	X – T. Perreault
GM		Legislative	
CAO	X – J. Loveys	Other	

Project Outline for Raw Water Reservoir Feasibility and Development Study

1. Project Objective:

The SCRD is considering the construction of a raw water reservoir for the storage of water from Chapman Creek. The Comprehensive Regional Water Plan (June 2013) proposed the development of a water reservoir for the storage of water from Chapman Creek to augment the supply during extended periods with less precipitation.

A consulting firm will be commissioned to conduct a Feasibility Study to assess multiple locations for the suitability to construct a reservoir and will result in the completion of preconstruction activities related to a selected location.

2. Project Description:

The study involves the investigation of a potential location for a raw water storage reservoir which would include site identification, preliminary engineering and costing.

The concept consists of the construction of a lined raw water storage reservoir that collects water during spring time and stores it for use during the summer months. Infrastructure would be required to capture water from the creek, to fill the reservoir, and to supply the stored water to the Chapman Creek Water Treatment Plant (CCWTP) when required for treatment and distribution to the Regional Water Service area.

Several options and locations will be assessed which will ultimately result in the initial steps towards the development of such reservoir. As each possible site will differ in limitations, water storage capacity (i.e. area x depth), requirements in terms of infrastructure, land acquisition, permitting, and operational/construction costs and risks, the preferred site and design criteria will be selected during a phased approach in which the feasibility of the sites will be assessed with an increased level of detail.

3. Minimum Requirements:

- Sizing of the reservoir for future supply requirements.
- Feasibility study to locate a potential reservoir location.
- Preliminary investigation indicating a high likelihood that all authorizations required for the construction and use of the reservoir as drinking water source can ultimately be issued by the appropriate authorities.
- shíshálh Nation consultation
- Construction Impact Assessment with consideration that the construction impact is reasonable given the increased community water supply it provides.
- Cost effective operational maintenance using the best available technologies.
- Engineered design of required infrastructure to capture water from Chapman Creek, store raw water in a lined reservoir, and to supply the water from the reservoir to the CCWTP.

4. Timeline:

The project will consist of a Feasibility Study and Development Study, each with two phases:

Feasibility Study

Phase 1: Desktop study and field reconnaissance

July-August 2018

- The contractor will review the Comprehensive Regional Water Plan and all other available information to determine the volume required to meet the long term demand needs of the SCRD to the year 2030
- Identification of all potential sites and assessment based on multiple criteria related to their feasibility
- Multi-Criteria Analysis to select a limited number of sites to be further investigated in Phase 2
- Preliminary review with all regulatory agencies and shishalh Nation

Phase 2: Preliminary Site Assessment

September-November 2018

- Detailed review of selected sites
- Further assessment based on preliminary designs
- Class D cost estimates for construction and operation
- Conceptual drawings
- Regulatory requirements
- **Development timelines**
- Cost-benefit analysis
- Engineering process to select the first and second preferred locations and design criteria

Development Study (only if development of reservoir is approved by the Board)

Phase 3: Selection of desired site and design criteria December 2018 -January 2019

- Additional site assessment of preferred location to confirm suitability
- Class C cost estimates for construction and operation

Phase 4: Site Design and development

2019-onwards

- 90% design drawings
- Assess and submit required applications for provincial authorizations and shíshálh Nation support
- Assist the SCRD in securing the land ownership rights
- Class A capital cost estimate
- Develop detailed life-cycle costing analysis
- Vendor cost information and asset life analysis
- Final report detailing decision making and analysis
- Develop Request for Proposal documents to be issued for construction

5. Deliverables

The project is expected to result in the following deliverables:

- A complete report identifying the preferred location of a reservoir that includes:
 - o Design
 - Capital costs
 - Life cycle costs
 - Asset Life analysis
- Assessment and assistance in:

April 19, 2018 Infrastructure Services Committee

- o Provincial Authorization
- o shíshálh Nation support
- Land ownership rights
- o Request for proposal development

6. Excluded from Feasibility and Development Study

- Activities directly associated with the actual construction (e.g. actual construction, project management, construction monitoring).
- Assisting the SCRD to secure funding for the construction of a raw water reservoir.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Tina Perreault, GM Corporate Services/Chief Financial Officer

Brad Wing, Financial Analyst

SUBJECT: Universal Water Meter Installations Phase 3 Funding

RECOMMENDATION(S)

THAT the report titled Universal Water Meter Installations Phase 3 Funding be received;

AND THAT staff prepare an Alternate Approval Process (AAP) to authorize long term borrowing of up to \$5,956,111 over a 20 year term to fund Phase 3 of the Universal Water Meter Installations project.

BACKGROUND

The following resolution (excerpt) was adopted at the regular Board meeting on March 22, 2018 following notification of an unsuccessful application for grant funding from the Strategic Priorities Fund for the Phase 3 of the Universal Water Meter Installations project:

Recommendation No. 8 Regional Water Service [370] – 2018 R2 Budget Proposals

THAT the following budget proposals be incorporated into the 2018 Budget:

 Budget Proposal 5 – Universal Water Meter Installations – Phase 3 – District of Sechelt, \$5,896,550 funded through Long Term Debt;

The funding recommendation above was based on the Comprehensive Regional Water Plan (CRWP) financial model which proposes a borrowing term of 20 years, equivalent to the estimated useful life of the assets.

Grant funding is only included in the model when an application is approved and a funding agreement is in place. Current parcel tax rates have been set based on the project being funded through long term debt over a 20 year term.

DISCUSSION

Local governments wishing to pursue long term debt financing may only do so with approval of the electors and subsequent adoption of a Loan Authorization Bylaw. Approval in this case can be in the form of an Alternate Approval Process (AAP) or a referendum.

Alternative funding options that do not require elector approval include short term financing for a 5 year term or a combination of short term financing and reserves.

Options and Analysis

Based on the budgeted project costs of \$5,896,550 and allowing for a required 1% contribution to the Municipal Finance Authority debt reserve fund, the maximum amount of borrowing to be authorized for this project has been calculated at \$5,956,111. Debt reserve fund contributions earn interest and are returned at the end of the borrowing term.

Approval for long term borrowing up to a specified amount does not commit the SCRD to undertake all of the borrowing should alternative funding sources such as grants or reserves become available. For instance, Phase 2 of the project is nearing final completion and staff are estimating a potential project funding surplus of \$500,000 that could be used towards Phase 3. Staff will report on final values and any recommended financial plan amendments on final completion of Phase 2.

The actual amount to be borrowed for Phase 3 will be based on the actual project costs, less any alternative funding sources approved prior to project completion, and is subject to final approval through the adoption of a Security Issuing Bylaw.

The maximum term of a local government debt is the lesser of 30 years or the reasonable life expectancy of the capital asset. Water meters have an estimated useful life of 20 years.

The SCRD is committed to proceeding with the final phase of meter installations in 2018. Therefore, in the spirit of transparency, it is important to understand that should approval of the electors for long term borrowing not be achieved, alternative funding options will be presented to the Board for consideration.

Option 1 – Long term borrowing over a 20 year term

A 20 year term would more equitably spread the funding requirements over the asset lifespan as future system growth will contribute towards servicing the debt thereby reducing the overall burden on the existing property base. This option is consistent with the CRWP financial model and results in a projected debt servicing ratio of 10.56% inclusive of both current and authorized unissued debt. Staff recommend a 20 year term.

Option 2 – 50/50 combination of short term financing over a 5 year term and reserves

Funding the project through a combination short term financing and reserves is feasible but also increases the short term risk to the organization both through higher annual debt servicing costs, reduced reserve balances and reduced contributions to reserves as capital funding is shifted to service the debt.

The Regional Water Service currently has uncommitted operating and capital reserves totaling \$5.8 million inclusive of budgeted transfers in 2018.

Funding the project through 50% reserves and 50% short term financing would reduce available reserves to \$2.85 million in the short term and result in a projected debt servicing ratio of 11.05%.

Given the current status of initiatives aimed at increasing the water supply capacity in the Regional Water System, this is not the preferred option in order to maintain maximum flexibility when determining funding of future projects currently in the feasibility stage.

Should the public approval process fail and this was the alternative source of funding, staff will provide a future report on funding implications and options.

Option 3 – Short term financing over a 5 year term

Short term financing over a 5 year term also increases the short term financial risk to the organization and would necessitate a rate increase as current parcel tax revenues would not be sufficient to fund the increased debt servicing costs and planned rehabilitation projects identified in the CRWP.

Section 3.5 of the Debt Management Policy states that 'revenues must be sufficient to accommodate debt servicing'. All other factors being equal, a parcel tax rate increase of approximately 20% would be required to maintain adequate cash flow over the borrowing term without drawing on reserves.

In addition, the organizations projected debt servicing ratio would increase to 12.88%. The Debt Management Policy specifies a maximum debt servicing ratio of 15% in order to maintain flexibility to issue debt in response to emerging financial needs.

Staff do not recommend this option.

Financial Implications

Funding the project from long term debt over a 20 year term is consistent with the CRWP financial model. Current parcel tax rates which are used for capital funding and debt servicing have been set based on the assumptions made in the model. As such, Option 1 will not have an impact future projected rate increases.

Alternative funding options utilizing short-term financing or a combination of short term financing and reserves are a deviation from the CRWP financial model that increase the short term financial risk and decrease financial flexibility in determining funding for future projects.

Estimated annual debt servicing costs for each of the three options, based on current interest rates, are detailed in the table below:

Option	Estimated Annual Debt Servicing
Option 1 – 100% Long term debt, 20 year term	\$400,344
Option 2 – 50% short term financing / 50% reserves	\$622,134
Option 3 – 100% Short term financing	\$1,244,268

Communications Strategy

In addition to statutory advertising, an information package will be produced as part of the Alternative Approval Process.

The information package will include a copy of the Loan Authorization Bylaw, the Notice of AAP, information on the metering project and a comparison of cost implications for both long term borrowing and alternative combination of short term borrowing and reserves.

Timeline for next steps or estimated completion date

The Loan Authorization Bylaw would be presented for three readings at the April 26th Board meeting. Related AAP materials (calculation of eligible electors, elector response form, schedule, etc.) would be prepared while awaiting the Inspector of Municipalities' approval of the bylaw, and would be forwarded to the Board prior to the public notice period

STRATEGIC PLAN AND RELATED POLICIES

Ensuring fiscal sustainability is a key priority of the SCRD Strategic Plan. The Comprehensive Regional Water Plan financial model meets the objectives associated with this priority by aligning service levels and long term capital planning with a sustainable funding model guided by the Financial Sustainability Policy and Debt Management Policy.

CONCLUSION

Following notification of an unsuccessful application for grant funding from the Strategic Priorities Fund for Phase 3 of the Universal Water Meter Installations project, the Board resolved to fund the project through long term debt as per the Comprehensive Regional Water Plan (CRWP) financial model.

Local governments wishing to pursue long term debt financing may only do so with approval of the electors. This can be achieved through an Alternate Approval Process (AAP) or referendum. An AAP is generally considered to be the more cost effective option.

Including the required 1% contribution to the MFA debt reserve fund, the maximum borrowing to be authorized for this project is \$5,956,111 over a term of 20 years based on the estimated useful life of the assets.

Alternative funding options that do not require elector approval include short term financing or a combination of reserves and short term financing. These options are a deviation from the CRWP financial model and increase the organizations financial risk in the short term as it relates to debt servicing costs and flexibility in determining funding for future initiatives.

Reviewed by:					
Manager		Finance	X-T.Perreault		
GM	X-R. Rosenboom	Legislative	X-A.Legault		
CAO	X-J. Loveys	Other			

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee Meeting – April 19, 2018

AUTHOR: Remko Rosenboom, General Manager Infrastructure Services

SUBJECT: DEVELOPMENT OF WATER SOURCING POLICY

RECOMMENDATION(S)

THAT the report titled Development of Water Sourcing Policy be received;

AND THAT the SCRD develop a Water Sourcing Policy in collaboration with local governments and First Nations.

