



INFRASTRUCTURE SERVICES COMMITTEE

Thursday, December 9, 2021
Held Electronically
and Transmitted via the SCRCD Boardroom,
1975 Field Road, Sechelt, B.C.

AGENDA

CALL TO ORDER 9:30 a.m.

AGENDA

1. Adoption of Agenda

PRESENTATIONS AND DELEGATIONS

2. Blair Wallace, Environmental, Health & Safety Consultant, New West Gypsum
Regarding Gypsum Recycling in BC
Verbal

REPORTS

3. Pender Harbour Transfer Station Site Assessment Results and Next Steps
Manager, Solid Waste Services
Regional Solid Waste (Voting – All)
Annex A
pp 1 - 27
4. Enforcement of Landfill Regulations Considerations, including potential use of clear bags
Manager, Solid Waste Services
Regional Solid Waste (Voting – All)
Annex B
pp 28 - 45
5. Pender Harbour Transfer Station Food Waste Drop-off Program Update and Next Steps
Manager, Solid Waste Services
Regional Solid Waste (Voting – All)
Annex C
pp 46 - 48
6. 2022 Water Rate Structure Review Process
Manager, Strategic Initiatives
Regional Water (Voting – A, B, D, E, F and Sechelt)
Annex D
pp 49 - 51
7. Roberts Creek Co-Housing Wastewater Treatment Plant - Update
Manager, Utility Services / Utility Operations Superintendent
Wastewater Plants (Voting – A, B, D, E and F)
Annex E
pp 52 - 55
8. Land Transfer shíshálh Nation Foundation Agreement - Update
General Manager, Infrastructure Services
Regional Water (Voting – A, B, D, E, F and Sechelt)
Annex F
pp 56 - 58

COMMUNICATIONS

9. 2021 WildSafe BC Sunshine Coast Annual Report
(Voting – All)

Annex G
pp 59 - 69

NEW BUSINESS

IN CAMERA

That the public be excluded from attendance at the meeting in accordance with Section 90 (1) (k) of the *Community Charter* – “negotiations and related discussion respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public”.

ADJOURNMENT

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Robyn Cooper, Manager, Solid Waste Services

SUBJECT: **PENDER HARBOUR TRANSFER STATION SITE ASSESSMENT RESULTS AND NEXT STEPS**

RECOMMENDATION(S)

THAT the report titled Pender Harbour Transfer Station Site Assessment Results be received for information;

AND THAT the Share Shed program at the Pender Harbour Transfer Station be discontinued and the Share Shed be dismantled in 2022.

BACKGROUND

The Pender Harbour Landfill site has been in operation since the 1960's, with the landfill closing in 2015 and operations continuing as a transfer station.

The public drop-off area at the site was constructed in the early 1990's and has had only minor ongoing maintenance since. Public drop-off infrastructure includes the fence, lock-block wall (raised drop-off area), concrete bin pads, scale and scale house as well as some of the on-site containers used for storage of materials. Minor maintenance has been conducted on an as-needed basis and no major repairs or replacements have occurred.

The share shed was constructed in mid-1990. Only minor exterior maintenance such as annual power washing and minor repairs to the eavestrough have been conducted.

The commercial tipping pad area was constructed in 2015 as part of the transition to a transfer station and has undergone several repairs to its lock block wall.

The Pender Harbour Transfer Station (PHTS) does not currently have a preventative maintenance or asset management plan with matching funding.

Over the past several years, staff have noticed degradation to the infrastructure, beyond the scope of available staffing resources. As such, as part of the 2021 Budget process, the Board approved funds to hire a contracted service provider to assess the existing infrastructure at the Pender Harbour Transfer Station and provide recommendations for immediate and future repairs (046/21 No. 55).

The purpose of this report is to provide the results of the assessment and to provide additional context on the associated budget proposal that will be part of the 202 Budget Round 1 Committee meetings agenda.

DISCUSSION

Findings

The SCRD's contracted landfill engineering company, XCG Consulting Ltd. (XCG), conducted a site visit to the Pender Harbour Transfer Station in September 2021 to assess the infrastructure.

The site assessment report is included as Attachment A.

Overall, work is required to be completed at the Pender Harbour Transfer Station to ensure the site remains safe to operate. As such, the work was divided into two phases:

- Phase 1 - Immediate Repairs / Improvements and engineering design for Phase 2
- Phase 2 - Future Repairs / Improvements

The anticipated cost for Phase 1 is \$80,000, plus a 20% contingency, resulting in \$96,000 if including the Share Shed program. Alternatively, dismantling and discontinuing the Share Shed program results in an anticipated cost of \$70,000 (\$57,000 plus a 20% contingency).

XCG recommends a complete redesign / reconstruction of the transfer station to address numerous issues on Site. The preliminary cost estimate for Phase 2 (including a 20% contingency) is \$765,000. This estimate will be updated as part of Phase 1.

Options and Analysis

Staff consider the nature of the issues of concern identified by XCG of such a critical nature for the safe operations of the transfer station for both staff and customers that it is recommended to advance their resolution in 2022. Additional Board direction is sought regarding the status of the Pender Harbour Transfer Station Share Shed Program. As such, staff have prepared two options for the Board's consideration. Staff prepared a 2022 R1 Budget Proposal with a high-level overview of the options and associated costs.

Under both options, Phase 2 would be brought forward to the 2023 budget process for consideration.

Option 1a – Prepare a 2022 R2 Budget Proposal for proceeding with Phase 1 with discontinuation of the Share Shed program (recommended option)

Under this option, the Share Shed program would be discontinued. The Share Shed would be dismantled and materials recycled or disposed of accordingly as per the SCRD's purchasing policy. Residents could continue to utilize existing thrift stores and online exchange/sales websites.

However, the Share Shed program at the PHTS was highly utilized pre-pandemic. It should be noted that the share shed has been closed since March 2020 due to COVID-19 pandemic and staff have received some requests regarding when the share shed will re-open.

This option aligns with the previous Board direction to not repair the Share Shed at the Sechelt Landfill due to the high cost to do so. Repairing the PHTS Share Shed is an additional \$26,000 as well as the costs for future repairs and replacement which are not currently accounted for in the PHTS budget.

As well, items are dropped off at the Share Shed at no cost and any items not removed for reuse are disposed with no tipping fees collected. It is estimated that between 60% and 80% of what is dropped off at the Share Shed is not reused and is landfilled.

The budget required under Option 1a is \$70,000 (\$57,000 plus 20% contingency).

Based on the above rationale, staff recommend this option.

Option 1b – Prepare a 2022 R2 Budget Proposal for proceeding with Phase 1 with continuation of the Share Shed program

Under Option 1b, the Share Shed program would continue after the recommended repairs are completed.

This option aligns with the public's desire to utilize the Share Shed program.

However, this option does not align with the Board's direction to not repair the Share Shed at the Sechelt Landfill due to the high costs to do so. As well, there are local opportunities for reuse and recycling via thrift stores and online.

The budget required under Option 1b is \$96,000 (\$80,000, plus a 20% contingency.)

This option is \$26,000 higher in cost than Option 1a and does not account for future repairs and replacement costs

Operational Implications

The XCG recommended repairs and improvements may have temporary operational implications that will be further assessed as the project proceeds. Any such implications would be communicated to the public as necessary.

Financial Implications

For either Phase 1 option, the proposed funding source is taxation, Regional Solid Waste [350].

Option 1a has a proposed budget of \$70,000.

Option 1b has a proposed budget of \$96,000.

For Phase 2, the preliminary budget is \$765,000 to be confirmed as part of Phase 1.

Timeline and next steps

The budget proposal prepared for the 202 R1 Budget deliberations is based on Option 1a and contains the details required for if the Board wants to consider option 1b.

Based on the results of Phase 1 staff will bring forward Phase 2 to the 2023 Budget process for consideration.

STRATEGIC PLAN

N/A

CONCLUSION

The assessment completed by XCG concluded that several repairs are required for the Pender Harbour Transfer Station site in order to remain safe to operate.

The proposed approach is to conduct the repairs in two phases, with Phase 1 completed in 2022 and Phase 2 completed in 2023.

Staff prepared a 2022 R1 Budget Proposal with a high-level overview of the options and associated costs. Staff will bring Phase 2 Repairs to the 2023 Budget process.

ATTACHMENTS

Attachment A: XCG's Pender Harbour Transfer Station Site Assessment Report dated December 1, 2021

Reviewed by:			
Manager		Finance	X-T.Perreault
GM	X- R. Rosenboom	Legislative	
CAO	X - D. McKinley	Other	

December 1, 2021

XCG File No. 4-2111-01-84

Mrs. Robyn Cooper
Manager, Solid Waste Services
Infrastructure Services
Sunshine Coast Regional District
1975 Field Road
Sechelt, British Columbia V0N 3A1

Re: Pender Harbour Transfer Station Assessment

Dear Mrs. Cooper:

XCG Consulting Limited (XCG) is pleased to provide the following letter to the Sunshine Coast Regional District (SCRD) regarding the Assessment of the Pender Harbour Transfer Station (Site). The purpose of this assessment is to provide a plan for immediate and long term repairs required to address safety and drainage issues at the Site.

1. BACKGROUND

The Pender Harbour Landfill had been in operation since the 1960s. Landfilling ceased at the Site on July 20, 2015, when the Site began operation as a transfer station. Construction of the landfill final cover and associated closure works was completed in the fall of 2015.

The Site is located approximately 2.75 kilometres northeast of Garden Bay, on Pender Harbour Landfill Site Road off Garden Bay Road. The legal description of the Site is a Portion of District Lot 4336, Group 1, New Westminster District. The Site property is on the North boundary of District Lot 4336 adjacent to District Lot 3677.

As shown on Figure 1, the current transfer station infrastructure includes the following:

- Weigh scale;
- Scale house;
- Public tipping area;
- Commercial tipping pad;
- Propane tank storage;
- Tire bin;
- Cardboard bins;
- Share shed;
- Wood and green waste areas; and
- 20 foot sea-can for tool storage.

The existing public drop off area was constructed in the mid-90s and is comprised of concrete lock blocks, concrete bin pads, and fill of an unknown nature. In general, the public backs vehicles up to the lock block wall and drops waste in to the 40-yard bins.



Although temporarily closed due to the COVID-19 pandemic, the Site operates a share shed where the public can drop off items in good condition for other patrons to collect and re-use.

The wood waste and green waste areas are loosely defined areas in the northeast corner of the Site where the public backs up and leaves treated and untreated wood as well as green waste.

The commercial tipping pad and push wall were constructed at the Site in the summer of 2015 to accommodate the transition of the facility to a transfer station. Commercial waste is now dumped on the commercial tipping pad, where it is loaded by the operations contractor into bins for transfer to the Sechelt Landfill.

2. SITE VISIT AND FINDINGS

On Thursday September 16, 2021, Mr. Trevor Mahoney from XCG completed a Site visit and identified the issues outlined below. It should be noted that the descriptions below will reference pictures in the photographic logs and the locations for those photographs are shown on Figure 2.

2.1 Propane Tank Storage Bin

As show in Photograph 1, the floor structure of the propane tank storage bin is showing signs of severe rot and decay. The public has direct access to this structure and would require, at times, to walk into the structure to place propane tanks.

2.2 Perimeter Electric Bear Fence

The perimeter bear fence was originally constructed in 1993 and has been repaired as needed over the years. As shown in Photograph 2, there are several areas around the perimeter of the Site where the electric bear fence is damaged. The damage to the fence is the result of the following:

- Site operations damaging the fence;
- Trees around the outside of the fence and or branches from those trees falling; and
- Section of the fence are sliding down the steep slopes around the perimeter of the Site.

2.3 Commercial Concrete Tipping Pad

The commercial concrete tipping pad is heavily damaged due to historic operations. Several of the lock blocks along two sides of the pad are damaged and in need of replacing. On the third side of the pad, the tool storage Sea-can is damaged as a result of being used as a push wall for the excavator loading the commercial bins. The damage to the lock blocks and Sea-can are shown in Photograph 3.

2.4 Wood and Green Waste Areas

Both the treated and un-treated wood, as well as the green waste areas are dangerously close to the steep slopes around the perimeter of the transfer station. The public has uncontrolled access to the entire area and backs up to drop off wood and green waste in this area. As such, there is the risk of a vehicle or person getting too close to the edge, potentially causing a slope failure or simply driving too far and going over the edge. Photographs 4 and 5 show the extent of the wood and green waste areas, while Photograph 6 provides the view from the bottom of the slope looking back up.



2.5 Site Drainage

Photograph 7 shows the drainage issues at the north end of the drop off area lock block wall. The grading of the drop off area is such that it creates a path for water to flow to one spot along the edge of the lock block wall eroding the soils in and around the lock block wall. Site drainage in general is inconsistent, with some potholes collecting surface water and some areas not draining properly.

2.6 Lock Block Wall Issues

Almost the entire lock block wall is showing signs of structural concern. The issues include some blocks tipping out, while others tip in, some blocks are heaved upwards, and others have sunk. Photograph 8 shows the lock block along the drop off area staircase heaved upwards. Photographs 9 through 12 show the tilting (inward and outward) of the lock block wall. The lock block wall issues are likely the result of improper construction. Inconsistent fill used in the construction, lack of drainage, and improper installation of the lock block wall has led to a number of the structural issues.

2.7 Concrete Bin Pads

Almost all of the concrete bin pads are showing signs of cracking or have developed large cracks already. Photograph 13 shows a large crack in one of the bin pads. Improper structural base and possibly lack of rebar in the concrete bin pads has led to the cracks and general decay of the bin pads.

2.8 Cardboard Bin Area

Similar to the lock block wall, the cardboard bin area is showing signs of unevenness and the wall between the bins and the area of public access is leaning. Again, similar to the lock block wall, poor construction, inconsistent fill, and lack of drainage have likely contributed to this issue. Photograph 14 shows the wall between the public access and the cardboard bin.

2.9 Share Shed

The share shed was constructed in 1996, and is showing its age. The roof, fascia, and eaves are all in need of replacing as part of regular maintenance. Inside, there is an area of excess moisture and rotting. The excess moisture and rotting is likely due to the location of the makeshift rain barrel located against the southwest wall of the share shed. The spout leading into the rain barrel is leaking and the rain barrel is rusted and may be leaking. The leaks, combined with the spout and rain barrel being located directly against the share shed structure, is causing excess water building inside the share shed. Photograph 15 shows the rotted southwest corner of the share shed and Photograph 16 shows the rain barrel and down spout.

