



INFRASTRUCTURE SERVICES COMMITTEE
Thursday, May 16, 2019
SCRD Boardroom, 1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

2. Lisa Trotter, Senior Manager - Government Relations, BC Transit
Regarding Transit Future Plan and Transit Improvement Program
Presentation
3. Jeff Ainge, Carey McIver & Associates Inc.
Regarding Residential Food Waste Collection
Presentation
Annex A
pp 1 - 28

REPORTS

4. General Manager, Infrastructure Services
Weekly Residential Food Waste Collection Considerations
(Voting – B, D, E, F)
Annex B
pp 29 - 36
5. General Manager, Infrastructure Services
Organics Collection Opt-Out Program Considerations
(Voting – B, D, E, F)
Annex C
pp 37 - 50
6. General Manager, Infrastructure Services
Regional Diversion - Annual Update
(Voting – All)
Annex D
pp 51 - 60
7. General Manager, Infrastructure Services
Updated Lifespan and Options to extend the lifespan of existing landfill
(Voting – All)
Annex E
pp 61 - 80
8. General Manager, Infrastructure Services
Process for siting a new landfill
(Voting – All)
Annex F
pp 81 - 85

- | | |
|---|-------------------------|
| 9. General Manager, Infrastructure Services
Water Supply Update
(Voting – All) | Verbal |
| 10. Interim Chief Administrative Officer
Managing Growth to address Water Supply Deficit
(Voting – All) | Annex G
pp 86 - 93 |
| 11. General Manager, Infrastructure Services
Universal Water Metering Program Update
(Voting –A, B, D, E, F, Sechelt) | Annex H
pp 94 - 100 |
| 12. General Manager, Infrastructure Services
2019 – 2020 BC Transit Annual Operating Agreement
(Voting – B, D, E, F, Sechelt, Gibsons, SIGD) | Annex I
pp 101 - 120 |

COMMUNICATIONS

- | | |
|--|-------------------|
| 13. Letter dated February 22, 2019 from Southern Sunshine Coast
101 Committee
Regarding letter of support to construct a highway | Annex J
pp 121 |
|--|-------------------|

NEW BUSINESS

IN CAMERA

ADJOURNMENT

MANUAL RESIDENTIAL FOOD WASTE COLLECTION - PROGRAM DESIGN

Sunshine Coast Regional District
May 16, 2019

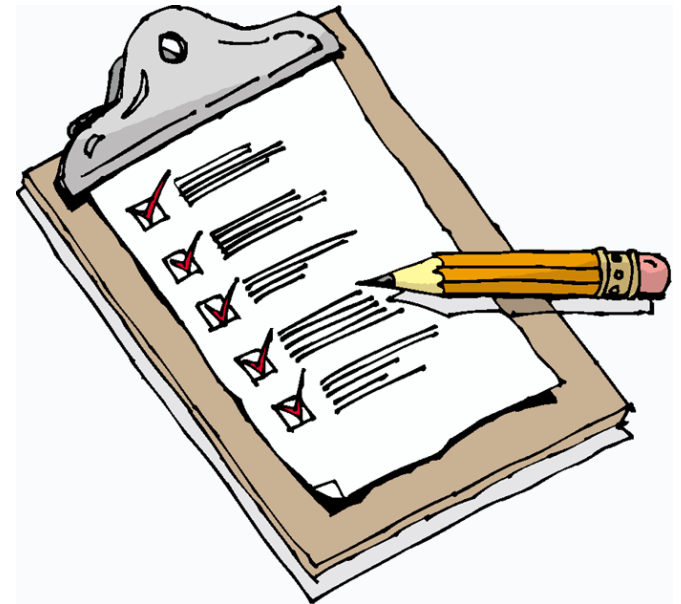
Introduction



- 20 years with the Regional District of Nanaimo
- 10 years coordinating RDN curbside collection program
- Planned and implemented the residential food waste (“green bin”) collection program
- Now working alongside Carey McIver

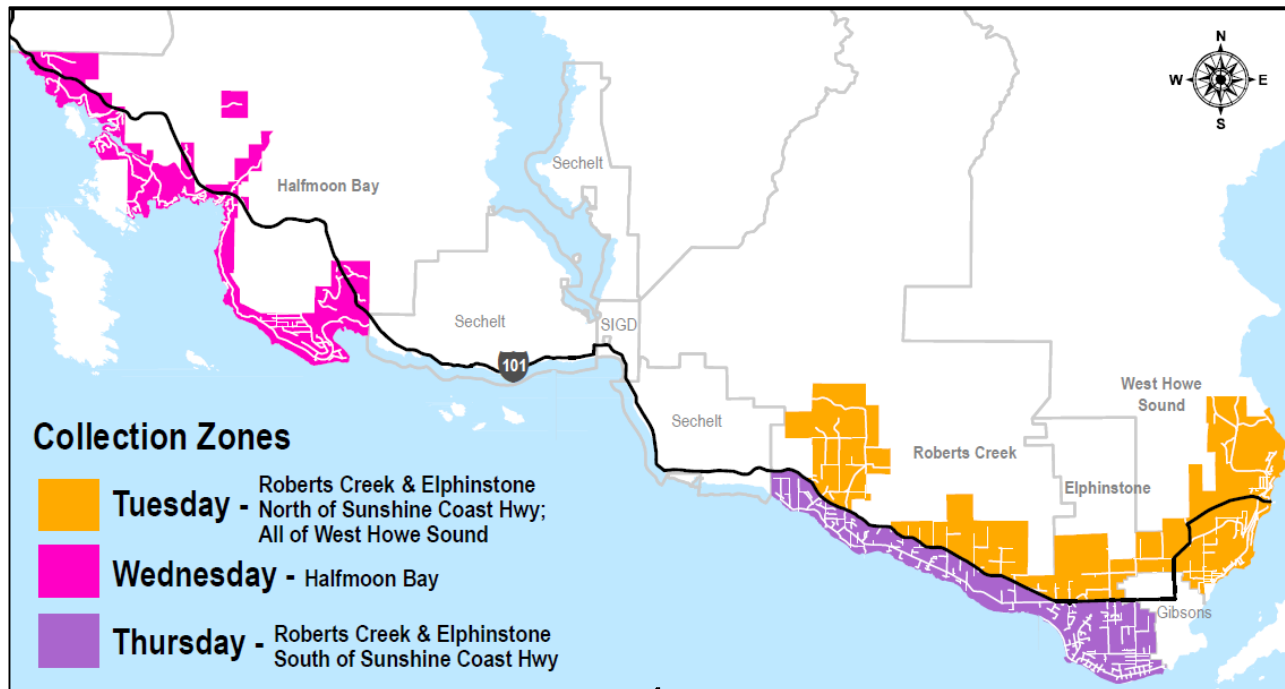
Presentation overview

- Board direction
- Manual collection program design – adding organics
 - Who
 - What
 - How
 - When
- Considerations for the SCRD



Board direction to staff

- THAT a report on weekly residential food waste collection for Areas B, D, E and F with manual collection of small bins be brought to a Committee for consideration.



Program design – adding organics



What do we mean by organics?

- Food Waste
 - Backyard Compostable
 - fruits, vegetables
 - Backyard – harder to compost
 - Meat, bones, breads, non-liquid dairy, fats, food soiled paper
- Green Waste
 - Small yard & garden waste
 - Leaves, branches, grass clippings



Beyond Backyard Composting

- Fruit and vegetable scraps
- Egg Shells
- Coffee grounds, filters, tea bags
- Houseplants, cut & dried flowers
- *Food leftovers, plate scrapings*
- *Meat, fish, giblets, and bones*
- *Dairy products, butter, mayonnaise*
- *Bread, cereal, grains*
- *Pasta, pizza*
- *Baked goods, candies*
- *Soiled paper towels & tissues*
- *Ice cream cartons, milk & cream cartons*
- *Baking ingredients, herbs, spices*
- *Nuts and shells*



Pilot Project

- Effective collection schedule
- Containers
- Impact on garbage collection
- Participation levels
- Diversion potential
- Challenges and solutions
- Urban – Rural differences



Customer Comments

"Best idea in years.
Please expand to
include entire area"
Chartwell resident

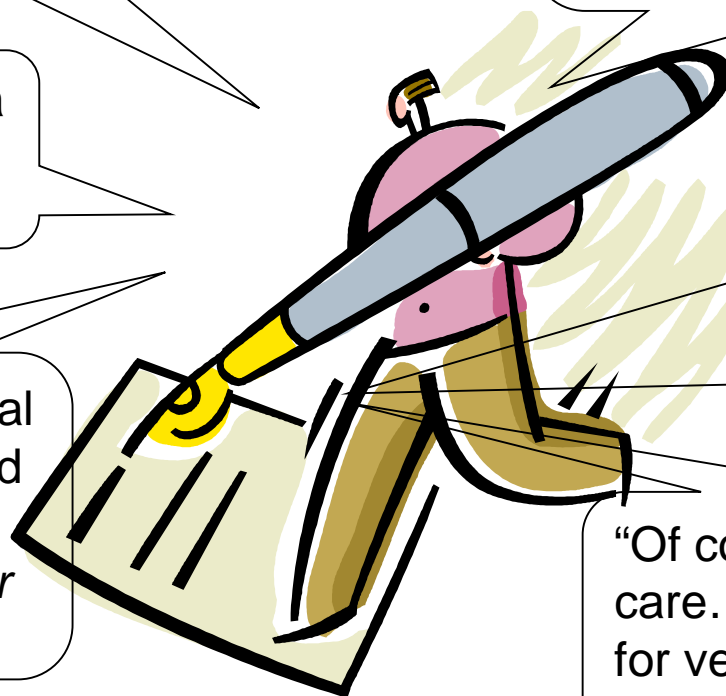
"I thought I would not use it
very much. We use it all the
time because it is very
convenient" *Nanaimo
resident*

We no longer have a
raccoon problem"
Nanaimo resident

"This program has
made us more
conscious of the
amount of garbage
we produce"
Chartwell resident

"If everyone in the regional
district used (it) that would
certainly reduce waste
going to the dump" *Cedar
resident*

"Of course it takes a little
care...(but has) great benefits
for very little additional time"
Cedar resident



Mandatory vs Opting out

2008 Pilot Project

- Participation was high
- Even the committed composters saw value
- Administrative challenge to manage opting out
- A regional service (just like garbage collection)

Average weekly food waste weights collected on Pilot Project routes



Nanaimo



Qualicum Beach



Cedar

The Food Waste Chain of events



from kitchen....

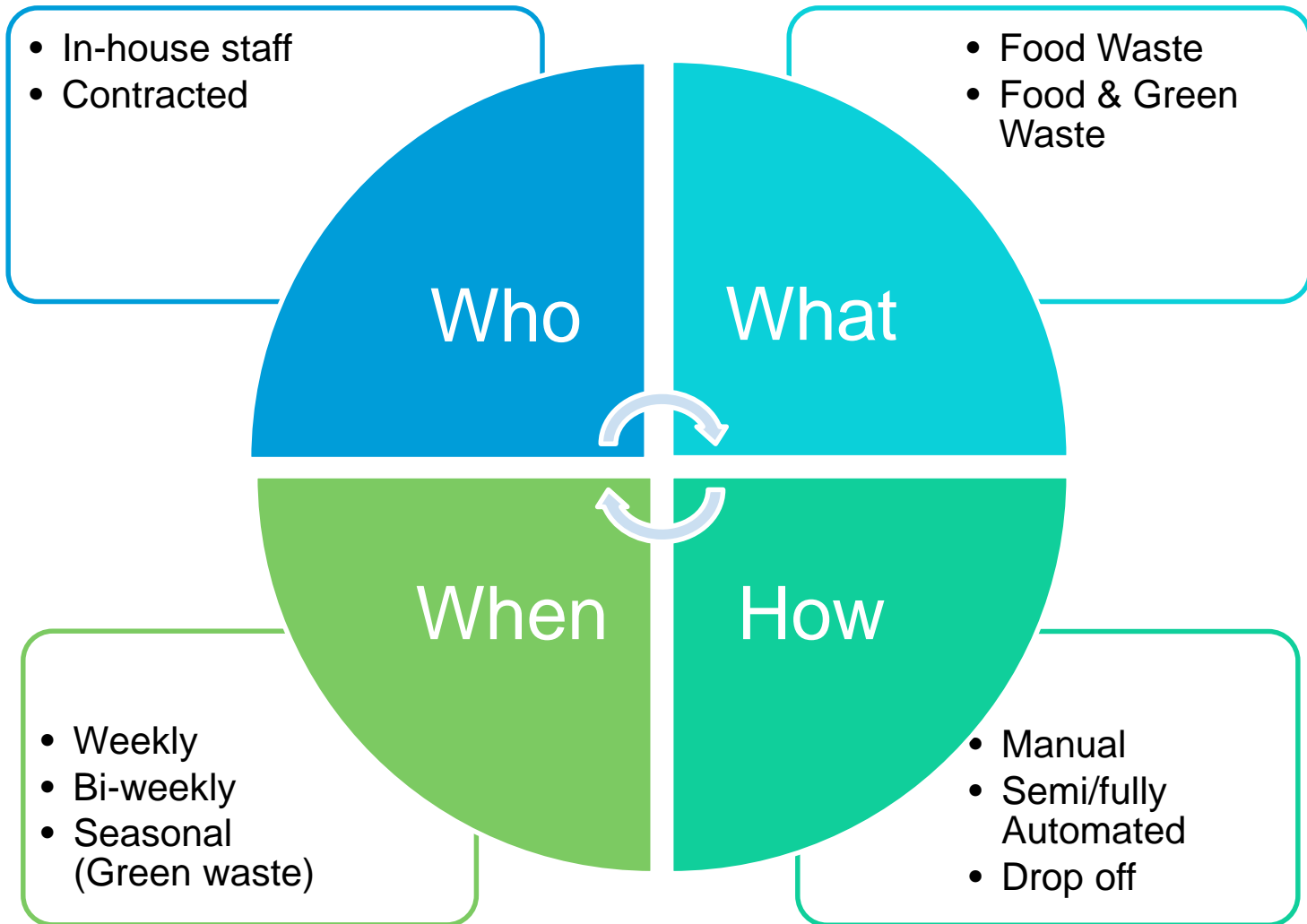


to curb....



... to compost

Collection System Considerations



Who collects?

- Ability for contractor to collect organics
 - Contract length to amortize cost of new trucks
 - Fleet requirements
 - Split packer or single body trucks
- Implications for other materials
 - Garbage tonnages



What to collect?

- Food waste only
- Green waste
 - Separate
 - Co-mingled



How to collect?

- Manual



- Automated



Manual Collection



- Suits food waste only
- Separated green waste possible
- No change to route design necessary
- Smaller containers
- Less expensive to implement



Container Sizes - Manual



- 23 litres
- 45 litres +/-
- 77 litres
- Supplied by:
 - Local Government
 - Collection contractor
 - Resident

Automated collection - Carts

- Suitable for food & green waste co-mingled
- Topography challenges
 - Hills, roadside swales, lanes, arm reach/swing
- Larger containers (carts)
- Expensive to implement
- Truck maintenance & longevity
 - Lift mechanism wear and tear
- Change to overall program design
- Administration (cart swaps, cart maintenance, ownership)



Alternate Sizes Available



18



Carey McIver & Associates Ltd.

Adding Green Waste - Some Pros & Cons

Pros

Convenience

Shift costs to user pay

Odour & pest management

Customer demand

Possible transport cost decrease

Can be collected manually

Reduce illegal dumping

Cons

Increased volume of material

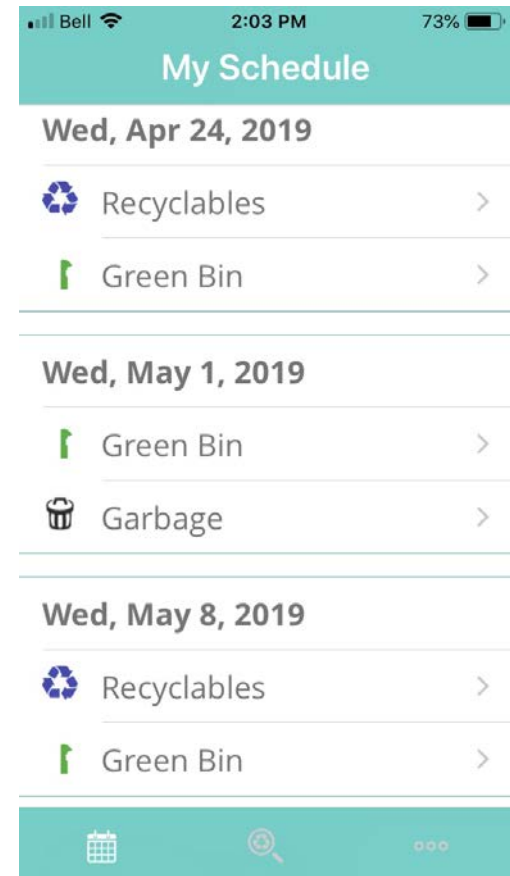
Shift costs to user pay

Possible volume constraints



When to collect?

- Weekly
 - Encourage organics participation
 - Wildlife interactions
- Bi-weekly
 - Mix food & green waste in single container helps reduce odours
 - Processor needs to approve
- Seasonal variations
 - Green waste “season”



Public education & outreach

THE GREEN BIN PROGRAM COMING SOON TO A KITCHEN NEAR YOU

The Regional District of Nanaimo and its municipal partners – Nanaimo, Lantzville, Parksville and Qualicum Beach – will soon be launching the Green Bin Program. This new service follows a successful pilot project and will have the biggest impact on reducing household garbage since curbside recycling began.

In recent years, communities across Canada have been introducing curbside food waste collection. Ladysmith has operated a Green Bin Program since 2006, Port Coquitlam launched its program in 2009, and Vancouver recently began collecting non-cooked food waste.

Residential food waste collection is the final step in the region's Organics Diversion

Strategy. Since 2005, the commercial and institutional sector has been sending food waste to the ICC Group's composting facility at Duke Point. The new Green Bin Program will enable households to help divert all food and kitchen waste from the Regional Landfill and recycle it into compost.

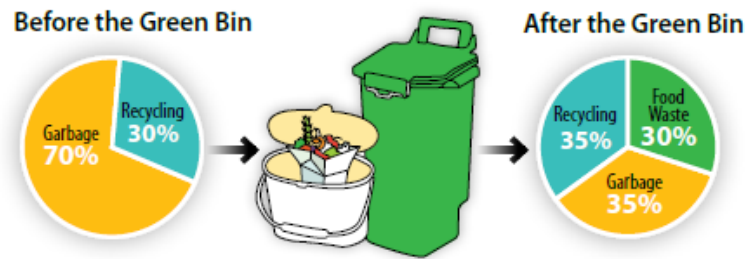
Why food waste diversion matters to our region

Fig. 1 illustrates the impact food waste collection can have on reducing your household garbage. When curbside food waste collection is fully implemented, it will divert an estimated 6,000 tonnes of food and kitchen waste annually to the ICC composting facility. That equals sending 800 fewer garbage trucks to the Regional Landfill.

The Green Bin Program goes beyond what is suitable for backyard composting as it will accept cooked food, meat, fish, bones and food-soiled paper packaging. A 2004 residential waste composition analysis showed that food waste and compostable paper products make up 50 per cent of household waste.



Fig. 1 - Food Waste Pilot Project Impact on Diversion Rates



Key Messages



Beans to bones in the bin!

Green bin curbside food and kitchen waste is coming in October. Watch the mail for your spring Zero Waste newsletter.

The Green Bin Program - a partnership of the Regional District of Nanaimo and its member municipalities - Nanaimo, Lantzville, Parksville and Qualicum Beach. www.beyondcomposting.ca



Wildlife interactions



If your home is located in an area frequented by bears and other pests, remember to:

- Store your green bin and garbage container **in a secure location** and keep the lids latched.
- Take containers to the curb **on the morning of your collection day**. Don't leave them out overnight.
- Deodorize the lid and exterior of your green bin with **Lysol or bleach solution** to prevent food odours from attracting wildlife.



Start-up package

- ✓ Guide to the new program
- ✓ Decals for container lids
- ✓ Kitchen catcher
- ✓ Sample bags
- ✓ Fridge magnet
- ✓ Calendar
- ✓ New recycling bag



ROUTE RA4 • 2010
FOOD WASTE, GARBAGE & RECYCLING SCHEDULE • SOLID WASTE SERVICES

October 2010

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

◆ GARBAGE & FOOD WASTE ● RECYCLING & FOOD WASTE ■ STATUTORY HOLIDAY

YOUR NEW COLLECTION PROGRAM STARTS ON OCTOBER 19, 2010

Inside your Green Bin
THE GREEN BIN IS COLLECTED EVERY WEEK

- Food leftovers, plate scrapings
- Meat, fish, poultry and bones
- Fruit and vegetable scraps
- Dairy products, butter, margarine
- Egg shells
- Bread, cereal, grains
- Pasta, rice, pizza
- Baked goods, candies
- Soiled paper towels and tissues
- Soiled paper food packaging
- Used paper cups and plates
- Coffee grounds, filters, tea bags
- Ice cream and milk & cream cartons
- Baking ingredients, herbs, spices
- Houseplants, cut and dried flowers
- Hats, and shoes
- Certified compostable plastic only

Inside your Blue Box
SHOULD NOT WEIGH MORE THAN 23KG OR 50 LBS

Household plastic containers:
e.g. milk jugs, margarine & yogurt containers, soap & laundry detergent bottles.

- Clean (NO food or other residue)
- NO foam plastic (Styrofoam), containers that hold chlorine or ammonia-based products, motor oil containers, metal bottle lids or caps, spray can heads and metal attachments
- NO plastic bags or "film" plastic

Metals: food and beverage containers, foil containers and trays

- Clean (NO food or other residue)
- Labels removed
- NO metal pots, plastic or paper, paper laminated with foil chip bags or yogurt lids

PLEASE NOTE: GLASS IS NO LONGER ACCEPTED

Inside your Yellow Bag
Newsprint & mixed papers:
e.g. newspapers, magazines, office paper, fibre egg cartons and household bookboard (such as cereal boxes, paper towel & toilet paper cores)

- Clean (NO food or other residue)
- NO books, soiled paper, drinking boxes or paper with plastic or foil lamination
- NO tissues, used paper towel, waxed paper, baking parchment paper, or pizza boxes. These can go in the Green Bin.

Beside your Blue Box
Textiles, Clothing and Linens

- Placed in a separate shopping bag and tied with a piece of fabric or string
- NO shoes, handbags or non-fabric items

Cardboard:

- Broken down, flattened and tied in a bundle
- Maximum size is 10'x10'x6'
- NO waxed, coated, or non-corrugated boxes
- Pizza boxes can go in the Green Bin.