BACKGROUND

The Comprehensive Regional Water Plan as approved in June 2013 lists four projects to increase the water supply for the Chapman System to meet the current and future community demand. These projects are:

- 1. Universal Metering Project
- 2. Chapman Lake Expansion Project
- 3. Expansion of Groundwater Extraction
- 4. Raw Water Reservoir

The Board adopted the following resolutions at March 22, 2018 meeting:

104/18 Recommendation No. 7 Regional Water Service [370] – 2018 R2
Budget Proposals

THAT the report titled 2018 R2 Budget Proposal for [370] Regional Water Service be received:

AND THAT the following budget proposal be incorporated into the 2018 Budget, as amended:

 Budget Proposal 3 – Regional Water Storage Capacity, \$200,000 funded from Development Cost Charges (DCC's).

Recommendation No. 8 Regional Water Service [370] – 2018 R2 Budget Proposals

THAT the following budget proposals be incorporated into the 2018 Budget:

- Budget Proposal 4 Groundwater Investigation Stage 2 Test Drilling Program, \$325,000 funded from Reserves;
- Budget Proposal 5 Universal Water Meter Installations Phase 3 – District of Sechelt, \$5,896,550 funded through Long Term Debt;

AND THAT the budget for [370] Regional Water Service be moved to adoption in the 2018 Budget as amended.

By means of adopting these resolutions, all four projects listed in the CWRP are now in some stage of development. While the Universal Metering Project is intended to reduce the water demand, the other three are intended to increase the supply, especially during the summer period. Since 2016, staff has been seeking the necessary permits for the Chapman Lake Expansion Project, the feasibility for the other two increased supply projects is scheduled to be confirmed late 2018 or early 2019.

During the March 1, 2018 Infrastructure Services Committee meeting, staff suggested to develop a policy on the integrated operation of all available water supply sources within the Chapman System. Such Water Sourcing Policy (WSP) would outline how the current and future (until 2030) water demand would be met using the available sources.

The long-term water demand (after 2030) will be incorporated in to the Regional Growth Strategy Options report targeted for June.

The purpose of this report is to outline the process and timelines for the development of a Water Sourcing Policy in cooperation with other local governments and First Nations.

DISCUSSION

A WSP would outline the operational systems to optimize the current water supply sources and those sources which are under consideration to be developed in the near future. If all these sources are developed, the WSP would consider the supply from:

- Edwards Lake
- Chapman Lake
- Chaster Well
- Grev Creek
- Raw Water Reservoir
- All newly developed production wells

The development of a final WSP depends on the confirmation of the feasibility of the Raw Water Reservoir, any additional groundwater wells and the permits for the Chapman Lake Expansion Project to be issued.

Where the feasibility studies for the reservoirs and wells will determine the maximum potentials of these sources, the WSP would establish the volumes and flows the SCRD are actually interested in withdrawing. As such, a decision to actually develop one or more new wells or the Raw Water Reservoir would be guided by this Water Sourcing Policy.

Engagement Local Governments and First Nations (also Stakeholders and/or General Public)

In the spirit of the SCRD's mission, the development of the Water Sourcing Policy will be undertaken in collaboration with partner local governments and First Nations. These parties will be engaged in both phases of the policy development and a taskforce with staff from the SCRD, local governments and First Nations will be established to guide this process.

Organizational Implications

Upon commissioning of every new water supply source, the Drought Management Plan will need to be updated to reflect policy direction as included in the WSP.

Timeline for next steps or estimated completion date

Staff intend to provide reports to the Board during both phases of the development of the WSP:

- Phase 1. May/June 2018: Confirmation of policy framework (e.g. objectives and principles)
- Phase 2: January/February 2019 (or as soon after feasibility has been confirmed for all new sources currently under consideration): Final WSP.

Subsequently, staff will prepare reports for the Board's consideration to initiate the actual development of any new water supply sources.

STRATEGIC PLAN AND RELATED POLICIES

As the current water supply for the Chapman System is lacking any redundancy and has a sustained supply deficit, it is in the spirit of the SCRD's mission of providing quality services to our community through effective and responsive government to develop a short and long term water sourcing policy in collaboration with the other local governments and the *shíshálh* and Skwxwú7mesh Nations.

The development of a Water Sourcing Policy in transparent collaboration with SCRD partners, would further allow for an effective, cost efficient and sustainable use of all available water supply sources within the Chapman System.

CONCLUSION

With the potential development of additional water sources to supply the Chapman System, there is a need to develop a policy on when each source will be used.

Such Water Sourcing Policy will be developed prior to final recommendations to the Board on the actual development of a Raw Water Reservoir or any new wells.

Staff will bring forward reports for Board consideration throughout the development of this Water Sourcing Policy. This policy will be developed in collaboration with local governments and shíshálh and Skwxwú7mesh Nations.

Reviewed b	y:		
Manager		Finance	
GM		Legislative	
CAO	X – J. Loveys	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Service Committee – April 19, 2018

AUTHOR: Raphael Shay, Water and Energy Projects Coordinator

SUBJECT: 2018 DROUGHT MANAGEMENT PLAN IMPLEMENTATION

RECOMMENDATION(S)

THAT the report titled 2018 Drought Management Plan Implementation be received;

AND THAT the Drought Management Plan be updated to incorporate restrictions on hand watering and low flow drip irrigation of lawns at Stage 3;

AND THAT the Water Rates and Regulations Bylaw No. 422 be updated;

AND FURTHER THAT a request be sent to the Town of Gibsons to harmonize their bylaw with Bylaw 422.

BACKGROUND

The purpose of this report is to discuss implementation of the Drought Management Plan in 2018.

The following recommendation was adopted at the March 22, 2018 Board meeting:

106/18 Recommendation No. 2 Drought Management Plan 2017 Review

THAT the report titled Drought Management Plan 2018 Review be received;

AND THAT a 2018 Drought Management Plan Implementation Report be brought to the April 19, 2018 Infrastructure Services Committee.

The report will address the following recommendations adopted at the January 11, 2018 Board meeting:

004/18 Recommendation No. 5 Drought Management Plan - Annual Review

THAT the Q1 2018 review of the Drought Management Plan consider a review of the DMP on an annual basis.

004/18 Recommendation No. 6 Drought Management Plan - Implementing Stage 2

THAT the Q1 2018 review of the Drought Management Plan include consideration of a calendar based annual deadline for the implementation of Stage 2 restrictions.

004/18 Recommendation No. 7 Drought Management Plan – Watering Ban

THAT the Q1 2018 review of the Drought Management Plan include consideration of a ban on watering private lawns at Stages 2 and 3.

The Drought Management Plan (DMP) provides direction for the timely and responsive management of water supplies during times of supply challenges or seasonal droughts. The Sunshine Coast Regional District's DMP was originally created in 2003. The DMP has four stages of escalating levels of restrictions with an emphasis on curbing outdoor water use.

DISCUSSION

Staff continue to conduct an annual review of the DMP. These reviews involve key staff and incorporates feedback from the community and are focused on identifying areas of concern and the potential for improvements. Information reports are and will be generated from these reviews for the Board's consultation. This report outlines the potential improvements based on the review of the application of the DMP in 2017 as received by the Infrastructure Services Committee at its March 15, 2018 meeting.

Implementing Stage 2 – Calendar Basis

Stage 1 water use restrictions are in effect on a calendar basis from May 1 to September 30 each year. Stage 1 is designed to respond to normal water supply conditions. As such, the restrictions in this stage are aimed at managing the Maximum Day Demand that normally occurs during dry and hot summer seasons to ensure the proper functioning of the water system.

Stages 2, 3, and 4 respond to water supply conditions that are Moderate, Acute, and Severe, respectively. In the last five years, Stage 2 was implemented anywhere between June 9 and August 9, dependent predominantly on the storage volumes in Edwards and Chapman lake and the weather conditions in a given year.

The current framework for implementing Stages 2, 3, and 4 provides an appropriate management approach during periods of drought and changes to the available water supply. The framework for these stages is outlined in Section 5 of the DMP and includes the following considerations:

- 1. Time of year and typical seasonal trends
- 2. Snow pack assessments and snowmelt forecasts
- 3. Storage volume of water sources and draw down rates
- 4. Stream flows and monitoring data
- 5. Weather, recent conditions and forecasts
- 6. Water usage, recent consumption and trends
- 7. Water supply system performance

A calendar based schedule related to calling these three DMP Stages does not take into consideration all of the parameters outlined in Section 5 of the DMP and could result in increased water shortages or unnecessarily conservative water restrictions.

Staff do not recommend a calendar date approach for the implementation of the Drought Management Plan's Stage 2.

Lawn Watering Ban at Stage 2 and 3

The DMP restrictions respond to the severity of water supply associated with each Stage.

- Stage 1 normal: 12 hours lawn sprinkling per week
- Stage 2 moderate: 4 hours lawn sprinkling per week
- Stage 3 acute: No sprinkling, hand lawn watering permitted
- Stage 4 severe: No lawn watering

The current water restrictions focus primarily on sprinkling and soaker hoses as water system usage patterns identifies watering as the largest water use during the summer. Low flow drip irrigation is exempted from Stage 2 and 3 restrictions as it is an efficient and preferred method of irrigation for landscaping and food producing plants. Hand lawn watering is currently permitted at Stage 3.

Banning all lawn watering at Stage 3, including hand watering, will expand the restrictions. Such a restriction will better correlate to other prohibited uses at Stage 3, such as car washing and pressure washing for residential and commercial water users. It will also more consistently restrict water uses to respond to an acute water supply situations that would trigger Stage 3.

Stage 2 already represents a significant drop in allowable lawn watering from Stage 1. Staff do not recommend further restricting lawn sprinkling at Stage 2. If water demand from sprinkling is affecting the available water supply, staff will evaluate the need to escalate restrictions to Stage 3 in accordance with the framework for calling Stages.

Staff recommend banning hand watering and low flow drip irrigation of lawns at Stage 3.

The DMP and the Water Rates and Regulations Bylaw No. 422 will require revisions to reflect these changes.

The following tables summarize the change to water restrictions for outdoor plants.

Current Water Restrictions for Outdoor Plants						
	Plant Type Stage 2 - Moderate Stage 3 - Acut					
Hand watering and low flow drip	Fruits, Vegetables, and Landscaping plants	Allowed	Allowed			
irrigation	Lawns	Allowed	Allowed			
Sprinkling and Soaker hoses	Fruits & Vegetables Landscaping plants	Allowed with restrictions	Not allowed			
	Lawns	Allowed with restrictions	Not allowed			

Proposed Watering Restrictions for Outdoor Plants					
	Plant Type Stage 2 - Moderate Stage 3 - Acut				
Hand watering and	Fruits, Vegetables, and	Allowed	Allowed		
Low Flow Drip	Landscaping plants				
Irrigation	Lawns	Allowed	Not allowed		
Sprinkling and	Fruits & Vegetables	Allowed with	Not allowed		
Soaker hoses Landscaping plant		restrictions			
Lawns		Allowed with	Not allowed		
		restrictions			

Business Exemption

Businesses involved in car washing have expressed the desire to be exempted from restrictions at Stage 3 as was previously the case.

Some neighboring jurisdictions have more refined restrictions which allows certain commercial sectors to continue to use water at a certain drought stage if specific water conservation measures such as use of grey water where permitted are adequately being implemented. Staff do not recommend any changes to the SCRD's DMP to include any such refined restrictions at least until sufficient additional water supply sources are available.

Intergovernmental Implications

The SCRD and the Town of Gibsons have harmonized their water restrictions. This is particularly important for the Town of Gibsons' Zone 3, which currently uses water from the Chapman System. Staff will meet and share the latest changes to the DMP with the Town of Gibsons staff to ensure consistency and proactive communication occurs.