2.10 Scale house

The scale house was constructed in 1994, and similar to the share shed, is showing its age. The floor inside the trailer is cracked and uneven, it lacks proper storage, and from time to time smells of excess moisture and possible rat and mouse urine/feces.

3. RECOMMENDATIONS

XCG has prioritized the repairs/improvements as, required immediately (within the next 1 to 2 months), and those that can be addressed in the future (possibly summer of 2022).



3.1 Immediate Repairs / Improvements

- New share shed roof, fascia, and eaves;
- Repair the southwest corner on the interior of the share shed;
- A new rain barrel system is recommended; however, at a minimum, relocate the rain barrel and properly waterproof the downspout connection;
- Replace and relocate the propane tank storage bin;
- Relocate the tire bin; and
- Relocated the wood and green waste areas and provide delineators to limit the areas of access for the public.

The revised locations of the rain barrel, propane storage tank, tire bin, and wood, as well as green waste areas are shown on Figure 3. All Site infrastructure that can easily be moved should be moved, a minimum of 5 metres from the top of the slope around the perimeter of the Site to ensure safe operations for the staff and public.

Table 1 provides and cost estimate for the immediate repairs/improvements for the Site. It should be noted that a cost to complete a full transfer station survey has been included as part of the process for completing the future repairs/improvements detailed below. Table 2 provides the cost estimate to complete the immediate repairs; however, it provides the price to demolish and recycle the share shed should the SCRD decide to not repair it and instead remove it from the Site.

3.2 Future Repairs / Improvements

XCG recommends a complete redesign / reconstruction of the transfer station to address the numerous issues on Site. The list of actions required for the redesign / reconstruction includes the following:

- Reconstruction of the current 40-yard bin drop off area including proper fill, geogrid, drainage, and grading;
- Construction of a new 20-yard bin drop off area including proper fill, geogrid, drainage, and grading;
- Construction of a new, relocated commercial tipping pad;
- A new scale house and foundation;
- A new Sea-can for staff storage; and
- General site grading and drainage improvements.

Figure 4 provides a conceptual site layout with the revised locations for all relocated Site infrastructure as well as locations of new construction items.

Table 3 provides and cost estimate for the future repairs/improvements for the Site. It should be noted that the construction of the new 20-yard bin drop off area is optional although recommended.



4. LIMITATIONS

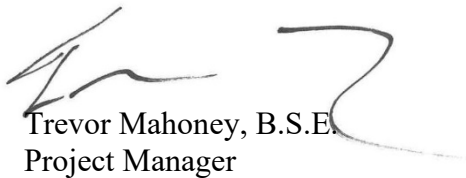
The scope of this letter is limited to the matters expressly covered. This letter presenting the Pender Harbour Transfer Station Assessment was produced for the sole use of the Sunshine Coast Regional District and may not be relied upon by any other person or entity without written authorization of XCG Consulting Limited. The scope of this letter may not be appropriate to satisfy the needs of other users, and any use or reuse of this document or the findings, conclusions, and recommendations represented herein, is at the sole risk of said users.

5. CLOSURE

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

Yours very truly,

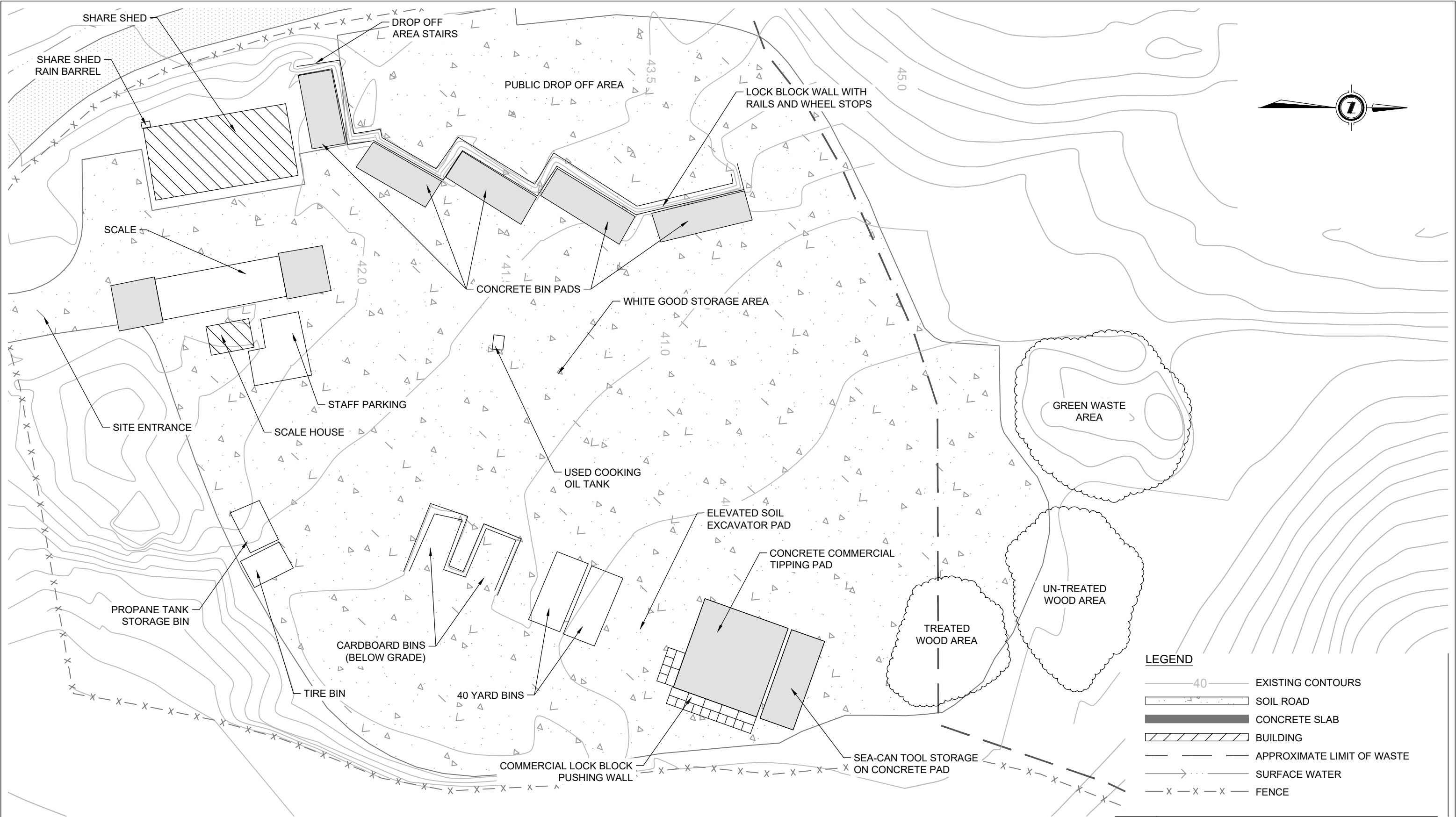
XCG CONSULTING LIMITED

A handwritten signature in black ink, appearing to read 'Trevor Mahoney'. The signature is fluid and cursive, with a large, sweeping 'T' and 'M'.

Trevor Mahoney, B.S.E.
Project Manager

Attachments: Figures
 Tables
 Site Photos

FIGURES



<div>FIGURE NOTES:</div> <div><div>-</div>SITE CONTOURS AS OF SEPTEMBER 14, 2013</div> <div><div>-</div>SITE INFRASTRUCTURE FROM AS-RECORDED DRAWINGS BY XCG IN AUGUST OF 2015 AND UPDATED BASED ON SEPTEMBER 18, 2021 SITE VISIT</div>

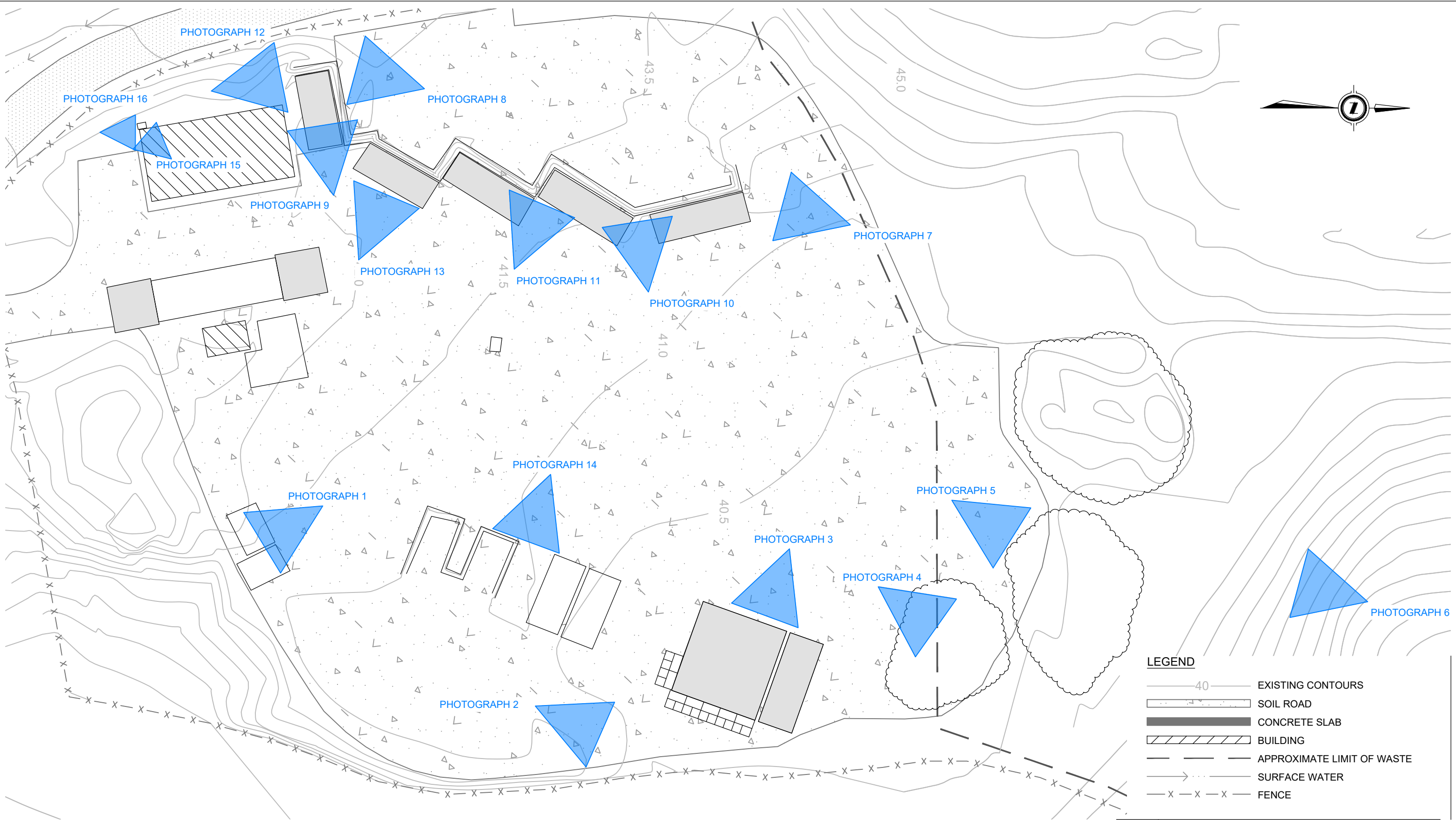


FIGURE NOTES:

- SITE CONTOURS AS OF SEPTEMBER 14, 2013
- SITE INFRASTRUCTURE FROM AS-RECORDED DRAWINGS BY XCG IN AUGUST OF 2015 AND UPDATED BASED ON SEPTEMBER 18, 2021 SITE VISIT

PENDER HARBOUR TRANSFER STATION ASSESSMENT

PENDER HARBOUR TRANSFER STATION

SUNSHINE COAST REGIONAL DISTRICT



VERIFY SCALE

BAR IS 10 mm ON ORIGINAL DRAWING.
0 10 mm
IF NOT 10 mm ON THIS SHEET, ADJUST SCALES ACCORDINGLY.




SITE PHOTOGRAPH LOCATIONS



Date:	DECEMBER 2021	Location:	BRITISH COLUMBIA	Rev:	0
Scale:	1 : 300		4-2111-02-84	Sheet:	FIG02

File: L42110184001FIG01+.dwg



FIGURE NOTES: - SITE CONTOURS AS OF SEPTEMBER 14, 2013	PENDER HARBOUR TRANSFER STATION ASSESSMENT		VERIFY SCALE		IMMEDIATE REPAIRS / IMPROVEMENTS		
	PENDER HARBOUR TRANSFER STATION		BAR IS 10 mm ON ORIGINAL DRAWING. 0  10 mm IF NOT 10 mm ON THIS SHEET, ADJUST SCALES ACCORDINGLY.				
	SUNSHINE COAST REGIONAL DISTRICT				Date: DECEMBER 2021	Location: BRITISH COLUMBIA	Rev. 0
			Scale: 1 : 300	4-2111-02-84	Sheet: FIG03		