Inside your Garbage Can
ONE CAN PER BI-WEEKLY SCHEDULED COLLECTION DAY

- 100 litres (22 gallons) garbage per can – larger cans can be used but not filled to the top (see diagram fill limits)
- 23 kg (50 pounds) per can – for the safety of your driver
- If you have trouble picking it up, so will your driver, and remember he has to pick up hundreds of cans per day
- No food waste (see your green bin)
- No construction or renovation waste
- No yard waste
- No items larger than 2 feet in any dimension
- Extra containers must have a 52 tag attached
- A maximum of two extra bags/containers with bags

PUT MATERIALS AT THE CURB **BEFORE 8AM** ON YOUR COLLECTION DAY.
MISSED COLLECTION OR QUESTIONS ON SCHEDULING • PLEASE CALL 1-866-999-8227

2011 CALENDAR



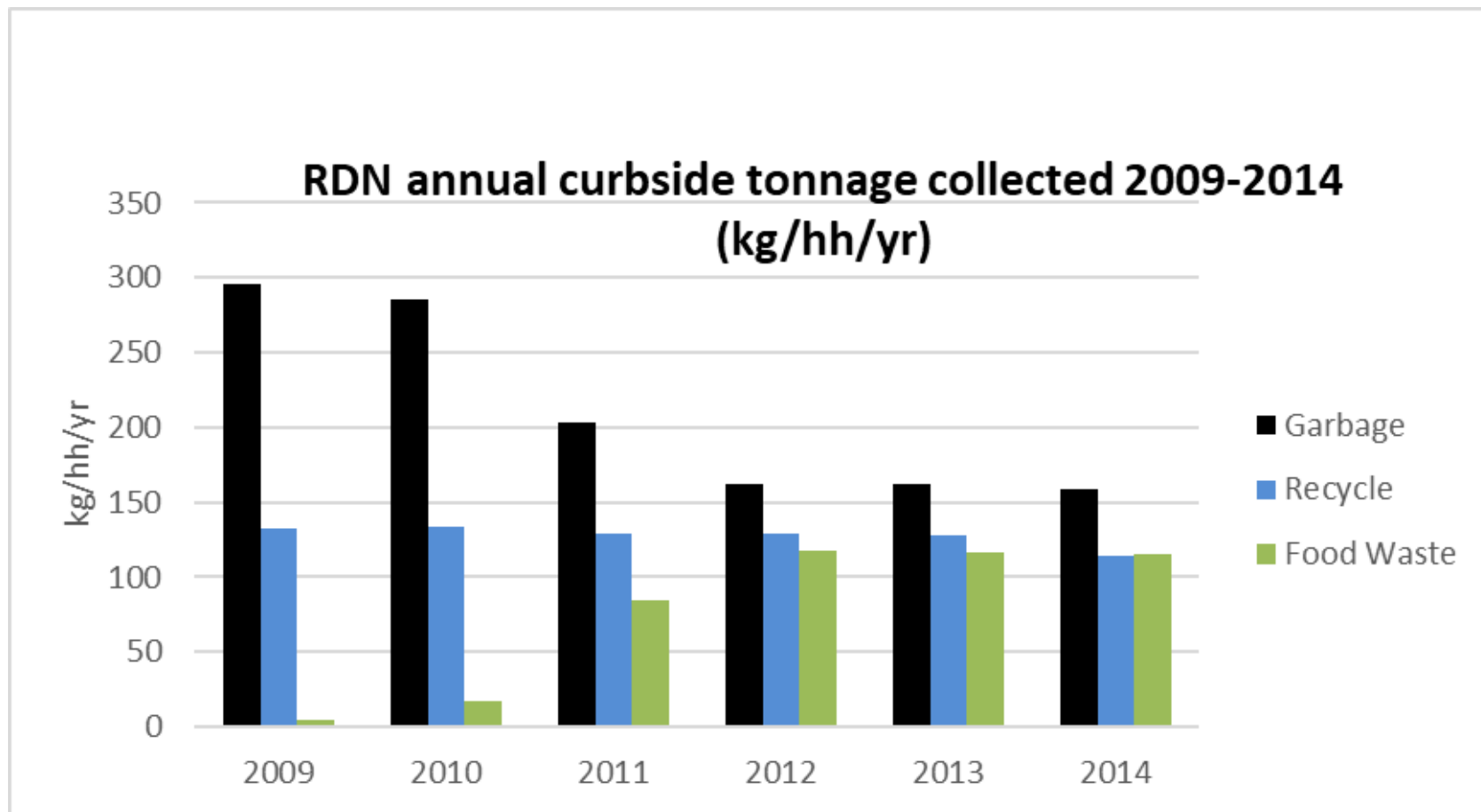
Optional extras

Provided at launch but resident's choice to use

- Sample of compostable bags
- Kitchen catcher



Program Results - RDN



QUESTIONS?



THANK YOU



SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: WEEKLY RESIDENTIAL FOOD WASTE COLLECTION CONSIDERATIONS

RECOMMENDATION(S)

THAT the report titled Weekly Residential Food Waste Collection Considerations be received.

BACKGROUND

The SCRD prepared and issued a Request for Proposal (RFP) in the fall of 2018 that included the residential curbside collection services for garbage, organics (food waste and green waste) and recyclables within the existing curbside garbage collection service area in Electoral Areas B, D, E and F. On February 28, 2019, the SCRD Board awarded services for weekly residential garbage collection only. This contract allows for a transition to bi-weekly garbage collection if curbside collection for organics is initiated by the SCRD. In the meantime, the collection of organics and recycling was placed on hold.

The following resolution is from the February 28, 2019 Board meeting (in part):

061/19 Recommendation No. 3 *Curbside Collection Services*

AND THAT a report on weekly residential food waste collection for Areas B, D, E and F with manual collection of small bins be brought to a Committee for consideration.

The purpose of the report is to provide an overview and options for the Committee's consideration of how a weekly residential food waste collection with manual collection of small bins could be implemented.

DISCUSSION

Currently, there are approximately 5,800 participants in the SCRD's residential curbside garbage collection services across Electoral Areas B, D, E and F. Participants include single-family homes, townhomes and suites.

The SCRD's curbside garbage collection service is weekly and includes the manual collection of one resident-provided 77 litre garbage can up to a maximum weight of 20 kilograms.

The intent is to reduce garbage collection service to bi-weekly (every-other-week) once a weekly food waste collection service is in place.

Food waste collection would include both food waste and food soiled paper in one collection bin.

Implementing a weekly collection service for food waste involves numerous decisions. Some of these decisions include: which collection bin to use, who provides the collection bin, is a starter kit provided and is green waste collected.

Collection Bin Considerations

For the purposes of manual collection of small bins, three bin options are being presented in order of size from smallest to largest. A summary of the bins with photographs is included as Attachment A.

Option A – 23L EcoSafe Bin

The EcoSafe bin is a small, 23L bin, weighing 0.45kg (2.9lbs) that has a flip-up lid and two handles. It is lightweight, making it easy to carry and it is easy to open, close and clean. However, it does not have a lock and is not wildlife or rodent resistant.

The EcoSafe bin is available wholesale only, so it cannot be purchased directly by residents and would have to be purchased and provided by the SCRD or the collection contractor. The wholesale cost is approximately \$15.

This is the collection bin currently used by the Town of Gibsons.

Option B – 46L Orbis Bin

The Orbis bin is small-medium sized 43L bin, weighing 3.27kg (7.2lbs) that has a flip-up locking lid, one handle and wheels. It is lightweight, making it easy to carry or pull using the wheels, and it is easy to open, close and clean. Orbis states that the locking lid is rodent resistant.

The Orbis bin is available wholesale or locally, so it can be purchased directly by residents or be purchased and provided by the SCRD or the collection contractor. If purchased wholesale, the lock is available in metal or plastic. If purchased locally by residents, only the plastic lock is available. The wholesale cost would need to be determined, whereas the retail cost is \$29.99.

This is the collection bin currently used by the Regional District of Nanaimo and Kootenay Boundary, the District of West Vancouver and the Municipality of North Cowichan.

Option C – 77L Garbage Can with sticker

A 77L garbage can represents the largest of the three collection bin options. The can weighs 3.97kg (8.75lbs), has a removable lid and two handles. It is lightweight, making it easy to carry, and it easy to open and close, but it is harder to clean. This is the can that is prescribed for the SCRD's garbage collection service.

Garbage cans are widely available locally at a cost of \$14.99 so this option would likely result in a resident-purchased and provided collection bin. The SCRD or contractor would need to supply a sticker to distinguish this can from the garbage can.

This collection bin is currently used by the Village of Cumberland, Town of Comox and was utilized by many municipalities in Metro Vancouver for their green waste collection programs and many continued to use when the program expanded to include food waste.

However, given the collection bin would only be used for food scraps, 77L is likely too large for most households.

Overall, considering size, interactions with wildlife and user-friendliness Option B, the 43L Orbis collection bin is recommended. The Orbis bin is mid-size to accommodate one week's worth of a food waste from a family, the bin can be carried or wheeled and has a locking lid that is manageable for all users.

Regardless of bin selection, best practices for curbside collection to reduce interactions with wildlife should be implemented. E.g. only place bin curbside the morning of collection and clean the bin regularly.

Board direction regarding who purchases and provides the bins would be required. It is recommended that the SCRD or Contractor provide the bin and that the specific bin be included in the RFP for the following reasons:

- Supplying a bin ensures residents have a rodent-resistant bin;
- Buying in bulk will reduce the individual bin cost; and
- Utilizing a consistent bin will ensure cost efficiency for the hauling contractor and will be reflected in their ability to appropriately bid on an RFP.

Starter Kit Considerations

Many jurisdictions provide a starter kit that includes a kitchen catcher, a sample of bags as well as education and outreach materials. Both the District of Sechelt and the Town of Gibsons provided starter kits for the launch of their organics pilot (food and green waste) and food scraps collection services, respectively.

Three kitchen catcher options are presented for consideration in order of size from smallest to largest. A summary of kitchen catchers with photographs is included as Attachment B.

Option D – 7L Orbis

The Orbis kitchen catcher is 7L in size, has a solid lid and a double-rim seal to contain odours.

This kitchen catcher is available locally at a cost of \$9.99 and can be purchased wholesale. Wholesale cost would need to be determined.

This was the kitchen catcher provided by many BC municipalities at the time of their program launches approximately eight to ten years ago, prior to other options being manufactured.

Option E – 7.1L Sure-Close

The Sure-Close kitchen catcher is 7.1L in size, available with a solid or perforated lid and a double-rim seal to contain odours. Additional features of this kitchen catcher over others, is that the lid can “click” to stay propped open and a perforated lid option decreases odours.

This kitchen catcher is available locally at a cost of \$9.99 or can be purchased wholesale at a cost to be determined. Wholesale purchase allows for a “hot-stamp” branding for an additional cost.

This is the kitchen catcher provided by the District of Sechelt and many other municipalities in BC.

Option F – 7.4L EcoSafe

The EcoSafe kitchen catcher is 7.4L in size, has a solid lid and a handle for carrying. The lid does not lock unless the handle is in the up-position and the lid does not seal.

This kitchen catcher is available wholesale only at a cost of approximately \$6.

This is the kitchen catcher provided by the Town of Gibsons.

Overall, based on previous feedback received from residents at community events regarding use of kitchen catchers, and in consideration of the total cost to provide them, it is not recommended to provide a kitchen catcher. Residents can utilize their own kitchen catcher that best suits their needs and many options at a variety of price-points and designs are available locally. However, it is recommended to provide a sample of kitchen catcher liner bags and education and outreach materials.

If a sample of bags is provided, then it is recommended to include one package of Bag to Earth paper bags with cellulose (plant) liner. Providing paper bags has been shown to reduce the “yuck” factor and encourages participation. The bags come in packages of five and can be purchased wholesale by the SCRD to include in the starter kit. If residents wish to continue using the bags, they are readily available locally. The use of paper liners would not be a requirement and if used, they cannot be placed curbside without being placed inside the collection bin.

For education and outreach, a “what’s in and what’s out” brochure would be developed as well as other materials such as Frequently Asked Questions which would include WildSafeBC practices to reduce interactions with wildlife. Digital materials would be developed as well and could include an App such as ReCollect. ReCollect is a Vancouver-based company and is the App currently used by the District of Sechelt and the Town of Gibsons as well as many Regional Districts and Municipalities in BC. ReCollect includes a “Recycling Wizard” detailing a what-goes-where as well as the option to create a custom collection schedule and receiving collection reminders in a format of your choice (e.g. email or text). Implementing an App is recommended.

Green Waste Collection Considerations

Should the Board wish to consider including green waste collection along with food scraps, Staff could provide a report to a future Committee that identifies benefits for residents and includes a financial analysis and impact to the current residential green waste drop-off service.

Implications – Organizational

Implementing a new program for food scrap collection will require allocating existing staff time for program development and public engagement leading up to the launch. This would include

liaising with the District of Sechelt and the Town of Gibson to review their programs to date. As well, Staff would liaise with WildSafeBC to review their best practices for curbside collection services.

A food scraps collection service will require amendments to Bylaw 431 (curbside collection services).

Additional staff time will also be required to update the utility billing database to add the new fees and charges for each customer.

Procurement

At the time of contract award for residential curbside collection services, the SCRD Board awarded garbage collection services only. To proceed with a residential food scraps collection service, a new Request for Proposal (RFP) process will be required.

If Board direction to proceed is given, the procurement process from preparing the RFP documents to contract award will take approximately four to five months.

Implications – Financial

The costs for curbside collection of food scraps and composting are unknown until completion of procurement.

Opt-out considerations and the financial implications are outlined in a report included on the agenda for this Committee meeting.

The costs for collection bins and any other program considerations such as a starter kit are dependent on pending Board decisions.

If Board direction to proceed is given and once the full costs are known, then the funding options will be analyzed and brought forward for the Committee's consideration.

Timeline for next steps

January 2020 is currently being considered as the earliest possible start date for curbside collection of food scraps.

Communications Strategy

If a residential food scraps collection service is implemented, a communications plan will be developed that will incorporate print materials, paid advertising, corporate newsletters, social media, the SCRD website and other engagement opportunities.

STRATEGIC PLAN AND RELATED POLICIES

This report is in support of the SCRD's Solid Waste Management Plan's targets of 65%-69% diversion and residential food scraps collection is one of the SWMP's recycle initiatives.

CONCLUSION

Implementing a weekly collection service for food scraps involves numerous decisions. Some of these decisions include which collection bin to use, who provides the collection bin, is a starter kit provided and is green waste collected.

An analysis of these decisions is provided in the report. Board direction on these decisions is required.

Attachments:

Attachment A – Collection Container Options

Attachment B – Kitchen Catcher Options

Reviewed by:			
Manager	X – R. Cooper	Finance	
GM		Legislative	X – A. Legault
Interim CAO	X – A. Legault	Other	X – A. Patrao

Manual Organics Collection Container Options

Manufacturer	EcoSafe	Orbis	Rubbermaid
			
Volume (Litres)	23	46	77
Weight (kg)	0.45	3.27	3.97
Retail Cost	Wholesale only	\$29.99	\$14.99
Wholesale Cost	< \$15	To be determined	Not available wholesale
Rodent Resistant	No	Yes	No
Used by	Town of Gibsons	RD of Nanaimo, RD of Kootenay Boundary, District of West Vancouver, North Cowichan ¹ ,	Village of Cumberland, Town of Comox, Many Metro Vancouver municipalities ²
Provided by	Municipality	Municipality or Regional District	Resident

¹ North Cowichan residents must purchase the Orbin bin.

² Initially utilized for Green Waste collection programs. Some continued to use when program expanded to include food waste. Stickers were provided to the residents to affix to the can identifying the program and to distinguish from the can used for garbage collection.

Kitchen Catcher Options

Manufacturer	EcoSafe	Sure-Close	Orbis
			
Volume (Litres)	7.4	7.1	7
Retail Cost	Wholesale only	\$9.99	\$9.99
Wholesale Cost	< \$6	To be determined	To be determined
Used by	Town of Gibsons	District of Sechelt, Many BC municipalities	-

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: ORGANICS COLLECTION OPT-OUT PROGRAM CONSIDERATIONS

RECOMMENDATION(S)

THAT the report titled Organics Collection Opt-Out Program Considerations be received.

BACKGROUND

The following resolution is from the February 28, 2019 Board meeting (in part):

061/19 **Recommendation No. 4** *Organics Opt-Out Program*

THAT a report be provided to Committee on an opt-out program for organics collection in the rural areas which identifies the financial and staffing implications and criteria for opting-out.

The purpose of the report is to provide an overview for the Committee's consideration of an opt-out program for residential curbside organics collection. For the purpose of this report, organics means food waste and food soiled paper only.

DISCUSSION

BC Jurisdictional Scan

Staff conducted a jurisdictional scan of curbside collection services in BC to determine which jurisdictions had an opt-out program and how their opt-out programs worked. This involved contacting Regional Districts that are members of the Association of Vancouver Island and Coast Communities (AVICC) as well as a few other Regional Districts in BC.

The results of the jurisdictional scan indicated that other than the Town of Gibsons only one other area had an opt-out for curbside collection services. The Sunshine Valley, a small portion of Electoral Area B in the Fraser Valley Regional District, offers a winter season opt-out program for garbage collection services due to the seasonal nature of Sunshine Valley residences. All other jurisdictions have mandatory service requirements for curbside collection programs including the District of Sechelt and Sechelt Indian Government District.

There were many Regional Districts and municipalities that offered opt-out programs for multi-family residences if the equivalent services were provided by the private sector.

A summary of opt-out programs by jurisdiction is provided as Attachment A.

The rationale provided to Staff for a mandatory service approach instead of offering an opt-out program included the following:

- To support their Solid Waste Management Plan.
- To support landfill bans.
- To support waste reduction and diversion goals.
- To maximize participation.
- Curbside collection service is viewed as a utility, similar to water services.
- Financial equity for participants.
- Consistent level of service
- To minimize administrative costs.

The Regional District of Okanagan-Similkameen (RDOS) provided their *Statement on the Regional Board's Exemptions Policy* that outlines the reasons for which the Regional Board will not grant a waiver of service and the impacts if the service was waived.

Some of the impacts identified in the RDOS's policy include the inability to verify proper disposal, collection service costs are incurred by driving the collection route and not by stopping at a specific house, and inability to achieve waste reduction goals. A copy of the policy is provided as Attachment B.

All of the Regional Districts that Staff communicated with advised against proceeding with an opt-out program.

Town of Gibsons Opt-out for Food Waste Collection

The Town of Gibsons provides collection services to approximately 2,300 residences, including suites, with mandatory collection for garbage and an opt-out program for food waste.

In 2018, the first year of food waste collection service, there were fifty-seven approvals for opting out, representing approximately 2.5%.

The 2019 renewals and new applications to opt-out are currently being reviewed and were not available to be included in this report.

To set the 2019 food waste collection rate, the Town of Gibsons factored in an opt-out up to one hundred, or approximately 4.35%. This results in the remaining 95.65% participants funding the entire cost.

Their opt-out program requires that owners complete a request form and then an annual renewal form in subsequent years. The request form requires a detailed description and photographic proof of diversion of all food waste and food soiled paper.

Copies of the Town of Gibsons' request form and annual renewal form are included as Attachments C and D.

Criteria for Opt-out

Should the Board proceed with an opt-out program for food waste collection, Staff propose the following criteria.

1. A plan identifying how all food waste is diverted must be provided by the home owner.
 - a. This includes a plan for diverting:
 - i. Fruits and vegetables, eggshells and similar.
 - ii. Grains including bread, pasta and similar.
 - iii. Meat products including bones and similar.
 - iv. Dairy products including cheese, yogurt and similar.
 - v. Food soiled paper including paper towels, cardboard, paper plates, tea bags and similar.
 - b. The diversion plan must be safe and environmentally sound. Burning will not be considered for opt-out.
 - c. The diversion plan must ensure that measures for pest, odour and public health are identified.
 - d. The diversion plan must be carried out on their property or by participating in a neighbourhood compost. Drop-off at depot will not be considered for opt-out.
2. Proof of diversion must be provided. Proof could be provided by photographs or on-site visits. The verification process would be completed by Staff.

Implications – Organizational

Currently, the SCRD provides curbside collection services to approximately 5,800 households across Electoral Areas B, D, E and F.

To offer an opt-out program, additional administration will be required.

Initially, additional staff time will be needed to prepare the opt-out communications material and advertise the opt-out request as well as to review the request forms, verify diversion and notify the applicants.

Since the volume of opt-out requests the SCRD may receive is unknown, the impacts to current staffing is unknown. Also, the staffing impacts would vary depending on the approach for verifying diversion (review of photographs or on-site visits) once an application is approved.

Additional organizational implications and concerns include the following:

- Opt-out is not considered in the SCRD's Solid Waste Management Plan.

- Opting out of organics creates inequitable service levels and is inconsistent with the existing garbage collection service that is mandatory:
 - Creates a financial inequity for the participating households.
 - Sets a precedent regarding requests to opt-out of garbage collection for those residents who minimally use the service or do not use the service.
- Opting out creates complications for utility billing processes including timing of opt-out and issuing utility bills.
- Concerns regarding billing processes and gap in service if a resident opts out and then sells their home.
- Limited opportunity to ensure food waste is not collected by the service provider if the resident opts out.
- Inconsistency between organics collection and other services listed in the SCRD bylaws as mandatory such as garbage collection, transit and recreation. In all cases residents are financially supporting this service, regardless of their actual use of this service.

Implications – Financial

The majority of costs incurred for a curbside collection service are the costs of a truck driving by and servicing each household and thus the service costs are a per household per collection cost.

Based on practices currently in place for the Town of Gibsons and discussions with haulers, it is anticipated that the service provider will not offer the SCRD a discounted rate for those households opting-out and instead the full cost of the services will have to be covered by the participating households.

Based on recent pricing, for the purpose of this report, a base rate of \$6.50 per weekly collection cost per household is being used. An example pricing structure for opt-out is provided in Table 1. It should be noted that the summary is for collection costs only and does not include the costs for composting that would follow a similar financial layout.

Table 1 – Example Summary of Collection Costs for Opt-out Program

	Total Weekly Contracted Costs	Participants	Weekly Collection Cost
No opt out	\$37,700	5,800	\$6.50
2.5% opt out - 145		5,655	\$6.67
5% opt out – 290		5,510	\$6.84
10% opt out - 580		5,220	\$7.22

There will also be additional annual advertising costs not previously incurred to promote the opt-out program.

As referenced previously in this report, there will be costs to administer an opt-out program.

Based on the organizational and financial implications, proceeding with an opt-out program for a food waste collection service is not recommended.

Timeline for next steps

A Board decision regarding an opt-out program for food waste is co-dependent on Board direction to proceed with a curbside collection of food waste service.

If the Board directs staff to proceed with curbside food waste collection with or without an opt-out option, as the work progresses, additional Board reports will be brought forward as necessary.

Communications Strategy

If an opt-out program is implemented, the program will be shared broadly through paid advertising, corporate newsletters, social media and the SCRD website.

STRATEGIC PLAN AND RELATED POLICIES

This report is in support of the SCRD's Solid Waste Management Plan's targets of 65%-69% diversion and residential organics collection is one of the SWMP's recycle initiatives.

CONCLUSION

A jurisdictional scan was conducted to review what opt-out programs existed in British Columbia for residential curbside collection programs. The results indicated that where curbside collection services existed, a mandatory service approach was implemented, with the Town of Gibsons and one other area being an exception.

There are several organizational and financial concerns with proceeding with an opt-out for food waste collection including inequity in service levels and increased costs for participating households.

Based on these concerns, proceeding with an opt-out program for food waste collection is not recommended.

Attachments:

Attachment A – Summary of BC Jurisdictions with Opt-out Programs

Attachment B – Regional District of Okanagan-Similkameen *Statement on the Regional Board's Exemptions Policy*

Attachment C – Town of Gibsons Opt-out Request Form

Attachment D – Town of Gibsons Opt-out Renewal Form

Reviewed by:			
Manager	X – R. Cooper	Finance	
GM		Legislative	
Interim CAO	X – A. Legault	Other	

Jurisdictional Scan of BC Regional Districts & Member Municipalities

Opt-out for Residential Curbside Collection Services – Single Family Dwellings

Date: May 2019

AVICC Regional Districts	Yes	No	Details
Alberni-Clayoquot		X	
Capital		X	
Central Coast	Does not provide curbside collection services to Electoral Areas		
Comox Valley		X ¹	
Cowichan Valley		X	
Mount Waddington		X	
Nanaimo		X	
North Coast		X	
qathet		X	
Strathcona		X	
Sunshine Coast	Town of Gibsons		Opt-out for organics ²
Other BC Regional Districts	Yes	No	Details
Fraser Valley	Sunshine Valley		Winter season opt-out for garbage ³
Metro Vancouver		X ⁴	
Okanagan- Similkameen		X	
North Okanagan		X ⁵	
Squamish-Lillooet		X ⁶	

¹ Village of Cumberland and City of Campbell River have opt-out for multi-family residences if equivalent services are provided from private sector. Town of Comox has opt-in for yard waste for multi-family residences.