STRATEGIC PLAN AND RELATED POLICIES

The SCRD Strategic Plan has a priority to Embed Environmental Leadership. The DMP helps the SCRD minimize environmental impacts by promoting water conservation.

The Drought Management Plan is a critical component of the Region's overall water supply strategy, as outlined in the Comprehensive Regional Water Plan (CRWP, 2013), and furthering the SCRD Goal of reducing water consumption by 33% relative to 2010 levels by 2020 (CRWP, p. 3-16).

These conservation targets are consistent with the We Envision Regional Sustainability Plan (2012) targets.

CONCLUSION

The Drought Management Plan (DMP) provides direction for the timely and responsive management of water supplies during times of supply challenges or seasonal droughts.

Based on the review of the application of the DMP in 2017 as presented to the Board in March 2018, staff recommend to update the DMP before its 2018 application. Staff recommend to

incorporate restrictions on hand watering and low flow drip irrigation of lawns at Stage 3. These additional restrictions would align lawn watering restrictions to other prohibited uses at Stage 3, such as car washing and pressure washing for residential and commercial water users. This will more consistently restrict water uses to respond to the acute water supply situation which triggered the calling of Stage 3 restrictions.

These changes will require changes to the Water Rates and Regulations Bylaw 422 as well as a request to be made to the Town of Gibsons to harmonize their bylaws accordingly.

Reviewed by:			
Manager		Finance	
GM	X – R. Rosenboom	Legislative	X-A.Legault
CAO	X - J. Loveys	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Robyn Cooper, Manager, Solid Waste Services

SUBJECT: RECYCLE BC REVISED PROGRAM PLAN - UPDATE

RECOMMENDATION(S)

THAT the report titled Recycle BC Revised Program Plan - Update be received;

AND THAT correspondence be sent to Recycle BC seeking confirmation that Electoral Areas B, D, E and F are eligible to join Recycle BC's curbside recycling program.

BACKGROUND

The SCRD has a contract with Recycle BC to provide regional depot recycling services for residential packaging and paper products. The contract is set to conclude on November 30, 2018. The contract has two one-year extensions available.

Recycle BC hosted a two-day consultation event on December 15 and 16, 2017 regarding proposed revisions to their Program Plan. Directors and staff attended and provided feedback during the event.

Recycle BC issued their revised Program Plan on March 29, 2018. The Plan is attached.

The purpose of this report is to update the Committee on Recycle BC's Plan revision process, timelines and impacts of the revised Program Plan.

DISCUSSION

During the consultation event, many changes were proposed and discussed including changes to:

- Curbside collection: eligibility, payment structure, rates
- Depot collection: differentiation of depots, payment structure, rates

Now that the revised Program Plan is issued, there is a public consultation period concluding May 14, 2018 after which, Recycle BC will submit their Program Plan and feedback to the BC Ministry of Environment and Climate Change Strategy (MoE) for approval.

MoE either approves the Program Plan or requests revisions and re-submission.

Once the Program Plan is approved by MoE, Recycle BC will proceed with updating their contracts and agreements.

A summary of the key milestones for Recycle BC's Program Plan revision process is provided in Table 1.

Table 1: Recycle BC Program Plan Revision Process Timeline

Key Milestones	Anticipated Completion Date
Host Consultation Event	November 15 and 16, 2017
Issue Consultation Summary	Late-February 2018
Revised Program Plan - Issued	March 29, 2018
Revised Program Plan - Consultation Period	May 14, 2018
Program Plan - Submitted to MoE	June 2018
Program Plan - Approved by MoE	July 2018
Issue Revised Contracts & Agreements	July 2018
Current Contract Expiry	November 30, 2018

Based on the revised Program Plan, the following change impacts the SCRD's recycling services.

Eligibility criteria was established for new curbside programs as follows:

- A curbside garbage collection program was in place by May 2014;
- · The community represents an incorporated municipality; and
- The community has a minimum population of 5,000 residents.

As per Board direction, an RFP is being developed for curbside collection services, which includes recycling, for Electoral Areas B, D, E and F.

Staff recommend sending correspondence to Recycle BC to confirm whether Electoral Areas B and D are included as they were previously accepted under the prior Program Plan and whether Electoral Areas E and F can be included. Being included in the program would result in financial incentives being provided to the SCRD and funding all costs to process the recyclables.

Financial Considerations

The revised Program Plan does not address payment structure or rates. Recycle BC has indicated that these will be addressed in the revised agreements and contracts which are expected to be issued in July 2018.

Timeline for next steps

Staff will be participating in RecycleBC's upcoming revised Program Plan webinar being held on April 17, 2018.

Additionally, once the updated contracts and agreements are issued, Staff will review and bring forward a report in Q3 2018 identifying any potential changes or impacts to the SCRD's recycling services and any recommended feedback for RecycleBC.

The SCRD's depot operations contracts with Gibsons Recycling, GRIPS and Salish Soils are aligned to conclude on November 30, 2018 with the same two one-year extensions available as the SCRD-Recycle BC contract.

Staff will bring forward a report in Q3 2018 with extension options for the SCRD's depot recycling services and will integrate Recycle BC's timeline in the report.

STRATEGIC PLAN AND RELATED POLICIES

This report is in support of the key strategic priority of Embed Environmental Leadership and the Solid Waste Management Plan's initiative of EPR Management Programs.

CONCLUSION

Recycle BC has revised their Program Plan and as part of their revision process, hosted a twoday consultation event in December 2017. Staff attended and provided feedback during the event.

There is a public consultation period starting March 29, 2018, the release of Recycle BC's Program Plan and ending May 14, 2018.

Staff have reviewed the revised Program Plan and identified one change that impacts the SCRD's planned curbside recycling program. Staff recommend sending correspondence to Recycle BC confirming that Electoral Areas B, D, E and F are eligible to join the curbside program and to provide feedback that unincorporated areas should be eligible to join.

Recycle BC has indicated that payment structure and rates will be addressed in the revised agreements and contracts scheduled to be issued in July. Once issued, Staff will review and bring forward a report in Q3 2018 identifying any potential changes or impacts to the SCRD's recycling services. Staff will also bring forward a report in Q3 2018 with options for the SCRD's depot recycling services and will integrate Recycle BC's timeline in the report.

Lastly, staff will be participating in Recycle BC's revised Program Plan consultation webinar being held on April 17, 2018.

Attachment A – Recycle BC Revised Program Plan

Reviewed	by:		
Manager		Finance	
GM	X – R. Rosenboom	Legislative	
CAO	X – J. Loveys	Other	

Created March 2018

Recycle BC's first 5-year stewardship plan can be found at https://recyclebc.ca/stewards/regulation and stewardship plan/



230-171 Esplanade West North Vancouver, BC <u>RecycleBC.ca</u>

Table of Contents

1. Introduction		3
2. The Extended Producer R	esponsibility (EPR) Agency	3
3. Packaging and Paper Pro	duct	. 4
3.1 Packaging		4
3.2 Paper Product		5
3.3 Sources of Packaging	and Paper Product	5
4. Program Design		е
4.1 Packaging and Paper	Product Program Delivery Principles	6
4.2 Packaging and Paper	Product Program Delivery Overview	6
4.3 Collection of Packagir	ng and Paper Product from Residents and Streetscapes	7
4.3.1 Existing Curbs	ide Programs	7
4.3.2 New Curbside	Programs	7
4.3.3 Transition to P	Provision of Curbside Service by Recycle BC	8
4.3.4 Multi-family C	ollection	8
4.3.5 Depot Collecti	on	9
4.3.6 Streetscape Co	ollection	9
4.4 Post-Collection		10
4.5 Collector and Process	or Qualification Standards	10
4.6 Dispute Resolution		10
4.7 Communications		11
4.8 Administration of the F	Program Plan	12
4.9 Program Financing		12
5. Program Performance		13
5.1 Managing Environme	ental Impacts	13
5.2 Pollution Preventio	n Hierarchy	14
5.3 Reporting		15
6. Consultation		16
Appendix A – Glossary		17
Appendix B – Summary of Pe	erformance Measures	18
Appendix C – Producer Mem	bers of Recycle BC	20
Appendix D – Definition of P	roducer for the Purposes of Producer Obligation and Reporting	21

1. Introduction

The British Columbia (BC) Recycling Regulation (B.C. Reg. 449/2004 – the "Regulation") under the *Environmental Management Act* requires that, effective May 2014, every producer of packaging and paper product (PPP)¹ that wishes to sell, offer for sale or distribute their products to residents in British Columbia must operate, or be a member of, an approved plan concerning the end-of-life management of their products.

Section 6 of the Recycling Regulation requires that every five years a producer must review its approved plan and submit proposed amendments to the Province of BC for review and approval, or in the case where no amendments to the plan are necessary, the Province of BC should be so advised. In 2017, having been in operation for three full years, Recycle BC conducted a thorough review of its performance and its approved plan to identify the changes that should be made to support its ongoing and future success. It conducted a review in consultation with its many stakeholders via a series of workshops held in November, 2017.

The Packaging and Paper Product Extended Producer Responsibility Plan (Program Plan) outlined in this document reflects a number of substantive amendments designed to build on Recycle BC's initial success and to support its operation over the next five years. This plan will replace the original Packaging and Printed Paper Stewardship Plan submitted by Multi-Material BC (now Recycle BC) and approved in April 2013.

2. The Extended Producer Responsibility (EPR) Agency

Recycle BC is responsible for residential packaging and paper product recycling throughout British Columbia. The recycling program is funded by businesses that supply packaging and paper product to BC residents.

Recycle BC aims to be a trusted environment advocate and community partner offering equitable, effective and efficient residential recycling services, and this guides the work Recycle BC does throughout BC. It provides recycling services either by working in partnership with local governments, First Nations, private companies and other non-profit organizations (Recycle BC collectors) or directly to communities.

Recycle BC is based in North Vancouver with local staff members managing its program operations. Recycle BC is supported in its work by Canadian Stewardship Services Alliance (CSSA), a national, non-profit organization dedicated to providing support services to stewardship programs across Canada. Recycle BC is governed by a Board of Directors representing brand owners and retailers. The current composition of the Board of Directors can be found on Recycle BC's website, here. Recycle BC also consults with an Advisory Committee on core elements of its program. The Advisory Committee includes representatives from stakeholders interested in the success of the program, including local governments, the waste management industry, steward industry associations, and the Recycling Council of BC. The Advisory Committee's membership can be found on Recycle BC's website, here.

Recycle BC is acting on behalf of its member businesses who are producers of PPP. For the purposes of the Program Plan, the producer for a specific unit of packaging or paper product is the supplier of service packaging or the first of the following: brand owner, the franchisor or the first seller (also known as the first importer)².

3

 $^{^{}m 1}$ For a full definition of packaging and paper product see section 3.1 and 3.2 in this document.

² For a full definition of "producer" for the purposes of obligation and reporting, see Appendix D.

3. Packaging and Paper Product

3.1 Packaging

British Columbia's *Environmental Management Act* defines packaging as "a material, substance or object that is used to protect, contain or transport a commodity or product, or attached to a commodity or product or its container for the purpose of marketing or communicating information about the commodity or product".

Schedule 5 does not further refine the definition of packaging beyond that provided in the *Environmental Management Act* as described above.