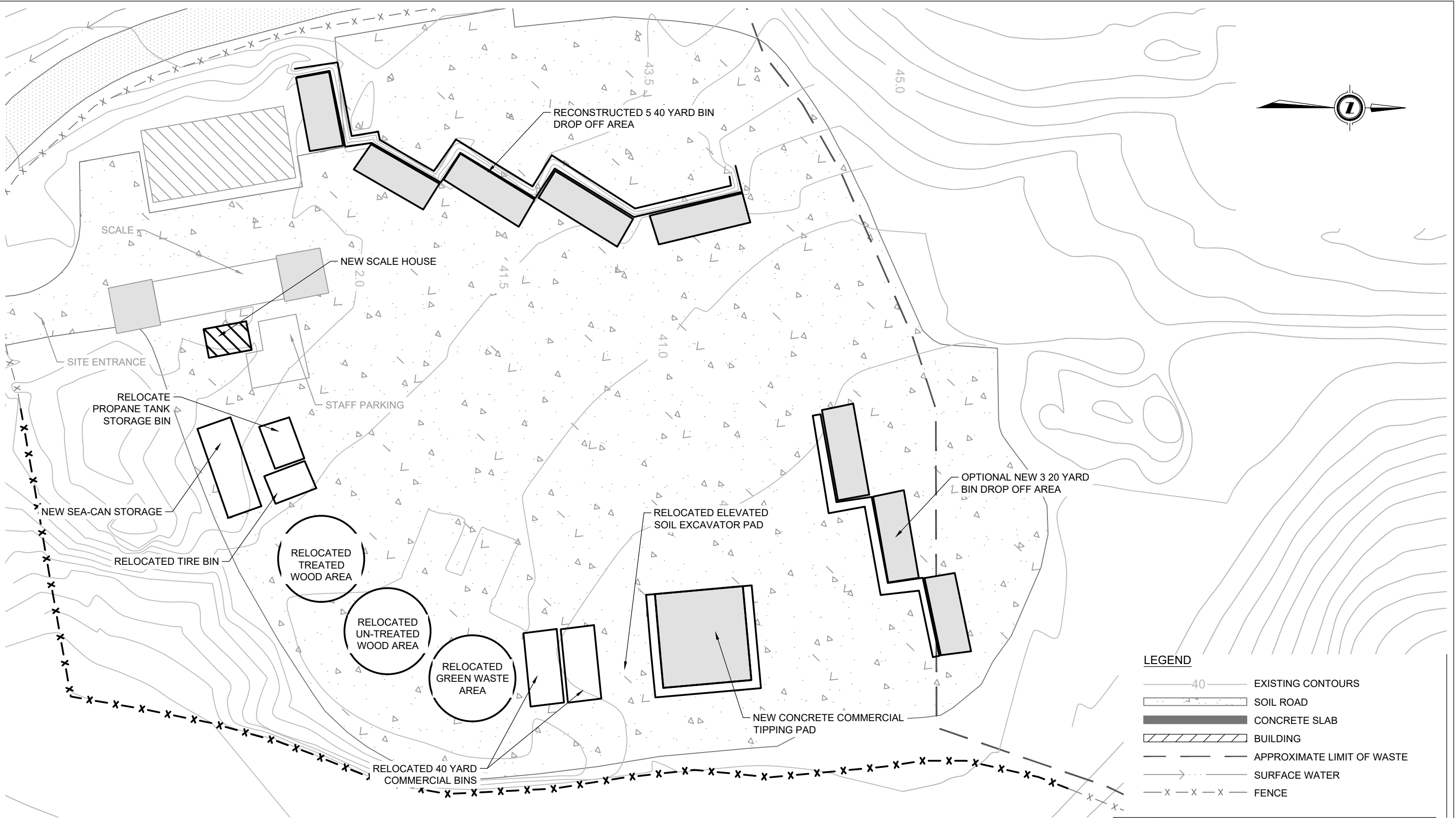


FIGURE NOTES:
- SITE CONTOURS AS OF SEPTEMBER 14, 2013

PENDER HARBOUR TRANSFER STATION ASSESSMENT

PENDER HARBOUR TRANSFER STATION

SUNSHINE COAST REGIONAL DISTRICT



VERIFY SCALE

BAR IS 10 mm ON ORIGINAL DRAWING.
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IF NOT 10 mm ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

FUTURE REPAIRS / IMPROVEMENTS



Date:	DECEMBER 2021	Location:	BRITISH COLUMBIA	Rev:	0
Scale:	1 : 300		4-2111-02-84	Sheet:	FIG03

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TABLES

Table 1 - Schedule of Prices - Immediate Repairs

Item	Specification	Total
New Share Shed Roof	00 00 00 / 1	\$ 17,500.00
Repair Interior Share Shed Wall	00 00 00 / 1	\$ 9,500.00
Relocate Rain Barrel and Downspout	00 00 00 / 1	\$ 1,500.00
Replace and Relocate Propane Tank Storage Bin	00 00 00 / 1	\$ 5,000.00
Relocated Tire Bin	00 00 00 / 1	\$ 250.00
Relocated Wood and Green Waste Areas	00 00 00 / 1	\$ 2,500.00
Complete Site Survey	00 00 00 / 1	\$ 8,500.00
Immediate Repairs Sub-Total		\$ 44,750.00
Mobilization and Demobilization (10%)		\$ 4,475.00
Engineering for Immediate Repairs		\$ 3,000.00
Engineering for the Design of Future Repairs		\$ 30,000.00
Total Schedule of Prices		\$ 79,225.00

Table 2 - Schedule of Prices - Immediate Repairs (Demolition of Share Shed)

Item	Specification	Total
Demolition and Salvage of Share Shed	00 00 00 / 1	\$ 7,500.00
Replace and Relocate Propane Tank Storage Bin	00 00 00 / 1	\$ 5,000.00
Relocated Tire Bin	00 00 00 / 1	\$ 250.00
Relocated Wood and Green Waste Areas	00 00 00 / 1	\$ 2,500.00
Complete Site Survey	00 00 00 / 1	\$ 8,500.00
Immediate Repairs Sub-Total		\$ 23,750.00
Mobilization and Demobilization (10%)		\$ 2,375.00
Engineering for Immediate Repairs		\$ 3,000.00
Engineering for the Design of Future Repairs		\$ 30,000.00
Total Schedule of Prices		\$ 56,125.00

Table 3 - Schedule of Prices - Future Repairs

Item	Specification	Total
Site Grading	00 00 00 / 1	\$ 27,500.00
Reconstruct 5 x 40 Yard Bin Drop Off Area	00 00 00 / 1	\$ 270,000.00
Construct New 3 x 20 Yard Bin Drop Off Area (Optional)	00 00 00 / 1	\$ 135,000.00
New Scale House	00 00 00 / 1	\$ 50,000.00
New Concrete Commercial Tipping Pad	00 00 00 / 1	\$ 17,500.00
Relocated Elevated Soil Excavator Pad	00 00 00 / 1	\$ 45,000.00
Replace 150 Metres of Bear Fence	00 00 00 / 1	\$ 12,500.00
Repair 250 Metres of Bear Fence	00 00 00 / 1	\$ 7,500.00
New Sea-Can Storage	00 00 00 / 1	\$ 22,500.00
Relocated 40 Yard Commercial Bins	00 00 00 / 1	\$ 750.00
Relocate Propane Tank Storage Bin	00 00 00 / 1	\$ 250.00
Relocated Tire Bin	00 00 00 / 1	\$ 250.00
Relocated Wood and Green Waste Areas	00 00 00 / 1	\$ 500.00
Immediate Repairs Sub-Total		\$ 561,750.00
Mobilization and Demobilization (10%)		\$ 56,175.00
Engineering (Construction Oversight)		\$ 20,000.00
Total Schedule of Prices		\$ 637,925.00



ATTACHMENTS

SITE PHOTOS



Photograph 1: Propane tank and tire bin area.



Photograph 2: Fence behind the concrete commercial tipping pad.



Photograph 3: Commercial concrete tipping pad.



Photograph 4: Treated wood area.



Photograph 5: Un-treated wood area.



Photograph 6: View up towards the backside of the wood areas.



Photograph 7: Drainage at the end of lock block wall.



Photograph 8: Lock block wall issues at drop off area stairs.



Photograph 9: Uneven lock blocks behind 40-yard bins.



Photograph 10: Uneven lock block at open wall locations.



Photograph 11: Uneven lock blocks at corner of lock block wall.



Photograph 12: Uneven lock block at the drop off area stairs.



Photograph 13: Cracked concrete bin pad.



Photograph 14: Uneven lock blocks at the cardboard bins.



Photograph 15: Interior share shed wall showing signs of excess water rot.



Photograph 16: Makeshift rain barrel at southwest corner of share shed.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Andrea Patrao, Solid Waste Programs Coordinator
Robyn Cooper, Manager, Solid Waste Services

SUBJECT: ENFORCEMENT OF LANDFILL DISPOSAL REGULATIONS – CONSIDERATIONS,
INCLUDING POTENTIAL USE OF CLEAR BAGS

RECOMMENDATION(S)

THAT the report titled **Enforcement of Landfill Disposal Regulations – Considerations, including Potential Use of Clear Bags** be received for information;

AND THAT SCRD Landfill Site Bylaw 405 be amended to remove the exclusion for residential curbside garbage collection loads as of July 1, 2022;

AND THAT the SCRD Refuse Collection Bylaw 431 be amended to require the separation of recyclable and controlled materials as identified in SCRD Landfill Site Bylaw 405 as of July 1, 2022;

AND THAT SCRD Landfill Site Bylaw 405 be amended to require that all bagged garbage disposed at the Sechelt Landfill and Pender Harbour Transfer Station use clear bags and allow the use of a privacy bag up to 25% volume of the clear bag as of July 1, 2022;

AND THAT SCRD Refuse Collection Bylaw 431 be amended to require that all bagged garbage be required to use clear bags and allow the use of a privacy bag up to 25% volume of the clear bag as of July 1, 2022;

AND FURTHER THAT these recommendations be incorporated into a future amendment of Bylaw 405 and Bylaw 431 accordingly.

BACKGROUND

At the January 28, 2021 Board meeting, the following resolution was adopted:

026/21 (in part) **Recommendation No. 1** *Landfill Disposal Bans for Food Waste and Recycling - Considerations*

AND THAT staff investigate how other jurisdictions monitor compliance including potential use of clear garbage bags;

The purpose of this report is to provide information to the Board as per the above resolution. It should be noted that the report is restricted to that focus and does not include any associated education or outreach that is or will be conducted to support landfill disposal regulations beyond the interactions at the Pender Harbour Transfer Station and Sechelt Landfill.

DISCUSSION

Current SCRD Disposal Regulations

As was presented in the January 14, 2021 Staff Report *Landfill Disposal Bans for Food Waste and Recycling – Considerations* (Attachment A) the SCRD regulates materials received at the Sechelt Landfill and Pender Harbour Transfer Station (Sites) via Landfill Site Bylaw 405. Once a material under the bylaw is designated as recyclable or controlled, the material is required to be separated by the customer otherwise additional fees apply.

The following is a list of materials designated as recyclable or controlled in Bylaw 405:

- Recyclable
 - Cardboard
 - Mattresses
 - Metal - includes appliances, propane tanks
 - Paint & Product Care Items (Sechelt Landfill only)
 - Tires
 - Yard and garden green waste
- Controlled
 - Asbestos containing materials (excluding gypsum, Sechelt Landfill Only)
 - Asphalt, concrete
 - Boats (Sechelt Landfill only)
 - Dead animals (Sechelt Landfill only)
 - Dirt & rocks
 - Gypsum
 - Recreation Vehicles (Sechelt Landfill only)
 - Roofing
 - Tires containing foam (pending, Sechelt Landfill only)
 - Wood

Pending SCRD Disposal Regulations

Following presentation of the January 14, 2021 Staff Report *Landfill Disposal Bans for Food Waste and Recycling – Considerations* (Attachment A), the Board decided to implement the regulation of disposal of food waste, food soiled paper and paper as of July 1, 2022. The associated Bylaw 405 amendments as per Resolution 026/21, No. 1, is to be implemented per July 1, 2022 and will result in 5% enforcement volume threshold for all sectors.

Current SCRD Compliance Monitoring

The SCRD completes compliance monitoring through screening customer loads (called waste screening) during the interactions between the Site customers and the Scale Attendant and Site Attendants, as well as, utilizing the Site Operator (Sechelt Landfill) for loads delivered to the active face. Waste screening, begins at the scale house with questions and is completed at the point of disposal where staff view the contents of the load as best as is possible based on how the load arrives.

Waste screening is required for all drop-off areas or points of disposal at the sites including those for green waste, wood waste (Pender only), appliances, mattresses and the drop-off bins (garbage, metal, gypsum).

At the point of disposal, if the threshold of a recyclable or controlled material has been exceeded, the Site Attendant will ask the customer to remove the materials. If the materials cannot be removed by the customer, the Site Attendant (or the Site Operator) would inform the Scale Attendant. The Scale Attendant then communicates this to the customer during the transaction prior to exiting the site. As per Bylaw 405, the tipping fee applied to the load is double the highest material type in the load. After disposal, there is no option for regulated materials to be removed and the material will be landfilled.

Currently, residential curbside garbage collection from all local governments is exempt from the recyclable or controlled materials in Bylaw 405. Staff recommend that Bylaw 405 be amended to remove that exemption. As well, staff recommend to amend Refuse Collection Bylaw 431 accordingly to ensure alignment with Bylaw 405. Without this Bylaw 405 amendment, SCRD, Town of Gibsons, District of Sechelt and Sechelt Indian Government District curbside residential garbage would be excluded from the pending July 1, 2022 landfill disposal regulations.

There are limitations to compliance monitoring in terms of insufficient staffing levels to be able to view every single load due to the spacing between the active face and the public drop-off area; there is not a staff member stationed at the active face. Another limitation is the use of black bags. Staff are directed to view the materials from a safe viewing distance as the customer is unloading and cannot see into black garbage bags.

Review of BC Municipalities Jurisdictional Scan of Regulated Material Enforcement

The following section provides a review and examples of how other BC municipalities enforce regulated materials.

Staff contacted, received responses from and utilized online resources available from eight Regional Districts. These included Cariboo, Kitimat-Stikine, Central Okanagan, North Okanagan, Mount Waddington, Comox Valley, Capital, and Metro Vancouver. A summary is provided in the table below.

Waste Screening Mechanism	Regional District Example	Regional District Example	Considerations
Inspections Targets regulated materials at designated locations that is not the final disposal location.	Metro Vancouver has dedicated inspector staff to inspect loads at random and at some sites utilizes Wi-Fi technology to instantly record what the inspection staff finds and transmits to the scale before the	Cariboo Regional District utilizes inspections mostly for commercial customers that are on account and the inspection is done on a timeframe such that the fees are levied after the hauler has left. This requires a dedicated staff	<ol style="list-style-type: none"> 1. Location for inspection required. 2. Dedicated staff or contractor. 3. Documentation required for proof of regulated materials. 4. Can be done on intermittent basis or

	waste hauler leaves the site.	person for this task who inspects the load.	at random based on staffing levels.
At the Scale	All Regional Districts rely on questions asked by Scale staff to assist in identifying regulated materials and communicating with the customer.		Limited ability to view materials if in black bags.
At the Active Face	Regional Districts rely on machine operators or contractors who perform the burial of landfilled materials to monitor for regulated waste. If it is visible, Scale staff are informed and a fee is charged to the hauler.		For some, this is the only method of enforcement. Limitations to visibility of materials. Cannot identify original source of regulated material in commercial loads due to fact loads are from multiple sources.
Curbside	Central Okanagan Regional District utilizes truck mounted cameras to monitor carts while being automatically emptied into truck; specifically for recyclables. Uses RFID tags, allows for a fine to be levied to specific household although no charges levied yet, utilized for education currently. Also conducts curb audits.	Cariboo Regional District conducts audits at the curb in conjunction with the neighbourhood. Contaminated bins are either flagged or residents are spoken to directly.	All of the Regional Districts rely on the hauler to look for regulated materials and only visible materials are detected. No reported instances of fines levied to residents, instead waste is not collected. Audits are used for education to improve compliance and can be targeted to specific neighbourhoods.