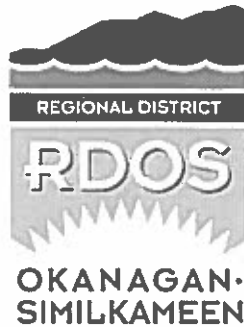
² Town of Gibsons provides garbage and organics collection.

³ Sunshine Valley receives garbage collection only.

⁴ Metro Vancouver and several member municipalities have opt-out for multi-family residences if equivalent services are provided from private sector.

⁵ RDNO does not provide any curbside collection services. Member municipalities do not have opt-out.

⁶ District of Squamish has opt-in for multi-family strata residences.



REGIONAL DISTRICT OKANAGAN-SIMILKAMEEN

Statement on the Regional Board's Exemptions Policy

Under Regional District of Okanagan-Similkameen "Solid Waste Collection and Drop-Off Service Regulation Bylaw No. 2191, 2003 "Every owner of residential premises in the service region to whom the Board does not grant an exclusion or exemption: must use the Solid Waste Collection and Drop-Off Service established by Bylaw No. 2190, 2003; and pay the rates and fees set out in Schedule 1".

For the purposes of this bylaw the definition of 'dwelling unit' is used to define what constitutes a residential premise. A dwelling unit is defined as one or more self-contained, habitable rooms with an exterior entrance, washroom and kitchen facility which is designed for use as a single housekeeping establishment.

To date, requests for exemptions have been very limited in number but several common themes have emerged as to why a resident does not wish to receive or pay for solid waste collection service. Reasons which are not considered adequate for exemption from the mandatory solid waste collection service are listed below and are subject to revision by the Regional Board.

**Reasons for Which the Regional Board
Will *Not* Grant a Waiver of Service**

1. Household generates little or no garbage.

It is definitely possible to reduce your waste through smart shopping, composting, and recycling. However, given our modern lifestyles, it seems there is always something to throw out that cannot be reused, such as toothpaste tubes, broken dishware, and expired light bulbs. Some items cannot be recycled locally and are part of the unavoidable packaging we buy with everyday products, such as peanut butter jars, plastic film wrap, and waxed milk cartons. These items need a proper method of disposal, which means they must somehow get to a local landfill. Without a mandatory service, the Regional District has no way to verify that this will happen.

Residents must also realize that most of the collection service costs are incurred by driving the collection route, not by stopping at a specific house to pick up a varying number of garbage containers. Furthermore, one must be aware of the social, legal and environmental benefits of the service such as tidier streets, less traffic, increased responsibility in the

management of household garbage, and achievement of waste reduction goals. These benefits outweigh concerns about variations in the level of use.

2. Residents are away from home for extended periods of time because of job requirements, vacation, alternate winter residence.

This service is similar to others such as sewer, library, and water which have fixed operating costs all year round. Most of the collection service costs are incurred by driving the garbage collection route, not by stopping at a specific house to pick up a varying number of garbage containers. Social, legal, and environmental benefits of the service such as tidier streets, less traffic, increased responsibility in the management of household garbage, and achievement of waste reduction goals outweigh concerns about variations in the level of use. Furthermore, occupancy of a dwelling cannot be monitored to ensure abuse of an exemption is not taking place.

3. Property is a recreational home and is only occupied during the summer.

This service is similar to others such as sewer, library, and water which have fixed operating costs all year round. Most of the collection service costs are incurred by driving the garbage collection route, not by stopping at a specific house to pick up a varying number of garbage containers. Social, legal, and environmental benefits of the service such as tidier streets, less traffic, increased responsibility in the management of household garbage, and achievement of waste reduction goals outweigh concerns about variations in the level of use. Furthermore, occupancy of a dwelling cannot be monitored to ensure abuse of an exemption is not taking place.

4. Resident prefers to pay private hauler and have a more flexible service.

Since the Regional District contractor will be driving past this home anyway, there is no need to increase truck traffic in a residential neighbourhood. The costs of the program can only be minimized and stabilized if everyone contributes. Private haulers are not working towards waste reduction goals and therefore have no interest in limiting or monitoring quantities of waste picked up. This will not be an affordable option due to market conditions resulting from a majority of households being on a separate collection contract.

5. Property is not easily accessible and owner does not want to bring garbage to a common area for collection.

Property owners must accept the consequences of choosing a particular location for their home and are solely responsible for making their property accessible. Higher levels of service may be available at some point in the future if a sufficient number of residential premises request such service. Residential premises requesting a higher level of service would likely pay an additional fee that the Contractor may charge. It is also nearly impossible to administer an exemption based on this reason and to verify that the objectives of the garbage collection program are being met. It will reduce vehicle traffic and air pollution even if residents drive their garbage to a public roadway instead of the entire distance to the landfill.

6. Resident prefers to go to the landfill directly

Taking garbage directly to the Landfill is allowable, but a tipping fee is paid at the site. This provides a monetary incentive to reduce garbage but does not meet other objectives of the garbage collection program, such as reducing vehicle traffic associated with garbage disposal

and providing a strong correlation between the cost of garbage disposal and the amount of waste being disposed. As well, there is no way of verifying that household garbage and recyclable materials not collected as part of the regular service is actually going to the landfill and not being disposed of illegally at a different location.

7. Resident prefers to take garbage to the dumpster at work.

Taking garbage to a commercial bin is unacceptable for many reasons. Most significantly, this method of disposal subverts the Regional District's ability to monitor and discourage the creation of garbage in favour of the goals of the Regional Solid Waste Management Plan. There is no direct cost incentive to reduce waste going into a commercial bin, unless you happen to be the owner or renter of that bin. Many business owners and hauling companies have resorted to locking up their bins in order to avoid paying for extra garbage placed there by residents who are not using the traditional residential garbage collection programs. Since the Regional District cannot possibly enforce or verify the legitimacy of residential waste in commercial bins, this means of garbage disposal cannot be considered as a reason for exemption.

8. Resident is on a fixed or low income.

Solid waste collection service is not different from any other mandatory municipal, regional and provincial services. Furthermore, regardless of income, waste is still being generated and must get to a local landfill. In many cases, the new service is significantly cheaper than previous options, such as a private hauling service or direct trips to the landfill.

9. Resident has a physical inability to get garbage to the curb.

In most cases the garbage leaves the house by the same manner in which it got inside - through the help of neighbours, friends, or relatives. Higher levels of service and special consideration may be available for extreme cases but there have been no requests for this type of special service to date.

10. Resident is burning or burying waste on property.

Burning or burying waste on private property is not an acceptable long-term solution for managing waste. Smoke from open burning has become a significant environmental problem in British Columbia, threatening health and reducing visibility. Under the Provincial Open Burning Smoke Control Regulation, domestic waste and plastics are a prohibited material for burning, even if a permit from the Ministry of Forests or the applicable Fire Department has been granted. Burying waste requires special approval from the Ministry of Water, Land and Air Protection.

REVISION OF THIS POLICY IS SUBJECT TO CONSIDERATION BY THE SOLID WASTE COMMITTEE AND ADOPTION OF ANY RECOMMENDATIONS OF THIS COMMITTEE BY THE REGIONAL BOARD. ALL FINAL DECISIONS REST WITH THE BOARD OF DIRECTORS FOR THE REGIONAL DISTRICT OF OKANAGAN-SIMILKAMEEN.

G:\Publicworks\SOLID WASTE MANAGEMENT\EXEMPTIONS\Exemptions Policy Final Updated May 2010.doc

Schedule A

Garbage and Organics Collection and Disposal Bylaw No. 1252-01, 2018

Request to Opt-Out of Organics Collection Service

Property Owner Name: _____ Utility Account #: _____

Property Address: _____ Main Dwelling ☐ or Suite ☐

Email Address: _____

Phone: _____

Effective April 1, 2018, the Town of Gibsons requires that all collectible organics produced by a dwelling, as those terms are defined in the Bylaw, be placed in organics containers for curbside collection.

Owners of dwellings who home compost 100% of their organic waste may apply to opt-out of the curbside collection program by outlining their plan for keeping all organics out of the landfill. Each application will be evaluated by Town staff and you will be notified in writing of the decision. If your plan is approved, the organics collection charge will not be levied for the current year.

To apply to opt-out of receiving organics collection:

- Step 1: Fill out this form and indicate how you will divert collectible organics from the landfill.
- Step 2: Provide proof of diversion - Provide a description and pictures of your composters.
(Note: to opt-out, composting the organics must be done in a safe and environmentally friendly way. ****Please review evaluation criteria below.****)
- Step 3: Return the completed application form and any photos by hand or mail to the Gibsons Town Hall (474 South Fletcher Road, Gibsons, BC V0N 1V0) or by email to: organicsopt-out@gibsons.ca. **Applications must be submitted by March 29, 2019** in order to avoid the organics collection charge for the year.

Food scraps

Describe how you will divert food scraps from the landfill. (Fruits, vegetables, peels, eggshells, bread, pasta, and similar.)

Food-soiled Paper and Cardboard

Describe how you will divert food-soiled paper and cardboard from the landfill. (Pizza boxes, tea bags, paper towels, paper plates, and similar.)

Meat scraps

Describe how you will divert meat scraps from the landfill. (Bones, meat, poultry, and similar.)

Dairy products

Describe how you will divert dairy products from the landfill. (Cheese, cottage cheese, feta cheese, yogurt, and similar.)

***List of collectible organics and evaluation criteria attached.**

By signing this form, the property owner agrees that via the methods indicated above, all food scraps, food-soiled paper and cardboard, meat scraps and dairy products will be diverted from the landfill.

Date: _____

Property Owner Signature

Office Use Only

Approved / Denied

Director of Finance or designate

List of Collectible Organics

Food scraps

- Fruits & vegetables
- Fruits and vegetable peels, seeds, and cores
- Rice
- Pasta
- Beans
- Eggshells
- Plate scrapings
- Tea bags
- Coffee grounds & filters
- Other table scraps
- Bread
- Compostable plastics
- Fish and shellfish

Food-soiled Paper and cardboard

- Paper towels
- Facial tissue (clean or used)
- Paper napkins
- Paper plates
- Paper table cloths
- Pizza boxes

Meat scraps

- Bones
- Meat
- Turkey
- Chicken
- Other poultry
- Meat trimmings

Dairy products

- Dairy and soy products (no liquids)

Evaluation criteria for organics composting

- Environmentally friendly composting methods – Owners must use environmentally friendly composting methods.
- Pest Control measures – Owners must have pest control measures in place.
- Odour control measures - Owners must have odour control measures in place.
- Public health measures – Public health measures must be evident.
- Composting containment methods – Owners must contain and cover composting adequately.

The intent of the opt-out plan is that the owners of property will properly compost their organics on their property or participate in a neighborhood compost.



TOWN OF GIBSONS

PO Box 340
474 South Fletcher Road
Gibsons BC | VON 1VO

T 604-886-2274

F 604-886-9735

info@gibsons.ca
www.gibsons.ca

Dear Resident,

This letter is to inform you that the Town of Gibsons has revised its Organics Collection "Opt Out" renewal process so that you do not have to complete the initial opt out application form each year.

Instead, we require that you sign and return the attached Opt Out Renewal Form, which states that:

- a. you still reside at the same address where you were initially approved to opt out of the organic curbside collection program, and
- b. you continue to home compost 100% of your organic waste, and that you use the same home composting methods described in your initial application.

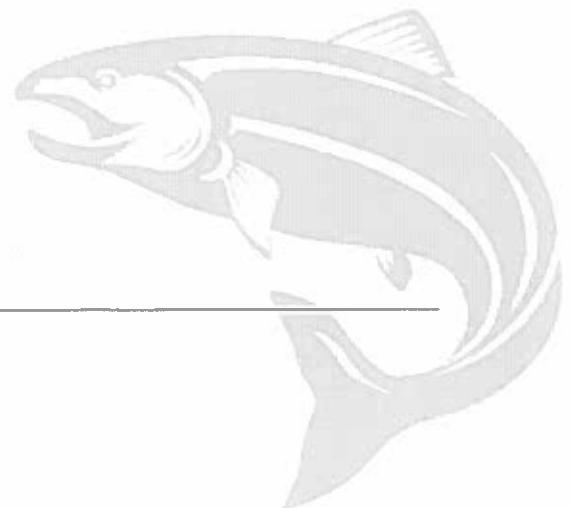
Completion of this renewal form will be required each year, for accounting purposes.

The deadline for submitting the renewal form to the Town is Friday, March 29, 2019.

We thank you for your understanding and support as this program continues to evolve, and invite you to contact us at 604.886.2274 with any questions or comments.

Sincerely,

David Douglas
Director of Finance





TOWN OF GIBSONS

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Gibsons BC | VON 1VO

T 604-886-2274

F 604-886-9735

info@gibsons.ca
www.gibsons.ca

Curbside Organics Collection – Opt Out Renewal Form

CONTACT INFORMATION

Owner Name: _____

Phone No: _____

Email address: _____

PROPERTY INFORMATION

Civic Address: _____

Utility Account Number: _____

DECLARATION

I declare that I reside at the above address, that I compost 100% of my organic waste, and that my methods of composting have not changed since I first applied to opt out of the organic curbside collection program.

Name (please print): _____

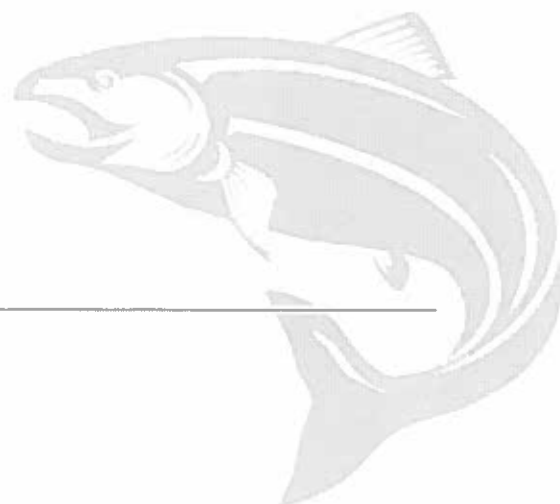
Owner Signature: _____

Date: _____

Personal Information on this form is collected in compliance with the Freedom of Information and Protection of Privacy Act (FOIPOP) and will be used only for the purposes of the Town of Gibsons' Curbside Organics Collection "Opt Out" Program. If you require further information regarding the FOIPOP Act, please contact the FOI Coordinator at 604.886.2274 or the Information Privacy Commissioner at 1.800.663.7867

TOWN OF GIBSONS

"Nature is our most valuable asset"



SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: REGIONAL DIVERSION – ANNUAL UPDATE

RECOMMENDATION(S)

THAT the report titled Regional Diversion – Annual Update be received.

BACKGROUND

The BC Ministry of Environment and Climate Change Strategy (MoE) requires all regional districts in BC to have a Solid Waste Management Plan (SWMP).

The SCRD's current SWMP was adopted by the Board in 2011 and outlines twenty-four initiatives that contribute to reaching targets by 2016. There are two targets: diversion and per capita disposal. The diversion target is 65%-69% and the per capita disposal target is 315kg – 279kg.

The purpose of this report is to provide an update on the SCRD's regional diversion from 2011 to 2018, the first seven years of the SCRD's SWMP.

DISCUSSION

Regional Diversion Data

The format of the diversion data is consistent with the method utilized in the SWMP and was applied to the period of 2011 to 2018. This data was utilized for calculating waste generation, diversion rates and per capita disposal.

The data is compiled from the Sechelt Landfill, Pender Harbour Transfer Station, the SCRD recycling depots and green waste program, Extended Producer Responsibility (EPR) programs and from the curbside collection services in the District of Sechelt, Sechelt Indian Government District, Sunshine Coast Regional District Electoral Areas B, D, E and F and the Town of Gibsons. A summary of the types of materials collected for diversion is included as Attachment A.

A summary of the diversion data is provided in Table 1.

Table 1: SCRD Regional Diversion Data 2011 to 2018

Disposal and Diversion (t)	2011	2012	2013	2014	2015	2016	2017	2018
Disposal								
Pender Harbour Landfill/Transfer Station	1,246	1,155	1,158	1,338	1,816	1,183	1,155	1,197
Sechelt Landfill	10,923	10,524	9,071	10,447	10,545	11,493	11,820	11,697
Total disposal	12,169	11,679	10,229	11,785	12,361	12,677	12,976	12,894
Diversion								
At Landfills	1,444	2,434	2,239	2,200	3,572	4,374	4,818	4,507
Green Waste	2,499	3191	3,437	3,672	3,415	4,343	4,061	4,209
Curbside Diversion	667	701	685	642	774	1,107	1,113	1,050
Depot Recycling	1,257	1,510	1,495	1,367	1,121	1,179	1,204	1,234
Extended Producer Responsibility	963	983	1,000	1,005	1,068	1,089	1,078	1,134*
C&D Estimate (as per SWMP)	4,255	4,255	4,255	4,255	4,255	4,255	4,255	4255
Total diversion	11,085	13,074	13,112	13,166	14,205	16,346	16,530	16,390
Total waste generation (disposal + diversion)	23,254	24,753	23,341	24,926	26,423	28,769	29,298	29,283
Diversion rate (diversion/waste generation)	48%	54%	56%	53%	53%	56%	56%	56%
Population**	28,918	29,222	29,270	29,512	29,390	29,243	29,390	31,977
Disposal per person per year (kg)	421	400	349	399	421	434	441	403

*Not all 2018 EPR data yet available; 2017 data utilized

**Population estimates based on BC Stats as of April 16, 2019

Waste Generation

Waste Generation is the sum of waste disposed and diverted. Disposal means buried in the Pender Harbour Landfill (until 2015) and at the Sechelt Landfill. Whereas diversion means waste diverted from the landfill and includes materials recycled, composted, reused or waste exported for burial elsewhere.

The trend from 2014 to 2017 had been an overall increase to the total waste generated. The primary factors contributing to this increase was considered to be a growing economy. However, in 2018, there was a small reduction in disposed materials at the Sechelt Landfill and a small overall reduction in diverted materials resulting in a small decrease in total waste generation in 2018 over 2017.

Diversion tonnages for green waste, recycling at depots and EPR increased from 2017 to 2018, whereas recycling at curbside and landfill diversion tonnages saw a decrease. Specifically, at the landfill and transfer station, less wood, and tires were received.

A summary of waste generation is provided in Figure 1.

Figure 1: Waste Generation



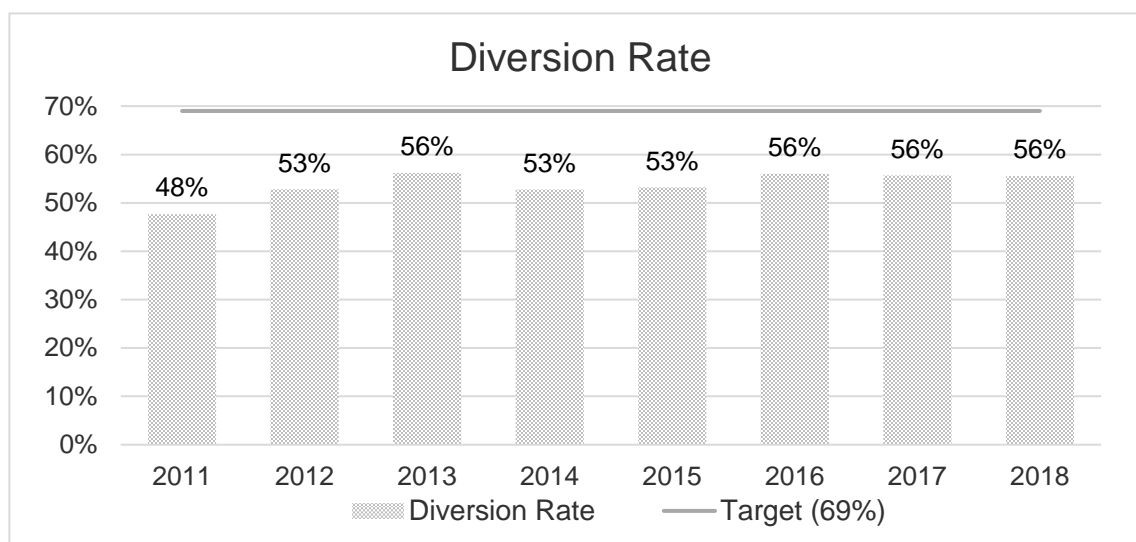
Diversion Rate

Diversion rate is calculated by dividing the diversion by the total waste generated.

2011 saw the lowest diversion rate at 48%. Since then, despite an overall increase in waste disposal, the diversion rate has remained fairly consistent with an improvement to 56% in 2016 and 2017. In 2018 there was a slight decrease in tonnages for disposed materials and a slight increase in diverted materials, which did not impact the overall diversion rate that remained at 56%. A summary of diversion is provided in Figure 2.

Based on 2018, a further 9%-13% diversion is required to achieve the 65%-69% target identified in the SCRD's SWMP. Implementation of the SCRD's Regional Organics Diversion Strategy, specifically curbside collection of food waste, is anticipated to contribute to an increase to diversion.

Figure 2: Diversion Rate



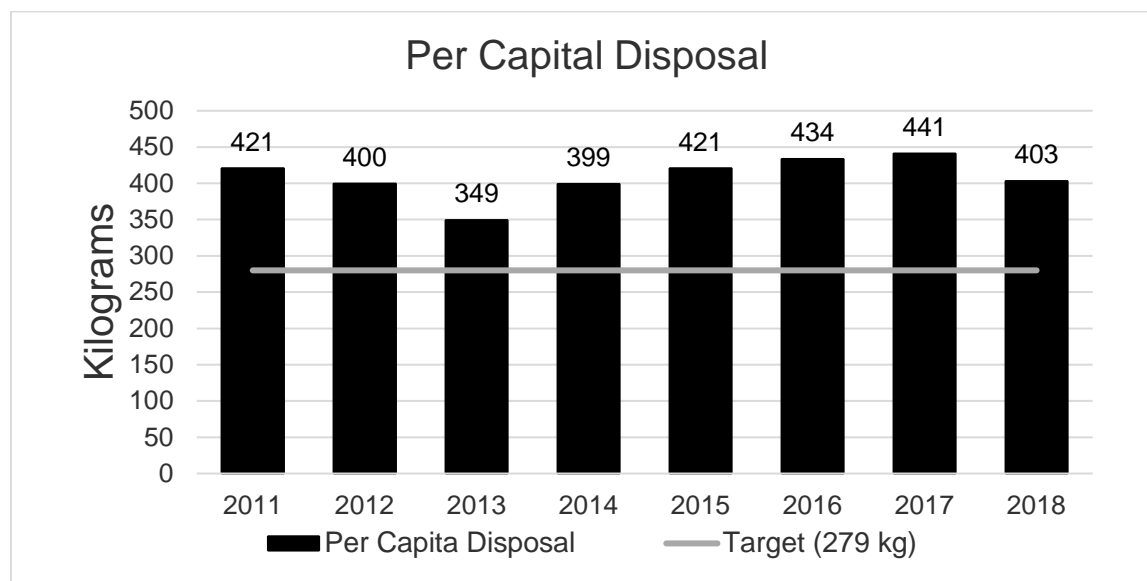
Per Capita Disposal

Per capita disposal is calculated by dividing the waste disposed by the population and is expressed in kilograms.