Packaging for purposes of producer obligation and reporting³ under the Program Plan includes:

- (a) Primary packaging, i.e., packaging that contains the product at the point of sale to the residential consumer;
- (b) Grouped packaging or secondary packaging that goes to the household⁴;
- (c) Transportation, distribution or tertiary packaging that goes to the household⁵;
- (d) Service packaging designed and intended to be filled at the point of sale and "disposable" items sold, filled or designed and intended to be filled at the point of sale such as:
 - Paper or plastic carry-out bags provided at checkout;
 - Bags filled at the shelves with bulk goods, produce, baked goods, etc.;
 - Disposable plates and cups;
 - Take-out and home delivery food service packaging such as pizza boxes, cups, bags, folded cartons, wraps, trays, etc.;
 - Flower box/wrap;
 - Food wraps provided by the grocer for meats, fish, cheese, etc.;
 - Prescription bottles filled and provided by pharmacists;
 - Gift wrapping/tissue paper added by the retailer; and
- (e) Packaging components and ancillary elements integrated into packaging, including ancillary elements directly hung or attached to a product and which perform a packaging function unless they are an integral part of the product and all elements are intended to be consumed or disposed of together⁶.

For the purposes of the Program Plan, paper packaging means all paper materials regardless of the cellulosic fibre source of the material including but not limited to wood, wheat, rice, cotton, bananas, eucalyptus, bamboo, hemp, and sugar cane (bagasse) fibre sources.

The plan does not apply to items covered by other EPR programs, non-PPP items or PPP items supplied

³ While producers of packaging described in Section 3.1 are responsible for contributing to the cost of providing reasonable access and achieving a 75% recovery rate, only those types of packaging for which there are recycling end markets are collected from residents.

 $^{^{\}rm 4}$ Multiple packages of product sold in a unit, often wrapped in film plastic.

⁵ May be both the primary packaging for the product and the packaged used to ship the product but is referred to as transportation packaging that goes home with the consumer. For example, household products packaged in corrugated boxes intended for final use or management by the consumer or end user.

⁶ Examples of this kind of packaging include, but are not limited to: labels and lids hung directly on or attached to the packaging; mascara brush which forms part of the container lid; staples, pins, clips; toy on the top of a candy product which forms part of the lid; devices for measuring dosage that form part of the detergent container lid; plastic make- up case; brush contained in the lid of corrective liquid paper; zipper on a plastic film bag containing a product.

to industrial, commercial and institutional facilities.

3.2 Paper Product

In November, 2017 the government amended Schedule 5 of the BC Recycling Regulation to expand the Paper Product Category from printed paper to paper products⁷. Paper product is now defined as paper of any description, including:

- (a) flyers,
- (b) brochures,
- (c) booklets,
- (d) catalogues,
- (e) telephone directories,
- (f) newspapers,
- (g) magazines,
- (h) paper fibre, and
- (i) paper used for copying, writing or any other general use.

This definition of paper does not include paper products that, by virtue of their anticipated use, could become unsafe or unsanitary to recycle, or any type of bound book not mentioned above.

For the purposes of the Program Plan, paper product comprises any type of cellulosic fibre source including but not limited to wood, wheat, rice, cotton, bananas, eucalyptus, bamboo, hemp, and sugar cane (bagasse) fibre sources.

3.3 Sources of Packaging and Paper Product

Under Schedule 5 of the Recycling Regulation, the packaging and paper product program addresses residential premises.

Residential premises⁸ are:

- Single-family dwellings inhabited year round or seasonally⁹; and
- Multi-family dwellings including rental, co-operative, fractional ownership, time-share, condominium¹⁰ and seniors residences¹¹.

Municipal property that is not industrial, commercial or institutional property comprises the following which are collectively referred to as 'streetscape' in this Program Plan:

• Sidewalks which are municipal property, which adjoin buildings in an urban commercial area and which are used for pedestrian traffic;

⁷ The term packaging and printed paper has been amended to packaging and paper product based on changes to the regulation.

⁸ Section 1 of the Recycling Regulation defines "residential premises" to include houses, apartments, condominiums, town homes and other premises in which persons reside but does not include institutional accommodations or visitor accommodations.

⁹ Vacation facilities, such as hotels, motels, cottages and cabins, are considered commercial operations.

¹⁰ Vacation facilities, such as rental, co-operative, fractional ownership, time-share or condominium accommodation associated with sports and leisure facilities (e.g., ski resorts), are considered commercial operations.

¹¹ Residences at which medical care is provided, such as nursing homes, long-term care facilities and hospices, are considered institutions.

- Plazas or town squares which are municipal property and which are available to the public;
- Parks which are municipal property.

4. Program Design

4.1 Packaging and Paper Product Program Delivery Principles

Recycle BC's program design was driven by one overarching objective – continuous improvement in recovery effectiveness and efficiency in British Columbia.

Recycle BC developed the following market engagement principles to guide the development and operation of the program:

- **Focus on outcomes, not process** maximize recovery, maximize efficiency, enhance resident service levels while minimizing complexity;
- **Provide economic incentives and set simple rules** effective economic incentives will drive behaviour that increases recovery activity throughout the PPP reverse supply-chain; simple rules will provide clarity and certainty to those collecting and recycling PPP;
- Foster interaction, collaboration and competition to drive innovation innovation is the result of
 complex interactions of ideas and efforts among producers and private, public and not-forprofit entities with parties bringing together complimentary skills to collaborate and deliver more
 value; and
- Set the stage for evolution harness existing activities and build on success through continuous improvement and use of economic incentives to increase collection of PPP and improve system efficiency.

4.2 Packaging and Paper Product Program Delivery Overview

Under the Recycling Regulation, Recycle BC assumed responsibility for driving residential PPP collection and recycling activity in BC, effectively supplanting the role that local governments historically played.

With respect to collection services to BC residents, Recycle BC provides a financial incentive to local governments, First Nations and private collectors that have chosen to deliver recycling collection services and resident education under contract. In other cases, communities have elected to have Recycle BC directly manage their curbside recycling service, which means that these local governments are no longer responsible for oversight or management of recycling services or resident communication regarding curbside recycling. In all cases, Recycle BC assumes financial responsibility for the cost of recycling thereby transferring that cost from taxpayers to producers.

Concerning the post-collection management of PPP, Recycle BC procured a post-collection system through a competitive process, resulting in an efficient, province-wide, PPP transfer and sorting system aimed at maximizing the value and re-use of the recyclables and minimizing redundancy.

Recycle BC regularly reviews both its collection and post-collection operations to identify opportunities to enhance its efficiencies.

4.3 Collection of Packaging and Paper Product from Residents and Streetscapes

Recycle BC's approach to delivery of PPP collection services is to contract with collection service providers that meet Recycle BC's collection qualification standards. These standards are designed to assist Recycle BC in achieving its program targets and commitments.

Qualified collectors are offered financial incentives for PPP collection. The value offered is established as the market-clearing price. Consistent with an outcomes-based approach to program operation, Recycle BC pays collectors once the PPP they have collected has been accepted for processing by a primary processor¹² under contract with Recycle BC.

Recycle BC established a set of collector qualification standards that include basic qualifications historically common to all PPP collectors, with additional requirements that enable tracking and reporting of sources and quantities of collected PPP. Local governments, First Nations, private companies and not-for-profit organizations that meet these collector qualification standards will be considered qualified as Recycle BC collectors, subject to the approach described below.

4.3.1 Existing Curbside Programs

Curbside collection is defined as the collection of PPP from single-family dwellings, buildings with up to four households and row house complexes with any number of households where each household sets out material separately for individual collection by collection vehicles.

All local governments operating PPP curbside collection programs that were in place by May 2014 are eligible to join the Recycle BC program as contracted collectors. It is Recycle BC's intention to add all eligible curbside programs to the Recycle BC program as soon as is practical and feasible from a financial and operational perspective.

Recycle BC assesses the need to expand its collection system on an annual basis and takes commercially reasonable steps to meet recovery targets and accessibility performance objectives in the subsequent year, taking into consideration, without limitation:

- Collectors that have expressed an interest in joining Recycle BC's collection system and that are able to:
 - Deliver collection services in areas identified as having insufficient collection service to meet accessibility performance objectives, in accordance with Recycle BC's Collector Qualification Standards, and the terms of the Master Services Agreement and Statement of Work;
 - o Contribute to Recycle BC's recovery target; and
 - Contribute to the efficiency and effectiveness of Recycle BC's collection system;
- The ability of Recycle BC to modify post-collection service provider agreements to add new collectors and more tonnes of PPP; and
- The timeline to execute agreements with collectors prior to finalizing Recycle BC's operating budget for the upcoming program year.

4.3.2 New Curbside Programs

Local governments in communities that did not have PPP curbside collection programs by May 2014, when the program was launched, are eligible to join the Recycle BC program as contracted collectors if they implement a PPP curbside collection program, provided each of the following criteria is met:

¹² For a definition of primary processor please see section 4.5 in this document.

- A curbside garbage collection program was in place by May 2014;
- The community represents an incorporated municipality; and
- The community has a minimum population of 5,000 residents.

The timeline for the provision of formal offers to these communities is determined based on the same assessment as noted above.

4.3.3 Transition to Provision of Curbside Service by Recycle BC

Recycle BC operates curbside service directly in communities where the local government has transitioned service to Recycle BC. In these communities, Recycle BC is responsible for all aspects of the management of curbside collection services to residents.

Local governments with existing collection agreements with Recycle BC may, at their discretion, request Recycle BC to operate PPP curbside services directly in their communities, provided each of the following criteria is met:

- The request is made in writing and is accompanied by a formal resolution from the applicable Council or Board;
- A formal commitment is made, in writing, to provide Recycle BC with all reasonable assistance and cooperation during the transition period (e.g. provision of a complete address list, household data etc.);
- The request pertains to the entire service area and not a portion thereof;
- If applicable, the existing inventory of collection containers is provided to Recycle BC (or left in the possession of residents) at no cost, at the discretion of Recycle BC;
- The PPP curbside program achieved a minimum capture rate of 90 kilograms of PPP per curbside household in the previous calendar year;
- A minimum of 18 months' notice prior to the proposed transition date for provision of curbside services directly by Recycle BC is provided; and
- The transition date falls on or after the original termination date of the applicable local government's curbside collection agreement.

Acceptance of requests will not be reasonably withheld by Recycle BC, provided the above criteria have been met.

Such requests will only be considered by Recycle BC during defined time periods as communicated by Recycle BC to eligible collectors. For example, October 1, 2018 is the deadline for local governments with curbside collection agreements with Recycle BC that expire at the end of 2018 to request Recycle BC to directly operate the curbside services. The 18 month transition period will begin effective Jan 1, 2019 and the effective date for transition to service operated directly by Recycle BC in any applicable communities will be July 1, 2020.

Recycle BC will be under no obligation to operate PPP curbside services directly in communities that do not meet the above criteria, including in locations where the applicable local government has requested to terminate their collection agreements prior to the original termination date.

4.3.4 Multi-family Collection

Multi-family collection is defined as the collection of PPP from residential complexes with 5 or more units where all households bring their recycling to a centralized location with shared containers.

Recycle BC delivers PPP multi-family building collection services by contracting with local governments and

private companies that accept the market-clearing financial incentive to deliver multi-family building collection services.

4.3.5 Depot Collection

Depot collection is defined as the collection of PPP at a location operated by a local government or private company in which PPP can delivered by residents.

Recycle BC delivers PPP depot collection services by contracting with local governments and private companies that accept the market-clearing financial incentive to deliver depot collection services.

Recycle BC tracks the number of households without access to curbside or multi-family collection services and strives to provide reasonable access to depot locations, in accordance with the Stewardship Agencies of British Columbia's (SABC) depot service delivery standard.

4.3.6 Streetscape Collection

Recycle BC conducted three pilots to test the effective delivery of streetscape collection systems in 2014, 2015 and 2016-2017. In each of these pilots, Recycle BC undertook waste composition audits of PPP and garbage. A behavioural study was conducted during three audit periods in 2016-2017 to further inform the effective delivery of streetscape collection to pedestrians. Recycle BC conducted this research to develop a preferred approach to streetscape collection and recycling services. Based on its study results, Recycle BC proposed a preferred approach for streetscape services and a financial incentive offer during its November 2017 consultation. Since the November consultation, a new challenge for streetscape collection and recycling services has emerged.