There were only a few differences in types of materials that were regulated from landfilling. Variety in contamination thresholds between the regional districts were dependent upon the material type and the available diversion options in the region. Typically, a material is not regulated unless there is local diversion option.

Thresholds for regulated materials varied between 0% and 10% depending on the material type and typically by weight, with the exception of Metro Vancouver's regulations that utilize both weight and volume. Overall, the variability between Regional Districts was dependent on the amount of staffing and space at the site to conduct inspections. The Regional Districts stated

that the inability to see into black bags and insufficient staffing to view every load were the two limiting factors to enforcing disposal regulations.

Jurisdictional Scan of Municipalities That Utilize Clear Bags

No local governments in BC as of yet mandate the use of clear bags for garbage. As such, staff reviewed information available online to determine the extent and use of clear plastic bags for garbage focusing primarily on the East Coast of Canada which staff were aware utilized clear bags.

This review included information from 3 regional municipalities, and 23 local municipalities of the 49 located in Nova Scotia and Prince Edward Island's Island Waste Management Corporation's (IWMC). As well, 40 local governments in Ontario including a sample of municipal and regional governments were reviewed.

The education materials available online provided residents and businesses with a variety of reasons as to why clear or see-through bags were required. The reasons included ensuring proper disposal is being practiced, preventing recyclables or hazardous waste from being disposed of and ensuring waste was identifiable by haulers and by staff at waste disposal sites.

Besides the online review, staff also spoke with IWMC on Prince Edward Island and were informed that clear bags have been in use for over twenty years. Clear bags are required for both residential and commercial sectors.

IWMC's residential system utilizes automated carts and residents are allowed to have their garbage loose in their carts or use clear bags. Privacy bags¹ are allowed, although no specific size is mandated. If an opaque bag is used, the entire cart is not serviced and is left curbside.

At their solid waste facilities, IWMC staff visually inspect loads as the truck is emptied. If more than 10% of the load visually contains opaque bags, then a surcharge of \$230 per tonne is levied which is more than double their garbage tipping fee of \$100 per tonne. If less than 10% of the load is opaque bags, then the hauler is charged a per bag fee of \$15 for every opaque bag in the load. The per bag fee is meant as a deterrent for the hauler to ensure their customers do not use opaque bags. IWMC advised that private haulers will not collect loads from their commercial customers if clear bags are not used.

Due to the maturity of their program, IWMC did not have data on how clear bags has helped reduce waste. However, their staff highly recommended the use of clear bags for garbage as it provides both easier inspection at their disposal facilities and for their haulers of commercial and residential waste.

Of the 49 municipalities in Nova Scotia, staff reviewed 26 and were able to confirm that 15 use clear bags for garbage. For Ontario that was the case for 20 out of 40 municipalities.

Almost all of the local governments using clear bags for garbage in Nova Scotia and Ontario allow for a smaller privacy bag that varied in size or volume based on the local government.

¹ A privacy bag is an opaque or dark coloured bag contained within a clear bag.

Clear Bags – Recent Clear Bag Implementation

The Township of North Kawartha within Peterborough County in Ontario is the most recent municipality to mandate clear bags that staff discovered during the jurisdictional scan. North Kawartha initiated clear bags on June 1, 2021 for their curbside collection program and at their Transfer Station. All municipalities in the County would, by the end of 2021, implement a clear bag mandate with an overall County objective to prolong the life of their local landfill. Information on North Kawartha's clear bag program can be found [here](#).

The City of St. John's, Newfoundland and Labrador, is planning to implement clear bags for garbage for January 1, 2022. Their rationale for clear bags is to help ensure recyclables are not going to the landfill. The news report can be found [here](#).

Clear Bags – Recent Reported Success

The City of Halifax Regional Council was provided with a report on May 26, 2020 that included the following information regarding clear bags used for garbage collection.

“The impact of the clear bag program was observed almost immediately with a 25% reduction in garbage tonnages generated by the residential sector, which has been maintained over the last four years. Other jurisdictions that have introduced a clear bag program have experienced similar declines in garbage. In the first three months of the clear bag program in Markham, Ontario there was a 28% decline in garbage tonnages. Cape Breton Regional Municipality and Valley Region also reported upwards of 25% declines in garbage tonnages”

Their clear bag program was implemented 2015. The report to Council can be found [here](#).

Clear Bags – Considerations for SCRD

The implementation of clear bags could assist greatly with waste screening at both the Sites, as well as, assist haulers during residential curbside collection or collection from their commercial customers to ensure compliance with Bylaw 405 for regulated and controlled materials. Clear bags would likely result in less recyclables or controlled waste being placed in the garbage.

If the SCRD were to implement clear bags at the point of disposal via a requirement in Bylaw 405, this would mean that all garbage from all customers on the Sunshine Coast would be required to use clear bags. After implementation, loads containing black bags (threshold to be determined) would be subject to additional tipping fees, or in the case of curbside, would be left at the curb.

One of the considerations for use of clear bags is availability and cost. Staff reviewed the availability of clear bags at local stores and most stores carried a variety of sizes of bags that are clear or see-through enough to identify the contents. Based on a comparison of bags of similar sizes, staff found that clear bags can be purchased for about the same price as black ones.

Should clear bags be considered, staff recommend to include the use of a privacy bag that is limited to 25% of the size of the clear bag used. This allows the greatest flexibility for the user of

the clear bag, addresses privacy concerns and 25% is manageable in terms of applying enforcement. Residents may use any type of opaque bag that they have on hand.

Additionally, should a resident utilize a paper bag for disposal curbside and the paper bag is sized 25% or less of the volume of the garbage can, this would be considered compliant. As well, plastic shopping bags would not be able to be used as a garbage bag but could be used as a privacy bag.

For timing, staff recommend that should the SCRD wish to implement the use of clear bags, that this be mandated for a July 1, 2022 start to align with the enforcement phase of the landfill disposal regulations. As well, this timeline would allow for the current supplies of black garbage bags to be utilized and lead time for sourcing of clear bags.

Options

To improve SCRD waste screening utilizing the current Site Attendant staffing levels, staff have prepared three options for the Board's consideration.

Option 1: All bagged garbage at Sechelt Landfill and Pender Harbour Transfer Station be required to use clear bags for July 1, 2022 with the use of privacy bag up to 25% volume of the clear bag (Maximum Enforcement Opportunity) – recommended option

The SCRD currently has scheduled a July 1, 2022 enforcement date for landfill disposal regulations for food waste, food soiled paper and paper. To maximize the impact of the enforcement, Option 1 is to implement clear bags at the SCRD sites and align the timing to July 1, 2022.

If black or opaque bags are found in loads brought to the Sites then staff recommend a similar approach to the IWMC of PEI. This would include a visual 10% of the load threshold to either levy a surcharge rate of double the MSW rate (\$300 per tonne) for over the visual threshold and a per bag charge of \$15 for under the threshold.

For materials that are in clear bags, the 5% threshold for food, food soiled paper and paper would apply to the load and tipping fees applied accordingly as per Bylaw 405. Further details regarding the thresholds can be found in the staff report included as Attachment A.

Under this option, privacy bag(s) up to 25% volume of the clear bag utilized is proposed. Most jurisdictions in Canada who utilize clear bags have this allowance and staff recommend this same approach.

This option would apply to all garbage from all sectors on the Sunshine Coast regardless of where the business or residence is located and would allow for fair implementation of any future disposal regulation considerations.

A July 1, 2022 start date would allow an almost six month notice to utilize existing supply of black bags and time to source clear bags.

Option 2: Refer clear bag use to the Solid Waste Management Plan Update (Status Quo Plus)

Under this option, there would be no implementation of clear bags at this time and would result in a referral for consideration during the update process for the SCRD's Solid Waste Management Plan (SWMP). The benefit of this approach would be that the anticipated benefit of the service level change required for mandating the use of clear bags would be considered in the context of an entire review of all the solid waste services the SCRD is or could provide moving forward. The SWMP update will be initiated in Q4 2021 and typically takes two to three years from initiation to adoption. Then, there would be the engagement process and implementation timeline. Under option 2, the earliest start date for mandating the use of clear bags, if included in the SWMP, would be mid-2024.

Option 3: Do not implement clear bags (Status Quo)

Similar to Option 2, however, does not include a referral to the SWMP. However, the implementation of a clear bag requirement could still be brought forward during the SWMP update process.

Organizational and Intergovernmental Implications

Landfill disposal regulations, including the use of clear bags would apply for all sectors and all site customers and thus would apply to all SCRD and local government facilities and all residential curbside garbage collection services.

Financial Implications

There will be no or minimal financial implications of note for any of the SCRD facilities associated with the potential implementation of the regulation of recyclables and controlled materials thru the use of clear bags.

Timeline for next steps

Based on Board direction, staff will prepare an updated implementation plan for the disposal regulations. The implementation plan will include items such as timeline, engagement plan and communications strategy as well as outline the amendments required for Bylaw 405. Staff anticipate this report in Q1 2022.

Communications Strategy

Based on Board direction, an extensive communications strategy would be developed as part of the overall implementation plan for the pending landfill disposal regulations for food waste, food soiled paper and paper.

STRATEGIC PLAN AND RELATED POLICIES

Landfill disposal regulations are identified in the SCRD's Strategic Plan under the Strategy of Achieve Sustainable Solid Waste Management and Tactic of Update and implement Regional Organics Diversion Strategy, including curbside collection services and education program and organics ban from landfill. Implementing the requirement of clear bags for bagged garbage supports the enforcement of landfill disposal regulations.

CONCLUSION

The SCRD Board requested that staff investigate how other jurisdictions monitor compliance of disposal regulations including potential use of clear garbage bags. This report presents the findings from a jurisdictional scan of BC and Eastern Canada.

As of yet, there are no local governments in BC who mandate the use of clear bags for garbage and instead, rely on staffing resources at disposal sites and haulers to monitor for compliance. The staffing levels varied based on Regional District and more staff resulted in an increased ability to monitor. However, a limiting factor in all local governments reviewed, is the lack of visibility to see inside of black bags.

Whereas, in Ontario, Nova Scotia, Prince Edward Island and Newfoundland and Labrador, many local governments, including municipal and regional, require the use of clear bags. Implementation ranged from twenty years ago in PEI to the City of St. John's January 1, 2022 launch. The rationale for clear bag mandates ranged from a desire to increase diversion (of recyclables), decrease the opportunity for hazardous or other regulated materials to be improperly disposed as garbage and to increase landfill life. Another benefit of clear bags, was the reduction in garbage tonnage. To help incentivize clear bag use, local governments implemented surcharges if a threshold of black bags per load was reached and, in some jurisdictions, a per bag fee was charged if the threshold was not reached yet the load contained black bags.

Based on the results of the jurisdictional scan, Staff recommend that the SCRD require that all bagged garbage disposed at the Sechelt Landfill and Pender Harbour Transfer Station use clear bags and allow the use of a privacy bag up to 25% volume of the clear bag as of July 1, 2022 to align with the start date of the disposal regulations for food, food soiled paper and paper.

Additionally, staff recommend that the current exemption for curbside garbage collection in Bylaw 405 be removed for July 1, 2022 and thus require the separation of all regulated materials to align with the requirements of all other loads of materials delivered to SCRD disposal sites.

ATTACHMENTS:

Attachment A – Landfill Disposal Bans for Food Waste and Recycling – Consideration
January 14, 2021 Infrastructure Services Committee Staff Report

Reviewed by:			
Manager		Finance	
GM	X – R. Rosenboom	Legislative	X – S. Reid
CAO	X – D. McKinley	Other	X – C. Suveges

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – January 14, 2021

AUTHOR: Robyn Cooper, Manager, Solid Waste Services

SUBJECT: LANDFILL DISPOSAL BANS FOR FOOD WASTE AND RECYCLING - CONSIDERATIONS

RECOMMENDATION(S)

THAT the report titled Landfill Disposal Bans for Food Waste and Recycling – Considerations be received;

AND THAT a landfill disposal ban for food waste and food soiled paper from all sectors with a 5% volume based threshold be implemented;

AND THAT a landfill disposal ban for paper from all sectors with a 5% volume based threshold be implemented;

AND THAT paper be defined as printed paper and boxboard;

AND THAT the landfill disposal ban for food waste, food soiled paper and paper from all sectors be implemented as of January 1, 2022;

AND FURTHER THAT the fees associated with the enforcement of these bans be implemented July 1, 2022;

BACKGROUND

Currently, the lower Sunshine Coast has one disposal option for its garbage, the Sechelt Landfill (Landfill). Garbage is dropped off at the Pender Harbour Transfer Station, collected curbside, collected in bins at commercial businesses or dropped off at the Sechelt Landfill. All of this garbage is then buried in the Landfill.

As of November 29, 2019, the Landfill had approximately six years of capacity remaining, until early 2026. An updated landfill life estimate will be available late Q1 2021.

At the January 20, 2021 Special Infrastructure Services Committee meeting the initial results of the Future Waste Disposal Options Analysis project will be presented. This project will help direct the next steps for waste disposal beyond the lifespan of the Sechelt Landfill.

To determine what was being disposed in the garbage, the SCRD conducted waste composition studies (Study) in 2014 and 2015. The 2014 study included garbage from residential collection from all local governments, whereas the 2015 study included the drop-off bins at the Pender Harbour Transfer Station and Sechelt Landfill.

Overall, both studies indicated that food waste (34%), food soiled paper (9%) and recyclables (23%) were being disposed in the garbage and thus buried in the Sechelt Landfill instead of

being composted or recycled. A copy of the both studies can be found at www.scrd.ca/waste-composition. A similar study has never been completed for waste exclusively from the commercial sector.

This was the basis for the development of a Regional Organics Diversion Strategy as well as Board resolutions regarding implementing landfill disposal bans.

In 2017, the development of a Regional Organics Diversion Strategy was initiated.

Also in 2017, two solid waste workshops were held for local governments. The first was held on March 2, 2017 as a Special Infrastructure Services (ISC) Meeting and the second was an Elected Officials Solid Waste Workshop held on October 24, 2017. The Special ISC identified short-term and long-term Board priorities and the Elected Officials Solid Waste Workshop resulted in agreed upon direction for regional programming and services. Along with the SCRD's Solid Waste Management Plan, these priorities and direction guided the Solid Waste work plan.