Disposal is typically related to economic trends. Since 2014, there has been a steady improvement to the economy with a corresponding increase to disposal. 2018 is the first year to have a decrease in the past five years. The 2018 per capita disposal was 403kg down from 441kg in 2017.

Based on 2018, a further 124 kg reduction is required to meet the 279 kg/pp/yr target in the SCRD's SWMP. Implementation of the SCRD's Regional Organics Diversion Strategy, specifically curbside collection of food waste, is anticipated to contribute to a reduction in per capita disposal.

Figure 3: Per Capita Disposal



Waste Disposal

Of the materials disposed, the top four materials are residential municipal solid waste (from curbside collection or drop-off), construction waste, commercial waste and durable goods such as couches and chairs. A summary of these materials by site is provided in Figures 4 and 5.

Other materials disposed include items such as materials containing asbestos¹ (Sechelt Landfill only), dead animals and share shed items that are not taken by residents.

Figure 4: Sechelt Landfill Top Materials Disposed

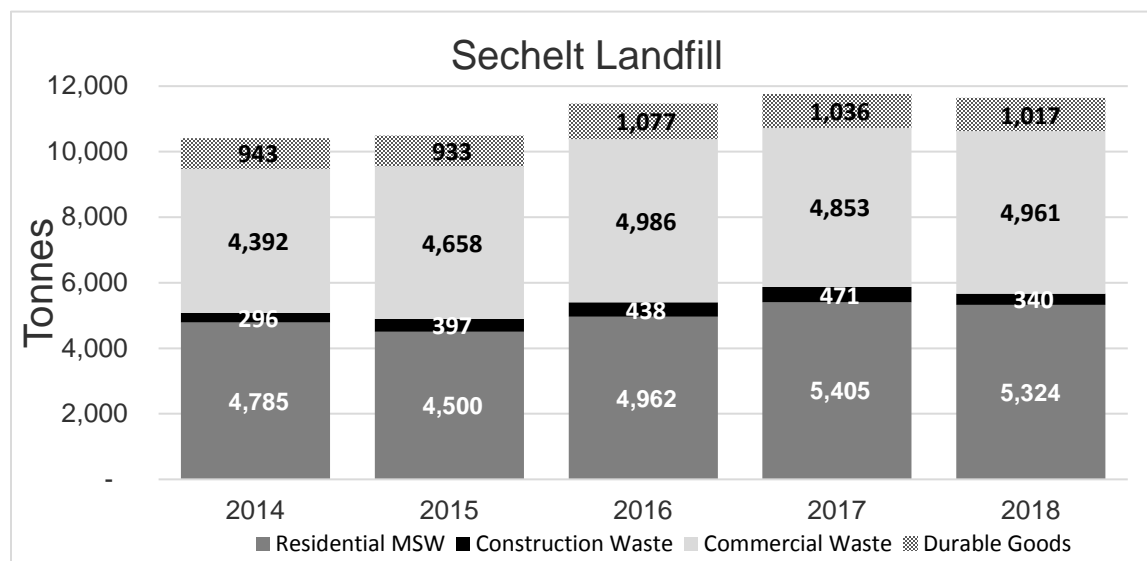
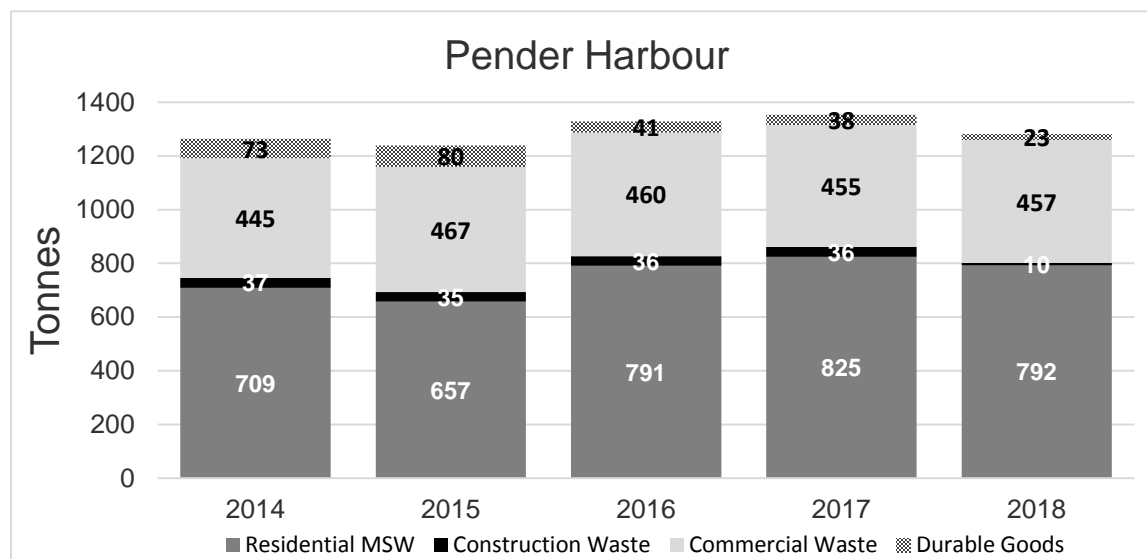


Figure 5: Pender Harbour Landfill/Transfer Station Top Materials Disposed



¹ Example materials that may contain asbestos and require testing include: ceiling tiles, cement panels, vinyl tiles. Drywall containing asbestos is not accepted for disposal at the Sechelt Landfill or Pender Harbour Transfer Station as per MoE requirement. More information about asbestos testing and disposal can be found at www.scrd.ca/asbestos

Residential Curbside Collection

Residential curbside collection services are provided by each of the local governments on the Sunshine Coast and the service type and frequency varies by jurisdiction.

Currently, the SCRD provides weekly garbage collection services for residents residing in a defined area of Electoral Areas B, D, E and F.

The District of Sechelt provides weekly garbage collection, bi-weekly recycling and has had a collection pilot for organics (food waste and green waste) for 500 homes in Davis Bay since 2014.

The Sechelt Indian Government District provides weekly garbage and weekly recycling collection.

The Town of Gibsons provides weekly food waste collection that launched in 2018 at which time garbage collection services were reduced to bi-weekly.

Since 2016, there has been a decrease in overall annual waste generation and an increase in diversion opportunities with the District of Sechelt organics (food waste and green waste) collection pilot which launched in 2015 and the Town of Gibsons food scraps collection which commenced in 2018.

Specifically for residential garbage collection, there has been a decrease in per household garbage disposal since 2016. This number is calculated by dividing total tonnage by the number of participants receiving the service for each jurisdiction and is presented in kilograms. A summary is provided in Figure 6. It should be noted that the residential garbage collection tonnage for the Sechelt Indian Government District includes their annual spring clean-up.

For organics and recycling collection, the District of Sechelt saw an increase in food organics and a decrease in recycling for 2018. The Sechelt Indian Government District also experienced a decrease in recycling in 2018 over 2017. The decrease in recycling is likely due to an increase in education and awareness about what is accepted curbside for recycling.

Since 2018 was the first partial year of food scraps collection in the Town of Gibsons, 2019 will represent the first full year of collection and tonnages will be available for comparison moving forward.

A summary by jurisdiction and service type is provided in Table 2. The data is presented in tonnes.

Figure 6: Per Household Disposal for Residential Curbside Garbage Collection

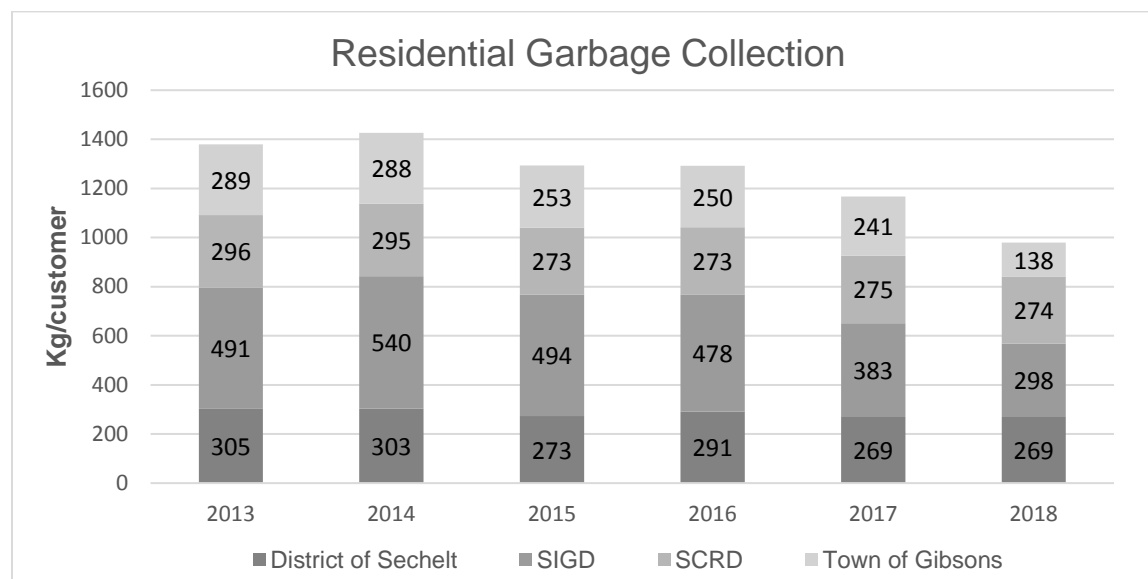


Table 2: Curbside Collection Tonnage

	2014	2015	2016	2017	2018
District of Sechelt					
Garbage	1258	1154	1252	1262	1294
Food Waste & Green Waste	0	143	225	218	260
Recycling	616	605	825	837	586
Sub-total	1874	1901	2301	2317	2140
Sechelt Indian Government District					
Garbage	191	174	169	142	114
Recycling	27	27	57	58	48
Sub-total	217	201	226	200	162
Sunshine Coast Regional District					
Garbage	1661	1546	1552	1587	1598
Sub-total	1661	1546	1552	1587	1598
Town of Gibsons					
Garbage	570	508	513	497	318
Food Waste					156
Sub-total	570	508	513	497	473
Annual Generation (tonnes)	4322	4156	4592	4601	4373

Landfill Capacity

Based on the 2018 post-closure liability letter prepared by XCG Consulting Ltd., the Sechelt Landfill estimated remaining site life is approximately 6.9 years, to late-2025 at status quo diversion programs and services and status quo per capita disposal.

By comparing the 2017 Annual Report Landfill life of 7.6 years to 2018, 0.7 years' worth of remaining site life was used over the course of one year.

Detailed information on landfill lifespan and options to extend the lifespan are outlined in a report included on the agenda for this Committee meeting.

Weekly residential food waste collection service considerations are outlined in a report included on the agenda for this Committee meeting.

An update on the implementation timeline for the Regional Organics Diversion strategy was provided at the April 18, 2019 Infrastructure Services Committee meeting.

Updates to Data

Over the coming months, the 2018 annual reports for extended producer responsibility programs will be released. Once the data is available, the regional diversion data will be updated. It is not expected to affect the overall diversion percentage.

Solid waste tonnage data will continue to be provided as part of the existing quarterly reports (green waste, depot recycling, garbage) and regional diversion rates will be provided annually.

Communications Strategy

A specific web page was created for diversion data, www.scrd.ca/diversion. The 2018 data will be added to the web page in June.

STRATEGIC PLAN AND RELATED POLICIES

This report is in support of the Solid Waste Management Plan.

CONCLUSION

The SCRCD collects disposal and diversion data and calculates annual waste generation, diversion and per capita disposal rates.

There has been an increasing trend in disposal, diversion and waste generation from 2014 to 2017. The increase is likely attributable to a steady improvement to the economy. However, in 2018, for the first time in the past five years, there was a slight decrease in total waste disposed and generated. There was also a decrease in per capita disposal to 403kg, the lowest since 2014. Despite the changes, there was no change to the diversion rate in 2018 and it remained at 56%, which is the same diversion rate since 2016.

For curbside collection services, there has been a decrease in overall generation, a decrease in per household garbage and an increase in diversion opportunities with the addition of the District of Sechelt's organics (food waste and green waste) pilot and the Town of Gibsons food waste collection service.

Further diversion and waste reduction is required in order to meet the targets identified in the SCRCD's SWMP. Specifically, a 9%-13% increase to diversion and a reduction of waste disposed by 155kg/pp/yr is required to meet the targets. Implementation of the Regional Organics Diversion Strategy is expected to contribute to an increase in diversion and a decrease in waste disposed.

There are reports on weekly curbside collection of food waste and options to extend the lifespan of the existing landfill as part of the May 16, 2019 Infrastructure Services Committee agenda.

Attachments:

Attachment A: Diversion Materials Summary

Reviewed by:			
Manager	X – R. Cooper	Finance	
GM		Legislative	
Interim CAO	X – A. Legault	Other	X – A. Patrao

Diverted Materials Summary

Service	Material Type Diverted
SCRD Landfill & Transfer Station	
Sechelt Landfill and Pender Harbour Transfer Station	Asphalt Roofing
	Cardboard
	Glass
	Green Waste*
	Gypsum
	Mattresses
	Metal
	Reuse – Share Shed
	Tires
	Toilets
*Green waste is also collected at Salish Soils and Town of Gibsons Public Works Yard	Wood
Sechelt Landfill only	Beach Styrofoam
	Paint (ProductCare)
Curbside Collection	
District of Sechelt	Food waste, green waste, recycling ¹
Sechelt Indian Government District	Recycling
Town of Gibsons	Food Waste
SCRD	Not applicable
SCRD Recycling Depots	
Gibsons Recycling, GRIPS, Salish Soils	As per Recycle BC - containers (plastic, metal paper, glass), paper and cardboard, Styrofoam food containers and packing blocks, plastic bags and overwrap and other flexible plastic packaging
Gibsons Recycling Depots	Books
Extended Producer Responsibility Programs	
Electrorecycle – small appliances e.g. toaster, microwave	
Encorp – beverage containers e.g. juice box, pop cans	
EPRA – electronics e.g. tv, computers	
ProductCare – paint	

¹ Curbside collection for recycling includes: containers (plastic, metal), paper and cardboard. The remaining materials accepted for recycling must be taken to a depot as per Recycle BC.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Arun Kumar, Solid Waste Operations Manager

SUBJECT: UPDATED LIFESPAN AND OPTIONS TO EXTEND THE LIFESPAN OF EXISTING LANDFILL

RECOMMENDATION(S)

THAT the report titled Updated Lifespan and Options to Extend the Lifespan of Existing Landfill be received.

BACKGROUND

On February 20, 2019, the Infrastructure Services Committee received a report on the Solid Waste Workshop Summary. At its February 28, 2019 meeting, the Board adopted the following recommendation:

061/19 **Recommendation No. 2** *Solid Waste Workshop Summary (in Part)*

THAT the report titled Solid Waste Workshop Summary be received;

AND THAT a report be provided to the Committee in Q2 2019 with respect to the following:

- Process for siting, sizing and provincial approval of a new landfill;
- Options to extend the lifespan of the existing landfill.

The purpose of this report is to present the Committee with options to extend the lifespan of the existing landfill.

DISCUSSION

Landfill Lifespan Overview

When a landfill is designed, the total air space available for burying waste is determined. As waste material is being placed in a landfill, it takes up the available air space.

An estimated lifespan is determined based on a number of factors such as estimated annual tonnage of waste expected to be buried annually and population projections. These factors are then compared with the total available airspace and an estimated lifespan is determined. As such, as waste is buried, air space decreases, and thus, the lifespan of the landfill decreases.

The total amount of airspace available and thus the lifespan, for the Sechelt Landfill is outlined in the SCRD's Design, Operations and Closure Plan (DOCP).

The DOCP is a plan approved by the Ministry of Environment and Climate Change Strategy (MOE), through which Sechelt Landfill's Operating Certificate is issued. The Operating Certificate identifies the schedule for updating the DOCP and other reporting requirements.

The Sechelt Landfill's first DOCP was prepared by Dayton & Knight in December 1995 and stated that the lifespan was estimated to be 20 years, closing in 2016.

The most recent DOCP for the Sechelt Landfill was prepared by XCG Consulting Ltd. in December 2017 and stated the expected lifespan to be until 2025. A staff report summarizing some of the key findings from the 2017 DOCP is included as Attachment A.

Remaining Lifespan

In order to provide an annual update to lifespan, a post-closure liability letter is prepared annually by the SCRD's engineering consultants. The post-closure liability letter identifies the estimated volume of remaining air space, the estimated number of years remaining and financial considerations.

The 2018 post-closure liability letter (Attachment B), prepared by XCG Consulting Ltd., states that there is 6.9 years of site life remaining as of December 2018. This would take the landfill to late 2025. Compared to December 2017, when the lifespan was 7.6 years, the Sechelt Landfill used only 0.7 years of site life in one year. This was due to over filling an area past the DOCP protocol and settling of the landfill itself.

The 6.9 years, to late 2025, was determined based on 143,800 cubic meters of air space being available. The air space projection is based on two assumptions: fixed per capita waste disposal rate of 0.43 tonnes per person per year and a minimum of 0.66 tonnes per cubic meter waste density. The actual per capita disposal rate for 2018 was 0.40 ton per person and the achieved density rate was 0.63 ton per cubic meter waste density.

Per capita disposal rate is calculated based on total tonnage buried divided by the population. Population projections are based on data provided by BC Stats. The projections are incorporated into the projections for air space and lifespan. If the Sunshine Coast experiences growth higher than projected, the current landfill lifespan projection will be reduced as more waste is generated and thus more air space is consumed and lifespan is reduced. Another factor influencing airspace consumption is landfill waste density. Landfill waste density refers the amount of waste that is placed in a given airspace. The higher the density, the higher the amount of waste that can be placed in the same air space. Conversely, the lower the density, the lower the amount of waste that can be placed in the same air space.

Options to Extend Lifespan

All options explored to extend the lifespan of the Sechelt Landfill have been compared against three fields of view: suitability, cost and the likelihood to increase landfill life. It is worth noting that the actual handling, placing, compacting, and covering of the waste at Sechelt Landfill is completed through a Contactor.

Option 1 – Increase Density

Increasing density looks at placing more material in the same air space, thereby conserving air space which leads to a longer landfill life. Overall, a higher density can be accomplished through the following methods:

Equipment Size

The size of the equipment doing the physical compaction of the waste plays a major part in the achieved density. This component of our landfill operations is accomplished through a contractor. The contractor is using an adequate size machine to achieve the required minimum density, as outlined in the contract and DOCP. Utilizing a bigger machine may increase density however, it cannot be explored until the next operations contract procurement process estimated to take place in 2022. Therefore, changing the size of equipment is not being considered at this time.

Material Shredding

Material shredding is the process of grinding up all waste before it is landfilled. Typically a 30% increase in density can be expected through this process. Although in theory it could be introduced at the Sechelt landfill, a barrier to implementation is that it is not incorporated into the current operations contract. Furthermore, there are other items to consider such as cost to purchase and maintain, operating considerations, and staff training. A rough estimate would be in the \$500,000 to \$1,000,000 range to purchase, deliver and setup a new machine. Therefore, material shredding is not being considered at this time.

Waste Baler

A Waste Baler is a machine used to compact the waste within the machine. The waste is then removed as a compacted bale and placed in the landfill. Typically 33% to 60% increase in density can occur through this process. A barrier to implementation is that it is not incorporated into the current operations contract. Baling also poses a significant up-front capital cost and is expensive to own and operate; however, it does have long-term use potential for the SCRD. A rough estimate would be in the \$500,000 to \$1,000,000 range to purchase, deliver and setup a new machine. Baling waste is not considered at this time, however, it could be explored further when exploring options for waste disposal past the current landfill life.

Cover Material

Cover material usage rate has a substantial impact on landfill life. As stated in the 2018 post closure liability letter, SCRD significantly exceeded the amount of cover material required for the operations at the Sechelt landfill for at least the last two years. In that period, the amount of excess cover material has resulted in several month reduction in landfill life. In early 2018, staff implemented corrective measures to reduce the use of soil as cover material and reuse more materials like chipped wood waste as cover material.

Option 2 - Vertical Expansion

Vertical expansion refers to building the existing landfill higher than its current design. Similar to the height of a pyramid, the height of the landfill is determined by the size of the base and the side slopes.

The Sechelt Landfill does not allow for vertical expansion because the current final height is at the maximum given the base and side slopes. Furthermore, the final height of the Sechelt Landfill is approved by the MOE and is set as per the DOCP. For these reasons, a vertical expansion is not an option.

Option 3 - Horizontal Expansion

Horizontal expansion refers to the expansion of the horizontal boundaries of a landfill. Boundary requirements are set by the MOE. The approved design of the Sechelt Landfill does not leave any space for a horizontal expansion. In addition, the process for approval of a horizontal expansion is the same process as siting a new landfill. For these reasons, a horizontal expansion is not an option.

Option 4 - Reinforced Retaining Wall

Though this option is not common in landfill applications, it can be used effectively to gain valuable air space. Reinforced retaining walls provide an opportunity to build steeper side slopes, thereby providing opportunities to fill waste to a steeper angle. Utilizing a reinforced retaining wall at the Sechelt landfill is no longer practical as the majority of the side slopes have already been built. Furthermore, the DOCP did not include this form of construction. Therefore, this option is not being considered.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

As of December 2018, the Sechelt Landfill has 6.9 years of lifespan remaining, equating to late 2025 of lifespan.

Many options for extending the lifespan were considered. Additional measures have recently been taken to reduce the use of soil as cover material. Staff have not been able to identify other measures that are feasible to be implemented in a timely manner to substantially extend the lifespan of the Sechelt landfill.

Attachments:

Attachment A - Sechelt Landfill Closure Update – February 22, 2018

Attachment B - 2018 Sechelt Liability Letter

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

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Corporate and Administrative Services Committee – February 22, 2018

AUTHOR: Tina Perreault, General Manager, Corporate Services / Chief Financial Officer

SUBJECT: SECHELT LANDFILL CLOSURE UPDATE

RECOMMENDATION(S)

THAT the report titled Sechelt Landfill Closure Update be received;

AND THAT the shortfall for the Sechelt Landfill Closure Liability be funded by an incremental annual taxation increase of \$125,000 per year for four years (2018-2021).

BACKGROUND

The BC Ministry of Environment (MoE) requires an update to the landfill design, operation and closure plan (DOCP) every five years. The Sechelt Landfill's Operational Certificate issued by the MoE stipulates that an updated DOCP be completed and submitted by December 31, 2017. The plan was completed by XCG Consulting Ltd., the Sunshine Coast Regional District's (SCRD) contractor for landfill engineering, and submitted to the MoE on December 22, 2017.

The purpose of this report is to inform the Committee with respect to some of the findings and implications as a result of this project.

DISCUSSION

The level of effort required to complete an updated DOCP is much higher than annual reporting requirements to MoE. Specifically, the update results in a more precise calculation of remaining airspace, and resulting landfill site life.

The key objectives of the plan is¹:

- *Provide an updated fill plan which addresses the need to reduce leachate generation, optimize surface water controls and optimize available landfill airspace;*
- *Provide a closure plan including implementing a low permeability cover system;*
- *Provide a post-closure plan for the landfill; and*
- *Reduce long-term environmental impacts associated with the landfill area.*

¹ DESIGN, OPERATIONS, AND CLOSURE PLAN, SECHELT LANDFILL, SECHELT, BRITISH COLUMBIA, XCG Environmental Engineers & Scientists, December 20, 2017

Prior to the completion of the updated DOCP, the anticipated closure date for the Sechelt Landfill was 2027 or ten years at current diversion programs and services. *Based upon population growth projections and fill rate assumptions presented herein, it is estimated that the Site will reach design capacity in 2025².* It should be noted that the anticipated closure date is based on status quo diversion programs and services. Actual closure may vary and is also reviewed annually by XCG as a condition of the SCRD's external financial audit.