The new challenge for streetscape collection and recycling services

As Recycle BC's pilot studies showed, PPP material can be collected but it is poorly sorted, heavily contaminated, wet with residual liquids, and unclean with food waste. Hazardous material can also be present. The processing and recovery of PPP from streetscape collection containers in the 2014-2017 pilots has proved challenging due to the highly contaminated nature of this material and the increasingly strict marketing specifications. The inability to find end markets for mixed waste material is now a global issue. For example, China currently (2018) requires material to have no more than 0.5% contamination; streetscape has greater than 30% contamination, suggesting that streetscape PPP collection may not be recoverable under current market conditions. Additionally, should the level of quality in streetscape PPP not improve then extensive investment in streetscape collection containers and their upkeep is not a sound use of resources if the collected material is not marketable.

Recycle BC's delivery of streetscape collection and recycling services

Recycle BC will continue to perform further research through streetscape collection projects to determine if a viable recovery of PPP can occur under the new restricted global marketing conditions.

Should streetscape produce a reasonable amount of recoverable PPP¹³, Recycle BC will service streetscape in areas where the local governments operate a litter collection system (referred to as 'streetscape collection service') ¹⁴ and that meets Recycle BC's reasonable access criteria. Reasonable access is defined as urban commercial areas with business activities that generate large amounts of PPP within municipalities with a population of 20,000 or more and a population density of 200 or more people per square kilometre.

¹³ Subject to proof of concept through testing effective delivery of streetscape collection systems.

¹⁴ The provision of a streetscape garbage collection service is critical to the operation of a streetscape PPP collection service.

Recycle BC will service streetscape recycling by offering a financial incentive to the local government for the provision of services that include PPP collection and recycling services, public education, promotion and first point of contact for collection service customers. Should local governments decline the offer, Recycle BC will not directly undertake streetscape collection in their community.

4.4 Post-Collection

Recycle BC contracts directly for post-collection services which include curbside, multi-family and depot collection activities subsequent to the collection of PPP from BC residents. Post-collection activities include receiving PPP from collection vehicles, picking up PPP from depots, consolidation and transfer where required, handling and sorting PPP, preparing PPP for shipment to end-markets or downstream processors, marketing PPP to maximize commodity revenue, appropriately managing residual materials, reporting the quantities of material received and marketed, and other metrics to Recycle BC as required.

Primary processors are considered to be the first receivers of collected PPP that market at least some types of processed PPP directly to end markets. Primary processors may engage subcontractors to provide consolidation, transfer, and transportation services to move PPP from the collection location to the processing facility. Primary processors may also engage secondary or downstream processors that can more efficiently or effectively sort, process, and market some types of PPP.

The primary processor contract(s) is awarded based on an RFP process. Processors are considered to be qualified based on compliance with the processor qualification standards and evaluation criteria including but not limited to price, location, capability, capacity, output to recycling end-markets per tonne received, and material revenue received.

4.5 Collector and Processor Qualification Standards

Collector and processor qualification standards, including reporting protocols, are the minimum operating standards that a service provider must meet on a continuous basis in order to be eligible to provide collection, depot operation and/or processing services under a contract with Recycle BC.

Qualification standards are used by Recycle BC to support the continued growth of a safe, stable and sustainable PPP collection and processing system across British Columbia. Recycle BC incorporates qualification standards into the RFP for post-collection services and into contracts with collectors and processors.

Qualification standards set out basic requirements, such as free collection service to residents, proof of all necessary licenses and permits, compliance with health and safety requirements and specified liability and business insurance coverage. Qualification standards also include reporting requirements to allow Recycle BC to meet its reporting requirements to the Ministry of Environment and Climate Change Strategy. Collector and processor qualification standards can be found here.

4.6 Dispute Resolution

Recycle BC seeks to balance the principles of access, efficiency, fairness and equitable outcomes in the design of its dispute resolution mechanisms. Dispute resolution processes are tailored to the nature of disputes as well as the likely parties to a typical dispute. The objectives of the dispute resolution process are to manage disputes to resolution rather than adjudication, earlier and faster and at a reduced cost to all parties involved.

The following suite of alternative dispute resolution processes are used:

Dispute Type	Path of Escalation/Resolution
Residents	 Discussion with Recycle BC management If unresolved, involvement of Recycle BC Board
Collectors and processors	 Discussion with Recycle BC senior management Facilitation: to prevent escalation and to explore interests/remedies Mediation: to be used if facilitation is unsuccessful. Process to be specified in commercial agreements regarding selection of mediator, roles of parties, time and place of mediation, conduct of mediation, length, responsibility for fees/costs, confidentiality, conclusion of mediation by agreed settlement or final settlement proposal by the mediator Arbitration: to be used if mediation is unsuccessful; process to be specified in commercial agreements regarding notice of arbitration, submission of written statements, place and conduct of meetings and hearings, the process for rendering and delivering decisions; jurisdiction and powers of the arbitrator, allocation of costs/fees; application of the B.C. Arbitration Act (RSBC 1996)

4.7 Communications

The Recycling Regulation requires that, as part of the Program Plan, Recycle BC design and deliver an effective resident education program that achieves two overarching objectives:

- Make residents and other target audiences aware of the program features and benefits through communication activities; and
- Employ promotion and education (P&E) activities to engage and encourage residents to make informed and proper decisions concerning the preparation and management of PPP for collection and recycling.

To achieve the above objectives, Recycle BC employs the following strategies:

1. Advertising

Recycle BC conducts targeted advertising campaigns independently or in partnership with stakeholders, such as other EPR agencies, producers, local governments, and community-based organizations.

2. Strategic partnerships

Recycle BC partners with organizations with targeted local or provincial market penetration to broaden the reach and raise the profile and awareness of Recycle BC.

3. Brand management

Recycle BC works with collectors and other stakeholders to maintain brand integrity (accuracy and consistency).

4. Collector resources

Resources are made available to Recycle BC collectors to be used to help educate their residents on various aspects of the Recycle BC program. In many instances templates are available for customization.

5. Additional resident communication

Recycle BC communicates directly with residents about various program elements including accepted and not-accepted materials, depot locations, collections schedules, contests, special projects, etc. using various channels.

6. Research

Recycle BC regularly conducts quantitative research to gather accurate provincial information on recycling habits, service levels, and brand and program awareness.

4.8 Administration of the Program Plan

Recycle BC is responsible for implementing this Program Plan on behalf of the producers that have chosen to be members.

Recycle BC's objective is to administer the implementation of the Program Plan effectively and efficiently through a combination of in-house and outsourcing of key specialized functions or services. Activities administered through out-sourcing include those that will not compromise the relationship between Recycle BC and BC stakeholders and where effectiveness and efficiency is enhanced by the best practices already incorporated by the service provider that would otherwise be a multi-year continuous improvement effort for Recycle BC.

Recycle BC directly administers collection and processing services including dispute resolution, communications to BC residents and performance reporting to the BC Ministry of Environment and Climate Change Strategy.

Recycle BC outsources producer registration, reporting, fee invoicing, payments, audits and compliance in order to facilitate harmonized systems for Canadian producers, whether operating only in BC or in other Canadian provinces.

4.9 Program Financing

Recycle BC is responsible to the producers that have chosen to be its members to deliver an efficient and effective PPP EPR program.

Producers that choose to be members of Recycle BC are responsible to pay fees that are sufficient, in aggregate, to implement the Program Plan. These costs fall into three categories:

- Administration what it takes to manage the business;
- Resident awareness what it takes to promote the behaviours that drive collection; and
- Material management what it takes to manage materials.

Producers that supply obligated PPP pay fees that are intended to cover:

- An equitable share of Recycle BC administration costs;
- An equitable share of resident awareness costs;

- A contribution to the costs to maintain the accessibility of the recycling system and to manage the recyclable PPP that is the basis for the PPP EPR program performance; and
- Where required, a contribution to advance the material's adoption in the recycling system, improve
 the cost efficiency to manage the material and/or to develop end markets to maximize the
 material's value.

Producers that choose to be members of Recycle BC do not apply a fee at the point of sale of products in packaging and paper product, primarily due to the relatively low cost per unit of packaging and paper product that, for many products, is less than one cent. In the absence of a fee at the point of sale, costs incurred by producers to meet their obligations under the Recycling Regulation through membership in Recycle BC is considered a cost of doing business in BC and is managed by the producer accordingly. Each individual producer determines for its own business how it manages the costs incurred to meet its obligations under the Recycling Regulation through membership in Recycle BC.

Costs incurred by Recycle BC to deliver and administer the Program Plan are allocated among producers based on the following principles:

- All obligated materials should bear a fair share of the costs to manage the packaging and paper product program, irrespective of whether a material is collected because all obligated producers who put obligated materials into the marketplace should contribute to the recycling system;
- The material management costs allocated to each material should reflect the material's cost to collect and manage it in the recycling system because a material's unique characteristics can drive costs in distinctive ways; and
- The commodity revenue should be attributed only to the materials that earn revenue because materials that are marketed have value and should benefit from earned revenue.

5. Program Performance

5.1 Managing Environmental Impacts

Section 5(1)(c)(vii) of the Recycling Regulation requires that an EPR plan adequately provide for eliminating or reducing the environmental impacts of a product throughout the product's life cycle.

Recycle BC works to reduce the environmental impact of its program materials through innovation and managing the collection and recycling of material. Innovation includes engaging with producers to advance the recycling of various materials and finding new ways to encourage source reduction, re-using and good recycling practices. Management involves partnering with communities on collection and overseeing the sale of processed material to selected end markets.

A key theme that emerged in 2016 is an increasing interest and engagement in circular economy thinking by Recycle BC members. The circular economy focus centres on creating systems and infrastructure to allow for the continuous, circular flows of materials and it is in large part due to the work of the Ellen McArthur Foundation and Canada's Circular Economy Innovation Lab (CEIL). Both of these entities are working with a range of organizations, including Canadian producers and Recycle BC, to overcome the systemic hurdles that prevent the continuous flow of materials. The Ellen McArthur Foundation and CEIL are creating opportunities for parties across the supply chain to collaborate and thereby increase the capture and reprocessing of valuable materials so they can be repurposed for further use, thereby decreasing reliance on virgin material inputs. The momentum behind this work will continue involving Recycle BC and a number of its members and processors.

While that work takes place at both a global level and local level, Recycle BC members continue to work independently and with their suppliers and processors on a number of fronts to reduce the environmental impact of the packaging and paper product they distribute to BC consumers. Examples of this work include:

- Light weighting packaging to reduce material while maintaining packaging integrity;
- Simplifying packaging and paper product by removing unnecessary layers or components to improve recyclability;
- Utilizing lifecycle modeling tools in order to more fully understand the impact of their packaging throughout its lifecycle encompassing both post-consumer management and carbon impact;
- Removing elements from packaging that might act as contaminants in the recycling stream such as utilizing new adhesives that are more compatible with the recycling process;
- Commitments to using 100% recyclable materials within a specified timeframe in order to support the market for recycled materials;
- Commitments to convert all packaging to recyclable materials within a defined timeframe; and
- Optimizing packaging in a way that reduces the carbon footprint over its lifetime.

All of these factors play a role in the way in which Recycle BC members innovate and build eco-efficiency in the packaging and paper products distributed to British Columbians.

5.2 Pollution Prevention Hierarchy

Section 5(1)(c)(viii) of the Recycling Regulation requires that an EPR plan adequately provide for the management of the product in adherence to the order of preference in the pollution prevention hierarchy.