The following are Board resolutions related to landfill disposal bans:

346/17 (in part) **Recommendation No. 15** *Elected Officials*

AND THAT the following agreed upon direction heard at the Elected Officials Solid Waste Workshop be integrated into the SCRD Solid Waste Work Plan:

- Implementation of regional disposal bans for recycling and commercial organics.

027/18 (in part) **Recommendation No. 5** *Regional Organics Diversion Strategy*

AND THAT the Regional Organics Strategy be adopted.

One of the initiatives in the Regional Organics Diversion Strategy (Strategy) is to implement a landfill disposal ban for organics for both the residential and commercial sector. A copy of the Strategy can be found at www.scrd.ca/organics-diversion-strategy.

Although there is Board direction for a landfill disposal ban for organics for both the residential and commercial sector, there is an opportunity to reaffirm that direction as well as seek clarity regarding thresholds and direction for a landfill disposal ban for recycling in terms of materials and sectors as well as determining implementation dates.

The purpose of this report is to provide options for landfill disposal bans for food waste, food soiled paper and recyclables for the Board's consideration and direction. The specific material type or types being considered for a ban will be referenced to ensure clarity for decision making.

DISCUSSION

Current Landfill Disposal Bans and Mechanisms for Enforcement

The SCRDC regulates materials received at the Sechelt Landfill and Pender Harbour Transfer Station (the Sites) via Bylaw 405 – Sanitary Landfill Site. A landfill disposal ban is determined under Bylaw 405 by designating a material as recyclable or controlled and requiring separation.

The following is a current list of materials designated as recyclable or controlled in Bylaw 405:

- Recyclable
 - Cardboard¹
 - Mattresses
 - Metal - includes appliances, propane tanks
 - Paint & Product Care Items (Sechelt Landfill only)
 - Tires
 - Yard and garden green waste
- Controlled
 - Asbestos containing materials (excluding gypsum)
 - Asphalt, concrete
 - Boats (Sechelt Landfill only)
 - Dead animals
 - Dirt & rocks
 - Gypsum
 - Recreation Vehicles (Sechelt Landfill only)
 - Roofing
 - Wood

One of the primary roles of the Scale Attendant, Site Attendant and Contracted Site Operator is to help identify recyclable or controlled materials in the loads delivered to the Sites. This is known as waste screening. If these materials are identified in the load, the hauler is given the choice to separate the recyclable/controlled material themselves and not be surcharged. If the hauler chooses not to separate the materials, the hauling company or self-hauler is charged a tipping fee which is double the regular fee of the most expensive item in the load. A \$100 per hour fee can also be charged to the hauler for the site operator to separate the materials. The customer is charged the fee at the time of transaction.

It should be noted that one of the limitations to successful waste screening is when waste is delivered to the Sites in black bags. Neither Scale nor Site Attendants can view the contents, while the Site Operator, if present during the unloading of a commercial load, can sometimes view the contents of the load.

As well, there are currently gaps in staffing levels for Site Attendants at the Sechelt Landfill and Pender Harbour Transfer Station. Typically, there are three hours at the Sechelt Landfill when there is only one Site Attendant available for waste screening due to lunch breaks (as opposed to two Site Attendants). At the Pender Harbour Transfer Station, there is no Site Attendant

¹ Cardboard disposal ban to be implemented in Q1 2021 as per resolution 320/20 #4 that indicates to implement a material category for cardboard and to designate cardboard as a recyclable material.

present for the first one and a half hours as well as there is one and a half hours of break coverage, resulting in all waste screening being performed by the Scale Attendant during these times. Waste screening is required for all drop-off areas at the Sites including those for green waste, wood waste (Pender only), appliances, mattresses and the drop-off bins (garbage, metal, gypsum). Enforcement of a disposal ban for food waste and recyclable products would primarily require additional waste screening at the self-haul garbage drop-off bins and commercial garbage drop-off areas.

Current implementation status of landfill bans for food waste and recycling

In 2018, following the direction to implement a landfill disposal ban for food waste and recycling, staff developed an implementation plan which included connecting with other jurisdictions in BC that already have implemented such a ban and then conducting four preliminary stakeholder engagement sessions, one for each of small and large business owners, haulers, local governments and SCRD staff and operators.

Based on this engagement with other jurisdictions and the local stakeholders it's recommended that the following is considered when implementing landfill disposal bans:

- Thresholds – that a threshold be set to establish the maximum allowable material accepted in a load before a fine would apply; the threshold limit should be able to be monitored and enforced; determining if there will be one set threshold or a decreasing volume based threshold target. E.g. 10% to start, decreasing to 5%
- Phases & Timelines – that an education phase be included (no fines would be assessed); that adequate time be provided between launch of an education phase and launch of an enforcement phase (when fines would be assessed)
- Readiness & Barriers/Motivators – that much engagement is needed ahead of launch(es) to ensure sector readiness
- Supports Provided by SCRD – that much engagement is needed to ensure adequate support is in place prior to ban launch and during the education phase e.g. brochure for commercial detailing options for diverting food waste and recyclables

Due to the delay in the implementation of a curbside collection service for residential food waste within the SCRD, District of Sechelt and Sechelt Indian Government District and unexpected unavailability of essential staff, no additional activities to implement these bans were initiated.

Current Composting and Recycling Options – Residential Sector

For composting of food waste and food soiled paper, the District of Sechelt (Davis Bay only), the SCRD Electoral Areas B, D, E and F and the Town of Gibsons currently provide curbside collection services. Other options include a free drop-off provided at Salish Soils, a pending drop-off (with a tipping fee) at the Pender Harbour Transfer Station and a variety of home composting options.

The District of Sechelt and the Sechelt Indian Government District provide curbside recycling collection services to their residences for those materials that can be collected curbside as part of the provincial recycling program for packaging and paper products. Those materials are paper (cardboard, printed paper, boxboard) and containers – plastic and metal.

Residents of the SCRD and the Town of Gibsons have recycling services provided by the SCRD via drop-off at three depots on the Sunshine Coast, one located in Pender Harbour, one in Sechelt and one in Gibsons. In addition to paper and containers, the depots also collect film plastic, other flexible plastic, polystyrene and glass, broadly known as PPP or packaging and printed paper. The materials collected at the depots are as determined by the BC Recycling Regulation. District of Sechelt residents can also utilize the depots for recycling the materials not collected curbside.

Current Composting and Recycling Options – Commercial Sector

Currently, if the commercial sector would like to recycle, they must contract their own private recycling services. The commercial sector is not permitted to utilize the SCRD depots due to the BC Recycling Regulation mandating that the packaging and paper products (PPP) must be from the residential sector only.

The private recycling sector has a limited scope of materials that can be collected. At the time of this report, cardboard, paper (printed paper and boxboard), metal containers and very limited plastic containers based on resin code could be collected. There are no commercial recycling options on the Sunshine Coast for glass, polystyrene, film plastic, other flexible plastic, paper containers that are used to hold liquids or plastics with specific resin codes or no codes.

For composting, options for the commercial sector include contracting a private hauler, self-hauling to Salish Soils (with tipping fee if a large load; currently free if 5 gallons or less) or choosing from a variety of composting systems that could be utilized on-site or off-site. As well, there are farms on the Sunshine Coast that accept food waste.

Proposed Landfill Disposal Ban Implementation Approach

The SCRD, as a regulator, will establish the rules and regulations. The proposal is to develop a non-prescriptive program such that the commercial sector can comply using the most cost-effective methods for their enterprise and the residential sector can comply utilizing the options previously mentioned.

The following proposed approach and timeline is based on the jurisdictional review and implementation plan feedback from local stakeholders as well as anticipated efforts for engagement, clarity with stakeholders, implementation and landfill life.

Staff propose the following as summarized in Table 1: Setting a volume based threshold of 5% instead of having a decreasing threshold; launch the ban January 1, 2022 with a six month education period (no fines issued) with a July 1, 2022 launch of the enforcement phase when fines would be issued to the customers.

Table 1 – Summary of Proposed Landfill Disposal Ban Approach and Timeline

	2021	Jan 1 2022 to Jun 30 2022	Jul 1 2022
Threshold	EDUCATION	5%	5%
Phase		EDUCATION	ENFORCEMENT
Materials		Food Waste, Food Soiled Paper Paper	

Landfill Disposal Ban Enforcement

After a customer arrives at the Sechelt Landfill or Pender Harbour Transfer Station sites, as part of the waste screening process, staff would view the contents of the load as best as is possible based on how the load arrives. If the threshold has been exceeded, staff would inform the Scale Attendant and the Scale Attendant would communicate this to the customer when the customer scales out of the site. The customer will not be given the option to separate materials themselves to avoid the surcharge as this is not deemed possible for food waste, food soiled paper or paper. The material will be landfilled.

What happens during this communication scaling out of the site depends on which phase of the ban applies.

During the education phase, the customer would be advised their load exceeded the threshold and be provided an education package. The education package would have information such as what is the disposal ban, what are the thresholds and options for diversion.

During the enforcement phase, the customer would be advised their load exceeded the threshold and that fines would be applied to the load as per Bylaw 405. The fee is charged to the customer regardless if the customer is a resident self-hauling, a commercial enterprise or a commercial hauler. An education package would also be provided.

As mentioned previously, there are staffing limitations at both sites with respect to conducting the required waste screening to enforce a ban on food waste or recycling. The most effective ways of doing this is to do random load checks of bagged garbage (i.e. cutting open bags and screening contents). Additional staff would be required to allow adequate screening of a food waste or recycling ban to occur.

As well, staff will track non-compliant loads from commercial haulers so SCRD staff can then liaise with the hauling companies or commercial enterprise.

Options and Analysis

Based on the availability of composting and recycling for the residential and commercial sectors, staff have prepared three options for the Board's consideration. Paper is considered to be printed paper and boxboard.

The increase in lifespan of the Sechelt Landfill associated with the presented options was not quantified due to the lack of data on the composition of commercial waste.

Option 1 – Implement landfill disposal ban for food waste, food soiled paper and paper from all sectors with a 5% threshold (recommended option)

This option aligns with the Regional Organics Diversion Strategy, is consistent for all sectors and there are available options for diverting food waste, food soiled paper and paper. For implementation, the approach would be able to be applied consistently at the sites for all loads regardless if self-hauled (residential or commercial), curbside collection or commercially hauled.

This option is expected to result in a maximum increase to the lifespan of the landfill. As well, this option maximizes GHG reduction potential by including all sectors in the food waste disposal ban. For these reasons, staff recommend this option.

This option does require additional staffing resources to ensure successful monitoring and enforcement at the sites.

Should the provincial recycling program be expanded to include commercial PPP, then the SCRD can at that time decide whether or not to expand the landfill disposal ban to include additional materials for both sectors.

Option 2 – Implement landfill disposal ban for food waste, food soiled paper from all sectors with landfill disposal ban for paper, containers (plastic and metal) from residential curbside collection only with a 5% threshold

Option 2 has a disposal ban for both sectors for food waste and food soiled paper only with an expanded recycling ban for a portion of the residential sector and no recycling ban for the commercial sector when compared to option 1.

As per Option 1, this option maximizes GHG reduction potential by including all sectors in the food waste disposal ban.

This option does not discourage the commercial sector or residential self-haul sector from disposing of paper in the garbage. This option would also exclude paper in loads of garbage from Pender Harbour and Egmont as the residents do not receive curbside garbage collection services.

Given the lesser increase to the lifespan of the Sechelt Landfill and in the inequalities this option would result in, staff do not recommend this option.

Option 3 – Do not implement landfill disposal bans for food waste, food soiled paper, paper or containers (plastic and metal)

This option does not align with previous Board direction, the Regional Organics Diversion Strategy, landfill life expansion intentions or GHG reduction potential and is not recommended.

Organizational and Intergovernmental Implications

A landfill disposal ban for all sectors would apply to all SCRD and local government facilities and all residents.

Financial Implications

To successfully implement a landfill disposal ban for food waste, food soiled paper and paper, additional Site Attendant resources are needed. Staff will prepare a 2021 Budget Proposal based on the Board direction of the ban scope and implementation timelines. This budget proposal will consider additional staffing requirements and other expenditures associated with the implementation of bans, including education materials and signage.

Staff do not anticipate the additional staff required for the implementation of bans under consideration to require more than 1.0 FTE Site Attendant at a cost of approximately \$75,000.

Timeline for next steps

Based on Board direction, staff will prepare an updated implementation plan. The implementation plan will include items such as timeline, engagement plan and communications strategy as well as outline the amendments required for Bylaw 405.

Communications Strategy

Based on Board direction, a communications strategy will be developed as part of the overall implementation plan.

STRATEGIC PLAN AND RELATED POLICIES

Landfill disposal bans are identified in the SCRD's Strategic Plan under the Strategy of Achieve Sustainable Solid Waste Management and Tactic of Update and implement Regional Organics Diversion Strategy, including curbside collection services and education program and organics ban from landfill.

As well, landfill disposal bans are initiatives included in the Regional Organics Diversion Strategy and Solid Waste Management Plan.

CONCLUSION

The SCRD has one landfill site for disposing of garbage on the Sunshine Coast, the Sechelt Landfill, which has approximately six years of site life remaining.

Results from waste composition studies in 2014 and 2015 indicated that food waste, food soiled paper and recyclables were being disposed in the garbage and thus buried in the Sechelt Landfill instead of being composted or recycled.

A Regional Organics Diversion Strategy was adopted in January 2018 and includes the implementation of a landfill disposal ban for organics (food waste, food soiled paper) for all sectors. As well, there is Board direction to implement a landfill disposal ban for recycling.

However, the recycling disposal ban parameters regarding which materials and which sectors as well as timelines and thresholds for both landfill disposal bans needs to be determined.

Staff engaged with other jurisdictions and local stakeholders to develop and review a preliminary implementation plan. To prepare proposed approaches and timelines staff also

considered anticipated efforts for engagement, clarity with stakeholders, implementation and landfill life.

Staff recommend to implement a landfill disposal ban for food waste, food soiled paper and paper from all sectors with a 5% volume based threshold. This option aligns with the Regional Organics Diversion Strategy, creates the largest increase in landfill life for the Sechelt Landfill, is consistent for all sectors and there are available options for diverting food waste, food soiled paper and paper. For implementation, the approach would be able to be applied consistently at the sites for all loads regardless if self-hauled (residential or commercial), curbside collection or commercially hauled. As well, this option maximizes GHG reduction potential by including all sectors in the food waste disposal ban.