The two major factors that resulted in the reduction of two years in site life are that one of the slopes along the closed section of the landfill is not quite filled to the 3H:1V slope as planned and that waste was not filled directly up to the contact water pond. This is the result of a variety of reasons including waste settling along the slope and operational direction to leave access adjacent to the contact water pond.

Staff are investigating engineering options to increase capacity as a result of the findings. The SCRD Board also provided direction as part of the 2017 Solid Waste workshop to conduct a preliminary investigation for a new landfill site. Both these items will come forward for consideration at a future Committee meeting.

Financial Implications

The change in anticipated closure date from ten to eight years has a material financial impact to the SCRD's landfill closure and post closure liability. As at the end of 2016, the Sechelt Landfill closure liability was estimated at over \$4.8 million. The revised estimate as at December 31, 2017 is \$5,771,361. Since the DOCP was conducted using 2016 data, the 2017 capacity used is in process of being verified from XCG and is subject to change. An update will be provided at the April 26, 2018 Corporate and Administrative Services Committee during the course of presenting the SCRD's 2017 Financial Statements.

Currently, \$300,000 per year is contributed to the Sechelt Landfill Closure Reserves from Taxation. Based on the updated closure date of 2025, if status quo level of contributions continue, there will be an estimated shortfall of \$3.5 million at Final Closure. Even if the closure was delayed to 2027 or beyond with an increase in capacity from implementing engineering options and additional diversion programs, a shortfall in closure contributions would still exist.

A summary of closure reserve contributions at status quo levels is provided in Table 1.

Table 1 – Summary of Sechelt Landfill Closure Reserves at Status Quo Contributions

	2018	2019	2020	2021	2022	2023	2024	2025
Item	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Opening Balance in reserve	810,445	1,127,870	1,452,119	1,783,339	(296,998)	(3,383)	296,544	602,920
Investment Income @ 2.15%	17,425	24,249	31,221	38,342	(6,385)	(73)	6,376	12,963
Annual Contribution	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Closure Costs	-	-	-	(2,418,679)	-	-	-	(4,435,947)
Closing Balance in Reserve	1,127,870	1,452,119	1,783,339	(296,998)	(3,383)	296,544	602,920	(3,520,065)

² DESIGN, OPERATIONS, AND CLOSURE PLAN, SECHELT LANDFILL, SECHELT, BRITISH COLUMBIA, XCG
Environmental Engineers & Scientists, December 20, 2017

As noted in the Table 1, in 2021 a progressive closure phase (Stage H) is required for a projected cost of \$2.4 million (future value) with final closure to occur in 2025. These are noted as the large expenditures in Table 1, however, several smaller maintenance and closure projects are required through this duration (Stage F through Stage K to Final Closure) which may also require funding.

Post closure costs are estimated at \$45,000 per year and the assumption is that it will be funded after the Sechelt Landfill is closed through regular Solid Waste Operations. Current MoE regulations require post closure maintenance and monitoring for a minimum of 30 years, but could be required as much as 100 years.

Options for Funding the Shortfall

Options to fund all or part of the closure reserve shortfall include increasing taxation, raising tipping fees, or imposing a parcel tax. Operating reserves have been committed to past or current projects and funds are not sufficient to allow for this as an option. Zero Waste Operating Reserves are also committed or planned for current and future diversion initiatives.

A summary of options is presented below.

Option 1 – Increase annual taxation incrementally by \$125,000 per year for four years

Increasing taxation by \$125,000 per year for four consecutive years (2018-2021) would fund the estimated closure costs by the projected closure year of 2025 and fund Stage H closure costs required in 2021, leaving a small potential shortfall. This also depends on the annual review of actual air-space available, interest earned on investments and external financial conditions such as inflation.

A \$125,000 increase is equivalent to a 0.69% overall tax increase in 2018, or \$6.03 for an average residential property. The cumulative increase after four years would vary based on property assessment and growth, and is estimated at 2.2% in overall taxation or \$19.28 for an average residential property based on current tax rates.

This option is recommended as this approach balances the requirement to meet the SCRD's future financial liability while allowing time for new fees and charges to take effect, explore engineering options to increase capacity, as well as effects of increased diversion strategies.

Table 2 – Summary of Sechelt Landfill Closure Reserves with Increased Contributions

	2018	2019	2020	2021	2022	2023	2024	2025
Item	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Opening Balance in reserve	810,445	1,252,870	1,829,806	2,544,147	979,167	1,800,219	2,638,924	3,495,661
Investment Income @ 2.15%	17,425	26,937	39,341	54,699	21,052	38,705	56,737	75,157
Annual Contribution	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Additional Contribution	125,000	250,000	375,000	500,000	500,000	500,000	500,000	500,000
Closure Costs	-	-	-	(2,419,679)	-	-	-	(4,435,947)
Closing Balance in Reserve	1,252,870	1,829,806	2,544,147	979,167	1,800,219	2,638,924	3,495,661	(65,129)

Option 2 – Fully Fund the Shortfall and Tax an additional \$400,000 from 2018-2025

Increasing annual taxation by \$400,000 in 2018, for a total of \$700,000 per year may result in a small shortfall at final closure in 2025 and would fund Stage H closure costs required in 2021, as summarized in Table 3.

This increase is equivalent to a 2.2% tax increase overall, or \$19.28 for an average residential property.

This option is not recommended as it would have a significant impact on the SCRD taxation as a whole in 2018 and doesn't allow for impacts of items listed in Option 1 to take effect.

Table 3 – Summary of Sechelt Landfill Closure Reserves with Increased Contributions

	2018	2019	2020	2021	2022	2023	2024	2025
Item	Amount	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Opening Balance in reserve	810,445	1,527,870	2,260,719	3,009,324	1,354,346	2,083,464	2,828,259	3,589,066
Investment Income @ 2.15%	17,425	32,849	48,605	64,700	29,118	44,794	60,808	77,165
Annual Contribution	300,000	300,000	300,000	300,000	300,000	300,000	300,000	300,000
Additional Contribution	400,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
Closure Costs	-	-	-	(2,419,679)	-	-	-	(4,435,947)
Closing Balance in Reserve	1,527,870	2,260,719	3,009,324	1,354,346	2,083,464	2,828,259	3,589,066	(69,716)

Option 3 – Tipping fee surcharge

A \$5 per tonne surcharge on tipping fees for municipal solid waste (MSW) would generate approximately \$50,000 in additional revenue annually based on 2017 tonnage. This could be implemented in conjunction with a taxation increase to cover the required contributions.

This option would require an amendment to the Solid Waste Fee Bylaw, which could be included as part of the Tipping Fee Review. Any revenues for this option would not fully materialize until 2019 and would be variable based on tonnage. Since the goal of the Solid Waste Management Plan is to reduce MSW, this source of revenue is projected to decrease over time, is variable based on tonnage and is not a sustainable source of funding which could further reduce funding the liability shortfall. The SCRD already has one of the highest tipping fees for municipal solid waste in the Province so this option is not recommended as this time.

Option 4 – Impose a parcel tax

Bylaw 1019 allows for the imposition of a parcel tax as a method of cost recovery for the service. A high level estimate indicates that a flat rate parcel tax of \$25-\$30 would be required to fund the annual contribution shortfall of \$400,000. The earliest a parcel tax could be imposed would be for 2019 subject to adoption of a parcel tax bylaw and approval of the parcel tax roll. Staff do not recommend proceeding with a parcel tax as it is similar to Option #2.

Timeline for next steps

Based on Board direction, staff will incorporate impacts into the Round 2-2018-2022 Financial Plan in preparation for adoption of Budget on March 22, 2018.

STRATEGIC PLAN AND RELATED POLICIES

This report is in support of the Strategic Priority of Ensure Fiscal Sustainability as well as the Solid Waste Management Plan.

CONCLUSION

An update to the Sechelt Landfill DOCP was recently completed by XCG Consulting Ltd. and submitted to the BC MoE.

During the DOCP update, the airspace remaining and site life was determined to be eight years with an anticipated closure date of 2025 at status quo diversion programs and services.

Existing annual contributions to the landfill closure reserve of \$300,000 are not sufficient to cover the anticipated closure costs.

Options for consideration to increase the contribution to the landfill closure reserve are taxation, raising the tipping fee for municipal solid waste, or implementing a parcel tax.

Staff recommend increasing taxation by \$125,000 per year for four consecutive years (2018-2021) which would fully fund the estimated closure costs by the projected closure year of 2025 and fund Stage H closure costs required in 2021. This option balances the requirement to meet SCRD's future financial liability while allowing time for new fees and charges to take effect, explore engineering options to increase capacity, as well as effects of increased diversion strategies.

Based on Board direction, staff will incorporate impacts into the Round 2-2018-2022 Financial Plan in preparation for adoption of Budget on March 22, 2018.

Reviewed by:			
Manager	X-R. Cooper	CFO/Finance	
GM		Legislative	
CAO	X-J. Loveys	Other	X-B. Wing



XCG CONSULTING LIMITED

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10455 84th Avenue, Edmonton, Alberta, Canada T6E 2H3

March 19, 2019

XCG File No. 4-2111-01-62

Mr. Arun Kumar
 Manager, Solid Waste Operations
 Sunshine Coast Regional District
 1975 Field Road
 Sechelt, British Columbia V0N 3A1

RECEIVED**MAR 19 2019****S.C.R.D.**

Re: 2018 Year End Closure/Post-Closure Liability Letter, Sechelt Landfill

Dear Mr. Kumar:

XCG Consulting Limited (XCG) is pleased to present the following letter summarizing the closure/post-closure liability associated with the Sechelt Landfill (Site). The liability assessment, presented herein, is based upon the Design, Operations, and Closure Plan for the Site (Plan) (XCG, December 2017). The objective of this letter is to provide an update of the remaining airspace and site life prior to closure, and to provide a summary of costs associated with closure based upon the Plan and landfill footprint.

2018 Airspace Consumed

The 2018 airspace consumption estimate is based upon a comparison of the December 5, 2017 and the December 5, 2018 contours from topographic surveys completed from aerial photographs, generated by Aero Geometrics Ltd. The existing conditions for the Site as of December 5, 2018 are illustrated on the attached Figure 1.

Based upon a comparison of the 2018 and 2017 contours, a total airspace consumption of 20,800 cubic metres was calculated. This consumed airspace is composed of new waste and daily cover.

XCG understands that approximately 13,191 tonnes of waste was landfilled at the Site in 2018, based on weigh scale records. The resulting apparent waste density is calculated to be 0.63 tonnes per cubic metre (13,191 tonnes / 20,800 cubic metres). The apparent waste density is not a true density, but is a relationship that represents the mass of waste that can be disposed in each cubic metre of landfill air space. The apparent waste density is based on the comparison of the waste tonnage landfilled versus the air space consumed (soil used as cover is excluded from the tonnage).

Efforts have been made to increase the apparent waste density by increasing compaction and minimizing daily cover. The use of steel plates as alternative daily cover was implemented as of February 2018 to further extend the site life. Approximately 7,776 cubic metres and 8,712 cubic metres of cover material were used in 2017 and 2018, respectively, showing an increase in the amount of cover material used. The 2018 daily cover estimate of 3,944 cubic metres from the Table 6.3 of the Plan was greatly exceeded, resulting in the unnecessary consumption of valuable airspace. Further efforts should be made to reduce the use of soil cover to the amounts predicted in the Plan.



Site Life

Based on the final contours presented in the Plan (Figure 2), the total airspace available from December 2018 through to final contours is approximately 143,800 cubic metres of airspace.

It is noted that in the 2017 Liability Letter the remaining total airspace was calculated to be 158,300 cubic metres, resulting in a difference of 14,500 cubic metres in 2018. However, the airspace consumed between the 2017 and 2018 surveys was calculated to be 20,800 cubic metres, resulting in a discrepancy of 6,300 cubic metres. This difference is due to the settlement of the waste since the 2017 survey (6,051 cubic metres) and the filling of some outer slopes to higher grades than anticipated final contours (249 cubic metres).

The remaining airspace for landfilling within the current limit of waste (existing footprint) is based on the following assumptions:

- A per capita waste disposal (2018) calculated to be 0.444 per year; and
- An apparent waste density of 0.66 tonnes per cubic metre as per the Plan.

Table 1 presents the projected waste tonnages for the Site. Based upon the assumptions above, the estimated remaining site life is approximately 6.9 years as of December 2018, to late-2025 (Table 2). As of December 2018, the landfill is at a combination of Stage G and Stage H of the development plan outlined in the Plan. The estimated life for each stage is outlined in Table 2. Implementation of the SCRD Regional Organics Diversion Strategy may increase diversion which could also help extend the site life.

COSTS

The closure cost for the remaining site life of the landfill, based on the development sequence presented in the Plan, is estimated to be approximately \$5,327,373 (including contractor administration and execution requirements, and engineering). This total cost includes the installation of the final cover. A detailed cost breakdown for the above items is presented in Tables 3 through 5.

Annual post-closure monitoring and maintenance costs are estimated to be \$25,000 and \$20,750, respectively.

CLOSING

Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Yours very truly,

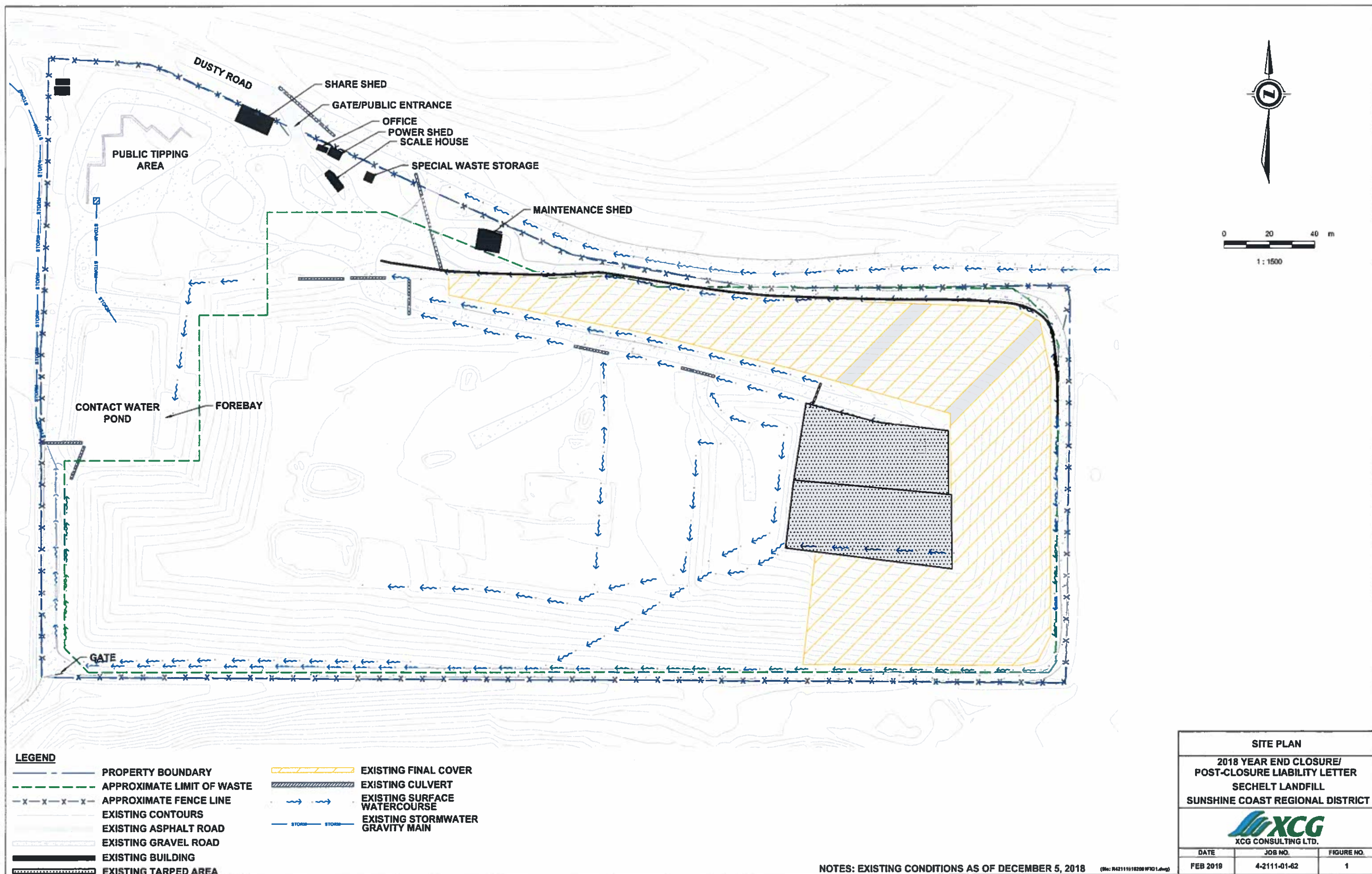
XCG CONSULTING LIMITED

A handwritten signature in cursive script, appearing to read 'Chloe Stone'.

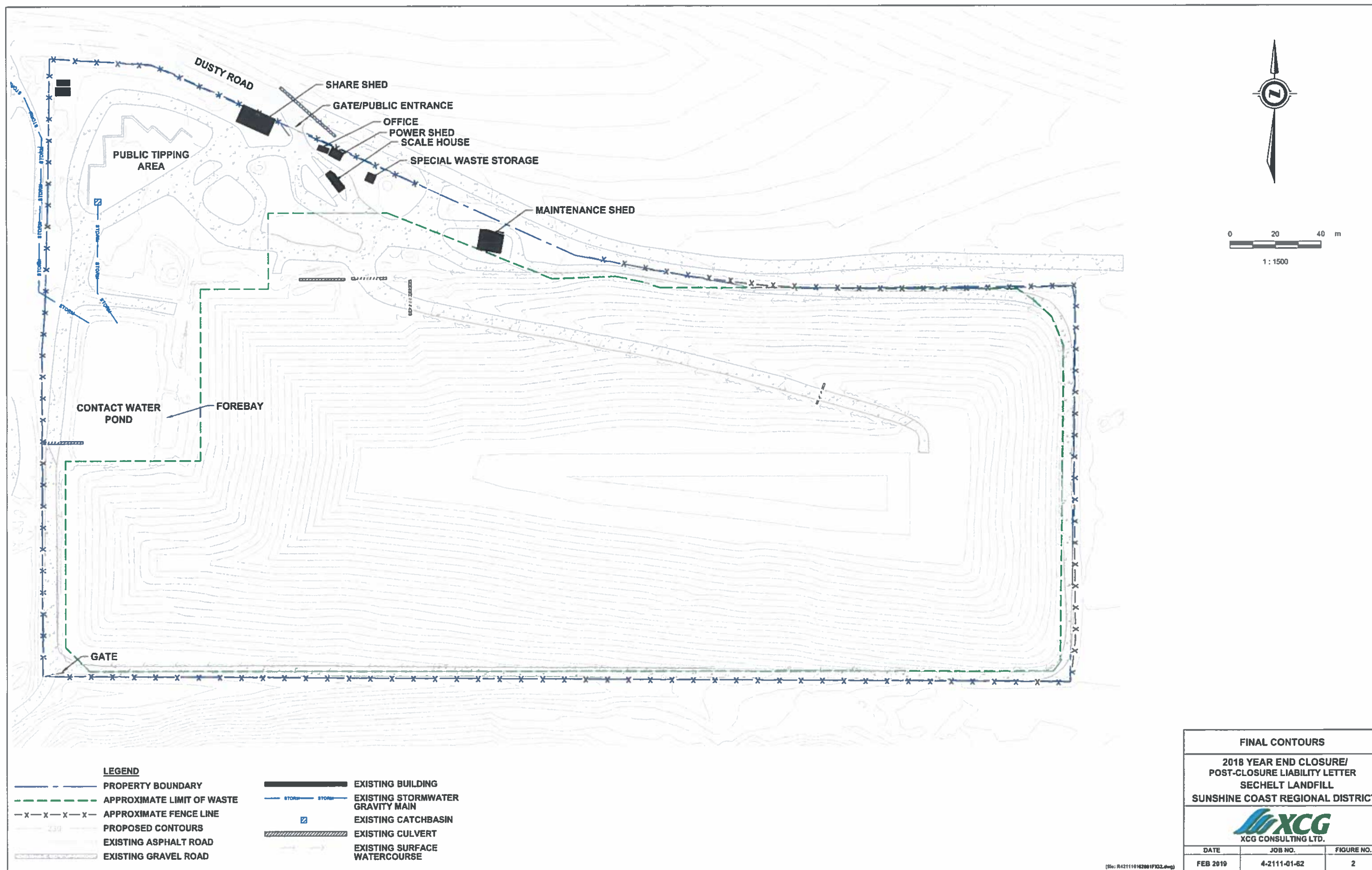
Chloe Stone, B.Sc., P.Eng.
Project Manager

Attachments: Figures 1 to 2
Tables 1 to 5

FIGURES



SITE PLAN		
2018 YEAR END CLOSURE/ POST-CLOSURE LIABILITY LETTER		
SECHLT LANDFILL		
SUNSHINE COAST REGIONAL DISTRICT		
 XCG CONSULTING LTD.		
DATE	JOB NO.	FIGURE NO.
FEB 2019	4-2111-01-62	1



TABLES

Table 1 Waste Data

Year	SCRD Population ¹	Tonnes per Person per Year ²	Tonnes of Waste	Total Waste Landfilled (tonnes)	Total Airspace Consumed (m ³) ³
Dec 6 to 31, 2018	29,696	0.444	939	939	1,423
2019	30,041	0.444	13,338	14,277	21,632
2020	30,390	0.444	13,493	27,771	42,077
2021	30,741	0.444	13,649	41,420	62,757
2022	31,094	0.444	13,806	55,225	83,675
2023	31,445	0.444	13,962	69,187	104,829
2024	31,790	0.444	14,115	83,302	126,215
2025	32,128	0.444	11,607	94,908	143,800

Notes:

1. Future population data provided by BC Stats. www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationProjections.aspx. #29000 - Sunshine Coast 2019-2025.

2. Per capita waste generation (2019 - 2025) calculated to be 0.444 tonnes per year. Based on 2018 population and waste tonnage data. (13,191 tonnes / 29,696 = 0.444 t/person).

3. Airspace consumption apparent density of 0.66 tonnes per cubic metre as per "Design, Operations, and Closure Plan" (XCG, 2017).

Table 2 Development Summary

Development Stage ¹	Stage Air Space (m ³)	Cumulative Air Space (m ³)	Estimated Stage Life (months) ²	Cumulative Life (years)	Year Capacity Reached
Stage G and H (remaining airspace)	46,100	46,100	27	2.3	2021.2
Stage I	28,200	74,300	16	3.6	2022.5
Stage J	25,400	99,700	14	4.8	2023.7
Stage K	24,700	124,400	14	6.0	2024.9
Final Stage	19,400	143,800	11	6.9	2025.8
Notes: 1. Development stages and stage air space from "Design, Operations, and Closure Plan" (XCG, 2017). 2. Airspace consumption apparent density of 0.66 tonnes per cubic metre as per "Design, Operations, and Closure Plan" (XCG, 2017).					