The Program Plan adheres to the pollution prevention hierarchy through the following activities:

Pollution Prevention Hierarchy	Activity
Reduce the environmental impact of producing the product by eliminating toxic components and increasing energy and resource efficiency	 Initiatives undertaken by individual producers Program Plan encourages reduction by rewarding companies that reduce the packaging supplied to market
Redesign the product to improve reusability or recyclability	 Initiatives undertaken by individual producers Program Plan encourages redesign through cost allocation
Eliminate or reduce the generation of unused portions of a product that is consumable	 Not applicable as packaging and paper product are not consumable
Reuse the product	 Initiatives undertaken by individual producers Program Plan encourages reuse through cost allocation
Recycle the product	 Program Plan utilizes payments to service providers to encourage collection of PPP and processing of PPP to meet recycling end-market requirements Recycle BC provides guidance to producers on design for recyclability

Pollution Prevention Hierarchy	Activity		
Recover material or energy from the product	 Primary and downstream processors are encouraged to further process system residues to meet recovery end-market requirements and minimize the amount of residue sent to landfill Research and development to explore ways recover material that is currently non-recyclable (e.g. multi-laminated plastic packaging) 		
Otherwise dispose of the waste from the product in compliance with the Act	 Primary and downstream processors are required to manage residue in compliance with the Act 		

5.3 Reporting

Recycle BC reports annually on indicators as summarized below:

- Accessibility indicators to describe access to PPP collection services in the province of BC such as:
 - Single-family and multi-family households receiving household collection service;
 - Number and service area locations of depots accepting PPP;
- Operational effectiveness indicators characterizing program performance such as:
 - Tonnes of PPP collected within each regional district;
 - Kilograms per capita of PPP collected within each regional district;
 - Tonnes of PPP recycled and recovered for the province;
 - Kilograms per capita of PPP recycled for the province;
 - Recovery rate expressed as a percentage for the province;
- Management of collected PPP in relation to the pollution prevention hierarchy
 - Tonnes of PPP managed by recycling;
 - Tonnes of PPP managed by recovery;
 - Tonnes of PPP managed by disposal;
- Operational efficiency indicators reflecting program performance in financial terms such as:
 - Total program cost per tonne;
 - Total program cost per household;
- Environmental impact measures to characterize actions intended to reduce the environmental impacts of packaging and paper product by producers who are members of Recycle BC and by Recycle BC; and
- Resident awareness indicators to assess public awareness and engagement such as:
 - Percentage of residents aware of the Recycle BC program;
 - Percentage of residents reporting use of available collection services; and
 - Visits to the Recycle BC website.

In addition to compiling data for the indicators listed above during implementation of the Program Plan, Recycle BC will begin to compile GHG data from its contractors in 2018 with the full data tracking system functional by 2019 and GHG performance reported in 2020.

Also in 2020, recovery rates for the following material categories will be reported: paper, plastic, glass, and metal.

Recycle BC reports on the performance of the PPP program in an annual report submitted to the BC Ministry of Environment and Climate Change Strategy and posted on its website by July 1 each year. A comprehensive list of the performance metrics reported by Recycle BC is available as Appendix B to this Program Plan. Recycle BC includes a reasonable assurance opinion of the accessibility indicators and operational effectiveness indicators by a third-party in its annual report.

6. Consultation

During the lead up to the launch of Recycle BC (then Multi-Material BC) in 2014, Recycle BC used a combination of mechanisms to consult with stakeholders during development of the Program Plan. This consultation period resulted in a number of changes to the original version of the Program Plan.

Recycle BC was required to host a stakeholder consultation within five years of the launch of the original program plan. In November 2017, Recycle BC conducted a consultation to gather stakeholder feedback and provide program updates.

In May 2017 invitations were sent to Recycle BC's partners for the November event, along with a survey to gather information and allow stakeholders to provide any initial feedback or topics they wished to discuss. Focus groups were held in August 2017 to provide an opportunity for additional feedback for topics that garnered a significant amount of interest or feedback. A pre-read consultation workbook was sent to all registrants and collectors in October 2017 and posted on RecycleBC.ca in anticipation of the November consultation.

The consultation was held on November 15 and 16, 2017 in New Westminster, BC and included nine workshop sessions on topics as listed below:

- 3 Years of Data;
- Curbside Collection;
- Multi-family Collection;
- Depot Collection;
- Contamination;
- Research and Development: Other Flexible Plastic Packaging;
- Streetscape;
- Marketing and Communications; and
- Program Plan Updates.

Stakeholders who were not able to attend the event in person were able to view four workshops via webcast and submit feedback or comments online until December 15, 2017. A consultation report summarizing feedback on a variety of topics was posted in February 2018. Click here to read the Consultation Report.

Following this consultation period, updates to the program plan were made and it was submitted to the Ministry of Environment in March 2018 for approval for consultation. Stakeholder feedback on the revised plan will be invited for a 45 day period following its publication date. The plan is expected to be finalized in June 2018.

Appendix A - Glossary

Collector

Entity providing services for collection of PPP from households or from streetscapes under contract with Recycle BC.

Depot

Facility where residents can drop off PPP under contract to Recycle BC.

Market Clearing Price

Payment available to collection service providers (subject to executing an agreement to provide the collection service, comply with the collector qualification standard on a continuous basis, report specified data on a defined schedule) designed to stimulate collection activities and act as a market clearing mechanism that causes quantities of supply and demand to be equal.

ICI

Industrial, commercial and institutional.

Processing

Manual or mechanical sorting and quality control of PPP for the purpose of shipping to recycling endmarkets.

Primary Processor

First receivers of collected PPP that market at least some types of processed PPP directly to end markets. Primary processors may engage downstream processors that can more efficiently or effectively sort, process and market some types of PPP.

Qualification Standard

Minimum operating standard that a service provider must meet on a continuous basis in order to be eligible to provide collection, depot operation and/or processing services under a contract with Recycle BC.

Recovery Rate

Calculated as a percentage with the numerator representing the quantity of PPP collected and the denominator representing the quantity of PPP available for collection.

Recovery Rate % =
$$\frac{\text{Collected}}{\text{Available for Collection}} \times 100$$

Service Provider

Entity that collects PPP from single-family or multi-family households or streetscapes, operates a depot or provide post-collection services under contract with Recycle BC

Appendix B – Summary of Performance Measures

Measures	2018	2019	2020	2021	2022
	Continue to on-board eligible communities to achieve and annually maintain, at a minimum, the overall provincial collection rate of 208,700 tonnes as assessed during preparation of the report titled <i>Current System for Managing Residential Packaging and Printed Paper</i> (March 2012). ¹			While continuing to maintain performance target and reporting as outlined in Appendix B, begin	
Recovery Target	Submit targets to achieve a 75% recovery rate if a 75% recovery rate is not achieved due to on-boarding timing. Goal to collect all packaging types. Introduce recovery rates for the following material categories will be reported: paper, plastic, glass, and metal.				
Recovery/Collection Reporting*	 Tonnes of PPP collected within each Regional District; Kilograms per capita of PPP collected within each Regional District; Tonnes of PPP recycled and recovered for the province; Kilograms per capita of PPP recycled and recovered for the province; Recovery rate expressed as a percentage for the province. 				
Accessibility Performance	Provide curbside collection of PPP to a minimum of 973,400 curbside households and 421,600 multi-family households (active service counts as of February 14, 2018).	Continue to on-board eligible communities with the exception of any households where a local government eligible to participate in the Recycle BC program declines to enter into a collection agreement with Recycle BC.	local to Annually maintain, at a minimum, single-family and multi-family household service levels where these households currently receive PPP collection. ²		
	Annually provide depot collection to communities across BC with a minimum of 200 depot locations.				

^{*}Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy July 1 each year.

¹ Subject to adjustments to correct any errors in the Phase 1 survey data identified during program implementation and to reflect any significant changes in the quantity of PPP available for collection.

² With the exception of any households where a service provider that currently provides collection of PPP terminates their Services Agreement with Recycle BC.

Measures	2018	2019	2020	2021	2022	
Accessibility Reporting*	 Single-family and multi-family households receiving household collection service; and Number and locations of depots accepting PPP. 					
Other Collection: Streetscape	Continue to perform further research through streetscape collection projects to determine if a viable recovery of PPP can occur in the new restricted global marketing conditions.		Implement streetscape collection and recycling services by offering a financial incentive to eligible local governments for the provision of services. ³			
Consumer Awareness Targets	research to measure reside	Maintain a resident awareness target of 90% or greater for a packaging and paper product recycling program. Continue annual consumer research to measure resident awareness. Conduct regular quantitative research to measure the effectiveness of resident education programs and to gather accurate provincial information on recycling habits, service levels, and brand and program awareness.				
Consumer Awareness Reporting*	 Percentage of residents aware of packaging and paper product recycling program; Percentage of residents reporting use of available collection services; and Visits to the Recycle BC website. 					
Pollution Prevention Hierarchy Performance	Target all PPP for collection and manage according to the pollution prevention hierarchy including shifting as much of the currently unrecyclable PPP from disposal or recovery up the hierarchy into recycling as possible.					
	Direct 85% to 90% of collected PPP to recycling commodity markets. Assess options to increase the percentage of collected PPP directed to recycling commodity markets.					
Pollution Prevention Hierarchy Reporting*	 Tonnes of PPP managed by recycling; Tonnes of PPP managed by recovery; Tonnes of PPP managed by disposal; and Environmental impact measures to characterize actions intended to reduce the environmental impacts of PPP by producer members of Recycle BC, and by Recycle BC. 					
Other Performance Measure: Greenhouse Gas Emissions (GHG)	Compile GHG data from Recycle BC service providers.	Full GHG data tracking system functional.	GHG performance reported.			
Other Reporting Metric: Program Cost*	 Total program cost per tonne; and Total program cost per household. 					

^{*}Reported in annual report submitted to BC Ministry of Environment and Climate Change Strategy July 1 each year.

³ Subject to proof of concept through testing effective delivery of streetscape collection systems.

Appendix C - Producer Members of Recycle BC

A total of 1291 producers are currently members of Recycle BC as of February, 2018. Recycle Producer companies that have joined Recycle BC fall into the following sector categories:

- Food and consumer products
- Retailers (grocers, mass/general merchandisers, hardware/housewares, drug stores and specialty merchandisers)
- Electronic manufacturers/brand owners
- Horticulture and agriculture
- Media and printed paper
- Quick service/take-out restaurants
- Paint and chemical products
- Other/miscellaneous

A complete membership list is updated annually and posted on Recycle BC's website here.

Appendix D – Definition of Producer for the Purposes of Producer Obligation and Reporting

"Brand" is a trademark.

"Brand Owner" is a Person Resident in British Columbia who is:

- (a) the owner of the registered or unregistered trademark; or
- (b) a licensee of the registered or unregistered trademark, where "licensee" includes a person who packages goods and includes any person whose corporate name or business name registration contains the trademark.

"Consumer" means an individual (other than a Person in the Industrial, Commercial, or Institutional (IC&I) sector) to whom Packaging or Paper Product is Supplied.

"First Importer" is a Person Resident in British Columbia who imports Packaging or Paper Product into British Columbia or is the first to take possession or control of Packaging or Paper Product in British Columbia for which a Brand Owner does not exist.

"Franchisor", "Franchisee", "Franchise System", or "Subfranchise" have the meaning ascribed to these terms in the Franchises Act or as may be amended or replaced from time to time: http://www.bclaws.ca/civix/document/id/lc/statreg/15035. This includes Franchisors who conduct business in British Columbia through their British Columbia Franchise System, regardless of whether the Franchisor has a Franchisor-owned fixed place of business in British Columbia.

"IC&I Material" means Packaging or Paper Product which is supplied to the industrial, commercial, or institutional sector and which is not subsequently Supplied to Consumers.

"Person" means an individual, partnership, joint venture, sole proprietorship, corporation, government, trust, trustee, executor, administrator or any other kind of legal personal representative, unincorporated organization, association, institution, or entity.