This option does require additional staffing resources to ensure successful monitoring and enforcement at the sites and staff recommend a 2021 Round 1 Budget Proposal.

Staff also recommend that paper is defined as printed paper and boxboard.

As well, staff recommend that the landfill disposal bans launch January 1, 2022 with a six-month education phase followed by an enforcement phase to launch July 1, 2022.

Reviewed by:			
Manager		Finance	
GM	X – R. Rosenboom	Legislative	
CAO	X – D. McKinley	Other	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Robyn Cooper, Manager, Solid Waste Services

SUBJECT: **PENDER HARBOUR TRANSFER STATION FOOD WASTE DROP-OFF PROGRAM
UPDATE AND NEXT STEPS**

RECOMMENDATION

THAT the report titled Pender Harbour Transfer Station Food Waste Drop-off Program Update and Next Steps be received for information;

AND THAT the Board direct staff on next steps for the Pender Harbour Transfer Station Food Waste Drop-Off Program.

BACKGROUND

In 2018, the Sunshine Coast Regional District Board (SCRD) adopted the Regional Organics Diversion Strategy (Strategy). One initiative in the Strategy is to implement three food waste drop-offs, with locations in the Pender Harbour, mid-coast and south coast, to support landfill disposal regulations for food waste.

As part of the 2020 budget process, the SCRD Board direction was to implement one food waste drop-off site, located at the Pender Harbour Transfer Station, for residents and small businesses, at \$54,000 annually, funded from tipping fees with a volume restriction of 50L (resolution No. 026/20).

Subsequently, at the July 30, 2020 Special Board meeting, as part of discussions related to the impacts of the COVID-19 Pandemic, the Board direction was to delay the program to 2021 (resolution No. 284/20).

The SCRD completed procurement processes for container and hauling services as well as for food waste processing services via RFP 2035004 and RFP 1935004 respectively. Although there was approved budget of \$54,000 per year that was sufficient to fund the contracted services, the approved cost recovery method was tipping fees, which had not yet been established. Staff brought forward a report to the February 11, 2021 Infrastructure Services Committee meeting, where the Board directed staff to bring forward a budget proposal to the 2021 Round 2 budget deliberations to seek direction regarding funding through a combination of tipping fees and taxation. Ultimately, the decision at the March 11, 2021 Board meeting was to defer the program to 2022, remove the \$54,000 from the Financial Plan, siting a desire to explore keeping food waste in the Pender Harbour area as an alternative to transporting food waste to the Sechelt area for composting, and to explore the potential for community partnerships (resolution No. 068/21). This resulted in RFP 2035004 being cancelled.

The purpose of this report is to provide an update to the Board regarding the food waste drop-off program at the Pender Harbour Transfer Station and seek Board direction on next steps.

DISCUSSION

Staff assessed options for exploring potential community partnerships and identified a Request for Expression of Interest (RFEI) as an appropriate tool for this purpose. An RFEI is a market research tool that helps plan for a future procurement process. Staff used an RFEI to understand if any vendors are interested in providing a service at the Pender Harbour Transfer Station that would include supplying and managing a container, processing the material on-site or at a different location, and hauling if applicable. The RFEI suggested that such a service should use food waste locally in the greater Pender Harbour area.

The RFEI process does not include evaluation, and no vendors are selected or screened for subsequent competitive bidding process. For this reason, a competitive bid process would need to follow to select a vendor to provide this potential service.

The RFEI closed on November 4, 2021. The SCRD received two responses. It can be concluded there are vendors interested in providing the requested service.

Financial Implications

There is currently no budget associated with this potential program. To seek a vendor through a Request for Proposal in 2022, staff would need to be directed to prepare a budget proposal to incorporate into the 2022 Budget Round 2 meetings.

Next Steps

If the Board directs staff to prepare a 2022 Round 2 budget proposal, and if the budget is approved, the next step would be to develop a Request for Proposal. A program could be operational in Q3 2022. The feasibility and funding model would be outlined in the budget proposal.

If the Board does not support a 2022 Round 2 budget proposal, the next opportunity for proceeding with a food waste drop-off program at the Pender Harbour Transfer Station would be part of the 2023 budget process. This would result in the earliest operational date of Q3 2023.

It should be noted that the SCRD Board has directed staff to implement landfill disposal regulations for food waste and food soiled paper, with enforcement starting July 1, 2022. These regulations would apply to waste delivered to the Sechelt Landfill and Pender Harbour Transfer Station.

STRATEGIC PLAN AND RELATED POLICIES

The SCRD's 2019-2023 Strategic Plan includes implementing the Regional Organics Diversion Strategy. The SCRD's Solid Waste Management Plan includes targets of 65%-69% diversion, and organics diversion is one of the SWMP's reduction initiatives.

CONCLUSION

The SCRD Board directed staff to develop a food waste drop-off program to service the Pender Harbour area in 2022. Staff explored the option of a contractor managing food waste collected at the Pender Harbour Transfer Station in the Pender Harbour area through a Request for Expression of Interest (RFEI). The RFEI outlined that a potential service could include supplying

a container, processing the food waste on-site or at a different location in the greater Pender Harbour area, and hauling if applicable. Vendors are not selected or screened during an RFEI process, therefore a competitive bid process would need to follow to select a vendor to provide this potential service. However, procurement cannot be initiated without approved budget, of which there is not one for a Pender Harbour Transfer Station food waste drop-off program.

Staff are seeking Board direction on next steps for implementing this potential program, including any direction to bring forward a budget proposal at the 2022 Budget Round 2 meetings.

Reviewed by:			
Manager		Finance	X – T. Perreault
GM	X– R. Rosenboom	Legislative	
CAO	X – D. McKinley	Communications	
		Procurement	X – V. Cropp

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Mia Edbrooke, Manager, Strategic Initiatives

SUBJECT: 2022 WATER RATE STRUCTURE REVIEW PROCESS

RECOMMENDATION

THAT the report titled 2022 Water Rate Structure Review Process be received for information.

BACKGROUND

The *Sunshine Coast Regional District (SCRD) Water Rates and Regulations Bylaw No. 422, 1995* (Bylaw 422) outlines rates for providing water supply throughout the distribution system to approximately 24,000 residents in the region. With the upcoming water meter installations in the Sechelt area, the SCRD could begin exploring new options for a water structure where residents pay for water they use, instead of a flat rate. Careful analysis is required to secure equivalent funding under the current structure to allow the SCRD to build, operate, maintain, and invest in water systems that provide the community with safe and reliable drinking water and fire protection.

This report outlines work that could support the following Board resolution from their October 24, 2019 meeting:

266/19 **Recommendation No. 1 (part)** *Bylaw Opportunities for Water Conservation*

THAT the report titled *Bylaw Opportunities for Water Conservation* be received;

AND THAT the review of *Water Rates and Regulations Bylaw 422* scheduled for 2020 include a review of water conservation provisions and the service connection application process.

The purpose of this report is to present the process for a potential water rate structure review.

DISCUSSION

As per Bylaw 422, the SCRD charges commercial customers a user-based rate for water in all areas, including Sechelt. Currently, water meters are installed at residential properties in the rural areas, including Areas A, B, D, E, and F, and at a smaller number of properties in Sechelt. Most residents in Sechelt do not currently have a water meter and all SCRD residential customers pay a flat rate.

In 2021, the SCRD received elector approval to borrow up to \$7.25 million dollars over a 15-year term to fund Phase Three of the Water Meter Installations Project. This is the final water meter installations in the region that will result in water meters on every water service connection, which will maximize the benefits of a water meter program. A fully implemented water meter program can include customer access to water use data, a leak notification program that provides guidance for fixing leaks, and the option to review the current rate

structure. As such, this presents an opportunity to explore user-based options for residential customers in 2022, while the SCRD installs water meters in the Sechelt area next year. Staff anticipate that a rate structure review would be a multi-year project that would proceed with the following three phases.

2022 Phase 1: Develop options for a new potential rate structure and seek public input.

Staff would review and consider options for residential properties, including single-detached, multi-home, and multi-family, and commercial properties. The potential options would seek to promote fairness and equity, support the SCRD's conservation programs, and establish a financially sustainable rate structure which supports the water system for the short and long term. Types of rate structures that could be considered in addition to the current flat fee would be a volumetric charge or tiered rates, charges for seasonal use or excess use, and could include both a fixed and variable rate to balance maintaining infrastructure and the cost of providing drinking water. The SCRD could consider leak detection rebates to encourage residents to fix leaks in a timely manner. This process would be supported by an engagement plan that would seek public input and the Board, and staff would bring the results of this review forward at a future Committee meeting .

In parallel, staff would work on leak resolution with new metered properties in the Sechelt area, to gather a full picture of residential water use in the region, that would support rate setting.

2023 Phase 2: Set rates and charges.

If a new rate structure is approved, the SCRD would complete a rate analysis and present any new rates through proposed bylaw amendments for the Board's consideration. Staff would set rates would be set to achieve cost recovery, and continue to review water rates regularly and make adjustments as required, as is current practice for all SCRD service functions. Currently, water rates are reviewed annually.

2024 Phase 3: Phased-in implementation.

Any changes to the current rate structure would be introduced prior to SCRD annual utility bills (April). Staff would need time to make operational adjustments to the SCRD billing system and meter reading program, and to develop and implement a communication plan to share any changes to utility billing with the public.

Financial Implications

Staff have put forward a budget proposal for Phase 1 of this water rate structure review process for the 2022 budget, for the Board's consideration. The budget proposal would seek to hire a consultant to support the development of potential rate structure options and an engagement plan.

Timeline for next steps

The budget proposal for the Board's consideration would allow staff to begin the work in 2022. Waiting until 2023 to initiate this work would push the potential implementation to 2025.

STRATEGIC PLAN AND RELATED POLICIES

A water rate structure review supports the advancement of the SCRD 2019-2023 Strategic Plan through the following strategies:

- Expand water conservation programs and increase engagement with residents and stakeholders on water conservation
- Hold public engagement events to provide status update on water supply expansion

CONCLUSION

The SCRD is moving towards a fully implemented water meter program for all water users. This presents an opportunity to begin exploring alternative water rate structures that could promote fairness and water conservation, while continuing to achieve cost recovery for the water systems. SCRD staff are proposing a three-phase process that would first develop options for a new rate structure, subsequent rate setting and implementation. Examples of potential new rate structures could include volumetric or tiered rates, rates that are seasonal or target excess use that could include fixed and variable charges.

To support this work, staff have put forward a budget proposal for Phase 1 of a potential water rate structure review process for 2022. Staff anticipate that all three phases would be completed by 2024. Staff recommend beginning this process in 2022, to allow time to undertake the steps involved in the three phases, including operational adjustments and public engagement that will occur in parallel to the process.

Reviewed by:			
Manager		Finance	X– T. Perreault
GM	X – R. Rosenboom	Legislative	X – S. Reid
CAO	X – D. McKinley	Communications	

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Shane Walkey, Manager, Utility Services
Codi Abbott, Utility Operations Superintendent

SUBJECT: ROBERTS CREEK CO-HOUSING WASTEWATER TREATMENT PLANT – UPDATE

RECOMMENDATION(S)

THAT the report titled Roberts Creek Co-Housing Wastewater Treatment Plant – Update be received for information;

AND THAT the Roberts Creek Co-Housing Waste Water Plant- Treatment System and Regulatory Enhancements project be increased to \$50,000 from \$30,000;

AND THAT the project be funded through a donation of \$15,000 from the Roberts Creek Co-Housing Strata and up to \$5,000 through Capital Reserves [392];

AND THAT the 2021-2025 Financial Plan be amended accordingly;

AND FURTHER THAT the following recommendation be forwarded to the December 9, 2021 Regular Board Meeting.

BACKGROUND

The Roberts Creek Co-Housing wastewater treatment facility was taken over by the Sunshine Coast Regional District (SCRD) in 2004. The treatment facility is registered as a small wastewater system with the Ministry of the Environment and Climate Change Strategy (MOE) under the Municipal Wastewater Regulation (MWR) and utilizes a MicroFAST package plant to treat sewage received from the Roberts Creek Co-Housing development. The treated effluent has not met required quality parameters consistently since the SCRD assumed responsibility of the facility.

During the 2021 budget process the board approved \$30,000 to complete the improvements required to increase the effluent quality and to de-registered under the MWR with the MOE and register under the SSR with VCH.

Recommendation No. 41 *Wastewater Treatment Services [381-395] – 2021 R2 Budget Proposal*

The Corporate and Administrative Services Committee recommended that the report titled 2021 R2 Budget Proposal for [381-395] Wastewater Treatment Services be received;

AND THAT the following budget proposal be approved and incorporated into the 2021 Budget:

- Budget Proposal 5 – [392] Roberts Creek Co-Housing Wastewater Treatment Plant – Treatment System and Regulatory Enhancements, \$30,000 funded, \$22,101 from Operating Reserves and \$7,899 from Electoral Area D - Federal Gas Tax Community Works Fund.

The purpose of this report is to provide an update on the progress made on this project to date.

DISCUSSION

In 2015 in an attempt to increase effluent quality staff completed modifications as per recommendations provided by the design engineer. The improvements did not improve the effluent quality. CCTV inspections were completed on the sanitary collection system in December of 2018 which noted two areas of infiltration due to pipe joint separation.

The MOE issued a Warning Inspection Report in October 2019 due to inadequate effluent quality. Throughout 2020 staff communicated with the MOE and Vancouver Coastal Health (VCH) regarding the appropriate regulation that the treatment facility should be registered with. It was determined that the wastewater treatment facility should be de-registered under the MWR with the MOE and registered under the Sewerage System Regulation (SSR) with VCH.

Staff completed community engagement sessions with the residents, worked with new design engineers, completed a thorough inspection and verified drawings to determine additional improvements to meet compliance. The drawings and operational plan had inaccuracies and subsequently design modifications were required to improve the effluent quality. During a November 2020 inspection by the MOE staff it was noted the facility may receive a further warning letter regarding effluent quality. The MOE November 2020 inspection report notification was received in February of 2021 which noted that an administrative penalty may be imposed on the SCRD.

Following the approval of the 2021 budget in March 2021, staff worked throughout Q2 2021 to identify and source the necessary materials and supplies and develop a plan to complete the modifications and improvements. Further vac truck pump outs of the septage chambers identified additional necessary improvements which required additional materials and supplies and pump outs. Supply chain and staffing issues resulted in work commencement on November 2, 2021.