Table 3 Development Cost Summary

Stage	Year	Cost
Stage H	2021	\$ 2,072,634
Final Closure	2025	\$ 3,254,739
Total (Excluding GST)		\$ 5,327,373

Table 4 Progressive Closure during Stage H

Item	Description	Unit	Approx. Quantity	Unit Price	Total Price
Administration and Execution Requirements	Bonds, Insurance, Mobilization, Demobilization, Temporary Controls, and Closeout (15%)				\$200,255
Operations	Temporary Haul Road - supply, place, and compact	L.M.	65	\$175	\$11,375
Closure	Ditch Realignment - fill in interior ditch, realign exterior ditch to pond, erosion control	L.M.	40	\$75	\$3,000
	Remove culvert by pond, construct inlet to pond with erosion control	L.S.	1	\$2,500	\$2,500
	Remove culvert on lower portion of the haul road ditch	L.M.	15	\$75	\$1,125
	Final Cover - district supplied native soils and topsoil, supply, place, compact, grade, seed	m ²	20,262	\$65	\$1,317,030
Subtotal					\$1,535,285
Engineering (15%)					\$230,293
Contingency (20%)					\$307,057
Total (Excluding GST)					\$2,072,634

Table 5 Final Closure

Item	Description	Unit	Approx. Quantity	Unit Price	Total Price
Administration and Execution Requirements	Bonds, Insurance, Mobilization, Demobilization, Temporary Controls, and Closeout (15%)				\$314,468
Closure	Final Cover - district supplied native soils and topsoil, haul, place, compact, grade, and seed	m ²	31,680	\$65	\$2,059,200
	Culvert - Removal	L.M.	45	\$50	\$2,250
	Pond Overflow - construct primary emergency overflow and connect to existing stormwater gravity drain, elevate existing overflow for use as secondary overflow	L.S.	1	\$5,000	\$5,000
	Regrade Haul Road	L.M.	180	\$50	\$9,000
	Ditching - including erosion control	L.M.	280	\$75	\$21,000
Subtotal					\$2,410,918
Engineering (15%)					\$361,638
Contingency (20%)					\$482,184
Total (Excluding GST)					\$3,254,739

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Arun Kumar, Solid Waste Operations Manager

SUBJECT: PROCESS FOR SITING A NEW LANDFILL

RECOMMENDATION(S)

THAT the report titled Process for Siting a New Landfill be received;

AND THAT a budget proposal for an analysis of Solid Waste disposal options be developed for the 2020 budget process.

BACKGROUND

On February 20, 2019, the Infrastructure Services Committee received a report on the Solid Waste Workshop Summary. At its February 28, 2019 meeting, the Board adopted the following recommendation:

061/19 **Recommendation No. 2** *Solid Waste Workshop Summary (in Part)*

THAT the report titled Solid Waste Workshop Summary be received;

AND THAT a report be provided to the Committee in Q2 2019 with respect to the following:

- Process for siting, sizing and provincial approval of a new landfill;
- Options to extend the lifespan of the existing landfill.

Provincial Governance

The BC Ministry of Environment and Climate Change Strategy (MOE) *Environmental Management Act* requires a Regional District to develop a Solid Waste Management Plan (SWMP) for approval by the Minister.

An approved SWMP authorizes a Regional District to manage its solid waste, including waste diversion and disposal activities in accordance with the plan, as well as any conditions set out in operational certificates, permits or local bylaws.

In addition to the SWMP, the *MOE's 2016 Landfill Criteria for Municipal Solid Waste* sets the framework under which all landfills operate. This includes criteria for siting, performance, design, operations, monitoring, reporting, closure and post-closure care as well as financial security.

Operational Certificate and DOCP

Like the Sechelt Landfill, all landfills in BC must operate under an operational certificate (OC) that is issued by the MOE. The OC outlines key attributes of that particular landfill. This includes items such as acceptable and unacceptable materials along with the maximum allowable materials to be buried in the landfill. Additionally, the OC sets out reporting requirements such as ground water sampling rates.

The operational certificate is issued against that particular landfill's Design, Operating, and Closure Plan (DOCP). The DOCP is a comprehensive plan prepared by a professional engineer in accordance to the MOE's Landfill Criteria for Municipal Solid Waste. The DOCP identifies how the site is designed, to be operated, and eventually closed. It also addresses post-closure care of the site.

Before the MOE issues an OC, the OC application, DOCP, and the existing SWMP are reviewed to ensure they are aligned. The SWMP, OC and DOCP are interdependent.

The purpose of this report is to outline the steps involved in receiving an operational certificate for a new landfill site.

DISCUSSION

The following summarizes the high-level steps expected to be completed for approval of a new landfill in BC.

The first three steps identified are to be completed before the application is submitted and the remainder can be completed after the initial application but before approval is granted.

Step 1 - Search and Identification of Potential New Landfill Sites

The process begins by searching and identifying potential sites which meets the MOE's *Landfill Criteria for Municipal Solid Waste* (Criteria) via a "desktop study".

MOE's Siting Criteria states that a proposed new landfill site must not be within:

- 500 meters of sensitive land uses. Sensitive land uses include but are not limited to: Schools, residences, hotels, restaurants, parks, churches, food processing facilities, cemeteries, and any areas identified as a future development area.
- 100 meters from heritage and archeological sites.
- 8 km of an airport.
- A gully or depression that acts as point of water collection during rainfall events.
- A flood plain.
- 100 meters of sea level maximum high tide.
- 100 meters of surface water.
- 0 to 1.5 meters above ground water.
- 100 meters of environmentally sensitive areas.
- 500 meters for water supply intake or well.

Step 2 - Geological Characteristics Investigation

Once a potential site has been identified, investigation into the geological characteristics of that site is completed via drilling. This is to determine the geology underlining the site and includes information such as ground water flows.

Step 3 - Leachate Treatment Options Initial Review

All new landfill sites are required to install and operate a leachate treatment system. Amongst other components, a leachate collection system of this nature requires the base of the landfill to be lined.

This step is the initial investigation into the options to treat the leachate generated at the potential new landfill site.

It should be noted that the Sechelt Landfill is not subject to the Criteria in terms of requiring a liner and leachate treatment system. The Sechelt Landfill operates as a natural attenuation landfill and utilizes a leachate collection pond.

Step 4 - Acquire the Site

Once a suitable site has been selected, the SCRD will need to review options for leasing or buying the land. If possible, the land should not be acquired until there is some certainty from the MoE of the new site being approved.

Step 5 - Application Process

In order to acquire an Operational Certificate for the new site, the MoE's Application Process must be followed which includes the following steps:

- Intake Phase (initial application form and tracking number assignment);
- Preliminary Application Phase;
- Screening Phase; and
- Review and Decision Phase.

The following information will most likely be required as part of the application:

- *Environmental Impact Assessment*
This includes groundwater and surface water impact assessment, environmental monitoring plan, compliance monitoring locations and background water quality.
- *Hydrogeological and Hydrology Characterization Report*
This includes final geologic investigation of the selected site, including borehole drilling, monitoring well installation, well development, soil sampling and testing, surveying and reporting.
- *Final Review and Selection of Leachate Disposal/Treatment Options*
- *Design, Operations and Closure Plan*
This includes description of environmental setting, site selection report, geotechnical and seismic assessment, site plan, filing plan, life span analysis, progressive closure plan,

summary of landfill design, contaminating life span assessment, surface water management plan, leachate management plan, environmental monitoring plan, operation plan, final closure plan, fire safety plan, emergency response plan, land survey, and landfill gas management plan.

- *Public Consultation and Meetings with MOE*

This component includes public consultation and meeting with MOE throughout the process. Public support is considered to be a crucial component for approval of a new site.

- *Detailed Landfill Design and Construction*

Once the MoE issues an OC, detailed landfill design and construction can start. This includes design and construction of liner, leachate collection system, storm water management, access roads, on-site infrastructure, and utilities. Detailed design and construction are expected to take 1 to 2 years.

Other Considerations

Besides the cost and time required in this process, major hurdles include finding a suitable site that has met the MOE's Criteria and has full public support. In recent years, there has been one known approval of a new landfill site in BC, located on Vancouver Island.

Alternative options to siting a new landfill include exporting waste for burial, exporting waste for waste-to-energy or building and operating a waste-to-energy facility. A jurisdictional scan could be completed to identify practices in other BC jurisdictions.

Timeline for next steps

As indicated in the report titled Solid Waste Management Plan Overview and Status Update presented at this Committee's April 18, 2019 meeting, an update of the SMWP is scheduled to be initiated in 2021. To inform the update, it would be beneficial to have an understanding of the feasibility and direction for the managing solid waste within the SCRD after the Sechelt Landfill is full.

Therefore, staff recommend that a budget proposal for an Options Analysis be developed for the 2020 budget process. The project would focus on confirming the feasibility of developing a new landfill on the Sunshine Coast, landfilling waste elsewhere in or outside of the region, or bring it to a waste-to-energy facility. A multi-criteria analysis of the feasible options which would also consider feedback received from the public and stakeholders would be included.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

As the current landfill approaches the end of its lifespan, developing a new landfill on the Sunshine Coast is one of the options to be considered. In the last decade only one new landfill has been successfully developed and only three in the last 25 years. The regulatory siting criteria, costs and public opposition are the primary reasons that other local governments have opted for alternatives such as waste export for burial or waste-to-energy.

Staff recommend that a budget proposal for an Option Analysis be considered as part of the 2020 budget process. The project would focus on confirming the feasibility of developing a new landfill on the Sunshine Coast, landfilling waste elsewhere in or outside of the region, or using a waste-to-energy facility.

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

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee, May 16, 2019

AUTHOR: Angie Legault, Interim Chief Administrative Officer
 Ian Hall, General Manager, Planning & Community Development
 Remko Rosenboom, General Manager, Infrastructure Services

SUBJECT: MANAGING GROWTH TO ADDRESS WATER SUPPLY DEFICIT

RECOMMENDATION(S)

THAT the report titled Managing Growth to Address Water Supply Deficit be received for information.

BACKGROUND

The SCRD Board adopted the following resolution at the January 10, 2019 Board meeting:

003/19 **Recommendation No. 10** *Growth Management Options*

THAT staff provide a report to a Committee in Q1 2019 regarding tools, options, and approaches related to the management of growth and development on the Sunshine Coast in the context of a water supply deficit.

At the December 13, 2018 Planning and Community Development Committee the report titled Regional Growth Strategy - Options Report was received for information. The purpose of that report was to outline “the current framework [for regional growth management] contained in the *Local Government Act*, a chronology of discussions on the Sunshine Coast and current practices”.

The purpose of this report is to provide an overview of tools, options and approaches to manage growth to address the water supply deficit and to seek direction on next steps.

DISCUSSION

As stated in the Regional Growth Strategy - Options Report there are growth pressures facing the Sunshine Coast beyond water supply management, many of which are external to SCRD authority. Highway capacity, ferry service, housing prices and availability, residential and forestry interfaces are examples of additional growth pressures. A comprehensive regional review of growth trends and pressures in co-operation with other levels of government would be beneficial for the SCRD. Such a review could inform the development of a more comprehensive regional growth management approach.

Issue Definition

There is a community narrative that growth and water demand are directly linked. This linkage is implied in the question considered by this report. In order to ensure that any growth management strategy that is applied in an effort to ensure adequate community water supply meets its aim, the scope and nature of this link should be explored.

Key considerations:

- Recent growth trends: 2016 Census data shows continued moderate (less than 1.1% annually) growth in the resident population of the entire Sunshine Coast from 2011. The District of Sechelt had a 10% growth in population over this time period (2% per year).
- Exact seasonal population and tourism figures are unknown but are a factor requiring further analysis.
- Despite the above-mentioned resident and tourism growth the recent trends in water demand are: Over the last 8 years, the annual average daily water use remains at 13,500m³ per day. The maximum daily demand during the summer months has fallen from 28,000m³ per day in 2009 to 21,500m³ per day in 2017 – a reduction of 23% that can largely be attributed to water conservation initiatives.
- Based on the best available information about local water use, significant water demands not related to new residential or business growth are (in no particular order) – (1) water use by tourist and seasonal residents, (2) water used for residential irrigation, especially of ornamental lawns, (3) water demand associated with leaks on private properties (especially in unmetered areas), (4) potable water used for applications where alternatives may be available.
- Presently only areas served by the Chapman Creek and Eastbourne water systems are impacted by a water supply deficit. These service areas include areas within the District of Sechelt, Town of Gibsons, Islands Trust, and Sechelt Indian Government District (all lands not under SCRD planning and development jurisdiction), as well as four of the five rural electoral areas.

Based on these considerations it can be concluded that while every individual development results in an increased water demand, the total water demand on the Chapman Creek Water System has declined in the summer months over the last decade. The current water supply deficit is caused by a significantly longer period of little or no rain during the summer months and an improved protection of aquatic ecosystems during those months.

Combined, the above factors point to the need for a nuanced approach to looking at how growth relates to water demand. For example, a subdivision leading to development of new dwellings that are water efficient, and which replaces a former sprinkler-based irrigation system with xeriscaping or with tree plantings may result in a net increase year-round but a decrease in water demand during dry summer months.

Legislative Authority

The ability of local governments to manage growth is a complex consideration that depends, in large part, on the nature of the growth to be managed. There is no specific authority available to local governments through the *Local Government Act*, *Community Charter* or other legislation for a blanket moratorium on development approvals.

By considering specific categories of development applications it is possible to identify potential growth management mechanisms. Broadly speaking, these are:

1. Building permits – an applicant for a building permit is entitled, as of right, to a building permit if they comply with the zoning bylaw, building bylaw and building code and so one would have to look to any provisions in the two building enactments regarding water supply as a basis to refuse a building permit. Staff suggest this would be an especially challenging approach to regulation.
2. Development permits – the only authority for refusal of a development permit relates to conditions or guidelines set out in the Official Community Plan and in the absence of that, there is no general discretion on a broad level to refuse based on water supply issues. See below for additional discussion of development permit areas and Development Cost Charges.
3. Zoning amendments – land use decisions are within the discretion of the Board and so a concern over water supply would be an acceptable rationale for not approving rezoning to a more water-intensive use or amending the zoning to a less water-intensive use.
4. Subdivision approval – a refusal to approve a subdivision based on clear statutory grounds (for example excess cost to local government) or the residual discretion (contrary to the public interest) by an approving officer would have a reasonably strong chance of withstanding any judicial challenge. SCRD is not the subdivision authority for electoral areas; staff provide input to the Ministry of Transportation and Infrastructure Approving Officer.
5. Water Service Application for subdivisions – an applicant for new water service connections resulting from a subdivision has to meet all terms and conditions of Subdivision Servicing Bylaw No. 320. Not meeting all these terms and conditions could be grounds for the SCRD to refuse a water service connection associated with a subdivision within the water supply service area. The current bylaw includes a section 302 (1) (1.1) which states that:

“An extension to a water system shall only be connected to an existing community water system if the water sources used for the combined system are adequate to serve each parcel to be served by the combined system with at least 2,500 litres of water per day year round.”

To date no new service connection has been refused based on this bylaw provision. While the intent of this section is to balance growth with water supply availability, the wording of this section is considered to be insufficient to withstand a judicial challenge.

Water Service for undeveloped property for which the water parcel tax is being paid, could not be refused as long as all technical requirements are met.

6. Water Rates and Regulations – Bylaw No. 422 regulates the actual allowable use of water provided by the SCRD, including during drought conditions. While the allowable water uses during drought conditions are reviewed annually (Drought Management Plan), this is not the case for the more general water use provisions.

Precedents

There is precedent in other jurisdictions for managing growth to maintain water service levels.

The **North Salt Spring** Waterworks District Board of Trustees (improvement district) significantly restricted all new, large-scale development in 2014. Undeveloped properties paying parcel taxes are limited to one 19mm service connection for a single residential or single commercial unit, regardless of zoning. Given the impact to the community this moratorium is not supported by the local municipality.

The **Town of Okotoks**, Alberta has a Water Allocation Policy to maintain service levels while accommodating growth. Developers are required to transfer a provincial water license to the Town with sufficient capacity to support increased population prior to development approvals. The Water Allocation Policy applies to lands that have not yet been serviced by municipal water service but considered for expanding urban development.

The **Municipality of Gig Harbor** through authority of Washington State's Growth Management Act, requires all developments and redevelopments to empirically show there is water, sewer, and transportation capacity available to serve their needs. Should capacity be lacking, applicants are required to provide service expansion (for example, develop and licence a ground water source) prior to the granting of land use approvals or building permits.

Considerations Related to Approach

With regard to regulating development, generally, key considerations are:

- Transparency – any policy or regulation respecting ability/restriction of development should be clear, easy to understand, and widely known.
- Equity – consistent, fair treatment must be provided for all citizens, property owners, or water users (as applicable) based on defensible criteria and established process.
- Unintended Consequences – restricting growth generally, or in a specific area, or of a specific type may have unplanned results including impacts on property values, economic effects, social effects, etc. Consideration of possible impacts and mitigating strategies may be required.

These considerations are variously prescribed by legislation, core values of good governance and/or prudent risk management to avoid legal challenges.

Specific Tools to Consider

Beyond the ability to plan for growth through Official Community Plans and Regional Growth Strategies, local government tools to manage growth include:

1. **Water Conservation Development Permit Area:** In 2008 the Province of BC adopted the *Local Government (Green Communities) Statutes Amendment Act*, which added additional development permit area possibilities including the establishment of development permit areas to promote water conservation. This particular development permit area has not yet been utilized on the Sunshine Coast specifically and would only apply to the areas within the planning jurisdiction of the SCRD while the majority of the growth is occurring outside of the SCRD jurisdiction.
2. **Development Cost Charges:** The Development Cost Charges Bylaw No. 693 allows the SCRD to collect Development Cost Charges (DCCs) for approved subdivisions or issued building permits which impose a capital cost burden on the regional water system. This bylaw applies to the entire regional water supply service area and is hence not restricted to the area the SCRD has planning jurisdiction over. Updating this bylaw would not allow for a direct regulation of the water use of new developments but could do so indirectly. It could promote water conservation through financial incentives for low water use developments or location-based fees that could result in increased DCC revenue to support development of water service(s).
3. **Regulating Water Use:** Expanding water use regulations within Water Rates and Regulations Bylaw No. 422 could impact both new use resulting from growth as well as existing uses. Updates could include a review of both the Zoning Bylaw and Bylaw 422 to look at a combination of blanket restrictions on certain allowable uses and/or placing terms and conditions on other uses e.g. establishing a maximum allowable volume per residential property or a ban on using water for certain commercial uses like water bottling or cannabis production. Bylaw 422 applies to the entire water supply service area and is hence not restricted to the area the SCRD has planning jurisdiction over. If this option was pursued, a careful review of the issues that might arise would be required to avoid any legal challenges.
4. **Subdivision Servicing Standards:** Updating Subdivision Servicing Bylaw No. 320 could result in additional terms and conditions to be set for applicants for new water service connections associated with subdivisions. This bylaw applies to all water supply service areas and is hence not restricted to the area the SCRD has planning jurisdiction over.
5. **Resolution for Comments on Subdivision:** The SCRD could develop a standard resolution for comments on subdivision referrals indicating that subdivision applications within the water supply service area should not be approved by the Approving Officers as that would result in excessive cost to the SCRD in water supply management and also not be in the general Public Interest.

Analysis of Tools

Aspects that should be considered in the selection or design of any of these tools are:

- Time to develop
- Cost to develop
- Cost to administer
- Jurisdiction – SCRD rural electoral areas only or shared with member/other Local Governments
- Enforceability
- Complexity / possibility of unintended consequences
- Effect on cost of housing
- Effect on economic development
- Community acceptance
- Precedent/proven/legally acceptable
- Fairness/equity
- Effectiveness and efficiency in achieving water demand reduction, especially during dry months

Developing a recommendation or making a decision on a preferred approach requires intergovernmental dialogue and would benefit from public participation. Questions to explore are:

1. What is the specific water demand target(s) in a service area?
2. What interest is there in cooperating/coordinating tools across jurisdictions? Would tools that are fully within the SCRD's jurisdiction be preferred?
3. From the community perspective, what are the costs and benefits associated with tools that change (1) allowable land use (planning-driven); (2) water use (infrastructure-driven) or (3) development costs?
4. What level of impact on the cost of housing and/or economic development is acceptable?
5. What are the costs and benefits of an approach that applies to all development versus a specific focus on subdivisions?

Staff recommend that if the Board directs that growth management to address the water supply deficit be further explored then these and other relevant questions form part of upcoming public participation opportunities related to water. Subsequently they can be discussed with other local governments on the Sunshine Coast.

Organizational and Intergovernmental Implications

Recent amendments were made to SCRD rural area official community plans for density strategies to promote affordable housing. This was a consistent policy applied to several official community plans. A similar consistent approach across OCPs could be undertaken to create a development permit area for water conservation. It would have to be determined under which condition this would apply; building permit, subdivision, etc. and whether it would apply to both rural area and municipal OCPs. SCRD does not have authority to amend municipal OCPs, however this initiative could be undertaken concurrently by local governments if each agrees.

In addition to policy development of when, where and how to apply any of the described tools, consideration must also be given to the additional resource pressure associated with these proposed changes, such as review of applications, record management and enforcement.

Financial Implications

Changes to growth trends/patterns could have financial implications for SCRD related to revenue from permits, DCCs and applications. Additional lenses/requirements applied as part of any of the growth related application processes could require additional staff time with commensurate impacts to fees, per SCRD's Financial Sustainability Policy.

Further financial analysis should be undertaken as part of considering application of any particular tool.

Timeline for next steps or estimated completion date

To be determined based on Board direction.

Communications Strategy

Refining of options, specific tools, and recommendations for action related to growth management could have significant impact for a broad constituency of stakeholders. SCRD's Public Participation Framework would support a participation strategy prior to decision making.

STRATEGIC PLAN AND RELATED POLICIES

The SCRD has a mission of providing leadership and quality services to our community through effective and responsive government. Prioritizing water uses in a way that respects the organization's values of collaboration, environmental leadership, and transparency contributes to this mission.

The SCRD's strategic priority to Embed Environmental Leadership is supported by the Region's overall water supply strategy, as outlined in the Comprehensive Regional Water Plan (2013) and furthering the SCRD's goal to reduce water consumption by 33% relative to 2010 levels by 2020.

CONCLUSION

There are nuances to the linkage between growth and water demand. As well, local government authority to manage/restrict growth is provided through a variety of tools that have specific and different constraints on application, areas of jurisdiction, social impacts, etc.

If the Board directs further exploration of growth management to address water supply deficit, intergovernmental dialogue and public participation are recommended to occur. There are possible financial implications to the selection of any particular approach.

Reviewed by:			
Manager	X - A. Allen X - S. Walkey	Finance	
GM	X - I. Hall X - R. Rosenboom	Legislative	X - A. Legault
Interim CAO	X - A. Legault	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Remko Rosenboom, General Manager of Infrastructure Services

SUBJECT: **UNIVERSAL WATER METERING PROGRAM UPDATE**

RECOMMENDATION(S)

THAT the report titled Universal Water Metering Program Update be received;

AND THAT the Board provide direction on the preferred funding and implementation options for the completion of Phase 3 of the Universal Water Metering Program.

BACKGROUND

The following Resolution was adopted at the September 27, 2018 regular Board meeting:

266/18 **Recommendation No. 2** *Universal Water Meter Program*

THAT the report titled Universal Water Meter Program be received;

AND THAT the Sunshine Coast Regional District confirms its commitment to the Universal Water Meter Program;

AND FURTHER THAT funding and program options for implementation be brought to the 2019 budget.

Water metering was first supported by the Board in 2003 and 2004.