"**Producer**" means the Person who is obligated with respect to the Packaging or Paper Product, and includes any person who elects to become a Voluntary Producer in accordance with Recycle BC's policies.

"Resident in British Columbia" with respect to a corporation, means a corporation that has a permanent establishment in British Columbia. In the case of Franchisors, it includes Franchisors who conduct business in British Columbia through their British Columbia Franchise System, regardless of whether the Franchisor has a Franchisor-owned fixed place of business in British Columbia.

Resident in British Columbia, with respect to a corporation, means a corporation that has a permanent establishment in British Columbia, where "permanent establishment" includes branches, mines, oil wells, farms, timberlands, factories, workshops, warehouses, offices, agencies and other fixed places of business. In addition to the foregoing, the following deeming provisions shall apply:

Contracting Employees or Inventory Sufficient

Where a corporation carries on business through an employee or agent who has general authority to contract for the corporation or who has a stock of merchandise owned by the

corporation from which the employee or agent regularly fills orders which the employee or agent receives, such employee or agent shall be deemed to operate a permanent establishment of the corporation.

Commission Agent not Sufficient

The fact that a corporation has business dealings through a commission agent, broker or other independent agent shall not of itself be deemed to mean that the corporation has a permanent establishment.

Subsidiary of Parent not Sufficient

The fact that a corporation has a subsidiary controlled corporation in a place or a subsidiary controlled corporation engaged in a trade or business in a place shall not of itself be deemed to mean that the first-mentioned corporation is operating a permanent establishment in that place.

Licensed Insurance Company Sufficient

An insurance corporation is deemed to have a permanent establishment in each jurisdiction in which the corporation is registered or licensed to do business.

Purchasing Office not Sufficient

The fact that a corporation maintains an office solely for the purchase of merchandise shall not of itself be deemed to mean that the corporation has a permanent establishment in that office.

Ownership of Land Sufficient

Where a corporation, otherwise having a permanent establishment in Canada, owns land in a province or territory of Canada, such land is a permanent establishment.

Production Packing and other Activities Sufficient

The fact that a non-resident corporation in a year produced, grew, mined, created, manufactured, fabricated, improved, packed, preserved or constructed in whole or in part anything in Canada, whether or not the corporation exported that thing without selling it prior to exportation, shall of itself, be deemed to mean that the corporation maintained a permanent establishment at any place where the corporation did any of those things in the taxation year.

Machinery or Equipment Sufficient

The use of substantial machinery or equipment in a particular place at any time in a year of a corporation constitutes a permanent establishment of such corporation in that place for such a year.

Principal Place of Business Sufficient

Where a corporation has no fixed place of business, it has a permanent establishment in the principal place in which the corporation's business is conducted.

Charter or By Laws designating Head or Registered Office Sufficient

Where a corporation does not otherwise have a permanent establishment in Canada, it has a permanent establishment in the place designated in its charter or by-laws as being its head office or registered office.

"Service Packaging" means packaging which may or may not bear a Brand that is Supplied at the point of sale by the retail, food-service or other service providers to facilitate the delivery of goods, and includes all bags, boxes, and other items for the containment of goods at point of sale.

"Supplied" means sold, leased, donated, disposed of, used, transferred the possession of or title of, or otherwise made available to a Consumer in British Columbia or distributed for use by a Consumer in British Columbia. Supply and Supplies have similar meanings.

"Voluntary Producer" means any non-resident Brand Owner who elects to become a member of Recycle BC in accordance with Recycle BCs policies and membership agreement.

DESIGNATION OF PRODUCERS

Designation of Producers

The following Persons are designated as Producers for Packaging and Paper Product. If two or more Persons are designated as a Producer pursuant to the following provisions, then the earlier provision shall prevail.

Producers for Packaging

For <u>Packaging</u> (except for Service Packaging) the Producer is the Person Resident in British Columbia who:

- a) is the Brand Owner for the British Columbia market; or
- b) if the Person described in paragraph (a) does not exist, then a Person who manufactures, packs or fills or causes the manufacturing, packing or filling of products regardless of whether the activity takes place in British Columbia or not; or
- c) if a Person described in paragraphs (a) or (b) does not exist, then the First Importer, unless the First Importer is a Consumer.

Producers for Service Packaging

Any Person that Supplies Service Packaging in British Columbia at the point-of-sale shall be the Producer for such Service Packaging.

Producers for Paper Product

For Paper Product, the Producer is the Person Resident in British Columbia who:

- a) is the Brand Owner of the Paper Product, whether production of the Paper Product takes place in British Columbia or not; or
- b) if a Person described in paragraph (a) does not exist, then a Person who is the title-owner of the Paper Product or is a licensee of those rights for British Columbia, whether production of the Paper Product takes place in British Columbia or not; or
- c) if a Person described in paragraphs (a) or (b) does not exist, then a Person who produces or manufactures the Paper Product whether the production or manufacturing takes place in British Columbia or not; or
- d) if a Person described in paragraphs (a), (b), or (c) does not exist, then the First Importer, unless the First Importer is a Consumer.

Franchisor is Obligated to Report for its British Columbia Franchisees

A Franchisor is obligated to report for its British Columbia Franchisees with respect to all Packaging and Paper Product which is Supplied within the Franchisor's British Columbia Franchise System.

More Than One Brand Owner for the Same Packaging or Paper Product

If there is more than one Brand Owner for the same Packaging or Paper Product, the Brand Owner more directly connected to the production of the Packaging or Paper Product shall be deemed to be the Producer.

Products Containing Two or More Independent Brands

If products containing two or more independent Brands are packaged to be Supplied together, the Brand Owner, First Importer or Franchisor most directly connected to the joint Packaging shall be designated as the Producer for the joint Packaging.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – April 19, 2018

AUTHOR: Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: INFRASTRUCTURE SERVICES DEPARTMENT – 2018 Q1 REPORT

RECOMMENDATION(S)

THAT the report titled Infrastructure Services Department – 2018 Q1 Report be received.

BACKGROUND

The purpose of this report is to provide an update on activities in the Infrastructures Services Department for the First Quarter (Q1) of 2018: January 1 – March 31.

The report provides information from the following divisions: Water, Waste Water, Solid Waste, Recycling, Green Waste, Transit and Fleet.

Utilities Division [365, 366, 370]

PROJECTS - CAPITAL WORKS

• Water main replacement program

- North and South Pender Harbour Water Main Replacement
 - As the first tender for the water main replacement program for North and South Pender Harbour was unsuccessful due to tenders exceeding budget, the ITT has been re-issued in March 2018. Prior to doing so, bed rock investigation was undertaken and construction drawings were updated to provide more clarity to bidding companies for this project. The deadline for the Clean Water and Wastewater Fund (CWWF) grant for these projects has been extended to March 31, 2019.
- Chapman Creek Bridge Water Main Replacement
 - The 200mm water main attached to the Chapman Creek Bridge is in need of replacement due to age and corrosion. An RFP for engineering design has been issued and closes on April 20, 2018. The water main is scheduled to be replaced in the fall of 2018.
- Mason Road Water Main Replacement
 - Mason Road water main from the Sunshine Coast Highway up to Meier Road is currently Asbestos Cement and is need of replacement with a Ductile Iron water main. The water main design and permits are in place and construction will begin in late April. SCRD Utilities will install the water main, complimented by contractor machinery and flagging crews.

- Eastbourne Water Main Replacement
 - Design for the replacement of a 400 meter section of the Eastbourne water main is complete. The work will replace a small diameter and on surface waterline with a buried 50mm HDPE water main. An RFQ for the installation of the water main will be completed and advertised.
- Henry Road Water Main Replacement
 - Design and permitting is underway to replace 480 meters of 150mm Asbestos Cement water main with 200mm Ductile Iron water main between Russell and Reed Road in Gibsons.

Water Projects

- Soames Chlorination Project
 - The installation of the automated chlorination system is nearing completion. A container with chlorination equipment has been installed at the Soames Point Reservoir and the electrical work is complete. Final commissioning will follow connection with BC Hydro grid.
- Eastbourne Water System Operation and Maintenance Contract
 - A three year Operation and Maintenance Contract for the Eastbourne Water System is in place. The successful qualified contractor will operate, maintain, install services and complete emergency repairs.

Wastewater

- YMCA/Langdale Waste Water Plants
 - Continuation of data assessment from the trial integration of both systems. A complete internal comprehensive review of the steps towards a final transition and agreement with YMCA camp have been completed. Staff will continue to work with the YMCA on implementation of the transition.
- Square Bay Waste Water Plant
 - Construction of a new wastewater plant at Square Bay has begun with completion targeted for early September. The new Upflow Sludge Blanket Filtration wastewater plant is partially funded by a CWWF grant that was extended to March 31, 2019.
- o Canoe Road Waste Water Field and Collection System Replacement
 - The Canoe Road Waste Water field and collection system is in need of replacement due to age. A previous RFP for design build were unsuccessful. The project has been re-worked to separate engineering from construction, a RFQ regarding engineering has been issued with construction to take place in the fall of 2018. The deadline for the CWWF grant has been extended to March 31, 2019.

- Merrill Crescent Waste Water Field Replacement
 - Merrill Crescent Waste Water field is in need of replacement due to age. A previous RFP for design build were unsuccessful. The project has been re-worked to separate engineering from construction, a RFQ regarding engineering has been issued with construction to take place in the fall of 2018. The deadline for the CWWF grant for this project has also been extended to March 31, 2019.
- Curran Road/YMCA Outfall Inspection
 - Inspection of the two sewage outfalls by a dive team is required once every 5 years by the MOE permit and was recently completed. A summary report was received with recommendations to replace all of the outfall pipe weights on the Curran Road outfall. A scope of work and funding review for these weights replacement is underway. There were no deficiencies noted on the YMCA outfall line.

Universal Metering Electoral Areas:

Phase 2 is 98% complete. The contractor returned in January 2018 for two months and was able to install 105 of the 223 outstanding meter installations remaining in the project. SCRD Utilities Services have installed a further 31 meters since. There are now 87 meter installations remaining to be completed by Utility Services staff before the end of 2018.

Utility Services Division Web Pages Project

In Q1 2018, Utilities Services staff and the Communications Coordinator worked together to update the Utilities Services web pages. The purpose was to make access to information about SCRD's water and wastewater services easier for residents.

The project is now complete as of Q1 and includes:

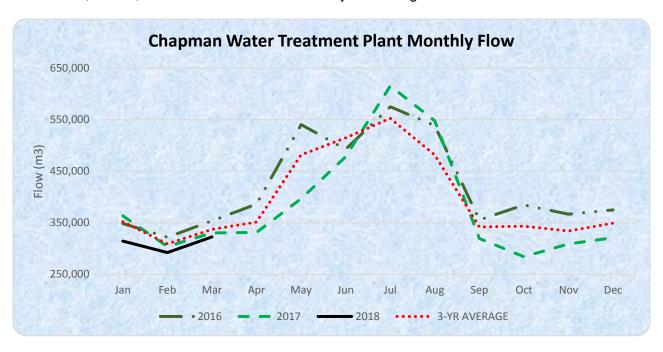
- Updated Utility Services Division home page with clickable icons to key topics of interest
- A streamlined top navigation structure:
 - o Conservation, Metering, Projects, Rates and Supply
- New web pages:
 - Wastewater Facilities including wastewater projects and environmental monitoring
- Updated information on all existing pages

The web pages can be viewed at: http://www.scrd.ca/Water.