While substantial upgrades and repairs have been completed, more are required to address all of the performance issues with this system. Appendix A includes more details on the progress to date and the remaining tasks.

Financial implications

Project costs to date have exceeded original estimates due to unforeseen additional essential improvements and unanticipated septage pump outs/disposal fees. It's anticipated that at year end the approved project budget will be exceeded by several thousand dollars. The final amount will be included in the year-end variance report presented in Q1 2022. Current reserve levels for this function are sufficient to fund this anticipated project deficit.

A progress update presentation was provided to the Roberts Creek Co-housing members on August 18, 2021. The presentation included information regarding additional necessary improvements along with a potential financial shortfall which could delay work completion pending Board approval for additional reserve funds.

The Roberts Creek Co-Housing residents and Strata are keen to improve the effluent quality without delay and have set aside an additional \$15,000 as a donation to ensure the work is completed rather than use reserves and have rates increase. Staff are in the process of accepting this donation and expect that the remaining work can be completed with these funds.

Therefore, the Roberts Creek Co-Housing Waste Water Plant- Treatment System and Regulatory Enhancements project needs to be increase to \$50,000 from the original \$30,000 and can be funded through a donation of \$15,000 from the Roberts Creek Co-Housing Strata and up to \$5,000 through Capital Reserves. This will require an amendment to the 2021-2025 Financial Plan.

STRATEGIC PLAN AND RELATED POLICIES

This work aligns with the SCRD's Strategic Plan with respect to Asset Stewardship and promotes ongoing sustainable service delivery by providing guidance of long-term capital planning.

CONCLUSION

As part of the 2021 budget process a \$30,000 budget was approved to complete the necessary treatment improvements, repair the sanitary collection system and complete the recommended changes to the registration. Project costs to date have exceeded original estimates due to unforeseen additional improvements and unanticipated septage pump outs and disposal fees. Outstanding work for 2022 includes completing the remaining improvements from the original budget proposal. The project now is estimated to cost up to \$50,000.

The Roberts Creek Co-Housing residents and Strata are keen to improve the effluent quality without delay and have set aside an additional \$15,000 from their reserves as a donation to ensure the work is completed. An additional \$5,000 from the capital reserves will also be required as well as a Financial Plan amendment.

Reviewed by:			
Manager	X- S.Walkey	CFO/Finance	X-T.Perreault
GM	X-R.Rosenboom	Legislative	
CAO	X – D. McKinley	Other	X- C. Abbott

Appendix A: Detailed status update on repairs and upgrades

Work completed as of December 1, 2021:

- Repair of one sanitary service lateral to stop infiltration,
- Installation of trash tank pipework to mitigate solids entering the treatment processes,
- Repaired and reinforced the cover for the FAST 9.0 tank which will include new hatch risers and covers with carbon filters for odor control,
- Cleaned and removed sludge from the trash and FAST 9.0 tankage,
- Inspected and cleaned the media in the FAST 9.0 and inspection of the FAST4.5,
- Exposed pipework around the treatment tanks that requires re-routing,
- Purchased a new pump, valve, actuator and media for the sand filter and new overloads for the air blowers,
- Improved programming for air blower operation.

Work scheduled in the upcoming weeks prior to 2022 include:

- Installation of filter media, overloads, hatch risers and covers, valve, actuator and pump.
- Reprogramming of the filters for optimized operation, valve and actuator installation and integration with the PLC.

Work remaining and to be completed in 2022:

- Improving piping around the plant providing increased flexibility for operational requirements,
- Purchasing a second filter feed pump,
- Reinforce cover for FAST 4.5 tank,
- Reducing air discharge piping for blowers,
- De-registering under the MWR and registering with the SSR,
- Remaining sanitary collection system repair.

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – December 9, 2021

AUTHOR: Remko Rosenboom, General Manager Infrastructure Services

SUBJECT: LAND TRANSFER SHÍSHÁLH NATION FOUNDATION AGREEMENT- UPDATE

RECOMMENDATION(S)

THAT the report titled Land Transfer shíshálh Nation Foundation Agreement- Update be received for information;

AND THAT staff, supported by SCRD legal counsel, be authorized to finalize a modification agreement to the Statutory Right of Way (SRW) over DL 2725 associated with water supply and telecommunication infrastructure that would allow for an extension of the term for a decision on the Release Areas for up to an additional 6 months;

AND THAT the delegated authorities be authorized to execute this modification agreement to this SRW.

AND FURTHER THAT this recommendation be forwarded to the December 9, 2021 Board meeting.

BACKGROUND

At its March 26, 2020 meeting the Board adopted the following recommendation:

IC040/20 **Recommendation 1** *Legal Instruments for Implementation of shíshálh Nation Foundation Agreement - Update*

THAT the report titled Legal Instruments for Implementation of shíshálh Nation Foundation Agreement – Update be received;

AND THAT the Sunshine Coast Regional District (SCRD) Board approve the following draft Statutory Right of Ways and direct staff to work with the Province of BC (BC) and shíshálh Nation on their registration on title:

1. A Statutory Right of Way (SRW) over DL 7613 to secure access to our water intake at Chapman Creek;
2. A SRW over DL 7613 associated with drainage work related the Sechelt Landfill;
3. A SRW over DL 2725 associated with water supply and telecommunication infrastructure.

AND THAT the SCRD confirms their approval of these SRWs and concerns regarding the watershed protection covenant in a letter to both the shíshálh Nation and the Province of BC;

AND THAT staff, on the recommendations of SCRD legal counsel, be authorized to make minor edits to these SRWs and approve the final survey maps of the SRW areas;

AND FURTHER THAT upon final legal review the designated authorities be authorized to execute the final versions of these SRWs.

Part of the SRW over DL 2725 associated with water supply and telecommunication infrastructure are provisions related to the release by the SCRD of a portion of land currently covered by the SRW.

Besides the above listed SRWs the completion of the land transfer of District Lot 1592 from the Province to the shíshálh Nation and the associated SRW for the SRW is pending.

The purpose of this report is to provide an update on both these items.

DISCUSSION

Land transfer District Lot 1592

District Lot 1592 is included in the Foundation Agreement as to be transferred to the shíshálh Nation within five years of the execution of the agreement on October 4, 2018. As the SCRD has several interests related to the provision of water and solid waste located on this parcel it was agreed on that the SRW would be granted a SRW related to these interest, similar to those that have been executed in February 2021 for DL 7613 and DL 2725.

The SCRD interest associated to this District Lot are:

- Several water mains and support infrastructure
- A monitoring site for environmental monitoring required under the SCRD Operating Permit for the Sechelt Landfill.

Provincial, shíshálh Nation and SCRD staff have recently initiated the discussions on these interests and how these could be addressed in a SRW. It's anticipated that further details on the proposed terms and conditions of this SRW could be provided to the Board in Q2 2022.

Amendment to SRW over DL 2725

The SRW over DL 2725 associated with water supply and telecommunication infrastructure (the SRW) include provisions related to land rights the SCRD obtained when it received one of its Water Licences on Chapman Creek for community water supply. These land rights included an area of approximately 6 acres and the land could be used to develop water supply infrastructure. At the time of the discussions on this SRW it was confirmed that while the SCRD never developed any infrastructure on that land, and since the land was actually partly mined, the SCRD still was entitled to an area of similar size on DL 2725 in close proximity to its existing water infrastructure. As it was impossible for the SCRD to confirm which area would be preferred, two potential areas were included in the SRW (the release areas). The SRW also included a provision that the SRW would decide within one year of the registration of the SRW with the Land Title Office which of the two release areas would be maintained and which would be removed from the SRW. As the SRW was registered on February 17, 2021, the SCRD Board will need to confirm its intent in January 2022 to allow required documentation to be executed in a timely manner.

One of the potential uses of the release areas is for additional capacity for the processing of the residuals of the Chapman Water Treatment Plant. Staff have been collaborating with staff from

Lehigh Hanson and the shíshálh Nation for some time now on the management of these residuals, Currently the parties are collaborating on the development of a Request for Proposals (RFP) for the long-term processing of these residuals and some of the collaborative options considered in the RFP might affect the size and location of the land required that the SCRD would release and remove from the SRW. In order to allow for the work currently proposed in the RFP to be completed and further arrangements to be made, the SCRD and shíshálh Nation Staff are currently discussing a modification agreement that would allow for an extension of the term for a decision on the release areas identified in the SRW for up to 6 months. Staff are seeking Board approval for the finalization and execution of such modification agreement.

Timeline for next steps

If supported by Board, staff would finalize the modification agreement and arrange for its execution by the delegated authorities. The findings of the project on the feasibility of the long-term options for the processing of the Water Treatment Plant residuals are anticipated towards the end of Q1 2022. Shortly afterwards staff will present them to the Board with a recommendation on the WTP residual processing options and the release areas from the SRW.

STRATEGIC PLAN AND RELATED POLICIES

This project supports the Strategy to Enhance First Nations Relations and Reconciliation.

CONCLUSION

There is an ongoing collaboration between the staff from the Lehigh Hanson, shíshálh Nation and the SCRD on the processing of residuals from the Chapman Treatment Plant. This collaboration has potential implications on the decision by the SCRD on size and the location of the decision to release one of the two identified release areas in the SRW for DL 2725. Staff are, therefore, recommending to modify this SRW to allow such decision to be extended by up to 6 months from February 17, 2022.

Reviewed by:			
Manager		CFO/Finance	
GM		Legislative	X - S. Reid
CAO	X – D. McKinley	Other	

WildSafeBC Annual Report 2021

Sunshine Coast

Prepared by: Russell Dunsford

WildSafeBC Sunshine Coast Coordinator



Executive Summary

This report describes the activities of the WildSafeBC Sunshine Coast Community Program between May 1st and November 30th, 2021. The program area covers the Sunshine Coast Regional District (SCRD) which spans from Port Mellon to Egmont (Figure 1), including the traditional territories of the Shíshálh (Sechelt) and Skwxwú7mesh (Squamish) Nations. The SCRD is comprised of eight administrative regions which are as follows:

- Area A: Pender Harbour and Egmont
- Area B: Halfmoon Bay
- Area D: Roberts Creek
- Area E: Elphinstone
- Area F: West Howe Sound
- District of Sechelt (DOS)
- Sechelt Indian Government District (SIGD or Shíshálh Nation)
- Town of Gibsons (TOG)

Local wildlife activity on the Sunshine Coast in 2021 was somewhat low compared to previous years, particularly in the spring. Some locations still saw hotspots of activity regardless such as a coyote pack on Thormanby Island, bobcats in Roberts Creek, a pair of orphaned black bear cubs in Elphinstone, and sparse black bear conflict throughout much of the program area. An unusually hot and dry summer caused drought and likely impacted natural food sources with some berries ripening earlier than usual. Despite this, black bear reports were low throughout the spring and early summer, picking up in the late summer and fall. This could reflect the availability of natural food sources, as well as being affected by curbside collection disruptions ongoing intermittently since August.

The WildSafeBC Community Coordinator (WCC) performed outreach activity with the goal of preventing conflict with wildlife in the community. Following COVID-19 safety precautions, several of the standard WildSafeBC program activities were modified to ensure proper sanitization and physical distancing measures were in place. The following summarizes key program deliverables over the course of the season:

- 13 WildSafe Rangers Program (WRP) presentations to 11 classes reaching 441 youth
- 916 door hangers were placed at homes and the WCC spoke with 153 people
- 5 farmers' market/trailhead/event display booths interacting with 810 people
- 39 Facebook posts were made, and 189 new Facebook followers were gained for a total of 1,431 followers
- 5 new businesses signed on to the WildSafeBC Business Pledge

The success of the Sunshine Coast WildSafeBC Program would not be possible without the support of the Sunshine Coast Regional District, the Conservation Officer Service (COS), and amazing volunteers. There are many opportunities to further engage the community through the

WildSafe Business Pledge, Bare Campsite Program, and WRP in 2022, especially if COVID-19 restrictions are eased and there are more opportunities for in-person activities. Moving forward, these initiatives and collaborations will help “keep wildlife wild and our community safe”.



Figure 1. WildSafeBC Sunshine Coast Program coverage area.

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Highlights from the 2021 Season

Wildlife Activity

Example (please expand your data range to include until October 31, 2021):

Reports made to the Conservation Officer Service (COS) through the RAPP line (1-877-952-7277) or online form (<https://forms.gov.bc.ca/environment/rapp/>) are available to the public through WildSafeBC's Wildlife Alert Reporting Program (WARP). This data is updated daily and this report for the Sunshine Coast includes data from January 1, 2016 to October 31, 2021 (Figure 2). Garbage was the most cited attractant followed by fruit trees/berry bushes (Figure 3).

From January 1, 2016 to October 31, 2021, there were 2,561 wildlife reports made to the COS and WARP for the Sunshine Coast Regional District areas. The top three species reported were black bear (n=1,639), deer (n=407), and cougar (n=299) (Figure 2). Calls regarding coyote (n=73) and others (n=143) made up the balance of calls.

From January 1, 2021 to October 31, 2021 there were 345 wildlife reports made to the COS and WARP. Of those, 201 were regarding black bears, 80 were deer-related, 19 cougar, 21 coyote, and 25 other wildlife reports.