243/03 **Recommendation No. 7** *Water Metering*

Proceed with grant application for Water Conservation Program to include Universal Metering and Toilet Replacement

340/04 **Recommendation No. 6** *Water Metering*

1) Amend subdivision service bylaw; 2) implement voluntary metering program;
3) introduce rate structure that encourages customers to have meters installed;
4) meter all non-residential properties; 5) develop public information package

In 2013, Universal Water Metering was identified as a central component of the Comprehensive Regional Water Plan's (CRWP) intensive demand management program.

The purpose of this report is to update Committee on the progress of the Universal Water Meter Program and to reaffirm the SCRD's commitment to the program.

DISCUSSION

Program Developments to Date

The first component of a program is water meter installations. Installations were divided into three phases. Phase 1 and 2 resulted in the installation of 6,186 meters in the Electoral Areas. North and South Pender Harbour Water Service Areas were equipped with water meters between August 2014 and February 2015. Halfmoon Bay, Egmont, Earls Cove, Roberts Creek, Elphinstone, and West Howe Sound (excluding Hopkins Landing) were equipped with water meters between September 2016 and October 2017 with a few remaining properties receiving installations in 2018. Phase 3 involves installations in the District of Sechelt and the Sechelt Indian Government District.

Other components of the Universal Water Metering Program are still to be developed. These include, development of policies and procedures, development of meter maintenance program, and advancing the engagement with private property owners with leaks.

Water Conservation

The Universal Water Metering Program will help the SCRD achieve its conservation goals as outlined in the Comprehensive Regional Water Plan in several ways. The first is by raising awareness about consumption. At this time, water consumption data is shared on bills for commercial accounts while residential accounts can contact staff if interested. In the future this could be enhanced by sharing information via myscrd.ca accounts or bills.

Other approaches could include use of a volumetric rate structure and advanced targeted outreach programs.

The timing of the development and implementation of these program components are in part related to the installation of the meters in the District of Sechelt and the Sechelt Indian Government District.

Water meters also help conserve water by detecting leaks. A simplified outline of the leak resolution procedure can be found in Figure 1.

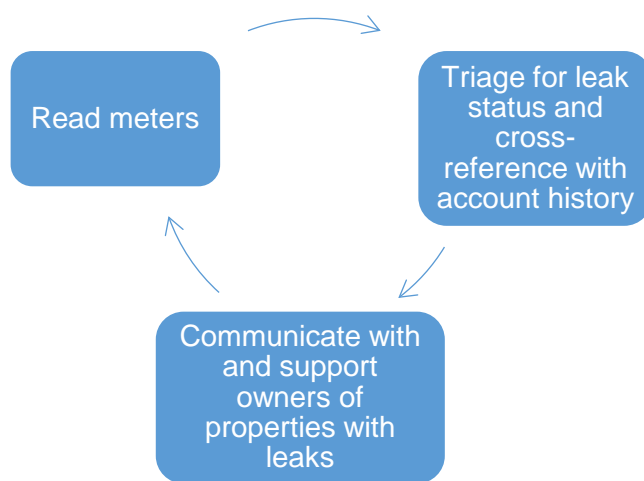


Figure 1. Simplified Leak Resolution Procedure

The table below presents the number of leaks resolved to date and those currently being addressed in the Electoral Areas.

Area	Resolved leaks	Active leaks
Egmont / Earls Cove	18	7
North Pender	137	23
South Pender	264	79
B	400	103
D	291	94
E-F	401	134
TOTAL	1511	440

Active leaks receive a first warning letter or an escalated second warning letter from staff. Staff are currently in dialogue with 135 property owners with active leaks. Although staff can escalate responses when dealing with larger leaks that remain unresolved, a collaborative approach is generally successful. In some cases, site visits to help troubleshoot and isolate the leak are undertaken. Smaller active leaks that remain unresolved are monitored in future meter reads.

There are various ways of estimating the volume of water saved from resolved leaks. Once a leak is resolved, a comparison can be made between a property's monthly water use when a leak was present to water use without a leak. The difference between the two demonstrates how much treated drinking water was being wasted. Using this method, an estimated 5.3 million litres of treated water is saved per day. Combined with the number of resolved leaks, this information provides an indicator for the reach of the program.

Of all the resolved leaks, some would have eventually been resolved without communication from staff and some would have gotten worse. Water distribution trends therefore provide a useful indicator of the impact of the program. The North and South Pender Water Systems are useful systems to look at because they are fully metered and are not impacted by watering restrictions. The following represents the change in water demand compared to the three year average prior to the start of the leak program.

- South Pender Water Service Area: 15% decrease
- North Pender Water Service Area: 8% increase

The North Pender Water Service Area has suffered several major water main breaks that have impacted the total distribution numbers in the last two years.

Current Status of Meters in District of Sechelt and Sechelt Indian Government District

There are 4,800 water services in this area. Of these, approximately:

- 1,200 have water meters. These include most of the commercial accounts.
- 1,100 of the existing meters are not equipped with data transmitters and will need a new radio frequency transmitter. In most cases, the meter will not need to be replaced.
- Over 250 meter setters and meter boxes are ready for meter installations and will not require excavation.

These numbers are approximate because some situations, such as multi-unit residential buildings, will require a custom approach.

During the 2019 budget process, the SCRD was notified that a grant application to support the third and final phase of meter installations in the Sechelt area was unsuccessful. Universal water metering is identified in the CRWP's intensive demand management program and a decision was made to proceed with an Alternative Approval Process (AAP) to authorize long term borrowing to finance the project.

At the July 26, 2018 Board meeting the results of the AAP for the Universal Water Meter Installations Project Loan Authorization were presented to be as follows:

10% of electors in the service area	1,957
Number of valid elector response forms received before the deadline	2,454

Elector approval for the borrowing was not obtained.

It has been confirmed that implementing a program such as the Universal Water Meter Program is essential for any future water infrastructure grants from both the Provincial and Federal Governments.

Following the failed AAP, a number of residents took the opportunity to meet with SCRD staff to share their feedback and opportunities to be cost effective with implementing the next phase of the water meters. With respect to the water meter program, one of the most common themes staff heard from residents is that they supported the water meters; however, did not want to pay (directly or through a loan) for them until additional water supply sources would become available.

Program funding Options for Consideration

Staff identified four options to fund Phase 3 water meter installations:

Option 1: Hold another AAP when additional water supply sources are confirmed.

It is expected that by late 2019 more detailed cost estimates would be available for the development of a well field in the Church Road area. This would allow the Board to confirm its commitment to actually construct this well field. Depending on the funding needs for that project, an AAP could be held in 2020 to authorize long term borrowing to support the financing of both the development of this well field and the Phase 3 installation project. Funds available through this loan could be supplemented by existing reserves and Development Cost Charge funds.

Based on the community feedback following the failed AAP, staff recommend this Option.

Option 2: Hold a Referendum

A referendum to authorize long term borrowing could address the long-term funding needs for the Phase 3 installation project. Should the Board select this Option, staff would report on the process and implications for the Legislative Services division work plan. There would also be costs associated with holding a referendum which would need to be incorporated into the budget for 2020 or 2021.

Based on the community feedback following the failed AAP, staff do not recommend this Option for the financing of solely the Phase 3 installation project. If the Board considers holding a referendum, staff recommend broadening the scope of such referendum to also include the borrowing approval for water supply expansion projects, such as the development of the well field in the Church Road area.

Option 3: Wait For Future Grant Success

Water meter installations could be paused while staff seek out grant opportunities. This Option would be viewed as a 'pause and wait' scenario and as such, could work against the SCRD when applying for further water supply expansion infrastructure grants.

This is not an option staff recommend, although staff will continue to monitor for grant opportunities for the Phase 3 installations.

Option 4: Use existing reserves

Solely relying on existing reserves as a funding source would deplete them and would be contrary to the SCRD's financial sustainability policy. The intent of the reserve funds is to support the operations, maintenance and replacement of current infrastructure. Development Cost Charge funds are intended for new infrastructure as a result of growth and therefore, are not an option to be considered.

Staff do not recommend this is option.

Staff is seeking Board direction on the preferred funding option.

Program Implementation Options for Consideration

Regardless of the approach taken to install the remaining water meters, the following activities will always need to be part of such a project:

- Confirming location of all water mains to private properties to install water meters on
- Communication with residents (including in-person, mail outs and customer call centre)
- Archaeological investigations
- Invasive species management
- Actual water meter installations, including repairs to sidewalks and driveways
- Project and contract management

To date contractors have installed the thousands of water meters as part of Phase 1 and 2 of the Universal Water Metering Program in North and South Pender Water Systems and those of the rural areas of the Regional Water System.

On a limited but routine basis, the installation or replacement of water meters has been addressed by SCRD staff.

Staff explored options for the completion of the Phase 3 installations that ranged from fully contracting this service through to hiring additional staff to fully address or a combination thereof. Contracting this service is the most cost effective at a cost of approximately \$6.6M versus up to \$10.4M for the other options. Contractors would also be able to complete the project within one year while all other options would require at least three years to complete.

The differences in total costs are in part due to the fact that the unit price for purchasing a water meter by the SCRD is about twice the cost a contractor can provide them for, given that they are also the manufacturer of the water meters.

All options for the implementation of the Phase 3 installation project could be financed with long-term borrowing or through grants as described in the above mentioned funding options 1, 2 and 3.

Staff recommend contracting as the preferred implementation option given that it is the most cost-efficient and quickest option.

Organizational Implications

Parallel to or following the completion of the Phase 3 installation, staff will work on the remaining components of the Universal Water Metering Program. These include a rate structure and billing review with public consultation, updates to utility accounts, and development of greater analytical tools including online information dashboards on myscrd.ca accounts.

Work plans and budget proposals associated with these components could be brought forward once staff receives direction on the installation and funding options for the Phase 3 installations.

STRATEGIC PLAN AND RELATED POLICIES

The SCRD Strategic Priority: Embed Environmental Leadership is achieved by implementing a Universal Water Meter Program. The SCRD will reduce waste and promote conservation of water. The CRWP has an objective of reducing water use by 33% from 2010 levels by 2020. This will principally be accomplished via the Universal Water Meter Program, supported by other water conservation programs.

The We Envision Regional Sustainability Plan (2012) has a water consumption reduction target of 33% relative to 2010 levels by 2020.

The CRWP financial model meets the objective of the Strategic Priority: Ensure Fiscal Sustainability by aligning service levels and long term capital planning with a sustainable funding model guided by the Financial Sustainability Policy and Debt Management.

CONCLUSION

The first component of a program is water meter installations. Installations were divided into three phases. Phase 1 and 2 resulted in the installation of 6,186 meters in the Electoral Areas. North and South Pender Harbour Water Service Areas were equipped with water meters between August 2014 and February 2015. Halfmoon Bay, Egmont, Earls Cove, Roberts Creek, Elphinstone, and West Howe Sound (excluding Hopkins Landing) were equipped with water meters between September 2016 and October 2017 with a few remaining properties receiving installations in 2018. Phase 3 involves installations in the District of Sechelt and the Sechelt Indian Government District.

Staff identified several options for the funding and implementation of the water meters in the District of Sechelt and the Sechelt Indian Government District and are seeking Board direction on the preferred options.

Other components of the Universal Water Metering Program are still to be developed. These include, development of policies and procedures, a rate structure and billing review with public consultation, updates to utility accounts, and development of greater analytical tools including online information dashboards on myscrd.ca accounts.

Work plans and budget proposals associated with these components could be brought forward once the Board provides direction on the installation and funding options for the Phase 3 installations.

Reviewed by:			
Manager		CFO/Finance	X - T. Perreault
GM		Legislative	X – A. Legault
Interim CAO	X – A. Legault	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – May 16, 2019

AUTHOR: Gordon Dykstra, Manager, Transit and Fleet
Brad Wing, Financial Analyst

SUBJECT: **2019-20 BC TRANSIT ANNUAL OPERATING AGREEMENT (AOA)**

RECOMMENDATION(S)

THAT the report titled 2019-20 BC Transit Annual Operating Agreement (AOA) be received;

AND THAT the Delegated Authorities be authorized to execute the 2019-20 BC Transit AOA.

BACKGROUND

Every year, BC Transit and the Sunshine Coast Regional District (SCRD) enter into an Annual Operating Agreement (AOA) to establish transit service hours, costs and funding for the BC Transit fiscal year, from April 1 to March 31.

At its January 24, 2019 meeting the committee received the report titled 2019-20 BC Transit Annual Operating Agreement Draft Budget and on January 31, 2019 the Board adopted the following recommendation

014/19 Recommendation No. 9 *2019-2020 BC Transit Annual Operating Agreement Draft Budget (in part)*

AND THAT the 2019-2023 Financial Plan be updated to reflect the draft Annual Operating Agreement budget.

The purpose of this report is to present the final 2019-20 AOA for the committee's consideration.

DISCUSSION

The SCRД budget process usually concludes prior to receipt of the final budget from BC Transit in March or April. It is therefore not always possible to incorporate any changes into the annual SCRД Financial Plan. This can result in funding surpluses or shortfalls. Historically, such changes have not had a material financial impact.

Operational service adjustments in 2019

Schedule adjustments within the service hour allocation are being made this summer to allow time for increased passenger loads and ferry traffic while maintaining schedule adherence, which proved challenging in 2018.

As directed by the SCRD Board in 2018, Route 2 will implement service to Chatelech Secondary School as of September 2019, pending the completion of the development of Cowrie Street.

BC Transit is continuing to implement a number of technology-based service improvements, such as real-time bus location (AVL), automated passenger counters (APC's), and electronic fare payment. Sunshine Coast Transit will benefit as these are progressively implemented across the province in the upcoming years. Implementation of AVL is anticipated within the next 12 months.

BC Transit has offered the SCRD an opportunity to participate in an advanced dispatch software for the Custom Service. Using this software would significantly reduce the staff time required for booking HandyDart trips and will improve the service to customers. Using this software would alleviate other pressures on our dispatch staff associated with Custom Service and would require no technical support from our IT-department. This efficiency improvement could be completed within the current budget for the Transit Service function [310].

Financial Implications

Revenue and Cost Summary

The table below summarizes the changes between the draft AOA as presented in January 2019 and the currently presented final 2019-20 AOA for the Custom and Conventional Services.

Custom Service	2019-2020 Draft AOA Budget	2019-2020 Final AOA Budget	Net Change	% Change
Total Revenue	9,931	11,000	1,069	10.8%
Total Operating Costs	413,565	401,946	(11,619)	-2.8%
Total Costs	481,593	453,457	(28,136)	-5.8%
SCRD Net Share of Costs	189,843	152,787	(37,056)	-19.5%

Conventional Service	2019-2020 Draft AOA Budget	2019-2020 Final AOA Budget	Net Change	% Change
Total Revenue	772,882	768,365	(4,517)	-0.6%
Total Operating Costs	3,427,991	3,257,947	(170,044)	-5.0%
Total Costs	3,945,091	3,770,666	(174,425)	-4.4%
SCRD Net Share of Costs	1,489,290	1,354,948	(134,342)	-9.0%

The figures above are based on the BC Transit fiscal year and are not reflective of actual SCRD budget values which incorporate pro-rated portions of both AOAs as well as non-shareable costs. Further information on each line item is detailed below.

Revenues

AOA revenues include fares and advertising and are applied against the local share of operating costs. 2019-20 final AOA values show a slight decrease as compared to the 2019-20 draft based on updated projections from BC Transit. A conservative approach is preferred when budgeting for fare revenue as any deficit has a direct impact on taxation.

Operating Costs

The 2019-20 draft AOA included approximately \$146,000 in scheduled service costs which were previously considered non-shareable and funded 100% by the SCRD. BC Transit has confirmed that an incorrect rate was used to calculate this amount and as a result, the increase was reduced by \$88,000 in the final AOA. This correction accounts for approximately half of the decrease in conventional service operating costs and a third of the decrease to the SCRD net share of costs noted in the conventional service table above; however, as these are existing expenditures, the SCRD's share of funding for these particular items will actually increase back to the original 100% as they will now be classified as non-shareable costs.

Other material decreases in operating costs as compared to the draft budget include a 17% decrease for vehicle maintenance based on prior year actuals and a 4.5% decrease in fuel.

Total Costs

Total costs are reflective of operating costs plus the local share of lease fees for buses, equipment, land and buildings. Lease fees in the final budget have decreased by 3.6% as compared to the draft budget.

SCRD Net Share of Costs

The SCRD net share of costs is the portion of shareable costs funded from taxation. It is calculated as the SCRD share of total shareable operating costs less fare and advertising revenue and any reserve fund adjustment if applicable.

The net share of costs in the 2019-20 final budget decreased by \$171,398 as compared to the draft budget. A significant portion of this is due to a 139% increase in the reserve fund adjustment. This figure was adjusted based on a higher than anticipated yearend balance in the reserve.

In 2015 the Provincial Government, through an Order in Council (OIC) began using operating savings to fund future inflationary increases through the establishment of a reserve fund. Past reports have highlighted that this model is not sustainable and would result in significant taxation increases once the reserve fund has been depleted.

Analysis of the 2018-19 AOA estimated that a taxation increase of up to \$150,000 could be required in 2019-20 if the reserve were fully depleted. This value was refined to \$95,204 per the draft budget and is now confirmed to be \$35,777 based on final budget values and reserve balances.

Reserve fund projections included in the 2019-20 AOA indicate a maximum taxation impact of \$84,346 in the 2020-21 AOA. This amount will be mitigated by any shareable cost savings achieved in 2019-20 which would increase the available reserve balance.

A summary of the items contributing to the \$171,398 decrease in the SCRD net share of costs between the draft and final AOA budgets are detailed below:

	Custom	Conventional	Total
(Increase)/Decrease in Revenue	(1,069)	4,518	3,449
Decrease in Total Operating Costs	(3,871)	(90,651)	(94,522)
Decrease in Lease Fees	(16,517)	(4,381)	(20,898)
Increased Reserve Adjustment	(15,599)	(43,828)	(59,427)
Total Increase/(Decrease)	(37,056)	(134,342)	(171,398)

2019 Taxation Impact

Due to the difference in fiscal years between the SCRD budget and the BC Transit AOA budget, pro-rated values from both the 2018-19 and 2019-20 AOAs are used to calculate the budget values for the SCRD financial plan.

The calculated taxation increase required to fund the 2019-20 AOA based on the draft budget was \$204,511. Of this amount, \$147,222 was included in the preliminary budget based on known increases for wages and benefits and an additional \$57,289 was approved for inclusion in the 2019-2023 Financial Plan per Board resolution 014/19 No. 9.

Analysis of the final AOA budget indicates that a taxation increase of only \$109,598 in 2019 was required.

This is a significant variance on a scale not previously encountered with AOA budgets and highlights the challenge faced by the SCRD in having to adopt a Financial Plan prior to receiving the final AOA. Staff will continue to work with BC Transit to minimize these variances as best as possible in the future.

In summary, taxation included in the 2019 Financial Plan was based on the draft AOA budget. The final AOA budget which was received after adoption of the Financial Plan Bylaw decreased the SCRD's net share of costs by a material amount. As a result, assuming all other accounts are on budget, it is anticipated that the Transit service will end 2019 in a surplus position of approximately \$90,000.

Timeline for next steps or estimated completion date

Staff will provide a semi-annual variance report at a July committee meeting.

STRATEGIC PLAN AND RELATED POLICIES

N/A

CONCLUSION

The revised (final) AOA figures would indicate potential for a small surplus based on the taxation approved in the 2019 SCRD Transit Budget [310]. Staff recommend that the BC Transit 2019-20 AOA be approved.

Attachments:

Attachment A – Annual Operating Agreement April 1, 2019 to March 31, 2020

Reviewed by:			
Manager		CFO/Finance	X - T. Perreault
GM	X - R. Rosenboom	Legislative	X – A. Legault
Interim CAO	X – A. Legault	Other	

SUNSHINE COAST

**ANNUAL OPERATING AGREEMENT
(CONVENTIONAL/CUSTOM)**

Between

SUNSHINE COAST REGIONAL DISTRICT

And

BRITISH COLUMBIA TRANSIT

April 1, 2019

INFORMATION CONTAINED IN SCHEDULE “C” – BUDGET AND SCHEDULE “D” – PAYMENT SCHEDULE IS SUBJECT TO FREEDOM OF INFORMATION & PROTECTION OF PRIVACY ACT.

CONSULT WITH BC TRANSIT PRIOR TO RELEASING INFORMATION IN THESE SCHEDULES TO INDIVIDUALS OR COMPANIES OTHER THAN THOSE WHO ARE PARTY TO THIS AGREEMENT.

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ANNUAL OPERATING AGREEMENT

BETWEEN: SUNSHINE COAST REGIONAL DISTRICT
(the “**Municipality**” and the “**Operating Company**”)

AND: BRITISH COLUMBIA TRANSIT
(the “**Authority**”)

WHEREAS the Municipality and the Authority are authorized to share in the costs of providing a Public Passenger Transportation System pursuant to the British Columbia Transit Act.

WHEREAS the Municipality is authorized to operate, manage and maintain a Public Passenger Transportation System within the Sunshine Coast Transit Service Area.

WHEREAS the parties hereto have entered into a Master Operating Agreement effective April 1, 2001, which sets out the general rights and responsibilities of the parties hereto.

AND WHEREAS the parties hereto wish to enter into an Annual Operating Agreement which sets out, together with the Master Agreement, the specific terms and conditions for the operation of the Public Passenger Transportation System for the upcoming term.

NOW THEREFORE THIS AGREEMENT WITNESSETH that in consideration of the premises and of the covenants herein contained, the parties covenant and agree with each other as follows:

SECTION 1 – DEFINITION OF TERMS

- 1.1 Definitions: Unless agreed otherwise in the Annual Operating Agreement, the definitions set out in the Master Agreement shall apply to this Annual Operating Agreement including:
- (a) “**Annual Operating Agreement**” shall mean this Annual Operating Agreement and any Annual Operating Agreement Amendment negotiated and entered into by the parties subsequent hereto;
 - (b) “**Master Agreement**” shall mean the Master Joint Operating Agreement, including any amendments made thereto;

SECTION 2 – INCORPORATION OF MASTER AGREEMENT

- 2.1 Incorporation of Master Agreement into Annual Operating Agreement: Upon execution, this Annual Operating Agreement shall be deemed integrated into the Master Agreement and thereafter the Master Agreement and the current Annual Operating Agreement shall be read together as a single integrated document and shall be deemed to be the Annual Operating Agreement for the purposes of the British Columbia Transit Act, as amended from time to time.
- 2.2 Amendments to Master Agreement: The parties agree to amend the Master Agreement as follows:

- (a) To remove Section 13 in its entirety and replace it with the following:

“SECTION 13 - INSURANCE

13.1 Insurance: The Operating Company and the Authority shall purchase and maintain in force throughout the term of this Master Agreement, insurance policies covering the perils specified herein as set out below. As evidence of insurance coverage, the Operating Company shall deposit with the Authority, copies of the insurance policies the Operating Company is required to purchase in accordance with this Master Agreement and the Annual Operating Agreement.