OPERATIONS - WATER DISTRIBUTION SYSTEM

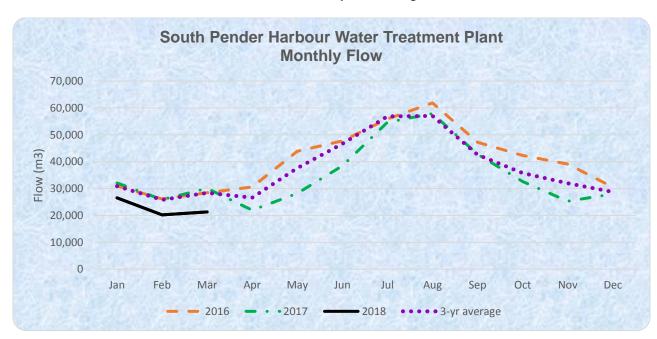
CHAPMAN WATER TREATMENT PLANT

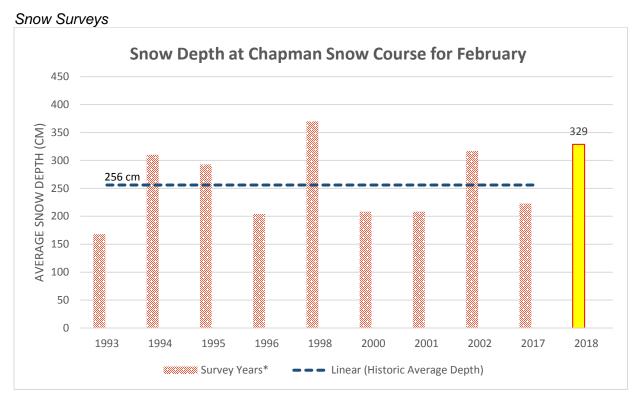
In the Q1 2018, the Chapman Creek Water Treatment Plant produced and supplied 929,184 m³, a 5% decrease over the three year average.



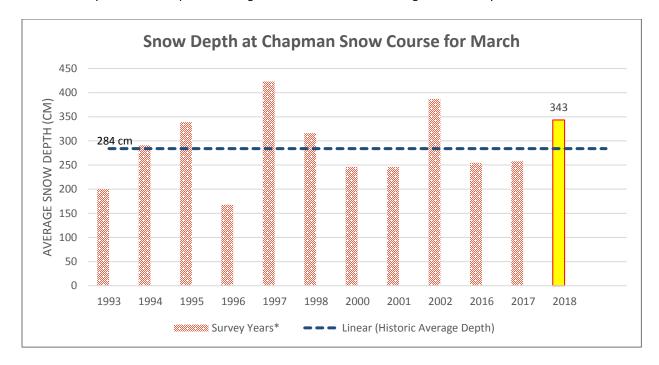
SOUTH PENDER WATER TREATMENT PLANT

In the Q1 2018, the South Pender Water Treatment Plant produced and supplied 68,057 m³, a 29% decrease over the three year average.





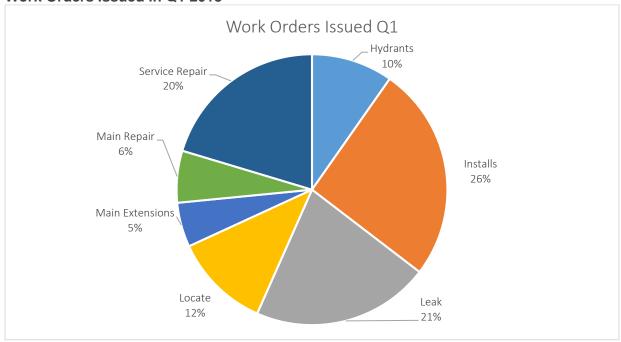
*Surveys were conducted from 1993-2002 and were re-established after the 2015 drought. The February 2018 snow depth is 73 cm greater than the historic average for February.



^{*}Surveys were conducted from 1993-2002 and were re-established after the 2015 drought. The March 2018 snow depth is 59 cm greater than the historic average for March.

Utility Services

Work Orders Issued in Q1 2018



Transportation and Facilities [310, 312, 345, 350]

PROJECTS

Transit

Two snow days in January/February were met with the same service approach as in 2016, residential feeder service is reduced when snow and ice accumulate while service was focused on Highway 101 where plowing was consistent. This allowed for regular bus service to be maintained between downtown Sechelt and the Langdale terminal. The public was kept updated of the ongoing changes in service through social media and web alerts.

In previous years, BC Ferries made 5-6 schedule changes per year triggering a similar amount of changes to the transit schedule. On January 2, 2018 BC Ferries implemented a new scheduling approach designed to improve on-time performance and reduce the number of changes. For example BC Ferries will have a similar schedule from mid-May through Thanksgiving, with added trips in the summer, instead of several schedules for the same period. Consequently the transit schedule will be consistent for this entire period which could further encourage ridership.

Solid Waste [350, 351, 352, 355]

PROJECTS

BC Product Stewardship Council

In Q1 2018, Solid Waste staff participated in seven BC Product Stewardship Council (BCPSC) meetings by conference call. Specific meetings included:

- Presentation by the Fraser Fort George Regional District on program service gaps to the Stewardship Agencies of British Columbia (SABC) – January 16, 208
- BCPSC Board Meeting January 23, 2018
- Recycle BC on consultation update January 30, 2018
- Tire Stewardship BC on overall program February 6, 2018
- Electronic Products Recycling Association (EPRA) on overall program February 20, 2018
- BCPSC Board Meeting March 13, 2018
- BCPSC Planning Meeting March 27, 2018

Recycling Council of BC

In Q1 2018, the Manager, Solid Waste Services participated in one RCBC Board Meeting by conference call. Specific meetings included:

RCBC Board Meeting - March 29, 2018

Metro Vancouver Municipal Waste Reduction Coordinator Committee (MVMWRCC) Meeting

In Q1 2018, the Waste Reduction Coordinator participated in one Metro Vancouver Municipal Waste Reduction Coordinator Meeting. Specific meetings included:

MVMWRC Committee Meeting - February 7, 2018

Regional Organics Diversion Strategy

The Regional Organics Diversion Strategy was adopted at the January 25, 2018 Board Meeting. Work has begun as per the Timeline in the Strategy, with the first task of securing a legal contract with a processor.

Commercial Ban on Organics and Recyclables

Staff have initiated the planning work for the commercial sector ban on organics and Recyclables. The SCRD, as a regulator, will establish the rules and regulations and allow the commercial sector to comply using the most cost-effective methods for their enterprise. E.g. contract a private hauler to collect organics, compost on-site or other cost-effective arrangement.

Initial Stakeholder engagement has begun. Meetings were held in March with the operators and staff of the Pender Harbour Transfer Station and Sechelt Landfill. Feedback from the operators and staff was positive and there was high support for the ban. They recommended the use of clear bags to help with waste screening.

An engagement session with haulers is scheduled for April 25, 2018.

Waste Reduction Initiatives Program

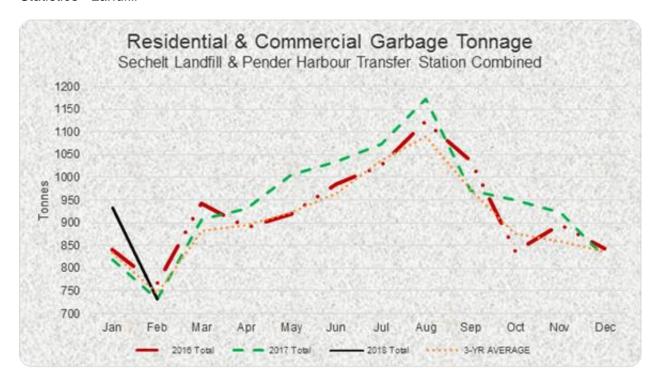
Three projects received funding from WRIP in 2016. The organizations had until December 31, 2017 to complete their projects and submit a final report. Their projected reported that they engaged approximately 1385 residents in waste reduction and diversion initiatives. The projects ranged from school and organizational recycling programs to a food waste reduction initiative. A summary of recipients and projects awarded is included below.

2016 WRIP Recipients and Project Summary					
Organization	Project Name	Area Served	Funds Received	Key Project Outcomes	
Gibsons Curling Club	Establish a new recycling program for the curling rink.	Gibsons and Area	\$175	Set up six recycling bins. Reduced garbage bin from 1 two-cubic yard dumpster bin to 1 360 litre cart.	
Gibsons Elementary School	Establish a school recycling & composting program.	Gibsons	\$2,095	Set up recycling stations for paper and containers in each classroom, support room and office room. Reduced garbage collection from weekly to every other week. Increased recycling collection from weekly to 2x per week. Composting program to be set up Fall 2018.	
Coast Canning Cooperative	Community Canning Kitchen – enhance ability to accept & store fruit donations otherwise destined to the landfill.	Coast-wide	\$1,500	From May to October, diverted 200lbs of fruit.	
		\$3,770			

The call for 2018 WRIP Applications is currently open and closes on Friday, May 11.

OPERATIONS

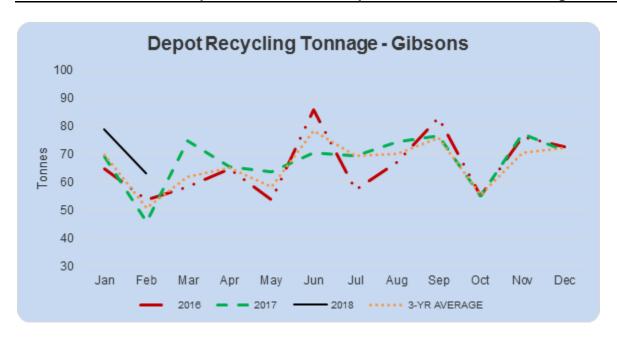
Statistics - Landfill

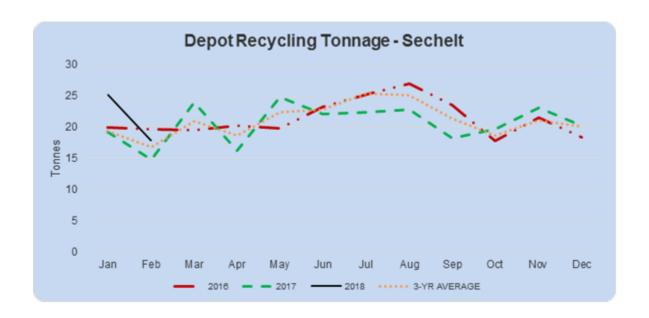


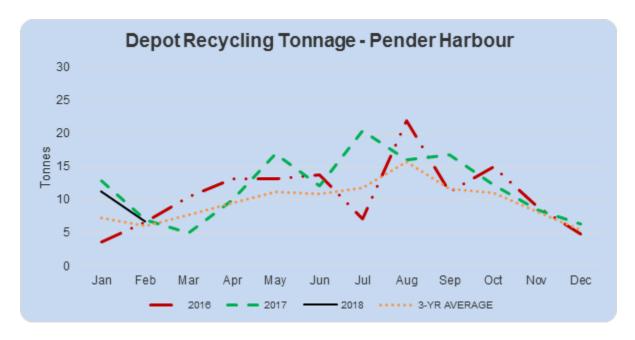
*Does not include other landfilled items such as construction waste, asbestos or furniture.

Statistics - Recycling









^{*} Data provided by RecycleBC (formerly called MMBC) and is updated as data is received.

Statistics - Green Waste



^{*}Combined totals for Sechelt Landfill, Pender Harbour Transfer Station, Town of Gibsons Green Waste Facility and residential self-haul at Salish Soils.

Infrastructure Community Events/Outreach

Date	Community Event	Topic
January 23	Water Treatment Plant Tour for the East Porpoise Bay Community Association	Water
March 14	Presentation to the Elphinstone Community Association regarding the Chaster Well	Water

Reviewed by:		
Manager	X – S. Walkey X – G. Dykstra X – R. Cooper X – D. Crosby	Finance
GM	X – R. Rosenboom	Legislative
CAO	X – J. Lovevs	Other