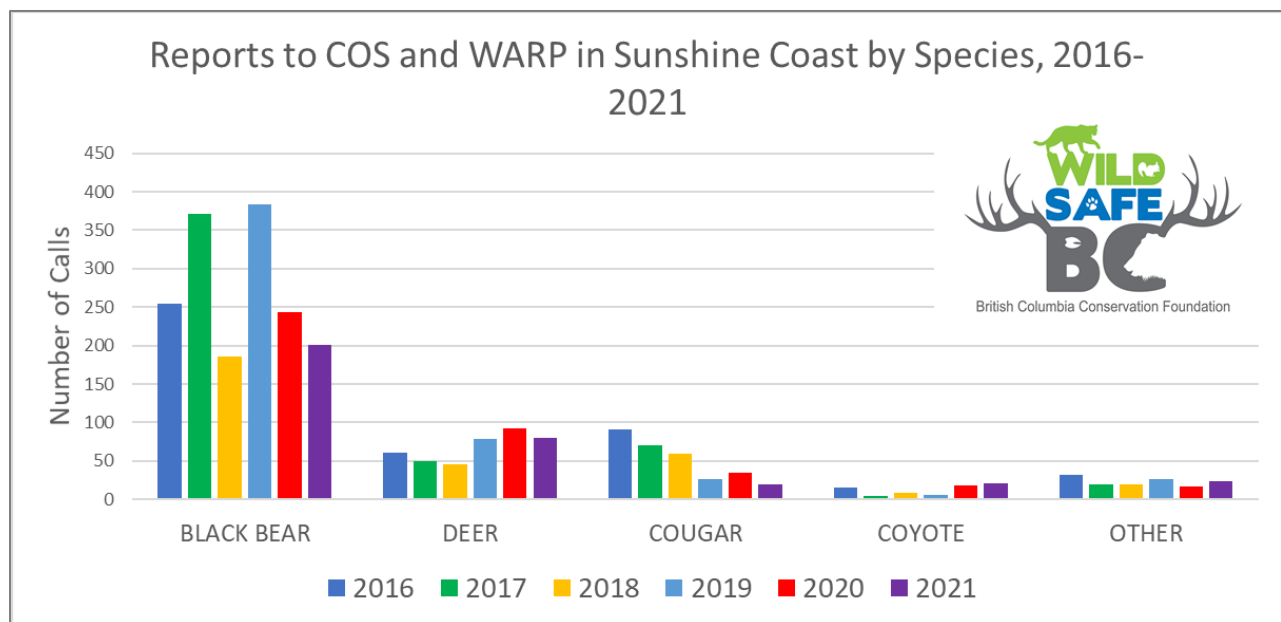


Figure 2. Reports to the COS and WARP regarding black bears from January 1, 2016 to October 31, 2021.

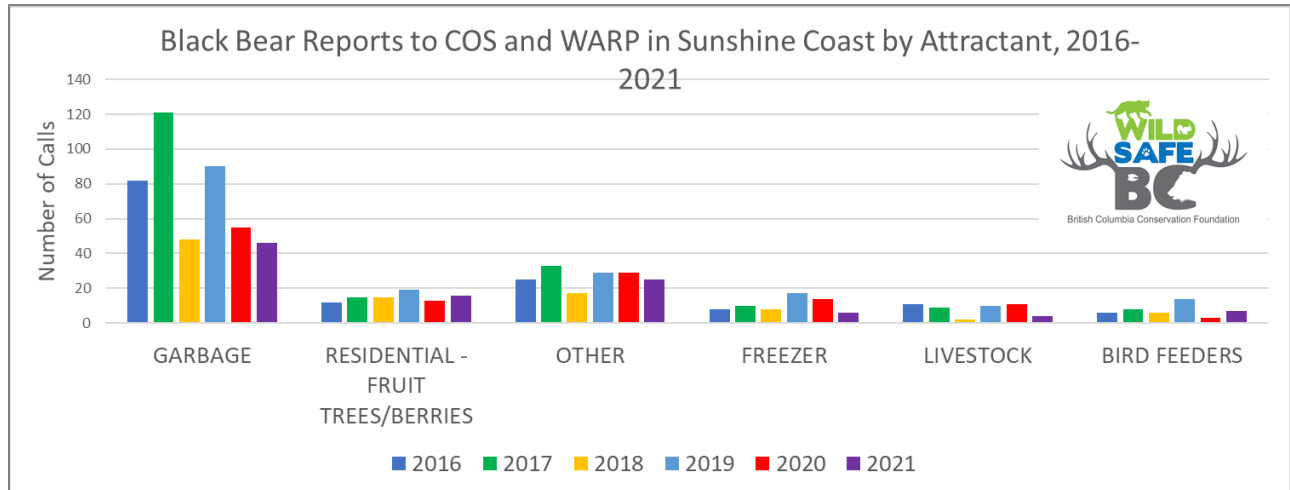


Figure 3. Black bear reports to COS and WARP in SCRD by attractant, January 1, 2016 to October 31, 2021.

Black bear reports were lower than average in the spring of 2021, with a significantly smaller peak in activity than expected (Figure 4). There was a pickup in activity in September/October which is similar trend to what was observed in other parts of the province.

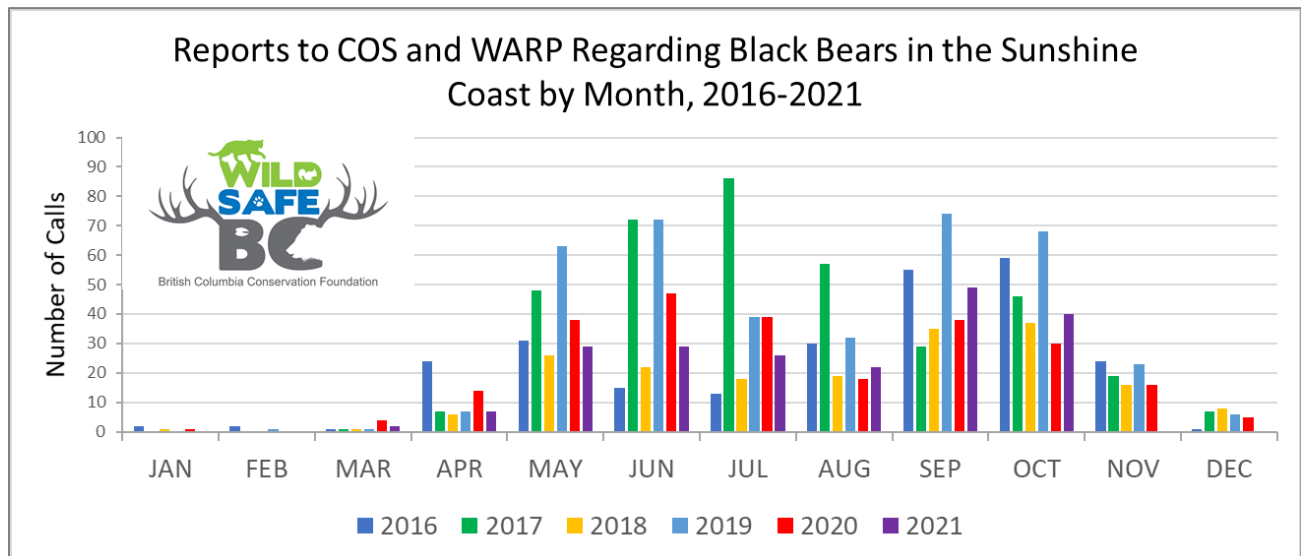


Figure 4 . Reports to COS and WARP regarding black bears in SCRD by month, January 1, 2016 to October 31, 2021

WildSafe Ranger Program

The WildSafe Ranger Program (WRP) introduces youth to the concept of human-wildlife conflict (Figure 5). A total of seven schools participated in the WRP through presentations that allowed for physical distancing. In total, 441 students became WildSafe Rangers (Table 1). Of these, 61 students received the extended version which included two visits, an outdoor activity, and a take home assignment on attractant management.

Table 1. Schools that received the WildSafe Ranger Program in 2021.

School	Grade	Students	Extended
Davis Bay	4/5/6	21	
Gibsons	2/3, 2/3	38	20
Halfmoon Bay	4/5	26	
Langdale	K-6	150	
Madeira Park	All Classes, K-6	113	
Kinnikinnick	2/3, 2/3, 5/6	67	41
West Sechelt	4	26	

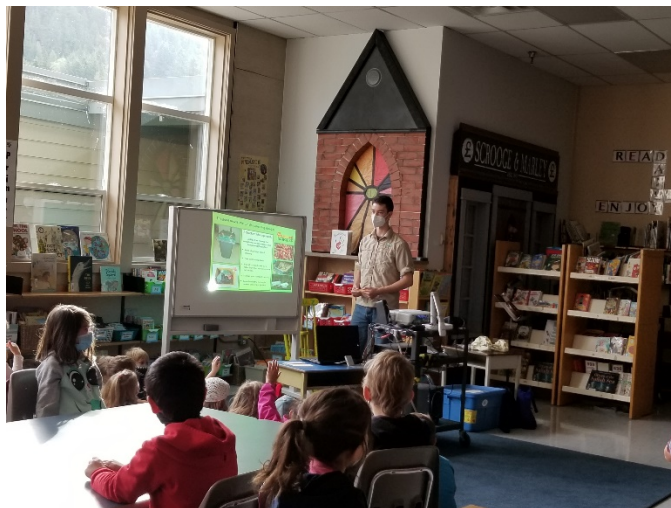


Figure 5. WildSafe Ranger school presentation.

Presentations to Community Groups

The WCC gave two outdoor presentations to 64 participants (Table 2). An electric fencing workshop was organized by the WCC and delivered by the Provincial Coordinator in collaboration with the Sunshine Coast Bee Club. While several attendees already had electric fences, many learned new best practices to improve their design.

A wildlife safety and awareness workshop was organized in collaboration with the Thormanby Island Residents Association in response to concerns caused by human-fed coyotes on the island. Residents were informed on the behaviours of human-habituated wildlife and the basics of managing wildlife attractants, as well as advised to report all conflicts to the RAPP line.

Table 2. Presentations given in 2021.

Date	Type of Presentation	Organization	Attendees
03/07/2021	Wildlife Safety and Awareness	Thormanby Island Residents Association	52
08/08/2021	Electric Fencing	Sunshine Coast Bee Club	12

Display Booths

Display booths were set up at a total of five events, including the BC Goes Wild event reaching a total of 810 people (Figure 6; Table 3). The farmers' markets were a great way to connect with residents and tourists alike. People enjoyed learning interesting facts about wildlife, what to do in a wildlife encounter, attractant management, and the kids especially loved the props such as bear skulls and deer antlers.

The display booths at the Sechelt Farmers' and Artisans' Market drew in massive crowds, while a number of people braved a blustery day to visit the BC Goes Wild trailhead booth and enter into a prize draw.



Figure 6. WildSafeBC display booth.

Table 3. Display booths in 2021.

Date	Event	# of People
10/07/2021	Sechelt Farmers' and Artisans' Market	267
24/07/2021	Sechelt Farmers' and Artisans' Market	196
28/08/2021	Sechelt Farmers' and Artisans' Market	187
25/09/2021	BC Goes Wild	65
30/10/2021	Mushroom Mania	95

Door-to-Door Education

Door-to-door education was modified this year to consist of leaving door hangers with a letter attached addressing the purpose of the visit (Figure 7). Due to COVID-19, the WCC did not knock on doors as had been done in the past. However, if people were outside, the WCC would engage in conversation and education. In total, 916 door hangers were left and conversations were had with 153 people in the neighbourhoods around Elphinstone, Langdale, Sechelt, West Sechelt, Granthams Landing, Welcome Beach, Davis Bay, Lower Rd, Crowe Rd, Highland Rd, and Connor Rd (Roberts Creek). These areas were prioritized as a result of reports of black bears accessing garbage or fruit on trees, or entering homes, sheds, and/or vehicles.



Figure 7. The WCC performing door-to-door.

Social Media and Press

The WildSafeBC Sunshine Coast Facebook page grew by 179 fans in 2021 from 1,214 to 1,393 page followers. This platform was an effective way to communicate a variety of information about wildlife safety, attractant management, and events to the community. Posts about wildlife were particularly popular, regularly reaching 2,000 to 3,000 people.

The WCC provide information to local media and submitted several news releases which resulted in the following articles:

- Coast Reporter announcing the start of a new WildSafe season, [New WildSafeBC coordinator on the Sunshine Coast](#)
- Coast Reporter included WCC activities in story about fed coyotes, [COS investigating fed coyote on Thormanby islands](#)
- Coast Reporter published fall safety info, and WCC comments on TOG Attractant Bylaw and curbside collection service disruptions, [Be 'bear aware' this fall](#)

Wildlife in Area Signs

While wildlife can be expected on trails throughout the Sunshine Coast, there are times when wildlife activity increases in hotspots and signage can be helpful in preventing conflicts. It is important for residents and visitors using trails to be aware of their surroundings, make noise with their voice, and keep dogs under control or on a leash.

Signage was posted in response to wildlife sightings reported through W.A.R.P., or in cooperation with requests by collaborating partners, including COS and BC Parks. Some of the locations that signage was posted throughout the year include Soames Hill, Secret Cove Mews, and Connor Park (Figure 8).



Figure 8. Bear-in-area sign.

Collaborations

Working closely with the COS is instrumental to this role. By providing consistent messaging and education to our community members, the WCC and the COS were able to help support different neighbourhoods dealing with human-wildlife conflict.

Working with other wildlife groups such as the Sunshine Coast Bear Alliance and Bear and Safety Awareness on the Sunshine Coast help serve an important role of extra education and awareness building. Connecting with these groups to collaborate on consistent messaging to the public helps make our work more effective at reducing conflict and increasing public safety.

The dedicated volunteers and members of these groups continue to serve the community year-round, providing an essential service during the hibernation months of WildSafeBC.

WildSafe Business Pledge

The WildSafe Business Pledge Program has been developed to encourage businesses good examples in their community on how to safely co-exist with wildlife. To take the pledge, a business is required to follow best practices in solid waste management, provide adequate training to staff and support WildSafeBC's safety and conflict reduction information. In return, WildSafeBC will provide ongoing support to the business in the form of staff training, WildSafeBC materials (subject to budget constraints) and a WildSafeBC Business Pledge poster. A total of 5 businesses signed the pledge this year, promising to use their platform to help reduce human-wildlife conflict in their community. They are Buck Fever, Mason Rd Market, Jean's Organic Foods, The Gibsons Dogrunner, and Shaggy Jack's Wild Mushrooms.

Challenges and Opportunities

Unsecured garbage remains a challenge in the community. As collection and service levels vary along the coast, messaging needs to focus on various ways to safely store waste throughout the week as well as on collection day. The introduction of curbside organics collection in the SCRD presents opportunities for waste management and waste reduction education.

Fruit trees and berry bushes continue to be a source of attractants in the community that draw wildlife into residential areas. Bears have been reported damaging fences and remaining in people's yards which impacts the safety of the neighbourhood. Several areas have been identified as hotspots in the community and would benefit to increased education and fruit gleaning activities. To address the abundance of fruit in the community, the following initiatives should be implemented in 2022:

- Electric fence demonstration
- Education campaign focusing on the hazards and solutions through social media, news articles, workshops
- Engage food banks, local breweries, and other non-profits
- Connect residents through Social Media food sharing groups
- Increased door-to-door campaigns in hotspots
- More extensive promotion of the business pledge program

There are many vacation rentals and BNBs on the Sunshine Coast. It would be beneficial to reach out to any and all of the associations that manage and promote them to share information and (budget permitting) materials.

Acknowledgements

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