13.2 Minimum Insurance Coverage Requirements: The following insurance coverage shall be purchased and maintained throughout the term of this Master Agreement and the

Annual Operating Agreement:

1. Vehicle Insurance:
 - a) The Operating Company shall purchase and maintain insurance on all vehicles used by the Operating Company in the operation of the Public Passenger Transportation System under this Master Agreement as follows:
 - i) Third party liability insurance of Five Million Dollars (\$5,000,000.00) per occurrence purchased from the Insurance Corporation of British Columbia.
 - b) The Authority shall purchase and maintain insurance on all revenue vehicles used by the Operating Company in the operation of the Public Passenger Transportation System under this Master Agreement as follows:
 - i) Third Party Liability insurance in excess of Five Million Dollars (\$5,000,000.00) to a minimum limit of Twenty-Five Million Dollars (\$25,000,000.00).
2. Physical Assets Leased from the Authority :(where applicable)
 - a) The Authority shall purchase and maintain insurance on all Physical Assets leased from the Authority, pursuant to the terms of the individual lease agreements with the Operating Company and respecting said Physical Assets.
 - b) Without limiting the generality of the foregoing, such insurance shall be in the name of the Authority and shall include a waiver of subrogation against the Operating Company. The insurance shall be in accordance with the laws in force and in effect in the Province of British Columbia and Canada.
 - c) The amount of such insurance for the respective categories of Physical Assets shall be not less than as follows:
 - i) Buildings and Structures Including Leasehold Improvements. The Authority shall purchase and maintain insurance on all buildings and structures on a standard all risk form including boiler explosion, flood and earthquake where applicable, in an amount not less than the full replacement value thereof as determined by the Authority.
 - ii) Other Chattels and Equipment. The Operating Company shall purchase and maintain insurance on all chattels and equipment not otherwise insured under this Schedule against loss or damage from all risks, in an amount not less than the full replacement value thereof.
 - d) The Authority may, in its sole discretion, self-insure part or all of the insurance requirements hereunder.
- 3 Physical Assets Owned by the Operating Company or Leased from a Party other than the Authority
 - a) The Operating Company shall purchase and maintain insurance on all Physical Assets owned or leased by them from a party other than the Authority, to the same extent as specified in Section (2), above, except that contrary to Section (2) the Operating Company shall determine the full replacement value thereof.
- 4 Comprehensive General Liability Insurance:
 - a) The Authority shall take out and maintain comprehensive general liability insurance (CGL) covering the operation of the Public Passenger Transportation System specified in Schedule “B” of the Annual Operating Agreement on an occurrence basis in an amount not less than Twenty-Five Million Dollars (\$25,000,000.00). Such insurance shall include the Operating Company and the Municipality as an additional insured party and further, the policy shall apply to each insured in the same manner and to the same extent as if a separate policy has been issued to each of the insured parties.
 - b) The Authority’s CGL does not extend to cover non-transit activities a company may be engaged in. If the Operating Company performs work outside of the terms of this Master Agreement and/or the Annual Operating Agreement, the Operating Company will require separate insurance coverage for that work which provides a waiver of subrogation in favour of BC Transit.
- 5 Additional Covenants:

a) The Operating Company covenants that it shall not knowingly permit, suffer, allow or connive at the use or operation of any vehicle in respect of this Master Agreement by any person, or in any way, or for any purpose, contrary to the provisions of this Master Agreement or the provisions of the Insurance (Vehicle) Act or any other applicable legislation and related regulations. The Operating Company shall indemnify and save harmless the Authority from any breach of this covenant.

b) It is mutually understood and agreed that the responsibilities to acquire and maintain policies of insurance pursuant to this Master Agreement and/or the Annual Operating Agreement shall be restricted and limited to the provisions of this Section 13."

(b) To remove Section 10.1 in its entirety and replace it with the following:

"10.1 As outlined in Operations Notices 19_02 and 19_03 and Fleet Management RTS Connect requirements as established or amended by the Authority."

(c) To remove Section 3.2 in its entirety and replace it with the following:

"3.2 Maintenance Payment: The Authority agrees to pay the Municipality upon approval of submitted work orders, and in accordance with the Budget contained in Schedule "C" of the Annual Operating Agreement, for all parts and labour for maintenance of the transit vehicles, and all insurance deductible payments upon presentation of suitable documentation. The amount paid for parts shall not exceed the amount paid by the Municipality and shall be net of GST."

SECTION 3 – TERM AND RENEWAL

3.1 Term and Renewal: The term of this agreement shall be from April 1, 2019 to March 31, 2020 except as otherwise provided herein. It is acknowledged by the parties that in the event renewal of the Annual Operating Agreement has not been executed before the end of this term, this agreement shall remain in full effect for an additional 180 days or until either:

- a) renewal of the Annual Operating Agreement is executed; or,
- b) termination as per Section 15.1 of the Master Operating Agreement.

It is further acknowledged by the parties that in the event of termination or non-renewal of the Annual Operation Agreement, the Master Agreement shall likewise be terminated or not renewed, as the case may be.

SECTION 4 – SCHEDULES

4.1 Schedules: The schedules attached hereto shall form part of the Annual Operating Agreement and be binding upon the parties hereto as though they were incorporated into the body of this Agreement.

- a) Schedule "A" – Transit Service Area
- b) Schedule "B" - Service Specifications
- c) Schedule "C" - Budget
- d) Schedule "D" – Payment Schedule
- e) Schedule "E" – Tariff-Fares

SECTION 5 – MISCELLANEOUS PROVISIONS

5.1 Amendment: This Annual Operating Agreement and the Schedules attached hereto may be amended only with the prior written consent of all parties.

5.2 Assignment: This Annual Operating Agreement shall not be assignable without the prior

written consent of the other parties.

- 5.3 Enurement: The Annual Operating Agreement shall be binding upon and enure to the benefit of the parties hereto and their respective successors.
- 5.4 Counterparts: This contract and any amendment hereto may be executed in counterparts, each of which shall be deemed to be an original and all of which shall be considered to be one and the same contract. A signed facsimile or pdf copy of this contract, or any amendment, shall be effective and valid proof of execution and delivery.
- 5.5 Operating Reserve Fund: In accordance with OIC 594, in fiscal year 2015/16, BC Transit established a Reserve Fund to record, for each local government, the contributions that BC Transit has received but has not yet earned.
- a) BC Transit will invoice and collect on monthly Municipal invoices based on budgeted Eligible Expenses.
 - b) Any expenditure of monies from the Reserve Fund will only be credited towards Eligible Expenses for the location for which it was collected.
 - c) Eligible Expenses are comprised of the following costs of providing Public Passenger Transportation Systems:
 - i. *For Conventional Transit Service:*
 - 1. the operating costs incurred in providing Conventional Transit Service excluding interest and amortization;
 - 2. the amount of any operating lease costs incurred by BC Transit for Conventional Transit Services;
 - 3. the amount of the municipal administration charge not exceeding 2% of the direct operating costs payable under an Annual Operating Agreement;
 - 4. an amount of the annual operating costs of BC Transit not exceeding 8% of the direct operating costs payable under an Annual Operating Agreement;
 - ii. *For Custom Transit Service:*
 - 1. the operating costs incurred in providing Custom Transit Service excluding interest and amortization, but including the amount paid by BC Transit to redeem taxi saver coupons issued under the Taxi Saver Program after deducting from that amount the amount realized from the sale of those coupons;
 - 2. the amount of any operating lease costs incurred by BC Transit for Custom Transit Service;
 - 3. the amount of the municipal administration charge not exceeding 2% of the direct operating costs payable under an Annual Operating Agreement; and,
 - 4. an amount of the annual operating costs of BC Transit not exceeding 8% of the direct operating costs payable under an Annual Operating Agreement;
 - d) Eligible Expenses exclude the costs of providing third-party 100%-funded services; and,
 - e) BC Transit will provide an annual statement of account of the reserves received and utilized, including any interest earned for each local government.
- (2) For Custom Transit Service:
- (a) the operating costs incurred in providing Custom Transit Service excluding interest and amortization, but including the amount paid by BC Transit to redeem taxi saver coupons issued under the Taxi Saver Program after deducting from that amount the amount realized from the sale of those coupons;
 - (b) the amount of any operating lease costs incurred by BC Transit for Custom Transit Service;

- (c) the amount of the municipal administration charge not exceeding 2% of the direct operating costs payable under an Annual Operating Agreement;
 - (d) an amount of the annual operating costs of BC Transit not exceeding 8% of the direct operating costs payable under an Annual Operating Agreement.
- f) BC Transit will provide an annual statement of account of the reserves received and utilized, including any interest earned for each local government.
 - g) On any termination of this Agreement, any funds remaining in the Reserve Fund, including any interest accrued, will be used to defray the Eligible Expenses of providing Service Hours in the following Fiscal Year.

SECTION 6 – NOTICES AND COMMUNICATION

All notices, claims and communications required or permitted to be given hereunder shall be in writing and shall be sufficiently given if personally delivered to a responsible officer of the party hereto to whom it is addressed or if mailed by prepaid registered mail, to:

SUNSHINE COAST REGIONAL DISTRICT

c/o Administrator
1975 Field Road
Sechelt, BC V0N 3A1

and to

BC Transit

c/o Chief Operating Officer
520 Gorge Road East
Victoria, BC V8W 2P3

and, if so mailed during regular mail service, shall be deemed to have been received five (5) days following the date of such mailing.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands and seals and where a party is a corporate entity the seal of such party has been affixed hereto in the presence of its duly authorized officer this _____ day of 2018.

THE CORPORATE SEAL OF **SUNSHINE COAST REGIONAL DISTRICT** has been hereto affixed in the presence of:

THE COMMON SEAL OF **BRITISH COLUMBIA TRANSIT** has been hereto affixed in the presence of:

Brian Anderson, Chief Operating Officer

Kevin Schubert, Director, Regional Transit Systems

SCHEDULE "A" - TRANSIT SERVICE AREA BOUNDARIES

The boundaries of the Municipal Transit Service Area shall be defined as follows:

The boundaries of the Sunshine Coast Transit Service Area shall be the corporate boundaries of the Sunshine Coast Regional District excluding Electoral Area "A".

SCHEDULE “B” – SERVICE SPECIFICATIONS**Sunshine Coast Base Budget Official AOA 2019/2020****Schedule 'B'**

Effective Apr 01, 2019

Scheduled Revenue Service**19/20 Full Year (Apr 01, 2019 to Mar 31, 2020)**

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Apr 19, 2019	Apr 22, 2019	May 20, 2019	Jul 01, 2019	Aug 05, 2019	Sep 02, 2019	Oct 14, 2019	Nov 11, 2019	Dec 25, 2019	Dec 26, 2019	Jan 01, 2020	Feb 17, 2020
Hrs/Day	98.85	98.85	98.85	98.85	101.38	56.07	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55	54.55
Kms/Day	3,367.81	3,367.81	3,367.81	3,367.81	3,454.01	1,910.30	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51	1,858.51

Extra Revenue Service

	Apr, 2019	May, 2019	Jun, 2019	Jul, 2019	Aug, 2019	Sep, 2019	Oct, 2019	Nov, 2019	Dec, 2019	Jan, 2020	Feb, 2020	Mar, 2020
Extra Overload Hours	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25	27.25
Extra Overload Kilometres	945.44	945.44	945.44	945.44	945.44	945.44	945.44	945.44	945.44	945.44	945.44	945.44

Adjusted Revenue Service

	Apr, 2019	May, 2019	Jun, 2019	Jul, 2019	Aug, 2019	Sep, 2019	Oct, 2019	Nov, 2019	Dec, 2019	Jan, 2020	Feb, 2020	Mar, 2020

2019/2020 Calendar Specification

Period	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Exceptions	Total	Exception Days
Apr 01, 2019 to Apr 30, 2019	4	5	4	4	3	4	4	2	30	Apr 19, 2019 Good Friday 2019 (Fri)
May 01, 2019 to May 31, 2019	3	4	5	5	5	4	4	1	31	Apr 22, 2019 Easter Monday 2019 (Mon)
Jun 01, 2019 to Jun 30, 2019	4	4	4	4	4	5	5	0	30	May 20, 2019 Victoria Day 2019 (Mon)
Jul 01, 2019 to Jul 31, 2019	4	5	5	4	4	4	4	1	31	Jul 01, 2019 Canada Day 2019 (Mon)
Aug 01, 2019 to Aug 31, 2019	3	4	4	5	5	5	4	1	31	Aug 05, 2019 BC Day 2019 (Mon)
Sep 01, 2019 to Sep 30, 2019	4	4	4	4	4	4	5	1	30	Sep 02, 2019 Labour Day 2019 (Mon)
Oct 01, 2019 to Oct 31, 2019	3	5	5	5	4	4	4	1	31	Oct 14, 2019 Thanksgiving Day 2019 (Mon)
Nov 01, 2019 to Nov 30, 2019	3	4	4	4	5	5	4	1	30	Nov 11, 2019 Remembrance Day 2019 (Mon)
Dec 01, 2019 to Dec 31, 2019	5	5	3	3	4	4	5	2	31	Dec 25, 2019 Christmas Day 2019 (Wed)
Jan 01, 2020 to Jan 31, 2020	4	4	4	5	5	4	4	1	31	Dec 26, 2019 Boxing Day 2019 (Thu)
Feb 01, 2020 to Feb 29, 2020	3	4	4	4	4	5	4	1	29	Jan 01, 2020 New Years Day 2020 (Wed)
Mar 01, 2020 to Mar 31, 2020	5	5	4	4	4	4	5	0	31	Feb 17, 2020 Family Day 2020 (Mon)
Total	45	53	50	51	51	52	52	12	366	12 Exceptions

Monthly Summary

Month	Conventional Transit						
	Revenue Hours				Revenue Kilometers		
	Scheduled	Extra	Adjusted	Total	Scheduled	Extra	Total
April, 2019	2,536.17	27.25		2,563.42	86,407.06	945.44	87,352.50
May, 2019	2,684.38	27.25		2,711.63	91,456.57	945.44	92,402.01
June, 2019	2,540.22	27.25		2,567.47	86,545.05	945.44	87,490.49
July, 2019	2,681.85	27.25		2,709.10	91,370.37	945.44	92,315.81
August, 2019	2,641.60	27.25		2,668.85	89,999.06	945.44	90,944.50
September, 2019	2,538.70	27.25		2,565.95	86,493.26	945.44	87,438.70
October, 2019	2,681.85	27.25		2,709.10	91,370.37	945.44	92,315.81
November, 2019	2,542.75	27.25		2,570.00	86,631.25	945.44	87,576.69
December, 2019	2,593.25	27.25		2,620.50	88,351.77	945.44	89,297.21
January, 2020	2,684.38	27.25		2,711.63	91,456.57	945.44	92,402.01
February, 2020	2,441.37	27.25		2,468.62	83,177.24	945.44	84,122.68
March, 2020	2,681.85	27.25		2,709.10	91,370.37	945.44	92,315.81
Total	31,248.37	327.00	0.00	31,575.37	1,064,628.94	11,345.28	1,075,974.22

Sunshine Coast Custom Base Budget Official AOA 2019/2020

Schedule 'B'

Effective Apr 01, 2019

Scheduled Revenue Service

19/20 Full Year (Apr 01, 2019 to Mar 31, 2020)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
Hrs/Day	11.25	13.25	13.25	13.50	14.50	5.00		
Kms/Day	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Extra Revenue Service

	Apr, 2019	May, 2019	Jun, 2019	Jul, 2019	Aug, 2019	Sep, 2019	Oct, 2019	Nov, 2019	Dec, 2019	Jan, 2020	Feb, 2020	Mar, 2020
Extra Overload Hours	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00

Adjusted Revenue Service

	Apr, 2019	May, 2019	Jun, 2019	Jul, 2019	Aug, 2019	Sep, 2019	Oct, 2019	Nov, 2019	Dec, 2019	Jan, 2020	Feb, 2020	Mar, 2020

2019/2020 Calendar Specification

Period	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Exceptions	Total	Exception Days
Apr 01, 2019 to Apr 30, 2019	4	5	4	4	3	4	4	2	30	Apr 19, 2019 Good Friday 2019 (Fri)
May 01, 2019 to May 31, 2019	3	4	5	5	5	4	4	1	31	Apr 22, 2019 Easter Monday 2019 (Mon)
Jun 01, 2019 to Jun 30, 2019	4	4	4	4	4	5	5	0	30	May 20, 2019 Victoria Day 2019 (Mon)
Jul 01, 2019 to Jul 31, 2019	4	5	5	4	4	4	4	1	31	Jul 01, 2019 Canada Day 2019 (Mon)
Aug 01, 2019 to Aug 31, 2019	3	4	4	5	5	5	4	1	31	Aug 05, 2019 BC Day 2019 (Mon)
Sep 01, 2019 to Sep 30, 2019	4	4	4	4	4	4	5	1	30	Sep 02, 2019 Labour Day 2019 (Mon)
Oct 01, 2019 to Oct 31, 2019	3	5	5	5	4	4	4	1	31	Oct 14, 2019 Thanksgiving Day 2019 (Mon)
Nov 01, 2019 to Nov 30, 2019	3	4	4	4	5	5	4	1	30	Nov 11, 2019 Remembrance Day 2019 (Mon)
Dec 01, 2019 to Dec 31, 2019	5	5	3	3	4	4	5	2	31	Dec 25, 2019 Christmas Day 2019 (Wed)
Jan 01, 2020 to Jan 31, 2020	4	4	4	5	5	4	4	1	31	Dec 26, 2019 Boxing Day 2019 (Thu)
Feb 01, 2020 to Feb 29, 2020	3	4	4	4	4	5	4	1	29	Jan 01, 2020 New Years Day 2020 (Wed)
Mar 01, 2020 to Mar 31, 2020	5	5	4	4	4	4	5	0	31	Feb 17, 2020 Family Day 2020 (Mon)
Total	45	53	50	51	51	52	52	12	366	12 Exceptions

Monthly Summary

Month	Custom Transit							
	Revenue Hours				Revenue Kilometers			
	Scheduled	Extra	Adjusted	Total	Scheduled	Extra	Adjusted	Total
April, 2019	281.75	5.00		286.75	0.00			
May, 2019	313.00	5.00		318.00	0.00			
June, 2019	288.00	5.00		293.00	0.00			
July, 2019	309.50	5.00		314.50	0.00			
August, 2019	304.75	5.00		309.75	0.00			
September, 2019	283.00	5.00		288.00	0.00			
October, 2019	311.75	5.00		316.75	0.00			
November, 2019	291.25	5.00		296.25	0.00			
December, 2019	280.75	5.00		285.75	0.00			
January, 2020	311.00	5.00		316.00	0.00			
February, 2020	276.75	5.00		281.75	0.00			
March, 2020	307.50	5.00		312.50	0.00			
Total	3,559.00	60.00	0.00	3,619.00	0.00	0.00	0.00	

SCHEDULE “C” – BUDGET**SUNSHINE COAST CONVENTIONAL**

	BASE BUDGET 2019/20
TOTAL REVENUE	\$768,365
TOTAL OPERATING COSTS	\$3,257,947
TOTAL COSTS (including Local Government Share of Lease Fees)	\$3,770,666
NET LOCAL GOVERNMENT SHARE OF COSTS	\$1,354,948

SUNSHINE COAST CUSTOM

	BASE BUDGET 2019/20
TOTAL REVENUE	\$11,000
TOTAL OPERATING COSTS	\$401,946
TOTAL COSTS (including Local Government Share of Lease Fees)	\$453,457
NET LOCAL GOVERNMENT SHARE OF COSTS	\$152,787

SCHEDULE “D” – PAYMENT SCHEDULE**2019/20 Payment Schedule****Sunshine Coast Conventional Transit and Custom Transit**

The Authority agrees to pay the Operating Company a monthly payment, except for d) below, the amount of which is determined on the following basis:

1) Payment Schedule

- a) For Specified Service in Schedule "B":
 - i) \$34,977.35 for Fixed Monthly Payment for conventional transit service; plus
 - ii) \$6,495.98 for Fixed Monthly Payment for custom transit service; plus
 - iii) \$48.15 per Revenue Hour for conventional transit service; plus
 - iv) \$38.32 per Revenue Hour for custom transit service; plus
 - v) Variable distance costs for fuel and tires as billed, with satisfactory supporting documentation.
- b) For deleted Fixed Costs as contained in Appendix 3 of this schedule, an amount equal to 1/365 of the Fixed Costs annual amount shall be deducted for each day or part day.
- c) For Added Service or Deleted Service within the regular hours of system operation specified in Schedule "B":
 - i) \$48.15 per Revenue Hour for conventional transit service; plus
 - ii) \$38.32 per Revenue Hour for custom transit service; plus
 - iii) Variable distance costs for fuel and tires as billed, with satisfactory supporting documentation.
- d) For Maintenance, the Authority agrees to pay the Operating Company upon processing an approved work order as follows:
 - i) \$54.64 per hour for labour by a licensed mechanic for the maintenance of transit vehicles.
- e) Not applicable.
- f) Prior to conducting a Special Group Trip, the Operating Company must apply for and receive from BC Transit, a pre-approval to conduct the trip, the cost recovery rates to be charged and the method of payment.

**INFORMATION CONTAINED IN THIS AGREEMENT IS SUBJECT TO THE
FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY ACT.
CONSULT WITH THE AUTHORITY PRIOR TO RELEASING INFORMATION TO
INDIVIDUALS OR COMPANIES OTHER THAN THOSE WHO ARE PARTY TO
THIS AGREEMENT.**

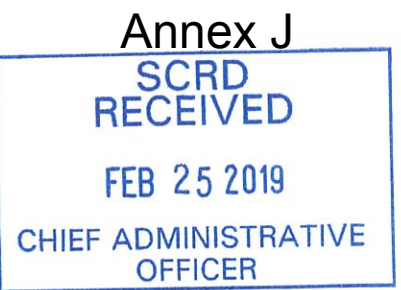
SCHEDULE “E” – TARIFF-FARES*Effective as of May 1, 2016***Fares:****Conventional Transit Service:**

- | | | |
|--|--|---------|
| a) Single Cash Fares | | |
| i) All Fares | | \$2.00 |
| ii) Child, 4 or under | | Free |
| iii) Accessible Transit Attendant, | | Free |
| b) Monthly Pass | | |
| i) Adult | | \$60.00 |
| ii) Senior | | \$42.00 |
| iii) Student | | \$42.00 |
| iv) Child, 4 or under | | Free |
| c) Tickets 10, \$2.00 tickets for | | \$18.00 |
| d) Day Pass: | | |
| i) All Fares | | \$5.00 |
| e) CNIB Identification Card available from the local office of the CNIB. | | |
| f) BC Bus Pass valid for the current calendar year and available through the Government of British Columbia BC Bus Pass Program. | | |
| g) BC Transit Employee Bus Pass | | |

Custom Transit Service*Effective as of May 1, 2016*

- | | |
|----------------------------------|---------|
| a) Registered User | \$2.00 |
| b) Companion | \$2.00 |
| c) Attendant required for travel | Free |
| Sheet of 10 tickets | \$18.00 |

SSC101 COMMITTEE
Southern Sunshine Coast, BC



BY EMAIL

February 22, 2019

SCRD Directors

We are writing to seek your full support of our efforts to convince the Government of British Columbia to construct a highway here on the Southern Sunshine Coast in place of the current route which is essentially a local road and parkway. Your support would be of great value as we pursue our objectives.

The SC101 Committee is comprised of a group of citizens living, working and travelling on the Southern Sunshine Coast. Along with over 6,000 signees on a petition with more coming every day we have fundamental concerns about the transportation infrastructure on the Coast. Simply put, it is inadequate for the rapid growth in residential, commercial and visitor traffic volumes of the last several years which will only continue to rise in the future.

Our Committee has adopted the following Mission Statement:

1. To achieve construction of a new, state of the art, spectacular scenic highway from Langdale to Sechelt that meets the needs of residents, visitors, businesses, transit and first responders, now and in the years to come.
2. To upgrade the existing thoroughfare to make it a safe parkway route for local traffic as well as cyclists, pedestrians and transit.
3. To increase safety, convenience and reliability for all.

Yours sincerely

Robin Merriott
On behalf of the SC101 Committee

www.SushineCoast101.ca

Coast101Project@gmail.com

